SUCCESSFUL WATERSHED PLANNING BY STAKEHOLDERS, BOONE COUNTY, MISSOURI

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Abstract

Successful watershed planning is essential to protection of water quality and aquatic ecosystems, but it is also essential to achieve planned growth that meets the economic goals and quality of life in a community. Development of a watershed plan that is likely to be adopted by a community and its local governments is a daunting task. The approach taken by the Bonne Femme Watershed Project appears, so far, to be successful. Development in the watershed, located near the rapidly growing City of Columbia, Missouri, threatens cave and karst resources including two endemic stygobites that reside in Devils Icebox Cave.

The project placed the task of watershed planning squarely in the hands of stakeholders who represented the diverse interests of business, environmentalists and landowners. Stakeholders were supported by a Steering Committee that provided technical expertise and a Policy Committee. Years of educational outreach and scientific research laid a solid foundation. Keys to successful watershed planning included: the organizational structure of the project, representation of diverse stakeholder interests, willingness to employ respectful engagement in dealing with contentious issues, dedication to reaching compromise, Policy Committee selection of the stakeholders, interested local governments and politicians, giving full control of the planning process to the stakeholders, providing an outline to serve as a "road map," providing progress reports, adherence to deadlines, fostering trust and respect, building relationships, patience and dedication. The stakeholder-led watershed planning process and its keys to success can be implemented in any watershed, to the benefit of the watersheds aquatic resources.

Key words: karst land management, hydrology, contaminants, planning, Devils Icebox Cave, Hunters Cave, Bonne Femme Watershed Project, Boone County, Missouri

Introduction

How do you develop a watershed plan that considers a wide range of community values? By including policy-makers, technical experts and a diverse group of stakeholders in the planning process to help ensure the plan has community support. Getting a diverse group of stakeholders to work together is challenging. Keys to successful stakeholder-led watershed planning included giving stakeholders full control of the plan's content, building relationships and trust, mutual understanding, good communication and a well-designed process. The process employed by the Bonne Femme Watershed Project can serve as a model for people in other areas who are interested in protecting water quality, sensitive habitats such as cave ecosystems and hydrologically vulnerable areas.

Cave and Karst Resources of the Bonne Femme Watershed

The Bonne Femme watershed, located in southern Boone County (Figure 1), has a rare combination of landscapes: former prairie, karst topography (e.g. caves, springs and sinkholes), woodlands and big river floodplain. Particularly noteworthy is the karst topography within the watershed. Within the watershed, this landform includes more than 35 caves , which provide habitat for rare, endangered and endemic species. It also includes losing stream hydrology, including two well-characterized, karst-recharge areas (Wicks et al. 1997, Lerch et al. 2005) that represent extremely

