

# **Watershed Planning Advisory Council**

## **Annual Report To The Iowa Legislature**

**January 31, 2012**



**Mississippi River Bridge – Davenport, IA**

**Watershed Planning Advisory Council  
Annual Report  
January 9, 2012**

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## **Watershed Planning Advisory Council Annual Report January 9, 2012**

### **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 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](#) - <http://www.iowaagriculture.gov/WPAC/pdf/finallegislativereport2007.pdf> (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). <http://www.iowaagriculture.gov/WRCC.asp>

The WPAC seeks to continue its 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 committee received reappointment in 2011, and met a total of six (6) times. The general discussion during these meetings was how to help WRCC organize and be more effective. Minutes of the WPAC can be found at this link: <http://www.iowaagriculture.gov/WPAC.asp>

### **2011 WPAC Highlights**

Highlights of the WPAC meetings include:

- Iowa Secretary of Agriculture Bill Northey shared his vision for implementation and coordination responsibilities of the WRCC and the continued plan to fulfill the vision of the task force in 2007. Senate File 535 transferred the responsibilities of the WRCC to the Iowa Department of Agriculture and Land Stewardship. This bill also gave the WRCC the ability to prioritize watersheds based on watershed assessments. Secretary Northey said the WRCC needs to identify where to focus limited resources on nonpoint sources, show action, improvement and engagement, examine available financial resources, and ongoing efforts to review nutrient management technologies and develop a state nutrient management strategy, as requested by EPA. The WRCC should work with the WPAC and host

regular, monthly meetings till January 2012, he said. There was discussion about development of a memorandum of understanding between the WPAC, the WRCC and its partners and agencies to define their roles and responsibilities. He also discussed the need for resources to incentivize behaviors rather than regulation.

- Senator Rob Hogg of Cedar Rapids reviewed the Cedar River Watershed Coalition and its citizen-led efforts to reduce the impacts of future floods in the watershed. The WPAC also heard from the Rathbun Land and Water Alliance and the Iowa Soybean Association, organizations that have worked extensively in developing watershed awareness and protection programs. They shared key points for successful voluntary participation.
- DNR staff reviewed the department's history of investment in "lean government" principles. The WPAC recommends that those agencies and departments involved in watershed planning and implementation conduct a strategic evaluation of programs and how they are implemented in order to make watershed work more understandable, more easily accessed, and more effective.
- Larry Weber, Director of IIHR-Hydrosience and Engineering and co-founder of the Iowa Flood Center, addressed the issues of how the IFC is working to ensure that communities, businesses, and individuals are well-informed and well-prepared during flood disaster situations. The IFC was founded in 2009 at the University of Iowa and has received state appropriations for the second year of research in the amount of \$1.3 million, which supports the center's objective of improving flood monitoring and prediction capabilities in the state of Iowa.
- Roger Wolf, WPAC vice-chair, lead development of a WPAC work plan, including a vision statement, roles and priorities for the WPAC. A copy is attached.
- The WPAC subcommittees that were established in 2010 were discontinued, but the subject matter and issues they examined continue to be addressed through the work plan. These discontinued subcommittees were organized around the authorizing legislation of the WPAC.
- DNR staff and contractors updated the WPAC on revisions to Iowa's Non-Point Source Management Plan. This plan, which directs more than \$3 million in federal EPA funding in Iowa, is expected to be completed early in 2012. The WPAC recognizes the importance of Iowa moving forward with the revised NPS plan and it is committed to working with the WRCC, state and federal agencies in helping implement it.
- The WPAC executive committee will meet monthly during 2012 and the entire council will meet quarterly. Both meetings will be in conjunction with the WRCC so as to continue to improve coordination with it on these matters as directed by the Iowa Legislature.

- The WPAC expressed its desire to consolidate as much watershed information onto one website location as possible. Work progressed in late 2011 on the DNR website. IDALS staff is assuming these responsibilities in 2012.

In addition, new members were appointed to the WPAC by the Iowa Legislature. They are: Senators Dick Dearden and James Hahn, and Representatives Charles Isenhart and Lee Hein. The legislative representation to the WPAC will need to be reappointed in 2012.

## **2012 Recommendations**

### ***A. Improving water quality and optimizing the costs of voluntarily achieving and maintaining water quality standards.***

Guest speakers from public agencies and private organizations shared information about current efforts to achieve progress in meeting water quality standards. The consensus finding from the WPAC includes that greater emphasis on coordination and prioritization among public and private organizations with buy-in from local communities for implementation is essential to optimizing cost and capturing efficiencies with watershed programs.

The WPAC recommends that entities, both public and private, involved in watershed planning and implementation programs conduct a strategic evaluation on how those programs are implemented in order to make watershed work more understandable, more easily accessed, and more effective.

