Illinois Environmental Protection Agency

Basinwide Management Advisory Group

Framework for a Basinwide Planning and Protection Pilot

Presented By
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Consensus Agreement

The participants in this dialogue have crafted the Framework Document that follows. All of the counsel contained herein was developed with an eye toward consensus and with three or fewer people indicating that they "could not live" with the counsel and recommendations. The majority of the Framework's content is presented with universal (100%) consensus.

Each person named below has negotiated in good faith with the other participants and confirms that the contents of this report reflect the group consensus. Though individual participants may take issue with one or more elements, each participant supports forwarding this report to the Director of EPA for further consideration and implementation.

A check in the box beside the named individual indicates the signatories appearing on the single supplemental opinion in Appendix 9.

☑ **Janet Agnoletti**	☐ **Heather Hampton-Knodle**	☑ **Sam Santell**
☐ **Ken Alderson**	☐ **Mark Harrison**	☐ **Dennis Schmidt**
☐ **Thomas Brooks**	☐ **Tom Heavisides**	☐ **Tom Skelly**
☐ **Terry Donohue**	☑ **Martin Jaffe**	☑ **Cindy Skrukrud**
☐ **Jerry Ducay**	☐ **Alan Jirk**	☐ **Julie Sullivan**
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☑ **Jonathan Goldman**	☐ **Tom Muth**	☑ **Ed Weilbacher**
☑ **Scott Goldstein**	☑ **Joyce O'Keefe**	☐ **Marcia Willhite**

Foreword

As the lead facilitator for this Basinwide Management Advisory Group (B-MAG) Collaborative Dialogue, I am pleased to present and endorse this report.

"Facilitators" are the guardians of fair and open processes. We are neutral. We don't provide the answers but rather create and maintain the environment for others to find their own solutions. In this role, I have seen firsthand the immense commitment and the high quality of work offered by many of the participants in this process. They have donated their time and energy and have put numerous priorities on hold as they embraced their charge with a surprising passion.

This "stakeholder" effort or "collaborative process" is an uncommon way of doing business on a statewide level in Illinois. It is based on the principle that government gets its best results when it brings the top minds from the most affected communities to bear on important policy issues.

The counsel contained in this report will contribute to the development of an important new pilot program. This pilot program will test methods for approaching water resource management in a holistic sense – and offers the promise of improvements in water quality planning and protection across Illinois for generations to come. The pilot program will be grounded in sound science, common sense, and an appreciation for the cause and effect relationships that exist at the nexus of economics, environment, and politics.

I applaud the stakeholders for their overall efforts and particularly the concessions they made relative to their own philosophical beliefs in order to reach agreement. I encourage all the citizens of Illinois to do the same.

Adam R. Saslow
President
Consensus Solutions, Incorporated
Atlanta, GA
May, 2004

Acknowledgements

A large team representing many, many interested parties affecting Illinois' water resource programs was assembled to develop this Framework. Appendix 3 lists the Stakeholder Group in its entirety.

These people came into this process with a wide variety of experiences and backgrounds. Significant time was spent educating the participants on matters of water quality and existing state programs. The group gratefully acknowledges the many experts who attended the meetings to present their knowledge, work, and expertise. These individuals are also listed in Appendix 4 as "Resource People."

Additionally, several staff members from the Illinois Environmental Protection Agency's (EPA) Bureau of Water (BOW) primarily assigned to other duties, generously committed their time and energy to ensure that our meetings went smoothly. Among them were Karen Cox, Chris Davis, Ashley Ferguson, Amy Walkenbach and Bruce Yurdin. Without their support, this process would not have come close to reaching the success that it did.

Finally, we would like to thank the organizations who graciously allowed us to use their facilities in this process including:

- The Illinois Department of Natural Resources (IDNR);
- The United States Environmental Protection Agency (USEPA);
- Kane County;
- The Illinois Farm Bureau;
- The Illinois Municipal League; and
- The Metropolitan Planning Council

These organizations provided gracious and hospitable environments for the B-MAG participants to work through the many difficult issues faced along the way.

Executive Summary

In recent years, the Illinois Environmental Protection Agency (EPA or "the Agency") has struggled with the implementation of its Facility Planning Area (FPA) program. In the Spring of 2003, the Agency contracted with a consultant to complete a Program Evaluation.[1] Though there were several recommendations, the clear sentiment was that the FPA program is part of a broader structure of "piecemeal" management of water quality. To the consultant, the FPA process appeared to be disconnected from other state programs and one "size" most certainly did not fit all. It was suggested that the State should move toward a more holistic and interconnected watershed planning and protection framework.

The Agency embraced this feedback and convened this process in an effort to redefine how Illinois plans for and protects water quality throughout the State. The Agency decided to move aggressively in that direction and with the knowledge and wisdom of a carefully selected group of stakeholders. This group, known as the "Basinwide Management Advisory Group" or "B-MAG," included balanced representation from every side of water quality planning and protection. This group was supported by a larger collection of water quality planning and protection specialists who were on hand as resources to provide real time answers to the questions that were posed by the B-MAG membership.

The group met over a period of nearly six months and developed the following consensus-based recommendations. It is the B-MAG's wish that the following twenty-one recommendations be immediately implemented within the context of the pilot programs:

1. The members of the B-MAG agreed that water quality assessments, watershed planning and resource protection would involve efforts at both the State and local levels (page 17)

    - EPA (with opportunities for stakeholder contributions) would prepare a River Basin Assessment at the 14 plus 2 River Basin level[2] as the precursor to watershed planning. These would be updated on a five year rotational schedule. The River Basin Assessment is described in Chapter 3.
    - Local units of government or a duly authorized agent would lead a stakeholder group (see Chapter 5) that uses criteria and technical assistance from EPA to create a Watershed Plan at the 52 sub-watershed (or more precise) level. These would typically be developed voluntarily following the completion of a River Basin Assessment (though sometimes concurrently). Authorized local government entities would adopt the Watershed Plan recommendations, and implement them. The Watershed Plan would then be updated every five to seven years by the Stakeholder Group. The Watershed Plan is discussed in more detail in Chapter 4.

2. The B-MAG believes the local stakeholders (government and non-government) within the watershed should lead voluntary efforts to develop Watershed Plans. (page 17)

[1] This may be accessed at http://www.epa.state.il.us/water/watershed/facility-planning/facility-planning.pdf

[2] The fourteen basin level plus two sub-basins results from the split of the Fox River Basin (Upper and Lower Fox sub-basins) and the Des Plaines River Basin (Des Plaines and Lake Michigan sub-basins).

3. The B-MAG agrees that the River Basin Assessment will be developed by the Bureau of Water - EPA with input from Illinois Department of Natural Resources (IDNR), Illinois Department of Agriculture (IDA) and local stakeholders during the year after sufficient monitoring has occurred. (page 22)

4. The B-MAG envisioned that local units of government and other stakeholders (see Chapter 5 below) that choose to engage in local watershed planning will produce more specific and results-oriented Watershed Plans at the sub-watershed level. This locally developed Watershed Plan should generally follow in sequence, the development of the River Basin Assessment discussed in Chapter 3. (page 24)

5. The B-MAG agreed that localities would have varying degrees of ability to develop Watershed Plans. As such, there is a certain degree of variance in quality and content that is expected. With that in mind, the B-MAG agreed that a Watershed Plan would need to address the elements listed in Figure 3 in order to be eligible for the various financial and programmatic incentives available.[3] (page 27)

6. The B-MAG participants believe that while the development and adoption of a Watershed Plan should be at the local government level, whatever the source of the motivation, these efforts should be recognized and supported by EPA. The B-MAG recognized the importance of making the necessary resources available to implement the program effectively. (page 30)

7. The B-MAG believes that these Watershed Planning Committees must be supported by a subordinate Technical Advisory Committee. (page 32)

8. The B-MAG believes that after public comment has been factored into the final version of the Watershed Plan, the Plan must be presented to local government entities for adoption or endorsement. The lack of adoption by one or more of the local government participants shall not diminish (in the eyes of the EPA) the validity of the plan for the remaining local governments that do adopt the Watershed Plan. (page 32)

9. The B-MAG presumes that the active engagement of the EPA Watershed Planning Coordinator will significantly reduce the likelihood that an endorsement by Illinois EPA's headquarters staff will involve an incremental step in the watershed planning process or any additional "review" component at by the Bureau of Water or others. (page 33)

10. The B-MAG proposes that the EPA Coordinator also serve as a liaison and coordinator to the full range of state and federal governmental interests. (page 36)

11. Overall, the B-MAG believes that existing law provides EPA with the authority and obligation to prohibit discharges from contributing to violations of water quality standards. The B-

[3] Please note that access to technical resources and assistance is an unconditional incentive available to all localities in need of these resources for developing a Watershed Plan.

MAG believes that EPA's use of the Internet to make NPDES documents available should continue, and be strengthened. (page 40)

12. The B-MAG overwhelmingly felt that non-point source programs are not adequately targeted to geographic areas most in need. Watershed plans should specify non-point source BMP's and their strategic locations as much as possible. The B-MAG unanimously agreed that one weakness of the current system is that there is not enough funding for the incentive-based programs to ensure that water quality standards will actually be met. (page 41)

13. There is broad agreement in the B-MAG on the usefulness of targeted monitoring data that identifies threats to water quality and indicates the efficacy of local watershed plans and attainment of the State's water quality management plan. (page 41)

14. The B-MAG strongly recommends that a model program test a more effective mechanism for local governments to settle disputes over issues of growth, and development. (page 43)

15. The B-MAG agrees that preferential standing and more favorable financing should be made available to existing facilities seeking to upgrade their systems for compliance. (page 43)

16. The B-MAG agrees that EPA's existing policy is appropriate and that EPA will not provide funding for any project that is inconsistent with the Watershed Plan (please reference Table 2, Phase V) or the WQMP if no local watershed plan is in place. (page 43)

17. The pilot programs must be developed in such a way as to test the redundancy (or lack thereof) in the FPA program. The B-MAG, in its annual meetings, needs to evaluate the results and help EPA determine the future of the FPA. In making a determination of the adequacy of the new watershed approach vis-à-vis the FPA, the B-MAG may utilize the strengths identified through the "SWOT" exercise and other materials to determine whether or not watershed planning provides sufficient protections and substitutes to the FPA program. (page 43)

18. The B-MAG agreed that FPAs would continue to be a part of EPA's water protection programs for the immediate future; even those who advocated ultimately eliminating FPAs agreed that FPAs should remain until comprehensive watershed planning coverage is in place and a determination is made as discussed in Chapter 6. (page 44)

19. During this transitional period, the B-MAG suggests that the FPA program be included and run parallel to the watershed planning framework. (page 45)

20. The B-MAG endorsed the selection of the Rock River Basin for the River Basin Assessment and the Watershed Planning to be conducted in the sub-watersheds of the Kishwaukee and the Green River. EPA was charged with catalyzing watershed planning efforts consistent with this Framework in each of these two locales. As appropriate, B-MAG membership hailing from these two regions will encourage development of a local watershed plan consistent with this Framework. If the appropriate local government entities are not committed to

participating in the pilot, the B-MAG will reconvene its Watershed Selection Committee to recommend other pilot areas within the Rock River Basin. Provision will be made for the B-MAG's concurrence with provisional selections via electronic mechanisms. Further, the B-MAG recommends that EPA send quarterly electronic transmissions to the B-MAG membership with updates. The B-MAG should be reconvened annually to evaluate progress and determine next steps. (pages48 and 49)

21. The B-MAG would like to be re-convened in its entirety one year from the issuance of this Framework so as to ensure consistency with the letter and spirit of this Framework as well as to evaluate progress within the pilot program allowing for adjustments in the program if necessary.

These recommendations were endorsed as a completed package by all but one of the B-MAG participants.

Introduction and Organization of this Report

This Framework report is best viewed as having three discrete sections.

- Chapter 1 provides rich context for why the State of Illinois is undertaking the challenge to change the tenets of water resource management in the State. The rationale is defined along with the roadmap used by the stakeholder group convened to provide sage counsel to EPA. Chapter 2 provides the Strategic Vision for Watershed Planning in the State – and the broad linkages between state and local efforts.

- Chapters 3, 4, 5 and 6 offer insights into the operationalization of watershed planning and protection in the State. Chapter 3 looks at watershed planning and protection in terms of the first step along the critical path – the River Basin Assessment. Chapter 4 lays out the mechanics for developing and implementing a Watershed Plan. Chapter 5 provides important insight into public involvement and Chapter 6 focuses on the new role for state level participation.

- Chapter 7 explains how and where Watershed Planning will be piloted and tested. Chapter 8 provides a few concluding remarks.

Of course there is significant reference material that may be of use to the reader as supplemental to the work relayed in the main text. This reference material is presented in the various appendices.

Chapter 1- The Evolution of the B-MAG

Illinois recognizes the value of aligning its Clean Water programs and regulatory decision-making on a watershed basis and promoting watershed-wide planning in order to protect water quality. Many believe that the current approach to planning for and implementing water quality protection in Illinois is distributed among various program elements and separated between various types of water pollution sources in each watershed.

Planning for water quality protection on a watershed basis allows for comprehensive consideration of all the potential impacts to surface water quality and to groundwater quality. It enables interested parties to identify generic and specific actions to prevent degradation of high quality waterbodies and even to restore the quality of impaired water bodies through existing voluntary and regulatory protections or the development of innovative alternatives.

Tracy Mehan, former USEPA Assistant Administrator for Water, communicated a charge to the federal and State Clean Water programs to renew their commitment to watershed management in a December 2002 memo:

> "About a decade ago, EPA embraced and took steps to encourage a watershed approach to better address water quality problems. I firmly believe that such an approach, which focuses multi-stakeholder efforts within hydrologically defined boundaries to protect and restore our aquatic resources and ecosystems, offers the most cost-effective opportunity to tackle today's challenges. Administrator Whitman shares my belief. She feels strongly that a watershed or "place-based" approach is one of the most important environmental guiding principles for her as well as for this Administration. By working together with a diverse array of partners, I believe we can identify and implement successful strategies to maintain and restore the chemical, physical and biological integrity of our waters. No doubt, many of these strategies will be tailored to specific problems in specific communities. Hence, the importance of the watershed as a social and hydrological reality. Here is where communities, neighbor to neighbor, can engage, educate and persuade one another in a mutual quest for shared goals.
>
> Although a decade of effort has resulted in general awareness of the watershed approach within the Agency, recent evaluations show substantial gaps in actual implementation. The watershed approach should not be seen as merely a special initiative, targeted at just a selected set of places or involving a relatively small group of EPA or state staff. Rather, it should be the fulcrum of our restoration and protection efforts, and those of our many stakeholders, private and public. Failure to fully incorporate the watershed approach into program implementation will result in failure to achieve our environmental objectives in many of our nation's waters."

Similarly, the 2003 "Nonpoint Source Program and Grants Guidelines for States and Territories" (FR Vol. 68, No. 205 October 23, 2003) makes clear that a pre-requisite for incremental Section 319 funding is watershed management planning that contains nine minimum elements.

The movement to watershed planning and protection in Illinois is driven by several additional factors including:

1. A movement toward "good governmental" practices including efficiency in delivery systems and the optimization of resources;
2. Recognition of the nexus between growth, infrastructure development (e.g., roads, sewers) and financial as well as natural resources – particularly in the northeastern quadrant of the State though elsewhere as well.
3. Broad and varied dissatisfaction with the Facility Planning Area (FPA) Program – particularly in the northern part of the State;
4. Assessments performed by outside interests calling for policy reform and even innovation in water quality management; and,
5. A White Paper produced by Illinois EPA staff urging the shift toward a watershed based planning and protection program.

The various drivers listed above, led EPA's Senior Management to decide that a facilitated multi-stakeholder dialogue, designed and guided by a neutral party, offered the greatest potential for success.

Participants in the Basinwide Management Advisory Group (B-MAG)

The potential participants in this multi-stakeholder "Basinwide Management Advisory Group" (B-MAG) process were carefully considered by the Senior Leadership of EPA. First, EPA sought to gain the perspectives from the interest groups most clearly interested in water quality:

- Development and Realty;
- Agriculture;
- Industry;
- Environmental;
- Smart Growth and Advocacy;
- Regional Government;
- Local Government;
- Sanitary Districts (also known as "Wastewater Agencies" and "Water Reclamation Districts"); and,
- State Government.

In the interests of a creating a "credible" process, EPA limited involvement from the "meta-constituencies" above to three representatives each[4] so as to achieve a balanced discussion. Determinations were then made concerning whom to best represent those interests – often in consultation with state leaders within their meta-constituencies. Efforts were made to attract the best and brightest water quality minds in the State while also attempting to ensure that there was a sufficient geographic distribution with participants hailing from all around Illinois. Once convened,

[4] After the first meeting, it was decided that the Illinois Dept. of Transportation was a stakeholder, thus raising the number of state government participants to four.

the participants were asked if any groups were not represented. The B-MAG thus endorsed its own composition.

There were a number of more "peripheral" interests identified that also required some degree of representation, though not to the same extent as those "primary" interests referenced above. These more secondary constituencies were served by one seat each and represented: Water Supply, Academia and an At-Large nomination.

It was recognized early on that there were many individuals who had unique expertise that needed to be brought into the dialogue. For that reason, a second tier of involvement was created. "Resource People" were utilized to provide technical support to the participants as informal members of the B-MAG itself. These individuals were afforded limited ability to participate in the B-MAG dialogue and no voting privileges.

The stakeholder participants are listed in Appendix 3 and the resource people in Appendix 4.

The Charge

Illinois EPA Director Renee Cipriano asked that the B-MAG work collaboratively to develop the best possible watershed planning and protection framework for the State of Illinois. She intended that this framework be "pilot tested" in one or more watersheds. As lessons were learned, if the framework was successful, it would be phased in over time until the entire state's water resource protection programs were re-oriented to reflect watersheds as opposed to the more programmatic structure that exists today.

It was her vision, expressed through a "Charge" given to the B-MAG (please reference Appendix 2) that directed the group to:

- Develop familiarity with the full range of federal, state and local water quality planning and protection activities and the specific programs and goals offered by each. Particularly important to the Agency are:
    - Monitoring;
    - NPDES Permitting, including Phase I and Phase II Permitting;
    - Anti-degradation Analysis;
    - Control Of Non-Point Source Pollution;
    - Land Use Policies; and
    - Facility Planning Areas and Wastewater Treatment Programs
- Identify a "delivery system" and the necessary legal authorities for guiding the implementation of customized programs within each basin. Incorporate a vehicle for stakeholder involvement that leverages all federal, state and local efforts for guiding the implementation of customized programs;

- Select a specific watershed or watersheds for pilot testing of a comprehensive, coordinated Basinwide planning and protection framework; and,

- Forge agreement on a watershed by watershed phase-in of additional basins resulting in a five to seven year rotational schedule of planning and protection activities that provide coverage for the entirety of the State.