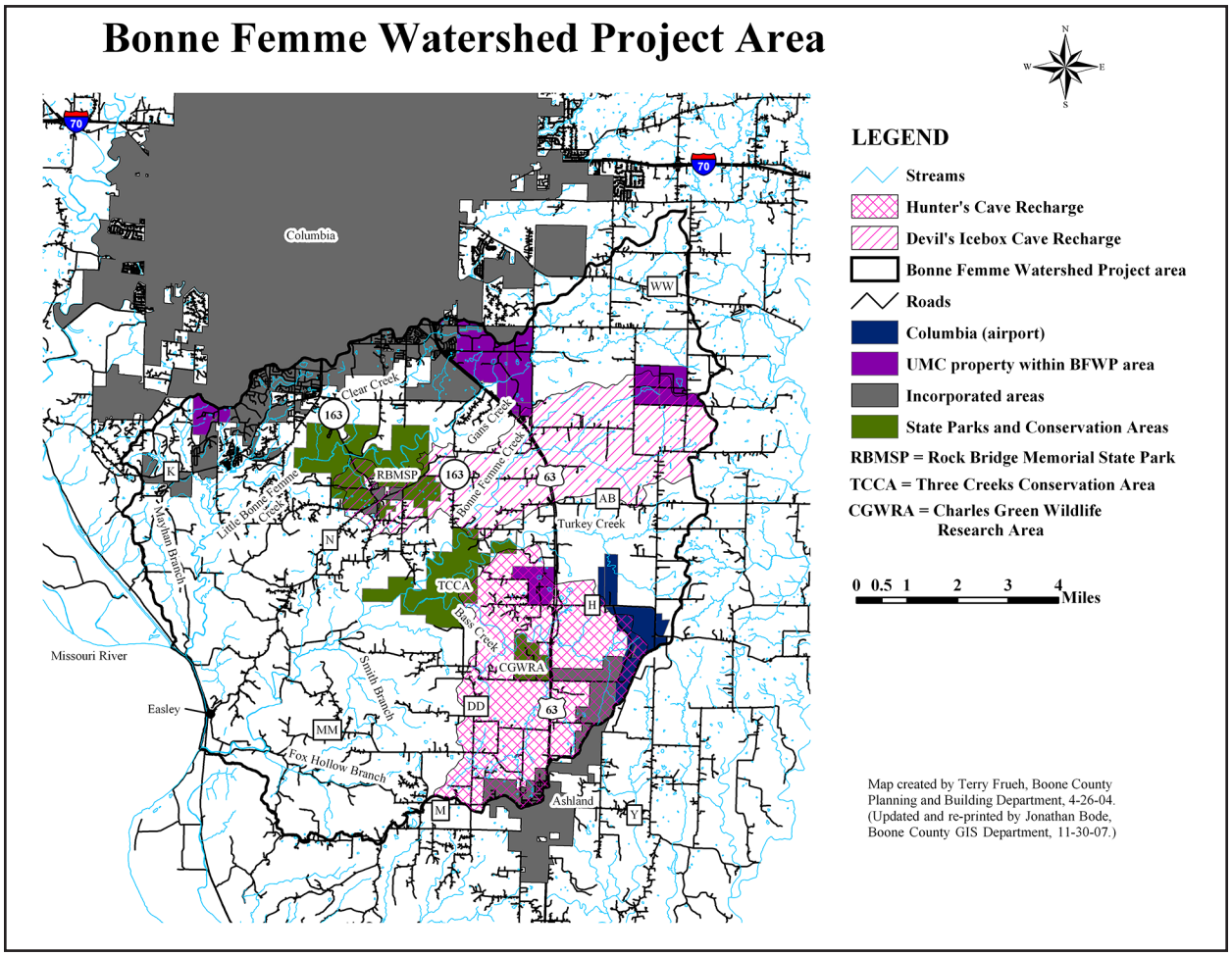

Figure 1. Bonne Femme Watershed Project Area.

vulnerable settings for contamination of groundwater resources. The Devils Icebox and Hunters Cave recharge areas are similar in size (~3,200 ha or 12 mi.^{2}) and land uses. Currently, both recharge areas predominantly include cropland, forest and grasslands, but urban areas are increasing around the cities of Ashland and Columbia. The population in the Bonne Femme watershed grew by 40% in the ten-year period between 1990 and 2000! Boone County's population is expected to grow at a rate of 2% annually through 2030, an increase of over 245,000 people. A key distinction between the two recharge areas is that the Devils Icebox recharge area includes both allogenic (i.e. losing stream) and autogenic (internally drained via sinkholes) recharge components while the Hunters Cave recharge area is mainly allogenic (Lerch et al. 2005).

The Devils Icebox Cave system, the seventh longest cave in Missouri with over 10.1 km (6.25 mi.) of mapped passage, currently ranks second in biodiversity among Missouris ~6,400 caves (Elliott 2007). Two federally listed, endangered bats use the cave, a maternal colony of gray bats and a hibernating group of Indiana bats. Found only in Devils Icebox Cave, the pink planarian (Figure 2) plays a role of both predator and prey in the cave ecosystem. Its numbers are being monitored using a protocol developed by Sutton (2004). Sutton (2004) collected an isopod in 2003 that was determined to be a new species of the genus *Caecidotea*. Both of these endemic stygobites are vulnerable to water quality and quantity changes that may occur because of land use in the Devils Icebox Cave recharge area.