The WPAC recommends that the WRCC agencies, in cooperation with WPAC members should utilize a process like Value Stream Mapping (VSM) where programs can be viewed and gaps and overlapping programs can be identified. Potential outcomes for conducting VSM may include: Clarifying the roles of various agencies; identifying entry points for potential watershed grant applicants; and determining “road maps” for watershed improvement programs.<sup>1</sup>

The WPAC recommends that prioritization of watersheds and sub-watersheds across the state be used to help guide investment of limited time and resources.<sup>2</sup> Congruent with this recommendation is for the state of Iowa to adopt an Adaptive Watershed Management Implementation framework which would follow a logical progression of targeting, planning, implementation and measurement with the primary goal of optimizing public and private return on investment along with measureable and reportable progress. The WRCC in cooperation with the WPAC could utilize a variety of data to prioritize watersheds and sub-watersheds reflecting assessment of receiving water problems, public

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<sup>1</sup> Chris VanGorp of the IDNR January 12, 2010 –WPAC [Meeting Minutes](#)

<sup>2</sup> Bill Northey and Jeff Berckes November 17, 2011 –WPAC [Meeting Minutes](#)

and private drinking water supply impacts, N & P loadings, opportunity to address high-risk sediment, N & P problems, flooding or other related factors and local support or interest in addressing resource concerns.

***B. Creating economic incentives for voluntary nonpoint-source load reductions, point source discharge reductions beyond those required by the federal Water Pollution Control Act, implementation of pollution prevention programs, wetland restoration and creation, and the development of emerging pollution control technologies.***

WPAC finds characteristics of successful watershed programs are those programs and projects that are able to leverage investment of time and financial resources of various stakeholders – local, state and federal and public and private. This has the affect of securing shared responsibility and accountability along with enticing action-oriented solutions for watersheds.<sup>3</sup>

The WPAC recommends greater emphasis be placed on leveraging public and private investment designed to create economic incentives for watersheds that are of higher priority. For example, state agencies should identify new opportunities like reverse auctions to reward and encourage local communities to adopt watershed approaches to solve water quality problems. Another example would be state agencies or private entities allocating dollars for technical assistance paired-up with federal planning and implementation. This essentially expands the funding pool available for watershed implementation. State programs not leveraging additional cash and in-kind support is likely a missed opportunity that may be unsustainable over time.<sup>4</sup>

***C. Establish a process for WPAC to review progress of TMDL, NPS Plan, unsewered communities, urban stormwater runoff, etc, as related to prioritized watersheds.***

The WPAC intends to focus on helping Iowa establish priority watersheds – and can then review the progress of these programs and efforts by requesting the appropriate staff from those programs to present information at a WPAC meeting, and to engage the WPAC members in discussion about those issues. During 2011 a presentation was made by the Iowa DNR's Watershed Improvement Section about the Nonpoint Source (NPS) Management Plan, and the WPAC members were able to engage in discussion about that plan. Similar presentations and discussions can be held in 2012.

***D. New Technologies and Best Management Practices***

The WPAC should continue to investigate and update its members, the WRCC and the public on the current state of research relative to Iowa's nonpoint source and point source

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<sup>3</sup> Wolf and Braster presentation October 12, 2011 – WPAC [Meeting Minutes](#)

<sup>4</sup> Ehm and Kling Presentation November 17, 2010 – WPAC [Meeting Minutes](#)

control technologies; research and application of these technologies in the field, including unsewered communities and the financial impacts to them of these new technologies. These efforts are intended to help Iowa communities and citizens build confidence in the performance of these technologies and aid in their increased adoption and use.

***E. Providing greater flexibility for broader public involvement through community-based, non-regulatory, and performance-driven watershed management planning.***

The Rathbun Land and Water Alliance and the Iowa Soybean Association have extensive experience in successfully increasing watershed awareness and engaging others in watershed protection programs. Representatives from both groups facilitated a discussion on key points they believe has led to their success. The key points are:

- There must be local interest and/or leadership
- Generate buy-in from stakeholders throughout the watershed
  - Host a kick-off meeting with local leaders to generate interest
  - Develop an organizational structure (could be informal like a taskforce or formal like an alliance or 501C3)
  - Conduct a watershed assessment (what is happening in the watershed to impact water quality, flooding, soil loss, etc.)
- Create a watershed management plan (This allows the group to set goals, action steps, and evaluate success.)
- Engage “experts” to provide on-the-ground technical assistance, building a better understanding of watershed needs and best management practices (BMPs) available to landowners/operators
  - This hands-on approach is the most effective way to implement a watershed plan
  - One-on-one allows for greater understanding of cost-share programs and leverages a landowners investment
- Encourage private/public partnerships for funding and implementation of BMPs and education
- Continually evaluate data and communicate results to all watershed stakeholders

In addition there was discussion regarding barriers to voluntary participation in watershed protection, ideas to influence voluntary participation, and the critical need for field advisors (getting the boots on the ground).