Outside the Scope of the B-MAG Charge

"What you will learn is that no single 'problem' can be placed in a box with a ribbon around it and a label bearing the inscription 'Finance' or 'Management' or… "

Dean Michael Levine
Yale University School of Organization and Management
Welcome Address - 1989

Dean Levine's message underscored the nexus of many technical and social science disciplines in public policy and the lack of clear boundaries between the various tools used to resolve the debates held on any given issue. Nevertheless, during the course of the B-MAG's deliberations, several issues arose that were viewed as clearly "outside" the scope of the Charge as provided by the Director.

The B-MAG was discouraged from discussing issues concerning financial resources and whether or not the programs discussed were "affordable." The budget issues in Illinois are highly complex. Many of the B-MAG's membership have been extraordinarily outspoken with regard to revenue sources and uses of the monies raised. The future funding of EPA's programs is a matter for legislative debate. Because the issues are viewed as somewhat intractable and because the debate is being held on different grounds, the facilitator was asked to divert discussions of funding.

Discussions concerning aquifer re-charge and more broadly, groundwater quantity management were also viewed as outside the parameters of the B-MAG's deliberations. Cleary there is a connection between groundwater quantity and water quality management. Nevertheless, given the limitations faced in this process, such issues were not discussed and left to future processes that might address these linkages, or more likely, the empowered Agencies charged with water quantity management .

The Road Map to a Pilot Program

Programmatic Review

The B-MAG's first responsibility was to develop a familiarity with the full range of state and other water quality planning and protection programs. The stakeholder group was offered many presentations and descriptive materials on the full range of federal and state sponsored efforts in

water resource management. Throughout the first half of the collaborative dialogue and beyond, the participants were afforded opportunities to better understand the programs and their goals. Informally, the B-MAG held candid discussions on the strengths of these various programs as well as their weaknesses.

Willoway Creek, DuPage County

State agency participants were unable to provide concrete figures on the cost of these programs. Many programs involve combinations of designated resources pulled from different sources. Additionally, many programs leverage the resources of other governmental and non-governmental entities.

Further, time constraints on the entirety of the process did not allow participants to become completely immersed in the details of the various programs. What evolved in dialogue was more of a cursory level of familiarity with the broad based goals of the programs.

In some cases, participants in this process did not have the time to develop a sufficient level of sophistication with the operational underpinnings of the great many programs impacting water quality planning and protection.

"SWOT"

Following discussions of the goals and structure of the various federal and state programs, one participant suggested that the B-MAG evaluate the perceived strengths and weaknesses of the various program that address the issues within the B-MAG's charge. This participant suggested using

a process similar to Michael E. Porter's "SWOT Analysis" as described in "*Competitive Strategy : Techniques for Analyzing Industries and Competitors* ." Though the model is used primarily for strategic planning purposes (and largely for private sector entities) is it adaptable to most causes. Most of the B-MAG agreed that it would be a useful tool for rhetorically evaluating the effectiveness of existing water quality planning and protection programs. SWOT (**S**trengths, **W**eaknesses, **O**pportunities and **T**hreats) analysis "provides information that is helpful in matching... resources and capabilities to the... environment in which it operates. As such, it is instrumental in formulation and selection…"[5] Though the "Opportunities" and "Threats" portions of the SWOT were abandoned early on, the "Strengths" and "Weaknesses" provided valuable information on the perceptions of the various programs in different meta-constituencies.

The B-MAG identified dozens of strengths and weaknesses in each of the issue areas within the charge. Many were actually two sides of the same coin. Over the course of several meetings, the participants voted on each and every one with indications of "agreement" "neutrality" or "disagreement" with statements that reflected either "strengths in the current programmatic efforts" or "weaknesses in current programmatic efforts."

While clearly unscientific, the data gleaned did provide insight on the many compatible values held vis-à-vis watershed planning and protection – regardless of the political alliances. The information also showed exciting commonality in views on effectiveness and efficiency of these programs. Above all else, it demonstrated that there were more areas of agreement than disagreement and provided ample material for the contents of this Framework.

Process for Progress

Given the limitation on time and resources placed on the B-MAG, one month before the end of this process a "Writing Team" was formed with a single representative from five meta-constituencies, an academician and the facilitator. The B-MAG assigned them the responsibility for recording areas of agreement, characterizing areas of debate and, more broadly, crafting nearly the entirety of this Framework (Chapters 2 through 6). Their work was brought back to the entire B-MAG for endorsement.

Watershed Selection Team

On a parallel track, a "Watershed Selection Team" with representation from all meta-constituencies was assigned the responsibility of identifying criteria for selecting a pilot watershed and then making recommendations to the broader B-MAG for approval. Their work is presented as Chapter 7.

[5] http://www.quickmba.com/strategy/swot/.

Chapter 2 - A Strategic Look at a Statewide Vision for Watershed Planning and Protection

Today's Structure for Water Quality Planning and Protection

The federal Clean Water Act requires states to identify how they will plan for water quality protection through areawide wastewater treatment planning and non-point source pollution management. Sections 106, 201, 205(j), 208, and 303 of the federal Clean Water Act were consolidated into an integrated process that required the development and maintenance of a **Statewide Water Quality Management Plan (WQMP).** The purpose of the WQMP is to coordinate the three areawide wastewater management plans (covering 19 counties) with the State plan (covering the remaining 83 counties). The WQMP is composed of the 4 preceding wastewater management plans plus all approved facilities plans and all wastewater National Pollutant Discharge Elimination System (NPDES) permits excluding industrial process, thermal, stormwater and non-contact cooling water NPDES permits as specified in Section 2.324 of the WQMP. The WQMP addresses control of pollution sources, maintenance of stream use and water quality standards, protection of groundwater resources, and control of hydrologic modifications.

The WQMP identifies the policies and recommendations of the State of Illinois for the protection of water quality and the control of point and non-point source pollution. Today, the Illinois WQMP identifies Facility Planning Areas (FPA), includes every NPDES permit (every issuance becomes an amendment to the WQMP) and the generic Illinois Non-point Source Management Plan.

Water Quality Planning and Protection in the Future

Under a watershed approach to water quality protection, the WQMP would become a compilation of watershed-specific plans that identify both point and non-point source pollution control strategies. These strategies would emerge from the consideration of the condition of the waterbody and the needs of the communities and landowners within the watershed.

The premise behind a watershed approach is that many water quality and ecosystem problems can best be solved at the local watershed level rather than at the individual waterbody or discharger level. Activities in a watershed have a direct influence on the quality of the water resources and their designated use. Understanding what a watershed is and the particular components of a watershed are the first steps in protecting water quality and related resources. Watershed management can help with the use, protection and restoration of water quality and related resources, while allowing for economic growth and development.

As described throughout this Framework Document, watershed planning and protection involves local stakeholders and decision makers coming together to voluntarily identify the activities within the watershed that are contributing (or could potentially contribute) to degradation of water quality. These stakeholders work to reach agreement on programs and specific local actions that could be

implemented to address water quality threats.[6] Watershed planning and protection should dovetail with a community's comprehensive planning process – where those processes exist. In impaired watersheds, much of the threat identification and implementation planning will occur through the ongoing Total Maximum Daily Loading (TMDL) development process.[7] However, since there is a limited regulatory structure for nonpoint source pollution (which only includes Phase II Stormwater requirements), effective control of nonpoint source pollution depends heavily on a well coordinated program. This may include state guidance, NPDES Phase II permitting, local regulations and/or voluntary commitments to action. The watershed planning process fosters that commitment.

The members of the B-MAG agreed that water quality assessments, watershed planning and resource protection would involve efforts at both the State and local levels:

- **EPA (with opportunities for stakeholder contributions) would prepare a River Basin Assessment at the 14 plus 2 River Basin level[8] as the precursor to watershed planning. These would be updated on a five year rotational schedule. The River Basin Assessment is described in Chapter 3.**
- **Local units of government or a duly authorized agent would lead a stakeholder group (see Chapter 5) that uses criteria and technical assistance from EPA to create a Watershed Plan at the 52 sub-watershed (or more precise) level. These would typically be developed voluntarily following the completion of a River Basin Assessment (though sometimes concurrently). Authorized local government entities would adopt the Watershed Plan recommendations, and implement them. The Watershed Plan would then be updated every five to seven years by the Stakeholder Group. The Watershed Plan is discussed in more detail in Chapter 4.**

Historically, water quality focused, watershed management approaches have involved state level planning. In light of today's pressures, **the B-MAG believes the local stakeholders (government and non-government) within the watershed should lead voluntary efforts to develop Watershed Plans.**

Watershed Protection as an Incentive Driven Framework

[6] These might include: stormwater ordinances, buffer strips, BMP's for construction practices, consideration of impervious surface, density and location of development, preservation of greenspace, guidance on development of sensitive land, alternatives to wastewater discharge, preservation of wetlands, etc.…. These actions include an areawide wastewater management strategy addressing appropriate uses of, or limitations on, centralized or on-site waste disposal.

[7] TMDLs are part of a federal program administered by the States that identifies impaired waterways and provides a plan to reduce the pollutant loadings so that water quality standards will be achieved.

[8] The fourteen basin level plus two sub-basins results from the split of the Fox River Basin (Upper and Lower Fox sub-basins) and the Des Plaines River Basin (Des Plaines and Lake Michigan sub-basins).

In order to encourage local governments to develop local Watershed Plans, the State[9] would need to put in place a menu of meaningful technical assistance, financial and programmatic incentives. This is an important facet of any state program because, while there was significant disagreement within the stakeholder group as to the scope of the cost of such an effort, nearly every member agreed that developing and implementing a watershed plan at the local level would impose additional costs upon local government.

The B-MAG's intent here is not to make watershed planning an additional step to any present or future regulatory or EPA process. Rather, the intent is to offer financial, technical and programmatic incentives to reward a voluntary attempt to complete a viable local watershed plan.

In several meetings of the group, the stakeholders brainstormed in an attempt to identify federal, state and other incentives that would be significant enough to encourage local governments to take on this added cost. EPA will consider the development of additional incentives as interested parties might suggest. What follows below is not intended to be the final word on available incentives:

Technical Assistance

- EPA could provide educational and training programs in planning and development practices and techniques that promote and encourage watershed planning; and,

- EPA could develop an information warehouse that could be utilized by local governments when engaging in local watershed planning, or drafting local water protection ordinances. The warehouse would provide data, along with technical assistance from staff, necessary to identify local concerns or threats to water quality protection.

Financial Incentives

- More favorable financing terms for municipalities and sanitary districts that participate in watershed planning and integrate the watershed management plan in their facilities plan;

- Partial fee waivers could be granted (subject to enabling legislation);

- Local matching requirements for Section 319 planning funds could be reduced;

- Easier and even priority access to Section 319 grants; and,

- Clean Lakes Grants

[9] The B-MAG encourages EPA to work with the related state agencies to find additional opportunities to leverage resources that may provide additional incentives.

Programmatic Incentives

- If EPA criteria are met with the Watershed Plan, EPA could institute short turn-around times for permit actions, or put in place expedited schedules for certain kinds of permitting (subject to available resource); and,

- Implementation of a Watershed Plan on the local level should be a precursor to removing an impaired water from the State's Section 303(d) list (a federal listing of waterbodies where any segment is known not to meet applicable water quality standards).

Still, the availability of meaningful incentives is no guarantee that the State will be fully blanketed by locally developed Watershed Plans that are of sufficient detail to protect water quality.

Characterization of Disagreement Regarding Whether or Not Watershed Planning is a Regulatory Tool

Throughout this stakeholder process, a great deal of discussion focused on the use of a watershed plan as a state mandated regulatory tool. Perhaps more simply put, the group discussed the nature and legal effect of a watershed plan, and whether it would carry or impose additional regulatory weight, or whether it would simply provided a guide to local planners. During the stakeholder meetings, essentially two schools of thought emerged with regards to watershed planning.

One school of thought saw the State developing a "**River Basin Plan**" that would function as a non-binding, comprehensive water protection plan. This River Basin Plan would provide technical information indicative of the conditions present in the basin and the needs to be addressed. It would reflect a vision for the basin and would also prescribe action steps for the vision's realization.

The River Basin Plan would not prohibit the EPA from taking an action pursuant to its existing legal authority. The next stage, or level of planning, would occur at the local level. Local governments could collaboratively and voluntarily engage in planning on a watershed basis and set forth "action items" through existing political processes. Local governments that engage in planning following the guidelines, principles, and methodologies established by the EPA, could be eligible for additional preferences in state economic development programs, state transportation programs, state planning programs, state natural resources programs, and state agricultural programs (intergovernmental agreements or even legislation would be required in order to move in this direction).

Another school of thought again provides for two separate planning processes: one on the State level and another on a local level. On the State level, the plan would include more than an itemization of concerns and needs of the watershed. Further, where no local Watershed Plan exists, the State would consider setting forth minimum Best Management Practices (beyond NPDES Phase II minimum stormwater requirements) to protect surface water quality. On the local level, many of the elements of the plan would be similar to that envisioned by the school of thought above. This plan, however, would ultimately be subject to approval by the EPA. Once the plan is in place, it would then guide all subsequent state and local activities that affect water quality.

It is also important to note that the group did not have consensus that the State should move towards a watershed planning system if that system were to rely primarily on voluntary measures (apart from the components, such as NPDES permits, that are mandated by federal law) and eliminate FPAs. Some members of the B-MAG felt that reliance on social pressures, incentives and other voluntary measures provided the best framework for the pilot program. Still other members of the B-MAG felt that reliance on social pressures, incentives and other voluntary measures would not achieve the water protections that are needed.

Characterization of the Disagreement on a "Backstop"

There was disagreement among the B-MAG participants as to whether or not a third level of planning and protection would be needed as a "backstop" if local level planning fell short of a pre-determined minimum standard for content and quality or if it did not occur at all.

Several participants felt that it was imperative that the State create a five year rotating schedules for developing "**River Basin Plans**." This would begin in the second cycle of Watershed Planning (likely in years six through 10). These River Basin Plans would evolve on a mirror image scale to the Watershed Assessments. Necessarily, the scale would be much larger than the Watershed Plans and thus the policies implemented would likely be far more generic. To further encourage the planning process at the local level, this subgroup preferred that EPA refuse to allow these state developed River Basin Plans to be used as an EPA approvable plan. Thereby the incentives available to those local groups that have completed an extensive plan (as laid out by this report) would not be available. It was believed that this would further encourage local watershed planning.

An almost equal sized subgroup of the B-MAG felt that this "backstop" would completely contradict the letter and spirit of local watershed planning. It was viewed as a top-down approach that in the long run would not be meaningful to local communities. State developed River Basin Plans would not be implemented and would take considerable time on EPA's part to develop. Further, even the existence of a state developed plan might create disputes in the ultimate implementation of water quality protections in instances when a neighboring Watershed Plan differed from a broader state developed River Basin Plan. Finally, a few in this subgroup believed that the advent of a River Basin Plan would be tantamount to another layer of regulation thus further increasing permitting costs and the time to approve. This subgroup felt that time, effort and money would be better spent if a single "EPA point of contact" were assigned to help local communities develop local watershed plans by providing technical assistance, information, and collecting additional data that is useable by local watershed groups.

For Now, What Happens in Areas with No Local Watershed Plan?

Watershed Planning is a voluntary endeavor. It is expected that a multi-year phase-in of watershed planning will be necessary due to resource constraints and the time it takes to develop a plan - particularly a good local plan. During this first "cycle" it is possible that in some sub-watersheds no local plan will ever be developed. For now, when there is no local plan, the River Basin Assessment and the Statewide Water Quality Management Plan (which currently outlines the Facility Planning Area process) and all its elements will guide EPA in watershed protection at the more local watershed level.

Chapter 3 - The River Basin Assessment

River Basin Assessments are the precursor to watershed planning. Generically speaking, this state-led effort involves data collection and an evaluation of water quality in the river basin over a period of time. The River Basin Assessment also includes the federally mandated (under section 305(b) of the Clean Water Act) "**Use Support Assessment**." This subsection of the River Basin Assessment provides "designated uses" for each waterbody in the state. While one might say that the inclusion of such an element represents a "top down" approach to watershed planning and protection, the B-MAG believes that the local determination of a desired state for a waterbody (which must be sufficiently strict so as to meet the Designated Uses) is important.

It is important to note what the River Basin Assessment is not. It is not a prescriptive set of detailed recommendations for public policy. It is not an implementation document.

As such, it is a "snapshot" view of the condition of the area's water resource.

GENERIC CONTENT OF A RIVER BASIN ASSESSMENT

- Condition of the waterbodies;
- Identification of sourcewaters or designated outstanding resource waters that require special protection;
- Use Support Assessments;
- Causes and sources of water pollution; and,
- General protections (NPDES Phase II stormwater or local stormwater requirements, etc.) that are or need to be in place upon which a local plan could build.

More specifically, a River Basin Assessment is the compilation of many different types of assessments. This may include, to the extent that they are water quality related, items such as

- Assessments of Surface Waters (Chemical, Physical and Biological {Habitat, IBI, MBI});
- Inventory of Impaired Waters;
- Inventory of Land Use;
- Inventory of Threatened and Endangered Species;
- Inventory of Prime Farmland;
- Mapping of NPDES Permitted Discharges;
- Inventory of Phase II Stormwater Plans;
- Drinking Water Source Water Assessments (Surface and Groundwater)
- Wetland Areas;
- Areas of Critical Habitat and Concern;
- Environmentally Sensitive Areas (e.g., Highly Erodible Soils, Steep Slopes)

- Known Areas of Degradation Including Superfund Sites and Brownfield Sites;
- Inventory and Mapping Of Major Roadways (Existing and Planned if available from IDOT);
- Delineations of Sub-Watersheds and 100 Year Floodplains;
- Mapping of Water Quality Assessments Within The Sub-Watersheds; and
- Inventory of Local Ongoing Planning Efforts.

The completed River Basin Assessment will detail the status of the basin's water quality, an inventory of available protections and potential gaps in coverage which may be considered in the local Watershed Plan. Scale of each of these inventories and the mapping will be dependent on several things:

1) The size of the basin;
2) The quality of data; and,
3) How much information is available.

The final document will need to be both all encompassing and easily used as a resource for further planning. River Basin Assessments will be made at the fourteen major river basin level, with the exception of the Fox River Basin divided into the Upper and Lower Fox River sub-basins; the Great Lake/Calumet River basin split out of the Des Plaines River basin. Please reference Figure 1.

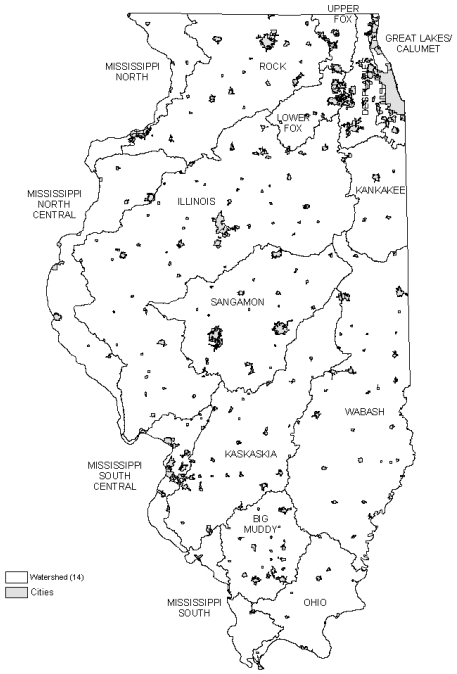
The B-MAG agrees that the River Basin Assessment will be developed by the Bureau of Water - EPA with input from IDNR, IDA and local stakeholders during the year after sufficient monitoring has occurred. Stakeholders in a given River Basin will have opportunities to involve themselves in the development of the River Basin Assessment via water quality monitoring, data collection, public meetings and open comment periods though this will be a state developed report. Vis-à-vis water quality monitoring, EPA will use discretion when utilizing data provided by stakeholder interests.