**Action(s) resulting from this discussion:**

1. WPAC meetings will include a stakeholder engagement opportunity.
2. WPAC will reinforce collaboration by suggesting state agencies identify and develop one central web-based location where citizens can go to get watershed information and that will facilitate discussions between watershed organizations.

Both actions are designed to elicit broad perspectives on watershed issues, community and landowner/operator engagement, public education, and open communication with the WRCC and WPAC.

***F. Assigning responsibility for monitoring flood risk, flood mitigation, and coordination with federal agencies.***

The Director of IIHR-Hydrosience and Engineering and co-founder of the Iowa Flood Center (IFC) gave a presentation as to their ability to support the work of the WRCC and WPAC by improving flood monitoring and prediction capabilities. The Center has provided web based maps available to more than 500 communities in Iowa that will help educate individuals with a better understanding of watershed boundaries – see <http://www.iowafloodcenter.org/>. The Iowa Flood Information System (IFIS) is a website that will be a key resource in creating computer models to predict flood water travels, map libraries, a flood risk calculator, and other features with regard to flooding.

**Action(s) resulting from this discussion:**

The WPAC recommends the Iowa Flood Center be assigned responsibility for monitoring flood risk, flood mitigation and coordination with federal agencies. The WPAC further reiterates support that the Iowa Flood Center should be included as a member of the WRCC and continue to provide updates to the WPAC.

***G. Establish Watershed Management Authorities.***

The Iowa DNR's Watershed Improvement Section was afforded the opportunity to issue a Request for Proposals for the development of Watershed Management Authorities (WMA). With support from the U.S. Department of Housing and Urban Development disaster relief funds in response to the 2008 flooding, the DNR, in partnership with the Iowa Economic Development Authority, awarded six grants throughout the state to:

- Upper Cedar River Watershed,
- Indian Creek Watershed,
- Turkey River Watershed,
- Catfish Creek Watershed,
- Squaw Creek Watershed, and
- South/Middle Raccoon Watersheds.

The WMA process encourages political subdivisions (cities, counties, and soil and water conservation districts) to collaborate within a defined watershed for water quantity and quality planning and implementation through a 28E agreement. The program goals for this one time grant program are to establish functional WMAs, establish an understanding of time and costs for successful development of a WMA, and learn from any hurdles or failures along the way. A second phase of the program will be unveiled in 2012 with up to three grant awards for planning in the newly formed WMAs.



The WPAC believes that cities and counties may be in need of additional training relative to watershed issues, including learning what incentives might be available or appropriate to encourage greater watershed planning. This need for training might be best addressed at the annual ISU water conference usually held annually in March in Ames, Iowa.

**Watershed Planning Advisory Council Membership**

<b>Organization</b>	<b>Member Name or Delegate</b>
Senate Seat	Dick Dearden
Senate Seat	James Hahn
House of Representatives Seat	Charles Isenhart
House of Representatives Seat	Lee Hein
Agribusiness Association of Iowa	Jeff Schnell
Department of Agriculture and Land Stewardship	Chuck Gipp
Department of Natural Resources	Bill Ehm
Department of Natural Resources	Tim Hall
Growing Green Communities	Tom Hadden, Chair
Iowa Association of Business and Industry	Scott Ickes
Iowa Association of Municipal Utilities	John Dunn
Iowa Conservation Alliance Seat 1	Jeremy Rosonke
Iowa Conservation Alliance Seat 2	Rich Meyer
Iowa Corn Growers Association	Gary Edwards
Iowa Drainage District Association	Vicki Stoller
Iowa Environmental Council	Linda Kinman
Iowa Farm Bureau Federation	Rick Robinson
Iowa Floodplain & Stormwater Management	Leanne Harter
Iowa League of Cities	Jessica Hyland Harder
Iowa Pork Producers Association	Cody McKinley
Iowa Rivers Revival	Rosalyn Lehman
Iowa Rural Water Association	Emily Piper
Iowa Soybean Association	Roger Wolf, Vice-Chair
Iowa Water Pollution Control Association	Jay Brady
Soil and Water Conservation Districts of Iowa	Darrel Weems

## Appendix

### **Legislative Watershed Policy History (2006-2010)**

The [Watershed Quality Planning Task Force](http://www.iowaagriculture.gov/WPAC/pdf/finallegislativereport2007.pdf) - <http://www.iowaagriculture.gov/WPAC/pdf/finallegislativereport2007.pdf> 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 Watershed Planning Quality Task Force (WQPTF) final report published in November 2007 (see <http://www.iowaagriculture.gov/WPAC/pdf/finallegislativereport2007.pdf>) 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 sewer 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](http://www.iowaagriculture.gov/WRCC.asp) (WRCC)- <http://www.iowaagriculture.gov/WRCC.asp> . 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://publications.iowa.gov/10062/1/2010-11-5\\_Smart\\_Planning\\_Task\\_Force\\_Report.pdf](http://publications.iowa.gov/10062/1/2010-11-5_Smart_Planning_Task_Force_Report.pdf)