Minimum data requirements for the River Basin Assessment are consistent with those defined in the Water Monitoring Strategy 2002-2006 (EPA/BOW/02-005). Likewise the 303(d) impaired waters list data requirements will be consistent with the minimum data requirements set forth in the Illinois 2002 Section 303(d) List (EPA/BOW/03/016). These two documents evolve with technology and abilities of field crews, as these documents are updated the River Basin Assessment Report will reflect those changes during the five-year River Basin Assessment Report update. The prime farmland information will be considered with regard to the EPA and IDA Memorandum of Understanding. Threatened and endangered species will be considered with regard to inventorying species present. The formal Consultation Process itself will not be a part of the development of the River Basin Assessment.

The River Basin Assessment identifies sensitive and protected resources as well as protections in place in the watershed. Please see examples in Table 1.

By identifying potentially sensitive or degraded areas, the Assessment will help local stakeholders take steps towards protecting and/or restoring them. Via GIS and location- specific resource definition, local planners will be able to better direct growth if they so choose. By identifying specific programs and protections within the River Basin Assessment, state and local planners will have

readily identifiable tools to use when defining areas for future growth. This Assessment will help the local planners formulate goals for the sub-watersheds and proceed with a local Watershed Plan for protecting local water quality.



Proposed River Basins for a five year River Basin Assessment cycle (the "14 + 2" schema). Noting that the Fox River has been divided into the Upper Fox River and Lower Fox River and that the Des Plaines River Basin has had the Lake Michigan/Calumet River split out of that River Basin.

Figure 1: Proposed Basins For A Five Year River Basin Assessment Cycle

A SAMPLING OF SENSITIVE RESOURCES IDENTIFIED IN THE RIVER BASIN ASSESSMENT		
Floodplains	Critical Habitats	303 (d) Impaired Waters
Wetlands & Important Hydric Soils	State Parks, Forest Districts and Other Public Protected Open Space	High Quality Waters (waters requiring special protections)
Source Water Protection Plans	Prime Farmland and designated farmland areas if available	Facility Planning Areas (FPAs)
Ecosystem Partnerships	Permits (NPDES & NPDES Phase II Stormwater)	Stormwater Ordinances
SRF Projects	NRCS Programs	Ongoing Planning Efforts
Section 319 Grants	Anti-degradation Regulation	Total Maximum Daily Loads
Soil & Water Conservation District Programs		Source Water Protection Plans

Table 1.

Chapter 4 - The Locally Developed Watershed Plan

Local watershed planning would be strongly encouraged, incentivized and supported by EPA, although not mandated.[10] EPA will design and implement a program that includes incentives and technical assistance to local governments who desire to work together on a watershed basis to develop detailed Watershed Plans for non-point and point source pollution prevention and reduction. Financial incentives would include priority access to Section 319 funding and more favorable financing terms for infrastructure loans. Process related incentives should be designed to expedite permitting or facility plan review. Programmatic incentives should be developed so that the rigors of the TMDL program are avoided, when consistent with federal law and guidance, by a watershed plan including requirements stringent enough to achieve water quality standards.

USEPA's Section 319 Guidance

On August 26, 2002, USEPA issued guidance for developing Watershed Plans in order to ensure eligibility for Section 319 funding. Beginning with FY03 grants, the USEPA is applying new requirements for watershed planning. All watershed projects involving impaired waters of the State that are funded with incremental Section 319 monies (as set forth by the federal Clean Water Act) must be supported by a Watershed Plan that includes the nine minimum elements listed in Figure 2.[11]

In this guidance, USEPA "encourages states to implement watershed-based plans holistically, as this approach usually provides the most technically sound and economically efficient means of addressing water quality problems. Consistent with this approach, USEPA encourages states to include in their watershed-based plans approaches that will address all of the sources and causes of impairments and threats to the watersheds in question. Thus, the watershed-based plans should address not only the sources of water quality impairment, but also pollutants that need to be addressed to assure the long-term health of the watershed."

The Content of a Watershed Plan in Illinois

The B-MAG envisioned that local units of government and other stakeholders (see Chapter 5) that choose to engage in local watershed planning will produce more specific and results-oriented Watershed Plans at the sub-watershed level relative to those that might be produced at a larger basin-level. This locally developed Watershed Plan should generally follow in sequence, the development of the River Basin Assessment discussed in Chapter 3. The Watershed Plan begins with a vision shared by the stakeholders in the watershed. It continues on with a road map for bridging the gap between the

[10] There was significant division among the B-MAG membership concerning the necessity for imposing regulated local watershed planning and local watershed planning on a voluntary basis. The group was largely split in their desire here. There was, however, consensus that local watershed planning should be so heavily incentivized that it is just not feasible to opt out of watershed planning.

[11] Excerpted from are excerpted from USEPA's "Supplemental Guidelines for the Award of Section 319 Nonpoint Source Grants to States and Territories in FY 2003" at http://www.epa.gov/owow/nps/Section319/319guide03.html

current state of the watershed (as evidenced by the River Basin Assessment) and the realization of the stakeholders' vision. Generically speaking, it is a plan that details specific action steps for using a variety of voluntary and regulatory tools to ensure the preservation and perhaps enhancement of water quality in a given watershed. The Watershed Plan is a report that further details the desired quality or state of the water resource (relative to the River Basin Assessment). This is where the visioning for the watershed's "desired state" should happen. The visioning process should include consideration of the social and economic needs of the landowners and communities. A comprehensive land use plan (if present), areawide wastewater treatment plan and facilities planning would be incorporated. The Watershed Plan is also a prescriptive set of recommendations for public policy. It is expected that the locally developed Watershed Plans will contain the specificity needed to make decisions on local actions. Once adopted by those local governmental entities with the authority to implement these recommendations, it becomes an implementation document.

Above all else, the Watershed Plan includes the metrics for success and the action steps that must be implemented to ensure the attainment of the locality's vision.

Presuming that local units of government wish to preserve access to § 319 monies, these Watershed Plans should also satisfy the USEPA guidance on watershed management plans presented below (Figure 2). Depending on other issues considered by the local planning group, in addition to water quality, the plans may also fulfill many elements of the Local Planning Technical Assistance Act (20 ILCS § 662), the Local Legacy Act (20 ILCS § 3988), the Local Land Resource Management Planning Act (50 ILCS § 805) and other statutes. The approach outlined here is also similar to the nine-step, three-phase planning process that the Natural Resources Conservation Service (NRCS) advocates for local-level resource planning (please reference Appendix 6).

Morton Arboretum, DuPage County

Because the local-level watershed plans described here would incorporate many of the same elements as plans prepared under USEPA guidance, under existing state statutes, under the NRCS resource planning program or under other initiatives, those plans should be incorporated into local watershed plans to save time and resources. There is no need to duplicate work that has already

been done. However, if those programs are not as comprehensive as the Watershed Plan framework described below, they should not be taken as mere substitutes for it.

USEPA's Nine Minimum Elements For A Watershed Plan

1. An identification of the sources that will need to be controlled to achieve load reductions established in the State's nonpoint source TMDL or any other goals identified in the watershed-based plan.

2. An estimate of the load reductions expected from the management measures described.

3. A description of the nonpoint source management measures needed to achieve load reduction and identification of the critical areas in which the measures will need to be implemented to achieve the nonpoint source TMDL.

4. An estimate of the assistance (financial and technical) and authorities anticipated for implementing the plan.

5. An information/education component, which will enhance the public's understanding of the project and encourage public involvement in the nonpoint source management measures.

6. A schedule for implementing the nonpoint source management measures identified in the plan.
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7. A schedule of interim, measurable milestones that can be used to determine whether nonpoint source management measures or other control actions are being implemented.

8. A set of criteria that can be used to determine whether substantial progress is being made toward the water quality standards and, if not, criteria that will help to determine whether the nonpoint source TMDL should be revised.

9. A monitoring component to evaluate how effective the implementation efforts are as measured against the set of criteria developed as described previously.

Figure 2. USEPA's 9 Minimum Elements for a Watershed Plan

The B-MAG discussed USEPA's minimum elements and whether their totality served the needs of the State of Illinois and its planning processes and resultant protections. It was decided that a pilot program ought to test the inclusion of a more refined set of elements and, if proven to be of value, that they would be more broadly requested as part of a minimum threshold for watershed planning and protection in the State. In order for local Watershed Plans to become part of the new statewide WQMP, the Watershed Plans would need to be developed according to EPA–specified

criteria. These criteria, when paired with the River Basin Assessment should satisfy the USEPA's 319 guidance.

The B-MAG agreed that localities would have varying degrees of ability to develop Watershed Plans. As such, there is a certain degree of variance in quality and content that is expected. With that in mind, the B-MAG agreed that a Watershed Plan would need to address the elements listed in Figure 3 in order to be eligible for the various financial and programmatic incentives available.[12] Stakeholders may offer a simple response to one or more elements, although EPA may request a more detailed response in order for the Watershed Plan to qualify for available incentives.

It is worth noting that different watersheds will have different needs. A watershed in a predominantly rural area far from urbanization pressures would have a different sort of Watershed Plan than a watershed that is already highly urbanized or a watershed on the suburban fringe that is experiencing rapid growth. One size will certainly not fit all.

Therefore, local stakeholders should tailor their Watershed Plan to meet their needs, and make adjustments to the following outline accordingly:

[12] Please note that access to technical resources and assistance is an unconditional incentive available to all localities in need of these resources for developing a Watershed Plan.

Elements of a Locally Developed Watershed Plan

1. Inventorying and Assessment (more detailed than the State plan – drawing on local information)

a. Describe sources of water quality degradation;

b. Identify current land uses;

c. Assess existing local regulations; and,

d. Describe and/or quantify existing protections such as NPDES permits, Phase II plans, existing ordinances, CRP and CREP acreage, etc.

2. Estimation of Future Needs and Concerns

a. Estimate twenty-year (or different time period, as appropriate to the planning area) growth patterns and land uses;

b. Estimate expected changes in sources of degradation in water quality ; and,

c. Identify funding, site-specific projects, policy changes and other resources needed to continue and expand (if necessary) protection programs.

3. A Vision For The Watershed

a. Outline issues and opportunities, incorporating local communities' comprehensive and other plans;

b. A vision for wastewater treatment and water supply and possibly other infrastructure;

c. A vision for land use; and,

d. A vision for protection and/or restoration of water quality.

4. Plan for Implementing the Vision

a. Identify a plan for protection and/or restoration of water quality;

b. Identify steps needed to achieve surface water quality protections;

c. Identify steps needed to protect groundwater quality;

d. Estimate pollutant reductions that will be achieved through implementing protections;

e. Identify tools that could be used to achieve these goals;

f. Identify monitoring and enforcement tools for use by state and local officials;

g. Identify the amount of funding and technical assistance needed to implement the watershed plan, possible funding and technical assistance sources, site-specific projects, policy changes, and steps to secure the needed resources;

h. Identify ways to ensure consistency with local communities' plans; and,

i. Set a schedule for implementing the actions identified in steps a. through h.

5. Metrics for Evaluation

a. Identify interim, measurable milestones for determining whether the action steps above are being implemented;

b. Criteria to determine whether pollutant reductions are occurring and progress is being made toward water quality goals; and,

c. A monitoring and evaluation plan to evaluate the effectiveness of the Watershed Plan and its implementation.

Figure 3.

A Concluding Observation

Although the issue of who will compose the "Watershed Planning Committees" is addressed more fully in Chapter 5, it is important to highlight the importance of shaping the plan locally and securing local buy-in. Most elements of the plan will likely be carried out at the local level, and much of the plan will depend on municipalities, counties and other governmental bodies for the legal underpinnings of its implementation authority. In addition, where local governments wish to include elements beyond those listed in the plan above, they should have the ability to do so. Institutional arrangements (e.g., Commissions or intergovernmental agreements) with regulatory authority and dedicated funding must be in place to increase the likelihood of effective implementation. Similarly, local stakeholders should have the ability to emphasize or incorporate different strategies to achieve their goals as they deem best. The plans should be judged based on their ability to meet certain goals (notably, cleaner water) rather than by the methods used to meet those goals.

Mazonia Braidwood

Chapter 5 - Who Creates and Implements a Local Watershed Plan?

A well designed Watershed Plan should provide guidance, technical assistance and information to local watershed efforts that lead to appropriate water protections and improved coordination within EPA, across state programs and in well coordinated local communities. The actual work in developing and implementing a Watershed Plan should be done at the local level by local stakeholders. Local watershed planning works because it has the involvement and buy-in of local communities. A key to this successful outcome of these local watershed efforts is the consensus-building process used to develop effective partnership approaches and decision making – and who participates in it.

What Stimulates the Development of a Local Watershed Plan?

There are several potential drivers of an effort to create a Watershed Plan.

All around Illinois, movements toward watershed planning have begun in different quadrants. Some were started because of citizen pressures to better manage the water resource. The formation of Stormwater Management Commissions has been the impetus for some watershed planning. Activities sponsored by NRCS and Illinois DNR have triggered additional watershed planning efforts. Regardless, local units of government need to be notified of these ongoing efforts. **The B-MAG participants believe that while the development and adoption of a Watershed Plan should be at the local government level, whatever the source of the motivation, these efforts should be recognized and supported by EPA. The B-MAG recognized the importance of making the necessary resources available to implement the program effectively.**

When watershed planning does not have its own momentum, the "trigger" for a local group, as discussed in Chapter 2, to begin the process of developing a Watershed Plan should be the finalization of the River Basin Assessment. At that point, local groups should have the necessary "feedstock" for developing their own locally led Watershed Plan. When locally-led decision processes are undertaken, socially accepted decisions will follow. Successful water quality and other natural resource management is based on the ability to recognize the importance of a sound, consensus–based process used to develop and implement plans.

Who Leads and Creates Local Watershed Plans?

Local units of government or their duly authorized agents should lead watershed planning and protection efforts. It is this level of involvement that is typically the keystone for a successful endeavor. Many times a leader or "champion" emerges from municipal or county government, County-wide Stormwater Commissions, a county soil and water conservation district, or an Extension Service. Alternatively a citizen group may emerge and seek to become authorized to lead such efforts and to develop the resource base to create a watershed planning entity. To actually

develop a plan, a multi-stakeholder[13] local **Watershed Planning Committee** should be convened by the local units of government or its duly authorized agent and subsequently authorized by affected local units of government. EPA will further encourage all units of local government within a watershed to participate in the process.

Stakeholder involvement is more than just holding a public meeting or seeking public comment on a new regulation. Effective stakeholder involvement provides a method for identifying public concerns and values, developing consensus among affected parties, and producing efficient and effective solutions through an open, inclusive process. Managing that process requires some attention to the logistics and synergies of creating and operating a team of diverse people pursuing a common goal. Whatever the reason for conducting watershed planning activities, stakeholders will help. Inclusive processes increase awareness and understanding of issues and challenges, generate more data, help determine priorities, increase support for programs, and generally enhance the likelihood of success. Stakeholder processes often provide the reality check for scientific efforts: they seek to synthesize ecological, technical, social, cultural, political, and economic concerns through a process that helps to define what's actually doable.

Legitimate stakeholders on the local Watershed Planning Committee hail from a population of candidates that are:

1. Likely to be affected by a local policy;
2. Responsible for implementing a public policy; and,
3. In a position to prevent the implementation of a public policy

Legitimate stakeholders are usually viewed as leaders in their geographic or ideological community. Oftentimes they are (or represent):

- Local Elected Officials;
- Local Planning and Zoning Offices;
- Regional Planning Agencies;
- Conservation/Environmental Groups;
- Residents and Landowners;
- Farm Owners and Operators;
- Business and Industrial Representatives;
- Builders and Developers;
- SSD Officials and/or Wastewater Agencies;
- Soil and Water Conservation Districts;
- Cultural and Historical Groups;
- Community Leaders;
- Homeowners Associations; and,
- EPA Local Watershed Coordinator (see Chapter 6)

[13] Many of the concepts in this paragraph have been borrowed from "Getting in Step: Engaging and Involving Stakeholders in Your Watershed" found at http://www.epa.gov/owow/watershed/outreach/documents/stakeholderguide.pdf

"Balance" is an important concept in the composition of a stakeholder group. The Watershed Planning Committee should seek approximate balance in the number of participant representatives from each of the above mentioned constituencies. Watershed Planning Committees should guard against "stacking the deck" in favor of one constituency or another. Oftentimes balance is achieved by forming caucuses where interest groups are identified and a specific (sometime proportionate, sometimes equal) number of seats is allocated to representatives of categorical perspectives.

The B-MAG believes that these Watershed Planning Committees must be supported by a subordinate Technical Advisory Committee. Counsel may be drawn from all levels of government as well as the private, civic and not-for-profit sectors.

The credibility of any product evolving from a stakeholder process is a function of the group called together to produce it. The B-MAG underscores the need for local Watershed Plans to be developed by a balanced group of legitimate stakeholders.

Local Approval and State Endorsement of the Watershed Plan

The work of the Watershed Planning Committee can not occur in a vacuum. Ideally, before moving to the implementation stage, there are three very important milestones:

1. Public Notice, Meeting and Comment Period;
2. Approval By Affected Local Units of Government;[14] and,
3. EPA endorsement and, if the Watershed Plan adheres to EPA thresholds, incorporation within the Illinois WQMP.

Ultimately, the Watershed Plan should be available to the public for their input as they are also stakeholders in the planning area. Some of the stakeholders will probably already be represented on the Watershed Planning Committee or on the Technical Advisory Committee. Via Public Notice and Meetings, the remaining non-committee public should be afforded the chance to contribute to the Watershed Plan and its implementation by providing periodic input on their concerns, expressing alternatives and desired outcomes.

No single government entity should have the ability to bring a collaborative process to its knees. That said, without nearly universal government approval, the likelihood of effective implementation is greatly reduced. Within the constructs of the Watershed Planning Committee's adopted ground rules, approval should be sought by all authorized implementing government entities.

The B-MAG believes that after public comment has been factored into the final version of the Watershed Plan, the Plan must be presented to local government entities for adoption or endorsement. The lack of adoption by one or more of the local government participants shall not diminish (in the eyes of the EPA) the validity of the plan for the remaining local governments that do adopt the Watershed Plan.

[14] Municipal level and, if not available, then the county should step in and be the local government authority.

If it is to succeed, this new statewide Watershed Planning framework must involve some level of endorsement by EPA. **The B-MAG presumes that the active engagement of the EPA Watershed Planning Coordinator will significantly reduce the likelihood that an endorsement by Illinois EPA's headquarters staff will involve an incremental step in the watershed planning process or any additional "review" component at by the Bureau of Water or others.** That is to say that if the EPA Coordinator is engaged, there should be the requisite quality assurance such that EPA can readily endorse a locality's final Watershed Plan. EPA's endorsement will mean certifying that the plan includes the elements in Figure 3 and does not conflict with local, state or federal clean water laws or regulations.

Implementation of the Plan

Once endorsed by EPA, the successful implementation of a locally developed Watershed Plan requires enormous commitment and energy. These plans are not short term fixes, but rather long term action plans that oftentimes require cultural changes in how we view natural resources and the world that surrounds them. Institutional changes and resource commitments must also be put into place. As such, progress toward overarching goals can sometimes be slow. It is important for Watershed Planning Committees to establish interim milestones and measure progress accordingly. Having systems in place to measure and communicate progress is a critical part of watershed work. Appropriate measures not only keep watershed issues on people's radar screens, but, as they are met, allow stakeholders to share successes and to highlight new challenges to the watershed.

From a regulatory perspective, the implementation of a Watershed Plan occurs within those units of government that have the authorities in place to do so. Which of these units of government is responsible or what activities they are responsible for is a matter of specific jurisdiction and may vary from locale to locale. Authorities may need to be clarified. Regardless, the well-written Watershed Plan must indicate precisely which entities are responsible for which regulatory programs.

From the voluntary perspective, the adage "it takes a village" is apropos. Implementation of the plan would be carried out by all units of local government, industry, farmers and developers along with every local citizen. It is a common misperception that certain constituencies have differing values concerning natural resources. At the end of the day, we all live in the same watershed. Again, however, as in the regulatory construct, successful implementation necessitates specificity in responsibility for precisely who will do what to protect water quality.

The successful implementation of the plan will depend on any one or more of several additional factors:

- The local plan must be developed by local stakeholders;
- The plan must be consensus based;
- The plan addresses local water quality needs;
- The plan is specific to the needs identified by the local level;
- There is funding through various sources to implement the plan;
- The plan helps build local partnerships and coordination with all levels of government;

- Notification and two-way communication between federal, state and local units of government within a watershed as they implement elements of the Watershed Plan;
- The plan ensures implementation and follow up;
- The plan incorporates voluntary incentive based measures;
- The plan leverages and may even maximize existing authorities;
- The plan is economically viable for all stakeholders; and,
- Effective coordination of state government programs.

This latter point is addressed next in Chapter 6.

Fishing at Beaver Dam

Chapter 6 - The Role and Structure of the State's Involvement

Today's problems related to the water environment are often subtle, chronic and inter-related. To better address these issues, the federal government began to encourage a more highly tailored watershed approach to resolve water quality problems. Such an approach, focusing efforts within specifically defined hydrological boundaries, could leverage local government structures and authorities as well as local interests and enthusiasm to identify successful strategies for maintaining and restoring the integrity of local waters. This kind of an effort cannot come from the top down, or be mandated by the State of Illinois. It must be a matter of local choice and depends on strong local participation and support. Thus far, this framework has discussed the following roles for Illinois state government:

- Chapter 2: The Development of A Meaningful Incentive System
- Chapter 3: Monitoring, Data Collection, Analysis and The River Basin Assessment
- Chapter 5: The Endorsement of A Locally Developed Watershed Plan

In this Chapter, the B-MAG discusses how various state programs might come together in a manner that creates greater state level efficiencies while affording more effective water quality protections - without additional state imposed mandates on local government or undue burden on local industries and citizens.

Greater Programmatic Efficiency Through Watershed Planning

As the State moves from its current piecemeal approach to water quality protection to a watershed planning and protection framework, there would be a transition period as the River Basin Assessments and local Watershed Plans are formulated and adopted. During this transition period, fully complimentary, but parallel programs would exist. Once the watershed planning process is in place, it will affect many existing state programs – most notably those of the EPA, but to a lesser degree those of other state agencies as well. This section outlines how a shift to watershed planning and protection could impact EPA as well as how it would affect some of the more prominent water programs.

The specially designated EPA Coordinator from the Watershed Management Section within the Bureau of Water would be the focal point for handling all Agency aspects specifically related to watershed planning.

For each of the designated River Basins, EPA would establish an internal **EPA Watershed Guidance Team.** Its members would manage the program elements in their duty areas within the River Basin that they are assigned. This team would be comprised of EPA staff from all key current EPA programs as depicted below:

Probable Members of the EPA Watershed Guidance Team

For each of the 14+2 River Basins, a Team would be comprised of staff from:

- EPA Coordinator
- Standards Section
- Non-Point Source Unit
- Monitoring Section
- Municipal NPDES Unit
- Regional office
- SRF Section
- Planning Unit (TMDLs)
- Industrial NPDES Unit
- Groundwater / Source Water Protection Program.

Figure 4.

The team would also include the regional planning commission, where applicable.

Through the EPA Watershed Plan Coordinator, team members would be responsible for providing technical assistance and assuring that the various program activities within their specified River Basin are considered in the locally developed Watershed Plan. For example, the team member responsible for water quality monitoring would work through the EPA Watershed Coordinator and members of the local Watershed Planning Committee to identify areas within a local watershed and/or parameters that need monitoring. Through the EPA Coordinator, the Watershed Guidance Team's Monitoring member would keep all EPA Team members apprised of assessment and data collection efforts.

Further, good government principles would suggest that the ongoing efforts of other state and federal agencies and departments should be involved in the watershed management teams. **The B-MAG proposes that the EPA Coordinator also serve as a liaison and coordinator to the full range of state and federal governmental interests.** Though this would not preclude these other agencies from active roles in assisting local entities in developing Watershed Plans, it might help governmental bodies better prioritize and allocate the investment of staff resources.

Delivery Systems for State Level Technical Assistance, Incentives and Other Support

Assistance for Local Watershed Planning Committees

The main instruments for assistance are technical expertise and financial resources. EPA will bundle its own assistance programs and provide resources in a concentrated, coordinated manner to Watershed Planning Committees interested in creating detailed, action-oriented watershed management plans that also have the institutional arrangement and regulatory and non-regulatory framework for effective plan implementation. In order to qualify, these plans need be developed consistent with EPA guidance. Further, the EPA Coordinator will help Watershed Planning Committees access resources that may be available through the Environmental Quality Incentives Program (NRCS); Conservation Reserve Enhancement Program (NRCS and IDNR); the Conservation Practices Program (IDA); Wildlife Habitat Incentives Program and Wetlands Reserve Program (NRCS).

The designated EPA Coordinator will serve as the single point of contact for interactions between EPA (and other state agencies) and the local Watershed Planning. This EPA Coordinator will either provide the technical assistance needed or arrange for such assistance to be provided.

Timeline

Localized Watershed Planning is not short term endeavor. Though the local timeline for watershed planning might be compressed from start to finish, the EPA River Basin Assessment cycle may be on a five year schedule. The various phases of watershed planning are presented below (some phases may run concurrently):

Phase	Activities
1	Monitoring is the first step in watershed planning. The Monitoring Member of the EPA Watershed Guidance Team will keep the EPA Coordinator apprised of monitoring efforts ongoing in the watershed. During the winter when the Intensive Basin Survey (IBS) sites are being selected, the Monitoring Team member would work with the Watershed Guidance Team to identify areas (e.g., lakes, streams, fish contaminant & other) that would benefit from monitoring. The other EPA Watershed Guidance Team members will begin collecting information used to support the local Watershed Planning Committee in their development of the Watershed Plan including: (i.e., 303(d) listed waters, ongoing 319 projects, point source maps, un-sewered communities, groundwater protection areas, functioning watershed groups).
II	EPA will develop the River Basin Assessment for the local watershed. With assistance from The Monitoring Team member, the EPA Watershed Coordinator will set up a public meeting within the River Basin for public review of the River Basin Assessment. The other team members will continue data collection. The Watershed Planning Committee is formed and reviews the monitoring strategy.
III	The Watershed Planning Committee develops its vision for water quality in the watershed, assesses the gaps between the current water quality and that vision and develops voluntary and other strategies for bridging the gap. Performance measures and interim milestones are also identified. The resulting local Watershed Plan (see Chapter Four for its component features) is introduced to the public.
IV	Input from stakeholders is factored into the final version of the Watershed Plan. That consensus-driven document is submitted to local units of government for approval and EPA for endorsement. Minor revision may be made in accordance with the Watershed Planning Committee's groundrules.
V	EPA actions (e.g., NPDES permits) should be consistent with the local watershed plan. Where this is not reasonable or appropriate or in compliance with state or federal law, EPA may use discretion and explain divergent actions to the Watershed Planning Committee. NPDES permitting may occur on a cyclical basis. Local action items are undertaken in accordance with the Watershed Plan.
VI	Start over, beginning roughly every fifth year, monitoring.

Table 2.

Engagement of Related State and Regional Planning Agencies

Watershed planning and protection activities intersect with the mission and mandate of state agencies beyond EPA. Examples include identification of threatened and endangered species (by IDNR), identification of prime farmland (by IDA), identification of future transportation projects (by IDOT) and identification of historical landmarks by the Illinois Historic Preservation Agency (IHP). IDNR, IDA, IDOT, IHP and other state agencies may need to be engaged even as local Watershed Plans are developed. To the extent that actions by these agencies may be a part of implementing the watershed management plan for water quality, the EPA Coordinator must develop and maintain lines of communication between the appropriate contact in those agencies and the Watershed Planning Committee.

Regional planning agencies (i.e., Northeastern Illinois Planning Commission, Southwestern Illinois Metropolitan Planning Commission, Greater Egypt Regional Planning and Development Commission) currently have a critical role in developing and implementing Watershed Plans within their jurisdictions. Activities include:

- Encouraging adoption of stormwater ordinances or other local requirements;
- Providing models of various kinds;
- Managing public comment on facility plans (for loan projects) or engineering reports (for projects not seeking loans) for individual wastewater treatment projects, including review for consistency with the watershed plan;
- Assisting watershed planning groups in locating funding for implementation of projects; and,
- Identifying resources and processes for dispute resolution.

These activities clearly have value today – and will continue to have value as Watershed Plans become the guiding tool for water quality protection. Where applicable, representatives from regional planning agencies must be active participants on the Watershed Planning Committees and Watershed Guidance Teams. Their role is not displaced or overshadowed by the EPA Coordinator in any way.

The Watershed Planning Delivery System

Though watershed planning may be initiated by EPA, local interest or through any one of a great many federal or state agency programs, overall, the delivery system for an effective statewide Watershed Planning framework would be based on state enabling legislation, Board or Agency actions that would:

- Assure adequate funding and staff resources at both the State and local levels;
- Authorize EPA to develop guidelines and minimum components of a watershed management plan, which would allow those watersheds covered by an "EPA concurrence" plan access to the bundle of related state funding, services and programs.

Some members of the B-MAG felt that legislation should enable urban and urbanizing counties to form regional watershed based institutions for stormwater management with dedicated funding

mechanisms. Legislative provisions that authorize watershed based institutions for stormwater management with dedicated funding mechanisms might create more equal partnerships between municipal and county governments as well as permissive (not mandatory) authorities. However, some members expressed concern that existing countywide stormwater management agencies exceed statutory powers and impose other restrictions and requirements not authorized by state law.

It is expected that there will be various "implementers" of a local Watershed Plan. EPA, sewer sanitary districts, municipalities and industrial facilities all implement aspects of the Watershed Plan that may be related to point source discharges through facility planning and NPDES permitting. The NPDES Phase II program requires that local government entities (i.e., municipalities, counties, stormwater commissions) adopt and enforce pollution prevention plans and ordinances related to stormwater that implement non-point source pollution protections identified in the Watershed Plan. Soil and Water Conservation Districts assist landowners in rural and urban areas in establishing practices that protect water quality from sediment and nutrients. Watershed groups provide education/outreach, overall promotion and coordination of the implementation. EPA reviews facility plans and permit applications for consistency with the Watershed Plans.

With so many parties engaged in implementation, it is certainly possible that there may be disputes. What then?

What Happens When There is Disagreement between Local Entities on How to Implement the Plan? Or Disagreement About What Constitutes "Consistency"?

When EPA Has Regulatory Authority

If there is disagreement between local entities (with equal standing) about an implementation issue, EPA will implement the action within the bounds of its authority or EPA may remand the determination for local resolution. Where the actions of one local entity may be more consistent with the Watershed Plan than the other, EPA will give preference to the more consistent application.

For example, if a sanitary district comes forward with a loan-related facility plan that identifies the need for an expanded discharge and there is disagreement by a planning council or the public with the need for increased capacity, EPA may make the final determination relying on its typical approaches to evaluating capacity need, considering comments from both sides of the discussion.

Similarly, the Agency will make a final determination of what constitutes consistency with an approved Watershed Plan for the purposes of that consistency being considered in a regulatory or loan review.

When EPA Has NO Regulatory Authority

If there is inconsistency between local entities about an implementation issue, the issue must be resolved at the local level.

Figure 5.

How Existing State Programs Would Operate in a Watershed Planning Framework

Broadly speaking, a Watershed Plan would guide all subsequent state and local activities that affect water quality.

Although the programs are listed here separately, it is important to note that efforts should occur, both in the state-level River Basin Assessment and the local-level Watershed Plan, to coordinate and (where possible without sacrificing water protections) streamline and consolidate program activities. Ideally, the watershed management approach would help fill current gaps in water protection programs but also eliminate duplications and inefficiencies, resulting in a system that is both more protective and less burdensome than the status quo. The results of the pilot program proposed in Chapter 7 will be instrumental in refining what is considered here as little more than conjecture.

Water Quality Management Plan (WQMP)

The Statewide Water Quality Management Plan would be the aggregation of all the River Basin Assessments and Watershed Plans. All NPDES permits, facility plans for loans and FPA expansions, TMDLs, and other EPA actions would need to be consistent with the WQMP.

Anti-degradation Analysis

Anti-degradation analysis would occur early in the facility planning stage and in accordance with EPA guidelines. EPA would expect to see alternatives examined by the applicant and a facility plan submitted that reflect(s) the protection strategies in the watershed plan.

National Pollutant Discharge Elimination System (NPDES) and NPDES Phase II

NPDES permit renewals would be shifted to a watershed-based five-year cycle, although new permits may be issued between cycles and as described earlier in Phase 5 (Table 2). Effluent limits would be reduced as needed to meet TMDLs and site-specific restrictions, but deviations might be allowed under a tradable pollutant permit arrangement. NPDES permits would be available on-line for public review and input. **Overall, the B-MAG believes that existing law provides EPA with the authority and obligation to prohibit discharges from contributing to violations of water quality standards. The B-MAG believes that EPA's use of the Internet to make NPDES documents available should continue, and be strengthened.**

The linkage to the NPDES Compliance Monitoring and Enforcement program occurs here. EPA staff will audit and inspect facility performance consistent with the NPDES permit.

EPA intends to develop additional guidance concerning the implementation of NPDES Phase II. The guidance should be made available to local Watershed Planning Committees for consideration in the development and implementation of local Watershed Plans.

Although time constraints did not allow for detailed discussion, there was some degree of interest in collaborating further on a review of the Illinois' NPDES Phase II stormwater program. If weaknesses are noted, modifications to the program could be considered to ensure that, consistent with existing law, stormwater runoff does not contribute to water quality problems.

Total Maximum Daily Load (TMDLs) Policy

A TMDL (if developed) would be an important component of the assessment portion of a watershed plan, since it identifies reductions in loading to an impaired waterbody needed to achieve water quality standards. Such load reductions for point sources would be incorporated into NPDES permits. Load reductions needed from non-point sources would be used to guide the choice of best management practices or the "action steps" of a local watershed plan. Similarly, the TMDL implementation plan (developed as part of the TMDL process) would form the backbone of a local watershed plan. If the Watershed Plan is developed first, it could potentially substitute for a TMDL.

TMDLs would be established or revised on a five-year cycle. TMDLs would have to be consistent with the Watershed Plans, and their loading levels must be reflected in NPDES permits and in non-point source protections (including stormwater management plans). TMDL plans would be incorporated into the Watershed Plan and could be used to meet some of the elements of the Watershed Plan. In time and with approval from USEPA, Watershed Plans may be developed and implemented at a sufficient level of detail that allows the Watershed Plans to replace the need for a TMDL.

Non-Point Source Pollution Programs

The B-MAG overwhelmingly felt that non-point source programs are not adequately targeted to geographic areas most in need. The Watershed Plan could specifically identify minimum development standards and non-point source BMP's that would work best in different locations in the watershed (*e.g.*, stream bank stabilization, buffer strips, enrollment in Conservation Reserve Program ["CRP"] or Conservation Resource Enhancement Program ["CREP"], adoption of NPS ordinances, etc.). **Watershed plans should specify non-point source BMP's and their strategic locations as much as possible.** Because financial incentives may not be ensuring that we attain water quality standards, the plan could include other approaches (in addition to incentive-based ones). Proper targeting will help efforts to identify and prioritize effective strategies and estimate expected load reductions. **The B-MAG unanimously agreed that one weakness of the current system is that there is not enough funding for the incentive-based programs to ensure that water quality standards will actually be met.**

Surface Water and Groundwater Monitoring and Assessment

These programs would be expanded to produce the information needed for the development of Watershed Plans on a five-year cycle, and also to provide the information needed for sufficient monitoring and evaluation. **There is broad agreement in the B-MAG on the usefulness of targeted monitoring data that identifies threats to water quality and indicates the**

efficacy of local watershed plans and attainment of the State's water quality management plan.

Source Water Protection / Groundwater Protection

Drinking water sources, wellhead protection areas and groundwater regulated recharge areas would be identified in the River Basin Assessment and subject to heightened protections, as necessary, based on expected pollutant levels and hydrologic modeling.

Compliance Monitoring and Enforcement

Beyond NPDES compliance monitoring and enforcement (previously referenced), related activities will be at the discretion of the Director for the Bureau of Water and coordinated with the EPA Watershed Coordinator. Information will be cycled back to the Watershed Planning Committee.

Prime Farmland

Farmland preservation could be considered during the visioning process and incorporated into the Watershed Plan based on input from all the membership of the Watershed Planning Committee. The Watershed Plan could take into account numerous factors as referenced in the Comprehensive Plan(s) (if one or more exist) including the:

- Location of prime or important soils;
- Feasibility of preserving contiguous tracts rather than allowing the fragmentation of farmland;
- Degree of development pressure on farmland and other factors;
- Need for lands used for municipal expansion; and,
- Strategies to encourage contiguous development.

The effects of farmland preservation on water quality, groundwater recharge and other hydrological questions should play a prominent role in the Watershed Plan.

Consultations with the Department of Natural Resources and the Department of Agriculture

As the law reflects today, actions that might reasonably affect natural resources would be subject to review by the Department of Natural Resources, and actions that could affect prime farmland would be subject to review by the Department of Agriculture. FPA expansions (to the extent that the program exists) would be reviewed by both agencies.

Alternative Dispute Resolution

Disputes over competing visions of growth and development are currently widespread and are likely to continue in a watershed planning framework (with or without FPAs) unless the watershed

planning framework provides a way for resolving the disputes. NIPC has produced some innovative thinking on potential dispute resolution alternatives (see Appendix 10).

The B-MAG strongly recommends that a model program test a more effective mechanism for local governments to settle disputes over issues of growth, and development. Competing visions on these issues have direct impacts on water quality, as well as other natural resources, economic development, and housing. Any process should be time-limited and have clear guidelines and procedures. FPA expansions (where applicable) would occur only after disputes are resolved. A county or neighboring municipality could contest an FPA expansion and request a dispute resolution process.

Facility Planning (as it addresses revolving loan fund and permit reviews)

Facility plans for wastewater treatment facilities would identify wastewater treatment needs, how they will be met and how they will be consistent with point source and non-point source strategies identified in the Watershed Plan. An alternatives analysis for anti-degradation would normally occur during facility planning. Planning for facilities would need to occur prior to the creation of specific development proposals within a given watershed. Facility plans would be available on-line for public review and input.

The facility planning review as part of the current loan program would be integrated into watershed planning. **The B-MAG agrees that preferential standing and more favorable financing should be made available to existing facilities seeking to upgrade their systems for compliance.** There was disagreement concerning the use of preferential treatment and financing rates for facility upgrades and enhancements beyond the water quality standards – even if consistent with the Watershed Plan. Some B-MAG members believed that lower interest rates and preferential treatment should be offered as an incentive for facilities to finance operational improvements. Other's suggested that the fixed pool of resources should not be used to finance projects that go beyond the water quality standards before compliance with existing water quality standards was universal.

The B-MAG agrees that EPA's existing policy is appropriate and that EPA will not provide funding for any project that is inconsistent with the Watershed Plan (please reference Table 2, Phase V) or the WQMP if no local watershed plan is in place.

Loan applications would be available on-line for public review and input.

Facility Planning Areas (FPA Program)

It is important to note that the FPA process will remain as a parallel part of the State-level and local-level planning efforts until it is determined that FPA protections are in fact being adequately captured under other programs in the new watershed approach. This leaves open the possibility of eliminating FPAs but would require assurances that other programs were picking up the strengths of FPAs before elimination could occur. **The pilot programs must be developed in such a way**

as to test the redundancy (or lack thereof) in the FPA program. The B-MAG, in its annual meetings, needs to evaluate the results and help EPA determine the future of the FPA. In making a determination of the adequacy of the new watershed approach vis-à-vis the FPA, the B-MAG may utilize the strengths identified through the "SWOT" exercise and other materials to determine whether or not watershed planning provides sufficient protections and substitutes to the FPA program.

The FPA Debate: Points of Agreement

A recurring topic during the B-MAG process was the current and future role of FPAs. There was broad consensus in the group on several points regarding FPAs. **The B-MAG agreed that FPAs would continue to be a part of EPA's water protection programs for the immediate future; even those who are advocates for ultimately eliminating FPAs agreed that FPAs should remain until comprehensive watershed planning coverage is in place and a determination is made as discussed above.**

In addition, there was broad based agreement that the FPA process, although flawed, has many strengths:

- The FPAs protection of existing municipal, state and federal investments in wastewater infrastructure is a strength in the program;
- The opportunity for public comment in local land use planning programs is a strength of the existing program;
- The FPA process provides a tool to support local planning;
- Land use planning occurs locally was viewed as another strength of the system;
- FPA boundaries can serve effectively as intergovernmental / boundary agreements and discarding them could create renewed uncertainty and conflict;
- FPA reviews occur early in the development process;
- The FPA process is a forum for bringing agencies, municipalities and other interested parties together to discuss a vision for how the region will address its wastewater needs (although some B-MAG members felt that this has not occurred as much in practice as it should);
- The FPA system provides the necessary consideration for infrastructure expansion and upgrades; and,
- It is effective in reducing small package treatment plants.

Finally, the B-MAG was almost unanimous in labeling as a "strength" the fact that the FPA program already exists and stakeholders are familiar with it.

Also, large majorities of the B-MAG group agreed on weaknesses in the current system including:

- Its tendency to promote competition between communities;
- The general lack of state assistance for effective planning, and,
- The existence of duplications / overlap with other programs.

The FPA Debate: Points of Disagreement

Fundamentally, the main point of disagreement regarding FPAs was whether or not they should be part of a new watershed planning framework. Some parties felt that they should not, arguing that any benefits currently provided by FPAs would be duplicated under elements of other programs in the new watershed planning system. Other parties felt that the benefits of FPAs would not be sufficiently captured by other programs in the new watershed system and that eliminating FPAs would therefore create a new void in water protections in Illinois.

The FPA Debate: Recommendations

Many members of the B-MAG expressed unease with the idea of eliminating the FPA process today. Indeed, some parties that otherwise favor FPA elimination might prefer retaining FPAs to the adoption of an unfamiliar new watershed model. Other members felt that a statewide watershed approach without the elimination of the FPA process would lead to duplication and inefficiencies within the system.

This is not to say that the FPA process could not be improved. Nevertheless, these and other points could be addressed in an FPA reform process (either within or without a watershed planning framework) and should not obscure the fact that the B-MAG strongly agreed that the current process has many strengths.

One possible approach offered was to establish a pilot watershed program that includes FPAs. This pilot program would include provisions to evaluate the program after a specified time to see whether FPA protections were in fact being adequately captured under other programs in the new watershed approach. This would leave open the possibility of eliminating FPAs but would require assurances that other programs were picking up the perceived strengths of FPAs before elimination could occur.

How FPAs Would Work In the Proposed Framework

During this transitional period, the B-MAG suggests that the FPA program be included and run parallel to the watershed planning framework. What happens after the transitional period remains to be seen and can not be projected. The critical question that must be answered is, "do FPAs (and the FPA Program more broadly) provide any incremental level of protection to the water resource or are they simply redundant and overlapping vis-à-vis other water quality planning and protection programs?" The B–MAG agrees that any pilot testing of watershed planning and protection must include explicit provision for precisely how this question will be answered in the pilot test.

After the pilot project, if non-FPA mechanisms can be shown to have achieved these protections (to the satisfaction of the B-MAG constituencies), FPAs would be considered redundant and possibly phased out. If the constituencies believe non-FPA mechanisms have achieved some but not all of the

protections, then the next phase of the pilot program should be adapted to target the remaining points.

Elements of the Status Quo That Are Likely To Be Eliminated

The watershed approach envisioned by the stakeholders was, in part, a method by which all regulatory and non-regulatory water programs would be integrated to create greater efficiencies and effectiveness in how EPA protects water quality throughout Illinois. There may also be opportunities for EPA to coordinate some of its activities with other entities that are already engaging in pollution reduction efforts. One weakness noted by the B-MAG throughout this process was the lack of adequate coordination between state and federal programs. Other groups, such as NRCS and SWCD, are already actively working to reduce non-point source pollution. By identifying and implementing these areas hopefully ripe for streamlining, by either eliminating duplication or outdated activities, it is hoped that the EPA could better utilize its resources to address water protection needs.

For instance, watershed management plans at the state level could satisfy requirements of the TMDL program if they satisfy applicable federal law and regulations.

Trading schemes for pollutants could possibly be developed. Finite deadlines and time limits could be established for the various permitting approval processes. If a detailed alternatives analysis has recently been completed (*e.g.*, at the local watershed planning or facility planning stage), it would not need to be repeated at a later stage (*e.g.*, FPA expansion). If relevant protections were implemented (*e.g.*, elements of a Phase II municipal plan), that could reduce the documentation or permitting requirements for subsequent actions.

Chapter 7 - The Selection of Two Pilot Watersheds

When this dialogue began, EPA clearly stated their intent to pilot test the product of the B-MAG. The premise was to test whether or not watershed planning and protection would be at least as effective as the current piecemeal approach before investing limited state human and financial resources in a commitment to a single watershed planning and protection regime. The pilot would be designed by the B-MAG. Annually, the B-MAG will be reconvened to evaluate the pilots' successes and failures. Lessons would be learned and any evolving system would be capitalize on the successes and address the failures before watershed planning and protection expanded across the State more broadly.

That was the premise. Ultimately, the B-MAG recommended that EPA conduct two "pilot" tests.

Illinois' is viewed by many as two states in one. Largely, the Northeastern part of the State is urbanized and growing rapidly. The rest of the State is much more rural in look and feel where agriculture is the dominant land use and growth is not rapid. The characteristics of existing water quality and the threats to the resource are significantly different. Governmental structures, available resources and expertise and the tools used to protect water quality are dramatically different.

A Watershed Selection Committee formed as a subgroup of the B-MAG. This Committee was comprised of a representative from each meta-constituency; it met via conference call and transacted business electronically over several weeks. Their charge was to define criteria for recommending alternative venues to the B-MAG. The intent was to then apply these criteria to the watersheds of the State, review maps and other data sources and present up to three rural and three urbanized alternatives to the B-MAG. The B-MAG would then whittle down those options to a single rural selection and a single urbanized selection. At that point, EPA would be charged with catalyzing community leadership to design and implement the watershed planning and protection framework counseled in this document.

Ultimately, the process of honing the selection criteria and nominating specific watersheds blurred and ran together. The Watershed Selection Committee did not formally define the selection criteria with a single formal vote. That said, there was general agreement on the characteristics related below.

The Selection Criteria

The Watershed Selection Committee generally viewed the following characteristics as significant when selecting a more urbanized watershed:

- FPA (W/Point Source and Non-Point Source Issues) Boundaries Within the Watershed;
- High Growth Area;
- Agricultural and Urban Diversity;
- Issues of Farmland Protection and Preservation;
- Willingness to Participate in Process;
- Size Of Watershed For State Assessment - 14 +2;

- Maximum Size Of Watershed For Local Watershed Plan – 52; and,
- Current Water Quality Data

The Watershed Selection Committee generally viewed the following characteristics as significant when recommending a more rural watershed:

- FPA in Watershed;
- No (or limited) Planning in Place;
- Willingness To Participate In Process;
- Maximum Size Of Watershed For Local Watershed Plan – 52;
- Current Water Quality Data Available; and,
- Rural[15]

Recommendation

The Watershed Selection Committee discussed these criteria as they applied to a great many waters of the State. There were several watersheds that would seem to meet most or all of the above. In the end, the Committee concluded that the pilot programs – both urban and rural – should be conducted in the same 14 + 2 river basin. Ultimately, the group nominated the Rock River Basin for the River Basin Assessment and the Watershed Planning conducted in sub-watersheds of the Kishwaukee River and the Green River.

Green River State Wildlife Area

The B-MAG has endorsed these selections. At the conclusion of this process, EPA will be charged with catalyzing watershed planning efforts consistent with this Framework in each of these

[15] Rural and rural area--a city, town, or unincorporated area that has a population of 50,000 inhabitants or less, other than urbanized areas immediately adjacent to a city, town, or unincorporated area that has a population in excess of 50,000 inhabitants. Urbanized area data will be based on the 2000 census.

two locales**. As appropriate, B-MAG membership hailing from these two regions will encourage development of a local watershed plan consistent with this Framework. If the appropriate local government entities are not committed to participating in the pilot, the B-MAG will reconvene its Watershed Selection Committee to recommend other pilot areas within the Rock River Basin. Provision will be made for the B-MAG's concurrence with provisional selections via electronic mechanisms.**

Further, **the B-MAG recommends that EPA send quarterly electronic transmissions to the B-MAG membership with updates. The B-MAG should be reconvened annually to evaluate progress and determine next steps.**

Chapter 8 - Conclusion

The charge to the B-MAG was to develop a pilot program that tests basinwide planning and a framework for protecting water quality. In developing that pilot, the members of the B-MAG were commonly driven by one guiding principle: the pilot was not to be designed to set forth the precise water quality protection mechanisms for the State of Illinois for the next decade or more, but rather it was designed to test the benefits of a new water quality management regime that could accrue from such a mechanism. It is anticipated that the pilot will highlight what works well, what does not work at all and what additional questions need to be addressed as the State pursues better ways to protect water quality for Illinois.

The state must dedicate the time, energy and resources to making this effort's recommendations a reality in the Green, the Kishwaukee and potentially elsewhere. Several of the recommendations contained in this report will require financial resources. The discussion of funding, however, was considered outside the scope of this group's charge.

The B-MAG would like to be re-convened in its entirety one year from the issuance of this Framework so as to ensure consistency with the letter and spirit of this Framework as well as to evaluate progress within the pilot program allowing for adjustments in the program if necessary.

The implementation of a pilot program - whatever its strengths and weaknesses – will yield valuable information for the further streamlining of state programs and the ultimate protection of Illinois' valuable waters.

Appendix 1 - Glossary of Acronyms and Key Phrases

TERM	DEFINITION
14 + 2	The fourteen basin level plus two additional basins resulting from the split of the Fox River Basin (Upper and Lower Fox sub-basins) and the Des Plaines River Basin (Des Plaines and Lake Michigan sub-basins).
303(d) water	A monitored water that is impaired for any of the designated uses
Agency	The Illinois Environmental Protection Agency
Anti-degradation Regulations	Regulations that are designed to protect existing water quality and provide a method of assessing activities that might affect the integrity of waterbodies
Aquifer Re-charge	Water entering the groundwater zone after rainfall
Basin	A region drained by one single river system
Best Management Practice	Methods, measures, or practices determined to be a reasonable and cost effective means to address certain NPS pollution issues.
B-MAG	Basinwide Management Advisory Group
Causes	Potential pollutants to a waterbody (e.g., phosphorous)
Channelization	The process of taking a stream from its natural meandering state to a straight and direct flowing route
Clean Lakes Grants	A state and federal grant program dealing with the study and subsequent restoration or protection of lakes
Combined Sewer Overflow ("CSO")	Discharge of a mixture of stormwater and domestic waste when the flow capacity of a sewer system is exceeded during storm events
DCEO	Department of Commerce and Economic Opportunity
Degradation	The process when pollutants enter a waterbody and it falls beneath standards
Delivery System	The means of getting information out to appropriate stakeholders
Designated Use	Those uses specified in water quality standards for each waterbody or segment whether or not they are being attained
Director	Head of EPA (Renee Cipriano)
Discharger	NPDES Permit holder
Ecosystem Partnership	A C2000 program administered by IDNR that consists of coalitions of local stakeholders--private landowners, businesses, scientists, environmental organizations, recreational enthusiasts, and policy makers.
Ecosystem	A biotic community and its abiotic environment
EQIP	Environmental Quality Incentives Program administered by NRCS
Environmentally Sensitive Area	An area that based on its location has the possibility of being harmed by pollutants
Extension Service	The nationwide network of Extension programs began in 1914 as a means of presenting land-grant university research in understandable and useful ways to farmers and rural families. Today, Extension serves both urban and rural areas
Facilities Plan	A plan that depicts the 20 year projected wastewater treatment needs of an area

Farmland Preservation Area	Under the Farmland Preservation Act of 1982, state agencies must establish agricultural land preservation policies and working agreements with the Agriculture Department. These documents guide agencies in their efforts to minimize farmland conversion and other adverse agricultural impacts associated with their programs and activities. The Agriculture Department reviews plans for construction and other development projects submitted by agencies to determine if they comply with the submitting agency's policy and working agreement. With utility projects, such as the installation of gas or water lines, department staff also works to ensure plans contain construction and restoration standards that leave affected areas in good condition after projects are completed.
Fee Waiver	Elimination or reduction of a permitting fee
FPA	Facility Planning Area
Facility Planning Area Program	The Bureau of Water is responsible for review and approval/denial of facility plans and planning areas
GERPDC	Greater Egypt Regional Planning and Development Commission
GIS	Global Information System
General Permit	An NPDES "permit" issued under Section 122.28 authorizing a category of discharges under the SWA with in a geographical area. General permits may be issued in accordance with Area (i.e. planning areas, sewer districts, municipal/state boundaries) or Sources (i.e. storm water, point sources)
Hydrological Boundary	Watershed divisions
IDA	Illinois Department of Agriculture
IDNR	Illinois Department of Natural Resources
IDOT	Illinois Department of Transportation
IEPA (sometimes "EPA")	Illinois Environmental Protection Agency
Illinois Natural Area Inventory	The primary tool used by the IDNR, other state and federal agencies and conservation organizations to identify high quality and significant natural features that occur on the Illinois landscape. It consists of a list of sites that have been identified according to specific biological criteria separated into 7 categories, and a spatial data layer
Impaired (Waterbody)	Water quality limited waters (any segment where it is known that water quality does not meet applicable water quality standards).
Intensive Basin Survey	Conducted by EPA on a five year rotation in cooperation with the IDNR. They are the major source of information for the Illinois Water Quality Report.
Infrastructure	Transportation systems, public water supplies and water treatment systems.
Land Disturbance	Construction activities such as grubbing, excavation and grading. This does not include agricultural production.
Local Land Resource Management Planning Act	50 ILCS 130/ Ch. 85, par.5700
Local Legacy Act	Promotes voluntary county-municipal partnerships in every county by 2020 that will inventory resources, develop Resource Protection Plans, and implement their respective plans. PA 93-0328
Local Planning Technical Assistance Act	Provides technical assistance to Illinois local governments, encourage planning, provide model plans and ordinances, research by way of demonstration projects, and promote planning among several units of government. PA 92-0768
LUST	Leaking Underground Storage Tank
MBI	Macroinvertebrate Biotic Index

Meta-Constituency	For purposes of the B-MAG, a group of like professional goals
Monitoring	For purposes of the B-MAG group - water quality data collection by the EPA and Illinois DNR and other groups with approved Quality Assurance Project Plans.
Nine Minimum Elements	Criteria developed by USEPA to support Section 319 watershed-based planning
No-discharge System	Treatment process which does not release effluent directly to a water of the State
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source Pollution
NPS Program	Developed by EPA to provide an overview of program initiatives designed to address water resource problems as identified in the Illinois State Water Quality Assessment.
NRCS	Natural Resource Conservation Service
Nonpoint Source Pollution	Occurs when runoff from rain and snowmelt carries pollutants into waterways such as rivers, streams, lakes, wetlands, and even groundwater.
Nonpoint Source Pollution Control	Cultural and structural best management practices installed to reduce or eliminate nonpoint source pollution.
Numeric Limits	Considers the magnitude, duration and frequency of exposure to specific pollutants. Acute or Chronic. Concentration of chemicals.
Outstanding (National) Resource Waters	A surface waterbody or waterbody segment that is of exceptional ecological or recreational significance, must be designated by the Illinois Pollution Control Board pursuant to 35 IAC 102 Subpart H
Pervious	Permeable material, such as a grass, soil, sand, etc.
Phase 1 and Phase II Permitting	Clean Water Act Amendments of 1987 established the NPDES Storm Water Program. The Act called for implementation in two phases.
Pilot Program	For purposes of the B-MAG - exercise to implement the Framework in a watershed setting.
Point Source	A source of water effluent coming from an easily identified opening, such as a discharge pipe
Purchase Of Development Right	The acquisition of property development rights through voluntary sale by the landowner to a government agency or land trust. The government agency or land trust acquiring development rights typically restricts future uses of the land to farming or open space
Sanitary District	A legally organized body in a defined area having the responsibility to treat wastewater
Section 303(d) List	A list of impaired waters prepared by the EPA to fulfill the requirements set forth in Section 303(d) of the Clean Water Act and the Water Quality Planning and Management regulation at 40 CFR Part 130. Section 303(d) of the Clean Water Act requires states to identify water quality limited waters, establish a priority ranking for such waters, and target watersheds for the development of Total Maximum Daily Loads (TMDLs)

Section 319	Section 319 of the federal Clean Water Act requires that the State Water Quality Management Planning Agency develop a State Assessment report and a State Management Program report to identity type and location of nonpoint source pollution impairing designated uses of state lakes, rivers and groundwater resources, as well as to describe statewide program efforts towards the reduction of nonpoint source pollution. Under Section 319, the EPA receives federal funds to implement nonpoint source pollution control projects in cooperation with local units of government and other organizations
Small Package Treatment Plant	A term commonly used to describe an aerobic wastewater treatment unit serving multiple dwellings or an educational, health care or other large facility
Soil And Water Conservation District (SWCD)	Established in 1937 under the Illinois Soil and Water Conservation District Act, these are local units of government. The Act gives SWCDs the responsibility of providing technical information to individuals and groups on methods of soil and water conservation and provide natural resource inventory information on properties slated for zoning changes. There are 98 SWCDs in Illinois
Source Water	Source water includes groundwater, lakes, rivers and streams that serve as sources of drinking water for local communities.
Sources	Identified in Appendix A of EPA's Illinois Water Quality (305(b)) Report. Categories of potential sources as known or suspected activities, facilities or conditions that may be contributing to impairment of a designated use.
SRF	State Revolving Funds
SRP	Site Remediation Program
SSD	Sanitary Sewer District
Stakeholder	In developing and implementing a Watershed Plan, stakeholders are those who will make decisions and those who will be affected by them.
State Revolving Fund	The federal Clean Water State Revolving Fund (CWSRF) provides funding to states to finance water quality protection projects for wastewater treatment, nonpoint source pollution control and watershed and estuary management through the issuance of low-interest loans.
Stormwater Commission	A local government agency that provides technical assistance, local knowledge and problem-solving skills to coordinate flood damage reduction, flood hazard mitigation, water quality enhancements and natural resource protection projects and programs.
Stormwater Management	The best practical and economically achievable measures to control the addition of pollutants to waterbodies through the application of nonpoint pollution control practices for stormwater runoff
Stream Segments	A linear section of a stream identified by the EPA for the purposes of reporting water quality data specific to that section.
Sub-Watersheds	A defined land area within a watershed drained by a river, stream or drainage way, or system of connecting rivers, streams, or drainage ways such that all surface water within the area flows through a specific point.

Superfund	A federal program created to protect citizens from the dangers posed by abandoned or uncontrolled hazardous waste sites. Congress established Superfund in 1980 by passing the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which gives the Federal government the authority to respond to hazardous substance emergencies, and to develop long-term solutions for the nation's most serious hazardous waste problems.
SWIMPRC	Southwestern Illinois Metropolitan and Regional Planning Commission
Technical Advisory Committee	A group people with specialized knowledge organized to advise a Watershed Planning Committee in matters of science, law or other technical issues.
SWOT	Strengths, Weaknesses, Opportunities and Threats Analysis defined in Michael E. Porter's "SWOT Analysis" as described in "*Competitive Strategy : Techniques for Analyzing Industries and Competitors*
TMDL	Total Maximum Daily Load
Trading Scheme	Trading programs allow facilities facing higher pollution control costs to meet their regulatory obligations by purchasing environmentally equivalent (or superior) pollution reductions from another source at lower cost, thus achieving the same water quality improvement at lower overall cost.
Urban Runoff	Storm water from city streets and gutters that usually contains a great deal of litter, nutrients, toxics and occasionally sediment.

Urbanization	The process by which rural areas and open space are converted into more intensely developed urban land uses with an associated increase in human population, roads, buildings, parking lots and related infrastructure. The conversion of natural ground cover to paved and other impervious surfaces generally decreases infiltration and increases the volume and rate of runoff, providing a larger capacity to transport pollutants.
USEPA	United States Environmental Protection Agency
Use Support Assessment	A use support assessment is an evaluation to determine the degree to which a waterbody supports its designated uses (fish and aquatic wildlife, fish consumption, swimming and drinking water supply). This determination is made through an analysis of all available data including biological, physical/chemical, habitat and toxicity.
Wastewater	Water that has been used in homes, industries, and businesses that is not for reuse unless it is treated
Waterbody	A land basin filled with water, or any river, stream, lake, reservoir or wetland.
Water Quality	The biological, chemical and physical conditions of a waterbody, often measured by its ability to support aquatic life.
Watershed	The geographic region within which water drains into a particular river, stream or body of water. Watershed boundaries are defined and separated by topographic ridges

Watershed Approach	An integrated, holistic process to effectively and efficiently protect, enhance and restore the physical, chemical and biological integrity of a water resource within a defined hydrologic area.
Watershed Plan	A document that identifies all of the water resources, identifies the sources and causes of pollution and specifies the implementation strategies for the protection and restoration of the water resources within the specific watershed.
Watershed Planning	A process to identify all of the water resources, identify the sources and causes of pollution, and specify the implementation strategies for the protection and restoration of the water resources within the specific watershed.
Watershed Planning Committee	A group of stakeholders and technical advisors convened for the purpose of watershed planning.
Wildlife Habitat Incentives Program And Wetlands Reserve Program	This cost chare program is administered by NRCS in consultation with the U.S. Fish and Wildlife Service and other Federal agencies to restore and protect wetlands through permanent easements, 30-year easements, and restoration agreements. Based on a certified land appraisal, the NRCS offers the landowner a payment for an easement and the landowner then files the easement and restores the wetland. NRCS reimburses the landowner for part of the restoration cost, depending on the easement type.
WQMP	Illinois Water Quality Management Plan

Appendix 2 – The Charge to the B-MAG

Basinwide water quality management involves many different elements of government activity. Planning, monitoring and measuring, study, permitting, enforcement and compliance assurance as well as a myriad of programs designed to develop and encourage best land use and management practices. These programs exist within and outside of the Illinois Environmental Protection Agency (EPA). These programs were developed separately and generally exist in isolation from each other. As a result, there are overlapping protections and, possibly, the occasional gap. Indeed, many of these programs have been developed with a statewide, one-size-fits-all orientation.

Earlier this year and for the past several years, we have struggled with the implementation of water quality management planning linked with our Facility Planning Area (FPA) program. This program focuses on the planning for wastewater treatment capacity and the facilities that serve the population. As you may be aware, we recently contracted with a consultant to complete a Program Evaluation. Though there were several recommendations based on input from a stakeholders workgroup (many of which we are now looking to implement), the clear sentiment was that the FPA program is part of a broader structure of "piecemeal" management of water quality. To the consultant and stakeholders, the FPA process appeared to be disconnected from other state programs and one "size" most certainly did not fit all. It was recommended that the State should move toward a more holistic and interconnected watershed planning and protection framework. In this charge, we are fully embracing that concept for implementation.

Our overarching goal here is to eliminate overlaps and duplications in planning and protection while at the same time ensure greater efficiencies in water quality planning and management and better water quality protection overall. In order to begin the transitional process of moving toward a statewide watershed planning and protection program, I hereby charge the Basinwide Management Advisory Group (B-MAG) to:

- Select a specific watershed for pilot testing of a comprehensive, coordinated Basinwide planning and protection framework;

- Develop familiarity with the full range of federal, state and local water quality planning and protection activities and the specific programs and goals offered by each. Particularly important to the State are:

    - Monitoring;
    - NPDES Permitting, including Phase I and Phase II Permitting;
    - Anti-degradation Analysis;
    - Control of Non-point source pollution;
    - Land use policies; and
    - Facility Planning Areas and Wastewater Treatment Programs

- Identify a "delivery system" for guiding the implementation of customized programs within each basin;

- Create or name a management structure for stakeholder involvement on the ground and within each basin; and

- Forge agreement on a watershed by watershed phase-in of additional basins resulting in a five to seven year rotational schedule of planning and protection activities that provide coverage for the entirety of the State.

In this first brief set of conversations, I urge you to create a "Framework" for how the State and local groups should consider the inter-relationships among these programs as well as the "constants" (in terms of mandates, goals and structures) that must exist across watersheds. At the same time, I hope you will identify areas where flexible, site-specific policies are more apropos.

Every effort should be made to ensure that the total range of recommendations and characterizations are consensus-based, though EPA recognizes that the elements of this Framework may not be universally subscribed. At any time, the facilitator may move the group along to other discussions recording for EPA the points of contention. However, my further charge to you is that you endeavor to reach consensus on as many of the identified, preferred policy recommendations and characterizations as you can.

This charge is ambitious and your work promises to be difficult. Yet for both environmental and economic reasons, this dialogue and any resultant consensus is critically important to the State of Illinois. I pledge to offer EPA's full support to your work. Governor Blagojevich and I thank you for your energy, your time and your commitment to the betterment of the State.

Renee Cipriano
Director

Appendix 3 – Participants, Organizations and Participation in this Process

LAST NAME	FIRST	TITLE	ORGANIZATION	ATTENDANCE						
				Sept	Oct	Nov	Dec	Jan	Feb	Mar
Saslow	Adam R.	President	Consensus Solutions, Incorporated	√	√	√	√	√√	√	√
Agnoletti	Janet	Executive Director	Barrington Area Council of Governments	√	√	√	√	√√	√	√
Alderson	Ken	Executive Director	IL Municipal League	√	√	√		√√	√	√
Brooks	Thomas		IL Department of Transportation - Bureau of Design and Environment		√	√	√	√√	√	
Donohue	Terry	Executive Director	Association of Illinois Soil & Water Conservation Districts	√	√	√	√	√√	√	√
Ducay	Jerry	Village Administrator	Village of Frankfort	√	√	√	√	√√	√	√
Duffield	Dennis		City of Joliet	√	√	√	√	√√	√	√
Erickson	Nancy		Illinois Farm Bureau	√	√	√	√	√√	√	√
Fruth	Mike		Metro East Regional Stormwater Management Committee	√	√	√	√	√√	√	√
Goldman	Jonathan	Executive Director	Illinois Environmental Council							
Goldstein	Scott	Vice President of Policy & Planning	Metropolitan Planning Council	√		√	√	√	√	√
Hampton - Knodle	Heather	Executive Director	Illinois Coalition of Animal Agriculture	√	√		√	√		√
Harrison	Mark		Homebuilders Association of Illinois	√	√	√	√	√√	√	√
Heavisides	Tom		Illinois Department of Natural Resources	√	√	√	√	√√	√	√
Jaffe	Martin	Professor	University of Illinois - Chicago	√	√	√	√	√√	√	√
Jirik	Alan	Director - Regulatory Affairs	Corn Products, Inc.	√	√	√		√√	√	√
Luesse	Shawn		Coldwell Banker Devonshire Realty	√	√	√	√	√√	√	√
McKenna	Dennis		IL Dept. of Agriculture	√	√	√	√	√√	√	√
Messina	Alec	General Counsel	Illinois Environmental Regulatory Group	√	√	√	√	√√	√	√
Muth	Tom		IAWA-Fox Metro Water Reclamation District	√	√	√	√	√√	√	√
O'Keefe	Joyce		Openlands Project	√		√		√√	√	√
Santell	Sam		Kane County Regional Planning Center			√	√	√√	√	√
Schmidt	Dennis		Urbana & Champaign Sanitary District	√		√	√	√√	√	√
Skelly	Tom		City of Springfield	√	√	√	√	√√	√	√
Skrukrud	Cindy		Sierra Club & Friends of the Fox River	√	√	√	√	√√	√	√
Sullivan	Julie		IL Association of Realtors	√	√		√		√	√
Thomas	Ron		Northeastern IL Planning Commission	√	√	√	√	√√	√	√
Tryon	Mike		McHenry County Board of Commissioners	√		√		√√		
Weilbacher	Ed		Campaign for Balanced Growth	√		√	√	√√	√	√
Wentzel	Beth	Watershed Scientist	Prairie Rivers Network	√	√	√	√	√√	√	√
Willhite	Marcia		Illinois Environmental Protection Agency	√	√	√	√	√√	√	√

Appendix 4 – Resource People and Their Organizations

LAST NAME	FIRST NAME	TITLE	ORGANIZATION
Acker	Richard	Regional Land Use Coordinator	Openlands Project
Correa	Janel		Illinois Department of Transportation
Czapar	George	Extension Educator	University of IL Extension
Davis	Chris		Illinois Environmental Protection Agency
Demissie	Mike	State Water Survey	Illinois Department of Natural Resources
Drainer	Ronald P.	Infrastructure - Financial Assistance	Illinois Environmental Protection Agency
Ettinger	Albert		Environmental Law & Policy Center
Flattery	Tom	Office of Realty & Environmental Planning	Illinois Department of Natural Resources
Forrest	Clyde W.	Chair, APA Divisions Council Professor Emeritus	University of Illinois, Urbana-Champaign Urban and Regional Planning
Frevert	Toby		Illinois Environmental Protection Agency
Hartzold	Sharon	Resource Planning Specialist, Area 4	Natural Resources Conservation Service
Leigh	Kerry		NIPC
Leinicke	Jim		Illinois Environmental Protection Agency
Lieberoff	Barb		Illinois Environmental Protection Agency
Miller	Ward S.	Executive Director	Lake County Stormwater Management Commission (for Metropolitan Mayors' Caucus)
Moreau	Phillipe	President	Walter E. Deuchler Associates, Inc.
Ristau	Scott		Illinois Environmental Protection Agency
Sampey	Frank	Community Planner	Kane County Government
Shubart	Ellen		Campaign for Sensible Growth
Thomas	Paul		USEPA - Region V
Tonsor	Connie		Illinois Environmental Protection Agency
Walkenbach	Amy		Illinois Environmental Protection Agency
Watson	Tammy	Ecosystems Division	Illinois DNR
Williams	Debbie		Illinois Environmental Protection Agency
Yurdin	Bruce	Manager - Watershed Management	Illinois Environmental Protection Agency

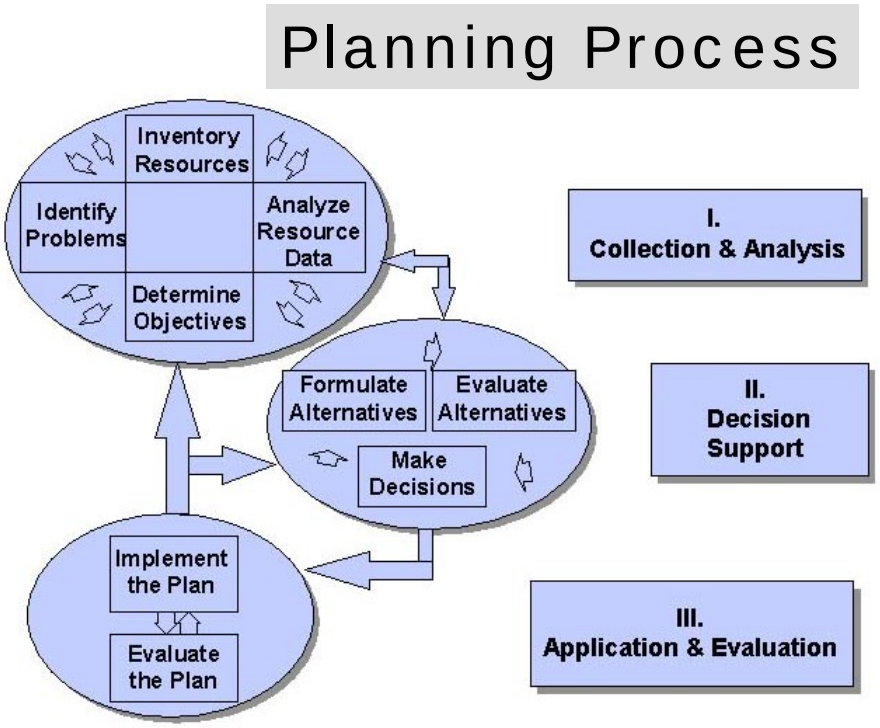
Appendix 5 – Code of Conduct

All Participants in this dialogue agreed to:

- Cooperate with each other and assist the Facilitator by participating fully in the process.
- Communicate and negotiate in a civil and respectful manner. Disagree without being disagreeable. Personal attacks are never compelling.
- Assist each other by not interrupting, making comments or being disruptive while someone else is speaking. Minimize the "sidebars" please!
- Listen carefully to each other... and to yourself. Process the words... refine thinking when necessary.
- Keep all statements and discussions focused, on point and concise.
- Focus on issues and interests (yours *and* theirs), rather than positions. Propose solutions that include consideration of others' interests.
- Be specific in identifying the problems, what you believe are the root causes of those problems, and your proposed solutions.
- Stretch your mind... feel free to propose any creative, workable solution you think might help in resolving this dispute. "Mistakes" are the seeds of brilliance.
- While we will always strive for 100% unanimity, the dialogue will be permitted to progress with all goals, strategies and recommendations intact just so long as no more than three persons disagree. Abstaining from a vote is never permitted.
- Substitutions are permitted in the event that a B-MAG participant is unable to attend. They must be prepared in advance by the B-MAG participant and, to the extent possible, the facilitator. If a substitute is not present, that participant may provide another B-MAG member with his/her proxy provided that the facilitator and the B-MAG is aware in advance. No B-MAG participant may hold more than one proxy.
- The media is welcome to attend the meetings. Media questions regarding process should be directed to Mr. Saslow. If participants choose to respond to media inquiries they should make it clear that their commentary reflects personal opinion and in no way reflects the opinions of the group. Please be careful.
- Be mindful of how important it is to your peers that you reach a durable resolution. Remember that your contribution to this process will be recognized, honored and appreciated by the citizens of IL for a very long time.

Appendix 6 – NRCS Model for Watershed Planning

9- Step Planning Process



Appendix 7 – Maps

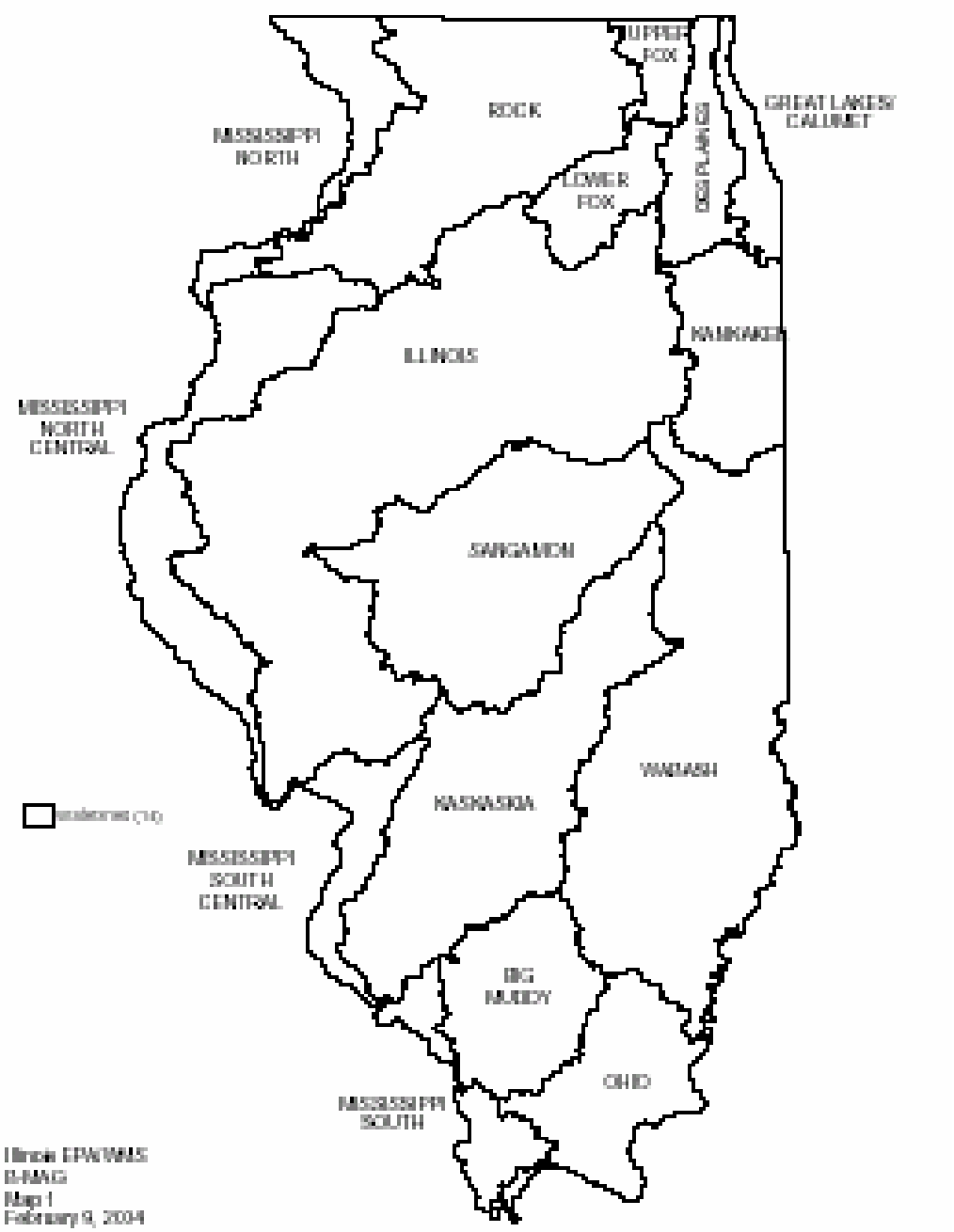


Figure 6: 14 + 2 Level Watershed Map

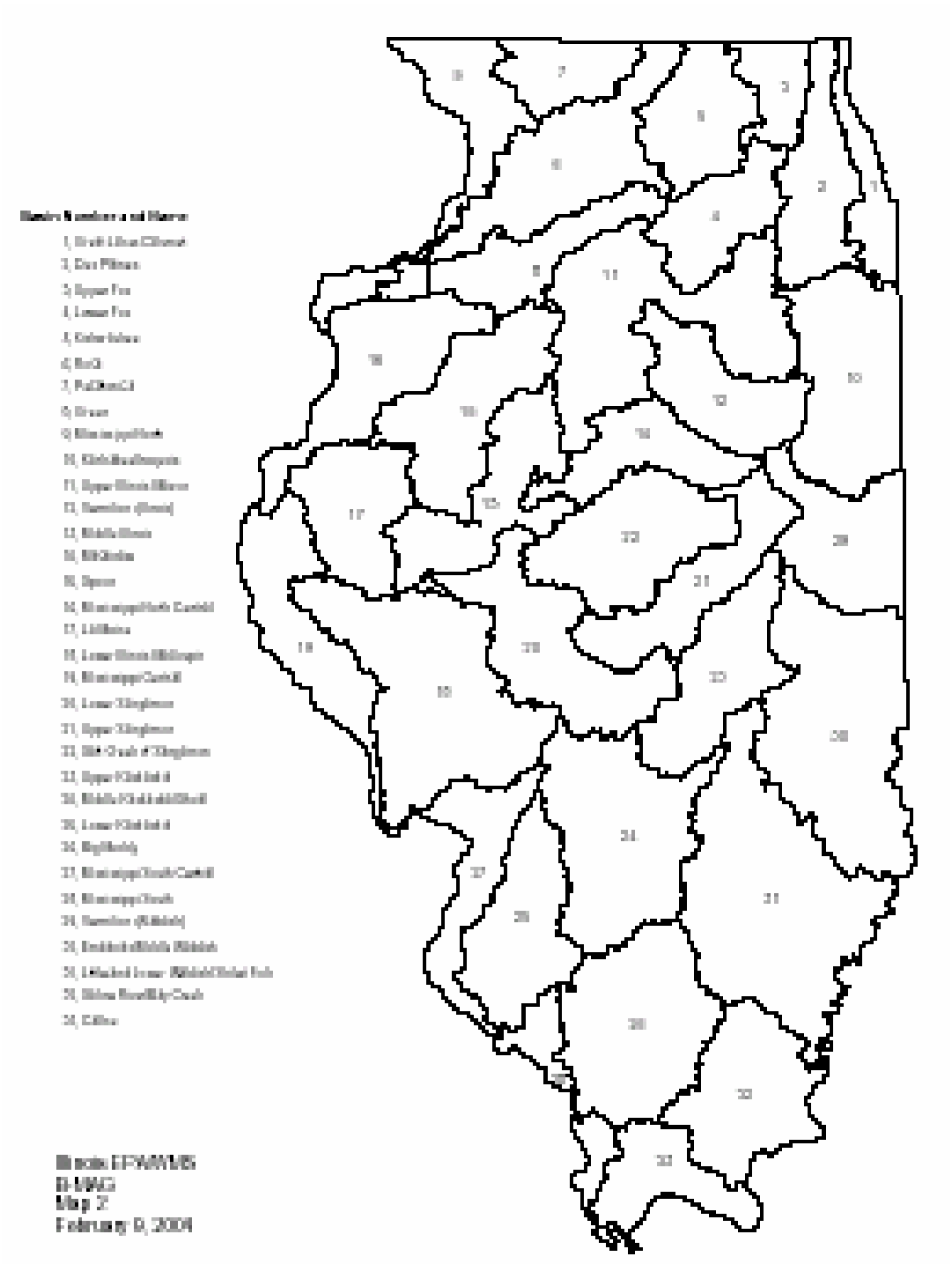


Figure 7: 33 Level Watershed Map

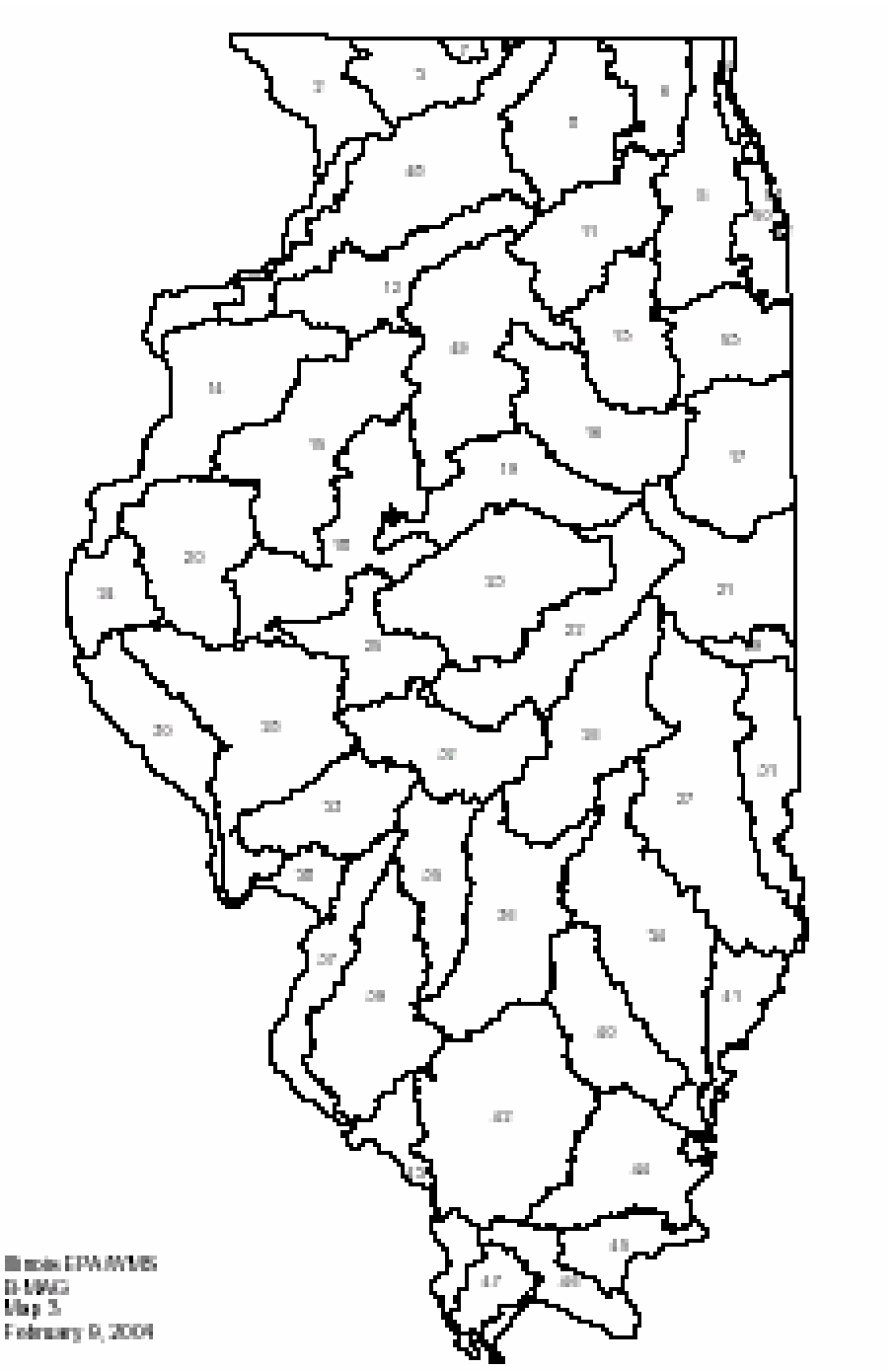


Figure 8: 52 Level Watershed Map

Appendix 8 - Framework for an Environmental Conflict Resolution Program in Illinois

Prepared by the Northeastern Illinois Planning Commission

INTRODUCTION

The State of Illinois, like other states and the federal government, has a multitude of interrelated environmental and planning laws and regulations. Environmental issues can frequently become highly contentious conflicts that are extremely complex and polarizing and often intensely emotional. These conflicts often result in the loss of tolerance for and communication between the various stakeholders. Illinois has no neutral forum in which these stakeholders can build consensus before conflicts arise or effectively resolve conflicts once they do arise.

Illinois has numerous laws and regulations designed to protect and enhance water quality, including the facility planning area (FPA) process. While originally designed to address water quality issues when planning for wastewater treatment facilities, the FPA process has become a forum for many non-water quality issues (such as open space preservation) and intergovernmental conflicts (such as boundary disputes). The FPA process was not designed to conduct consensus building sessions for governmental jurisdictions and/or stakeholders, nor was it designed to resolve environmental or intergovernmental conflicts. The FPA process would benefit greatly from the development and implementation of an environmental conflict resolution and consensus building program. The many intergovernmental and non-water quality issues and conflicts that arise in the context of facility planning could be brought into the consensus building and conflict resolution forum prior to the filing of an FPA application, thereby allowing the FPA process to work as originally intended.

EPA may phase out the FPA process and develop a comprehensive watershed management and planning program in its place. Currently, there are numerous environmental and land use planning laws and regulations that impact watershed management and planning. For example, the Local Planning Technical Assistance Act and other comprehensive planning laws include provisions for natural resources and land use components. Municipal annexations and boundary agreements can determine the parties involved in a particular watershed as well as the provision of wastewater treatment services. In addition, there are regional population and growth forecasting figures (20 year planning timeframe) which provide significant data that can be used in preparing accurate watershed management plans.

If EPA phases out the FPA process and creates a comprehensive watershed management and planning program, an environmental conflict resolution and consensus building program would greatly enhance its success. Effective and comprehensive watershed management and planning requires local input and support. Consensus building at an early stage among the diverse interests and stakeholders will provide for local input and create support. Providing a forum for resolution of conflicts when they do arise will lead to more effective solutions, take less time and cost less money. In addition, a properly conducted conflict resolution process can avoid creating ill will among the stakeholders, thereby allowing them to continue working productively together. Integrating the watershed management and planning program and an environmental conflict resolution and consensus building program will allow the process to work more efficiently and effectively. It will

take less time and money and will lead to better results that will have the full support of the local community.

WHAT IS ENVIRONMENTAL CONFLICT RESOLUTION AND CONSENSUS BUILDING?

Many states and most federal agencies currently have laws and regulations establishing alternative dispute resolution (ADR) and consensus building procedures and programs. There are also countless private organizations engaged in similar activities. The State of Illinois has ADR programs for domestic and other disputes (such as auto accidents) but it does not have an environmental conflict resolution and consensus building program.

There are various terms that can be used interchangeably to describe the wide range of conflict resolution processes that occur outside the traditional court/legal system. Such terms include alternative dispute resolution and conflict resolution. The federal Administrative Dispute Resolution Act of 1996[16] defines "alternative means of dispute resolution" as "any procedure that is used to resolve issues in controversy, including, but not limited to, conciliation, facilitation, mediation, fact finding, minitrials, arbitration, and use of ombuds, or any combination thereof".[17] Each of these forms of conflict resolution involves a neutral third party to assist the parties in designing and conducting the process and in reaching agreement.

Federal agencies are required by the Administrative Dispute Resolution Act to develop a policy addressing the use of alternative means of dispute resolution and to evaluate the use of such procedures in connection with: (A) formal and informal adjudications; (B) rulemakings; (C) enforcement actions; (D) issuing and revoking licenses or permits; (E) contract administration; (F) litigation brought by or against the agency; and (G) other agency actions.[18]

Many governmental agencies are establishing consensus building programs and there are also numerous private organizations offering these services. Generally, consensus building is a "process of developing sufficient support among competing interests" to achieve a desired outcome (such as passing legislation).[19] The U.S. Environmental Protection Agency describes "consensus building" as a "process in which people agree to work together to resolve common problems in a relatively informal, cooperative manner".[20] Consensus building occurs early in the decision making process, before conflicts arise. Like conflict resolution proceedings, it often involves a neutral third party who helps the participants design and implement their own strategies and solutions.

All aspects of a conflict resolution or consensus building proceeding are generally voluntary. This includes participation, form of the process and content of the final agreement. Frequently, a governmental agency is the convener, but may hire a neutral third party to conduct the proceedings. The neutral third party has no interest or stake in the issues nor in the agreement reached. Neutral

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[16] Public Law 104-320.
[17] 5 U.S.C. 571(3).
[18] Public Law 104-320, Section 3.
[19] Dukes, E. Franklin and Karen Firehock, Collaboration: A Guide for Environmental Advocates (Charlottesville, Virginia, University of Virginia, The Wilderness Society and National Audubon Society, 2001).
[20] U.S. EPA Conflict Prevention and Resolution Center, Frequently Asked Questions, http://www.epa.gov/adr/cprc_faq.htm.

third parties often come from one of several trusted designated sources such as public agency, a nonprofit organization or university-based institutes. The other important consideration is the person or persons managing the dispute resolution. Both the organization and the person(s) must be acceptable to the participating parties.

Over the last two decades the practice of dispute resolution, mediation and facilitation have emerged as recognized professional practices with a range of certification standards. While many practitioners come from the legal profession and the subject is increasing included in legal curriculum, the profession itself has been established as an independent field with degrees granted from institutions such as the Center for Conflict Resolution at George Mason University in Virginia and Harvard's Mediation Center.

In considering the range of dispute resolution options, the skill, experience of the mediator/facilitator is a primary consideration along with the institutional neutrality of the sponsoring organization.

STEPS TO DEVELOPING AN ENVIRONMENTAL CONFLICT RESOLUTION AND CONSENSUS BUILDING PROGRAM

Illinois does not have an environmental conflict resolution and consensus building program. Developing an effective, efficient and successful program should follow a deliberate and well-planned path. The framework for establishing an environmental conflict resolution and consensus building program in Illinois should include the following steps:

- Evaluate other governmental and private environmental conflict resolution and consensus building programs. Prepare a report outlining these programs and identifying the issues to be addressed in establishing such a program in Illinois.
- Convene a workshop with local conflict resolution and consensus building experts to discuss their experiences and the report prepared in step 1. Prepare a summary of the workshop and list of recommendations to be considered in developing the Illinois program.
- Develop a conceptual environmental conflict resolution and consensus building program, including all of the programmatic elements and significant related materials.
- Convene a workshop of environmental conflict resolution and consensus building experts from across the country to analyze the conceptual framework and related materials and to further develop options and recommendations.
- Develop the Illinois environmental conflict resolution and consensus building program and finalize related materials.
- Conduct a pilot study of the environmental conflict resolution and consensus building program and make any necessary revisions to the program.
- Prepare a final report incorporating all of the information gathered on environmental conflict resolution and consensus building and draft appropriate legislation and implementing rules.

Each step should build upon the information gathered and the lessons learned in the previous steps. The end result will be a comprehensive environmental conflict resolution and consensus building program for the State of Illinois. In addition, there will be significant supporting documentation to educate lawmakers and the public on the need for the program and how it can more efficiently and effectively accomplish the goals of protecting water quality and enhancing land use planning.

(1) EVALUATE OTHER ENVIRONMENTAL CONFLICT RESOLUTION AND CONSENSUS BUILDING PROGRAMS

The first step in developing an environmental conflict resolution and consensus building program is to evaluate and assess similar governmental and private programs. There are numerous programs that can provide valuable information and insight, including: the State of Florida's Conflict Resolution Consortium, the State of Oregon's Dispute Resolution Commission and its Public Policy Program, the Virginia Water Control Board Dispute Resolution program, the University of Virginia's Institute for Environmental Negotiation, U.S. Environmental Protection Agency's community-based environmental protection initiative, the U.S. Institute for Environmental Conflict Resolution and the National Policy Consensus Center. A brief summary of each of these programs is attached.

Each program was developed under different circumstances and designed to meet different needs, but all of the programs encompass similar elements and goals. Elements of each program that should be enumerated and summarized include:

- intent or mission of the program;
- scope of the program;
- issues covered (and not covered) under the program;
- timeframes and deadlines;
- services provided by the conflict resolution and consensus building entity;
- participants and their roles;
- designing the process;
- controlling the process;
- steps in the process;
- conduct of the proceedings;
- enforcement of agreements;
- ground rules; and
- legislation and implementing regulations.

Issues that have arisen during the development and implementation of the programs should also be enumerated and summarized. These include, but are not limited to:

- principles and goals of the conflict resolution and consensus building entity;
- physical location of the conflict resolution and consensus building entity;
- education and training of conflict resolution and consensus building professionals;
- stakeholder/community training, education and outreach efforts;
- constitution of an advisory committee to oversee development and implementation, as well as growth, of the program; and
- funding sources.

In addition, any "lessons learned", best practices or guidance documents that the States or other programs can provide should be summarized. This might include a state's experience in developing a

conceptual program and educating lawmakers and the general public in order to pass the legislation and get the program running.

The goal is to prepare a report outlining each of the programs evaluated. The report will also identify programmatic elements and issues that will need to be assessed when developing Illinois' environmental conflict resolution and consensus building program. This document will be used to help guide the discussion during the workshop of local experts.

(2) CONVENE LOCAL EXPERTS ON CONFLICT RESOLUTION AND CONSENSUS BUILDING PROGRAMS

The next step is to convene a workshop of local (i.e., Illinois) experts to discuss their experiences with conflict resolution and consensus building in Illinois. In addition, they can review the information on environmental conflict resolution and consensus building programs in other states and address the issues and elements identified in those programs. The goal of the workshop is to determine the best options for creating an efficient and successful environmental conflict resolution and consensus building program in Illinois.

Participants in the workshop might include representatives from EPA's stakeholder group, the Dispute Resolution Research Center and Kellogg Environmental Research Center at Kellogg Graduate School of Management at Northwestern University, JAMs Dispute Resolution, and the Center for Conflict Resolution. In addition, Judith Stockdale (Donnelly Family Foundation), a representative of the Joyce Foundation, and a representative from the Chicago Community Trust should be invited to participate.

(3) DEVELOP A CONCEPTUAL ENVIRONMENTAL CONFLICT RESOLUTION AND CONSENSUS BUILDING PROGRAM

The third step is to utilize the information gathered from the other programs and during the workshop of local experts to prepare a conceptual environmental conflict resolution and consensus building program. This conceptual program should include all of the elements and logistical aspects of the program. The conceptual program should be as comprehensive, specific and detailed as possible. It should provide the framework for the program, with supporting documentation for each element of the program.

Another goal of this step is to produce public education and outreach materials, funding strategies, facilitator/mediator and staff training materials or strategies, and feedback questionnaires or strategy. It should also include a strategy for integrating the environmental conflict resolution and consensus building program into the watershed management program and other state and local planning programs.

(4) CONVENE A WORKSHOP OF EXPERTS ON ENVIRONMENTAL CONFLICT RESOLUTION AND CONSENSUS BUILDING FROM ACROSS THE COUNTRY

Once the conceptual program is completed, the next step is to convene a workshop of environmental conflict resolution and consensus building experts from across the country to

evaluate the conceptual program and related materials (such as the public education and outreach materials). The goal of this step is to utilize national experts to assist in further developing and refining the conceptual program into a final program.

Participants in this workshop might include representatives from EPA's stakeholder group, Bill Potapchuk (Center for Collaborative Problem Solving), professionals from the previously evaluated programs (such as Florida, Oregon and Virginia) and national public dispute experts such as Susan Carpenter and Larry Susskind.

(5) DEVELOP THE ILLINOIS ENVIRONMENTAL CONFLICT RESOLUTION AND CONSENSUS BUILDING PROGRAM AND FINALIZE RELATED MATERIALS

The conceptual program can be revised using the information gathered from the previous workshop to create the Illinois environmental conflict resolution and consensus building program. The goal of this step is to create a comprehensive program that is as close to complete and final as possible. This program should incorporate all of the elements previously identified and refined by local and national experts. A viable funding strategy should be outlined. Public education and outreach materials should be finalized. Training strategies for conflict resolution and consensus building professionals should be detailed. Every aspect of a comprehensive program should be addressed to the greatest extent possible.

(6) CONDUCT A PILOT STUDY

Once the program has been developed, the next step is to conduct a pilot study involving two consenting municipalities that have a non-water quality dispute that they would have brought into the FPA process. Educational and outreach materials can be given to the parties to help them understand the process and to prepare for the pilot study. The pilot study will be conducted as an actual conflict resolution program following all of the ground rules and resulting in an enforceable agreement.

Experts and stakeholders should be invited to observe the proceedings and should also receive all of the educational and outreach materials. Upon completion of the pilot study, the participants and observers should submit their comments and suggestions regarding the environmental conflict resolution program and related materials, utilizing the questionnaire or feedback process previously designed. The goal of this step is to see how the program will work in the "real world". Any final revisions to the program can be made upon completion of this step.

(7) PREPARE THE FINAL REPORT AND DRAFT LEGISLATION

The last step is to prepare a final report and to draft legislation and implementing rules. By this point in the process, all background and support documentation has been prepared, the program has been through several reviews and a pilot study, and many of the related materials have been used. The goal of this step is to prepare all necessary materials, draft legislation and implementing rules for presentation to state lawmakers. The final report can be prepared in a format that can be used to educate state lawmakers and as background information or supporting documentation for the legislation and implementing rules.

CONCLUSION

EPA is now presented with an ideal opportunity to develop an environmental conflict resolution and consensus building program in Illinois. Such a program can resolve intergovernmental conflicts and non-water quality issues that continually arise in the FPA process. If EPA phases out the FPA process and creates a comprehensive watershed management and planning program, this environmental conflict resolution and consensus building program would be integral to ensuring its success. A comprehensive and successful watershed management and planning program requires the full participation and support of local stakeholders as well as a conflict resolution mechanism. Developing these two interrelated programs at the same time will result in a more comprehensive, efficient and successful program to protect water quality in Illinois.

Appendix 9 – Supplemental Opinion

April 9, 2004

Mr. Adam R. Saslow, President
Consensus Solutions, Inc.

Ms. Marcia Willhite, Chief, Bureau of Water
Illinois Environmental Protection Agency

For the Basinwide Management Advisory Group

Dear Mr. Saslow and Ms. Willhite,

As representatives of the Barrington Area Council of Governments (BACOG) and Kane County Planning Division, we are submitting a supplemental opinion to the "Framework for a Basinwide Planning and Protection Pilot". We submit this document on behalf of a broad coalition of members representing local government, regional government, environmental organizations, planning agencies, stormwater management agencies and higher education who participated in the Basinwide Management Advisory Group (B-MAG), under the Illinois Environmental Protection Agency (EPA), in 2003-04.

The supplemental opinion consists of two parts: "River Basin Plans" and "Local Watershed Plans", which were contained in Appendix 8 and Appendix 9 in earlier drafts of the Framework, with some clarifications. As representatives of government and other bodies that perform planning activities on an on-going basis, we believe the information provided in these two documents is critically important to those who will create the new plans. Good planning requires a solid framework of data, concepts, practices and strategies, all of which is outlined in the "River Basin Plans" and "Local Watershed Plans" documents. The breadth of ideas presented will give state and local officials and planners the guidance, direction and options they need to create their plans.

River Basin Plans

The Framework provides for the EPA to perform river basin assessments (Chapter 3), describing existing conditions and water quality at a given point in time, for every basin in Illinois. The assessment is intended to be a precursor to local watershed planning.

There are many areas in Illinois, however, that will choose not to develop local watershed plans immediately or even in the near future. In the absence of local plans, the EPA assessment would stand alone. Though beneficial, the assessment is generalized and not substantive or strong enough by itself to address or measure water quality planning and improvement. Further, the assessment may not contain sufficient guidance to ensure compliance with Phase II stormwater requirements.

A river basin plan, which would give general guidance and direction for planning activities, is needed for those areas. The river basin plan would be supplemental to the assessment. River basin plans

would be developed within five years of the adoption of the Framework and updated every five years thereafter.

Attached to this letter is the document, "River Basin Plans", which outlines the elements that could be contained in such a plan.

Local Watershed Plans

Local watershed plans will contain substantially more detail than the river basin assessment, and more even than the river basin plan. The local plan is a roadmap for bridging the gap between current conditions and the stakeholders' vision for the watershed. It will contain goals and recommendations for public policies, action steps, implementation and metrics for success. Local watershed plans are envisioned to contain a more refined and detailed version of USEPA's "Nine Minimum Elements for a Watershed Plan" (Chapter 4, Figure 2). In order to be eligible for incentives, local plans also need to address "Elements of a Locally Developed Watershed Plan" (Chapter 4, Figure 3). The charts represent minimal standards for the content of a local watershed plan, and we expect many stakeholder groups will choose to further develop their plans.

Different stakeholder groups will identify different needs for their areas, and they will tailor their plans accordingly. Some groups may want to present a greater level of detail and complexity than can be visualized through the charts mentioned above. To that end, we believe a complete index of watershed plan elements that could be contained in a plan should be provided, for local officials' consideration.

The attached document, "Local Watershed Plans", was developed by members of B-MAG who contributed their extensive environmental, governmental and planning expertise. We believe the ideas and guidance offered are invaluable to local governments who will soon begin to put plans into place.

Thank you for the opportunity to submit this supplemental opinion. The B-MAG members listed below join us at BACOG and Kane County in expressing support for the positions described herein.

Sincerely yours,

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Barrington Area Council of Governments
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Barrington, IL 60010

Sam Santell
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Also:

Michael Fruth, Madison County Coordinator
Metro East Regional Stormwater

Jonathon Goldman, Executive Director
Illinois Environmental Council

Scott Goldstein, Vice President of Policy & Planning
Metropolitan Planning Council

Martin Jaffe, Professor
University of Illinois - Chicago

Joyce O'Keefe, Associate Director
Openlands Project

Cindy Skrukrud, Clean Water Advocate, Sierra Club
Board of Directors, Friends of the Fox River

Mike Tryon
McHenry County Board of Commissioners

Ronald L. Thomas, Executive Director
Northeastern Illinois Planning Commission

Ed Weilbacher
Campaign for Balanced Growth

Beth Wentzel, Watershed Scientist
Prairie Rivers Network

RIVER BASIN PLANS

A watershed planning framework is envisioned in which the State and other stakeholders produce a general River Basin Assessment (see Chapter 3). Though beneficial, the assessment is generalized and not substantive or strong enough by itself to address or measure water quality planning and improvement.

We believe a River Basin Plan, which would give general guidance and direction for planning activities, is needed to supplement River Basin Assessments in areas that lack local watershed plans.

State-level River Basin Plans would include at least the following elements (and possibly other elements as well) that are above and beyond the content of the River Basin Assessment:

- Sources of water quality degradation (*e.g.*, point source discharges, combined sewer overflow outfalls, urban runoff, storm sewer discharges, rural runoff, construction site runoff, dams, channelization, eroding stream banks, septic systems, contamination from hazardous waste sites, etc.) at the basinwide scale, including possible mapping.
- Current land uses, including identification of areas and estimated current percentage of each sub-watershed covered by impervious surface area, in recognition of the close connection between land use and water quality.
- Established TMDLs and implementation plans. TMDLs could be considered in state level planning efforts. Locally-led planning and implementation activities could be relied on to substitute for TMDLs when consistent with federal TMDL guidance.
- NPDES Phase II stormwater permit plans where available. Where not available, describe efforts that could be strengthened to create them.
- Best management practices and other non-point source controls that could/should be employed within the watershed.
- Municipal or county ordinances (stormwater, sedimentation and erosion control, stream and wetland protection, floodplain protection, etc.) that incorporate the protections offered in the NIPC models.
- State authority to enable all urban or urbanizing counties to form countywide stormwater management agencies.
- Protections for environmentally sensitive areas (including groundwater, surface water sources, Outstanding Resource Waters, wetlands, floodplains, high quality surface waters, etc.).
- Facility Planning Area (FPA) boundaries within which designated management authorities will continue to exercise authority.
- Financial incentives (recommended):
    - Eligibility for lower loan rates and other incentives developed in this report for projects within a sub-watershed that has a plan that meets the EPA criteria, noting that these incentives would not be available if the State were doing the planning.

- Increased or prioritized funding from Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP), Wetlands Reserve Program (WRP), etc., for projects within a sub-watershed that has a plan that meets criteria, including a discussion of which programs would best address specific problems in the River Basin.

In order to make best use of all available resources, including federal funding and other incentives, the River Basin Plan additionally needs to address all elements of the USEPA's "Nine Minimum Elements for a Watershed Plan" (Framework, Chapter 4, Figure 2) and "Elements of a Locally Developed Watershed Plan" (Framework, Chapter 4, Figure 3).

LOCAL WATERSHED PLANS

Local watershed plans are the backbone of any successful watershed planning system. Most decisions influencing growth occur at the local level, and good local planning is the key to protecting water resources while allowing economic development.

The following list presents a fairly comprehensive outline for what a thorough watershed plan should include or address. The information in a local watershed plan would draw on available information from the river basin assessment, the State-level river basin plan, local information, and other resources. Where necessary, it would also involve the creation of new data.

1. Inventorying and Assessment
    a. Assess water quality in all stream segments and lakes, including chemical and biological health
        i. Determine success in meeting designated uses
        ii. Develop IBI and MBI ratings
    b. Classify waters (there may be overlap)
        i. Waters requiring special protections (source waters for water supply, waters that are designated outstanding resource waters, waters that may be in the process of or eligible for designation as outstanding resource waters, etc.)
        ii. Waters subject to anti-degradation standards (specifying which parameters those are)
        iii. Waters that are impaired (specifying impaired parameters)
    c. Describe (and possibly map) sources of water quality degradation (*e.g.*, point source discharges, combined sewer overflow outfalls, urban runoff, storm sewer discharges, rural runoff, construction site runoff, dams, channelization, eroding streambanks, septic systems, contamination from hazardous waste sites, etc.)
    d. Identify and map environmentally sensitive areas, including:
        i. areas the degradation of which would reasonably be expected to harm water quality (*e.g.*, wetlands, hydric soils, floodplains, steeply sloped areas, highly erodible soils)
        ii. other sensitive areas (*e.g.*, threatened and endangered species habitat, Illinois Natural Area Inventory sites, etc.)
    e. Estimate available groundwater quantity and quality, aquifer sensitivity to contamination, current groundwater withdrawal rate, and current recharge rate.
    f. Identify current land uses, including the current percentage of each subwatershed covered by impervious surface area.
    g. Describe and quantify protections already in place (*e.g.*, existing NPDES permits, Phase II plans, existing ordinances, CRP and CREP acreage, etc.)

2. Estimation of Future Needs and Concerns

    a. Estimate twenty-year (or different time period, as appropriate to the planning area) growth patterns and land uses (including increases in impervious surfaces) by reviewing municipal, county and regional plans and garnering input from local governments and regional planning bodies

    b. Estimate likely changes (positive or negative) in sources of degradation (*e.g.*, changes in point source discharges, combined sewer overflow outfalls, urban runoff, storm sewer discharges, rural runoff, construction site runoff, dams, channelization, eroding streambanks, septic systems, contamination from hazardous waste sites, etc.)

    c. Model expected effects of the changes in degradation on streams, lakes, and rivers

    d. Model expected effects of changes in land use and impervious surface cover on groundwater quality and quantity

    e. Estimate expected groundwater needs based on predicted residential, commercial, and agricultural needs

    f. Identify funding, site-specific projects, regulatory changes, and other resources needed to continue and expand protection programs (*e.g.*, conservation reserve program and conservation reserve enhancement program, C2000, technical assistance, etc.)

3. Choosing a vision for the watershed

    a. Outline issues and opportunities, incorporating local communities' plans

    b. Articulate a vision for key infrastructure (including: water supply, wastewater, transportation, telecommunications, and other utilities)

    c. Identify the needed community facilities and upgrades to existing facilities for the future (schools, police and fire protection, libraries, etc.)

    d. Outline housing and economic development needs and trends

    e. Identify a vision for land use, including farmland preservation areas and natural resource protection and restoration areas.

    f. Establish a mechanism for resolving inter-municipal disputes outside the FPA process.

    g. Identify a vision for protection and/or restoration of water resources

    h. Specify environmental and natural resource protection tools

        i. Retain or revise designated uses for waterbodies

        ii. Establish TMDLs

        iii. Prepare or revise facility plans (including anti-degradation and alternatives analyses)

iv. Retain or revise FPA boundaries (within which designated management authorities would continue to exercise authority).

v. Plan protections for environmentally sensitive areas (including the nomination of Outstanding Resource Waters)

4. Evaluation of the process
    a. Establish a mechanism to determine the success of the watershed planning process in improving water quality
        i. Interim, measurable milestones for determining whether the items are being implemented
        ii. Criteria to determine whether pollutant reductions are occurring and substantial progress is being made toward water quality goals
        iii. A monitoring and evaluation plan to evaluate the effectiveness of the watershed plan and implementation efforts
    b. Identify suggested changes for the next five-year cycle of planning

5. Implementing the vision
    a. Identify steps needed to achieve surface water quality protections
        i. Best management practices and other non-point source controls
            1. BMPs and non-point source controls must be specifically described
            2. The plan should identify different alternatives and choose the most appropriate one for local conditions
            3. The federal government has begun using regulatory approaches for certain types of pollution traditionally viewed as NPS (*e.g.*, urban and construction site runoff), and there is nothing to prevent the State, county, municipal, or other local governments from adopting important NPS controls as part of their legislative or regulatory framework (such as stream and wetland protection ordinances, stormwater management ordinances, etc.). These options should be explored.
            4. The role of FPAs in furthering the adoption of NPS controls should also be recognized.
        ii. No-discharge systems
        iii. Preservation of open areas and environmentally sensitive areas
            1. High priority preservation for special resources (*e.g.*, wetlands, aquatic habitat for threatened or endangered species, water bodies with higher IBI or MBI scores, etc.)

2. Numeric goals for how much of a subwatershed should retain pervious surfaces to maintain water quality
3. Estimated limit on how much land disturbance could occur cumulatively or simultaneously in a subwatershed without harming surface waterbodies

iv. Reduction of NPDES effluent limits to meet TMDLs

v. Adoption of site-specific restrictions to protect higher quality waterbodies

vi. Restoration plans

vii. Designation of Outstanding Resource Waters

viii. Best available technology

b. Identify steps needed to protect groundwater quality and quantity

c. Estimate pollutant reductions that will be achieved through implementing protections in parts (a) and (b) above

d. Identify tools that could be used to achieve these goals

i. State-level permitting and planning programs

ii. Municipal or county ordinances (stormwater, sedimentation and erosion control, stream and wetland protection, floodplain protection, etc.) that incorporate the protections offered in the NIPC models

iii. State authority enabling all urban or urbanizing counties to form countywide stormwater management agencies

iv. Financial incentives

v. Purchase of land or conservation easements

vi. Incorporation of watershed plan recommendations into municipal, county and regional plans within the watershed

vii. Outreach and education programs (NPS, Phase II, and others)

e. Identify the amount of funding and technical assistance needed to implement the watershed plan, possible funding and technical assistance sources, site-specific projects, regulatory changes, and steps to secure the needed resources.

f. Identify ways to reduce duplication and make the process more efficient

g. Identify monitoring and enforcement tools for use by state and local officials. Where local governments will take the lead, a showing should be made that the local governments have the resources for adequate monitoring and enforcement.

h. Identify ways to ensure consistency with local communities' plans

i. Set a schedule for implementing the actions identified in steps A through H

j. Implement the actions identified in steps A through H