Figure 2. *An endemic stygobite, the pink planarian of Devils Icebox Cave is vulnerable to water quality degradation. Photo by William R. Elliott, Missouri Department of Conservation.*

Background of the Bonne Femme Watershed Project

There has been a long history of public interest in the natural features of the watershed. The effort to create a park at Rock Bridge began in the 1960s, although it had been a semi-public area for more than a century. It culminated with the formation of Rock Bridge Memorial State Park in 1967. A similar effort to form Three Creeks Conservation Area began in the late 1980s.

Staff at Rock Bridge Memorial State Park initiated educational programs to encourage landowners to protect Devils Icebox Cave life and water quality. Efforts included a Devils Icebox Task Force in the 1970s, Wild Cave Tours from 1980 to the present and landowner outreach programs in the late 1990s. Collaboration began as staff of other agencies and organizations helped with the outreach programs. An EPA Clean Water Act (section 319), nonpoint-source-protection grant was awarded to Show-Me Clean Streams in 1998. Staff of the Natural Resource Conservation Service (NRCS) applied for and received funding through a Missouri Department of Natural Resources' Nonpoint Source Special Land Area Treatment (SALT) grant. The 319 grant was primarily educational while the SALT project provided cost-share assistance for implementation of agricultural conservation practices. Together, they formed the Bonne Femme Watershed Partnership that functioned from 1998 through 2002. The Partnership's focus was the entire Bonne Femme Watershed of 24,087 ha (93 mi.^{2}). It was beneficial to broaden the focus area beyond just the Devils Icebox Cave recharge area, because it drew in more partners and encompassed the caves and karst features of Three Creeks Conservation Area as well as several surface streams.

The Bonne Femme Watershed Partnership provided funding and demonstrations about subjects such as on-site sewage treatment, streambank stabilization, lawn care, fencing and wetland management, sponsored stream clean-ups and tree planting events, held an educational festival for over 350 local fifth and sixth grade students each year, and conducted other educational efforts such

as newsletters and meetings. The result was that more people were aware of watershed issues and were involved in some way in watershed protection.

Scientific research added to our understanding of the condition of streams in the watershed and received media coverage, thereby increasing community awareness of the need to protect water quality in local streams. Show-Me Clean Steams collected EPT data (macroinvertebrates that inhabit streams) and correlated it with the amount of impervious land cover in each subwatershed, showing that impervious cover negatively impacted the biological health of the streams. Lerch et al. (2002 and 2005) conducted intensive water quality and hydrological studies of the Hunters Cave and Devils Icebox recharge areas. High levels of fecal bacteria were found in both cave systems and reports of these findings by local media caused concern regarding the safety of recreational activities associated with both streams, particularly of children playing in Devils Icebox Spring Branch in Rock Bridge Memorial State Park.

Some hoped that an educated citizenry aided by scientific research could influence local government and expect tools such as county-wide zoning to be used to protect streams. Others in the community were concerned about property rights and economic development. On numerous occasions, hotly contested debate arose during hearings held by local governments about proposed developments. Community interest and media attention was especially strong concerning the approximately 500-acre Philips Farm development that was situated in the Gans and Clear Creek watersheds upstream of Rock Bridge Memorial State Park. The Columbia City Council tried to reach an acceptable compromise by approving the development with extra protections for the streams. The need for more comprehensive land use planning to protect the watershed was now more apparent than ever.

In 2001, the Directors of the Missouri Departments of Natural Resources and Conservation appointed a technical group to investigate ways to protect the caves and streams in the Bonne Femme Watershed. This group, the Southern Boone County Karst Team, decided to pursue an EPA Clean Water Act 319 grant, to protect the streams from nonpoint source pollution and to develop a comprehensive land use plan. The 319 grant funded the Bonne Femme Watershed Project from 2003 through 2007. The project benefited greatly from the foundation laid by earlier work that resulted in education that heightened community awareness of watershed issues and in research that increased the community's understanding of the risks posed to water quality in this watershed.

Components and Function of the Bonne Femme Watershed Project

Purpose of Watershed Plan—

A stream's health is most affected by the use of the land in its watershed. Thus, in order to maintain the environmental quality of the watershed and its streams, land use and its management in the watershed must be addressed, preferably by means of a land use plan specifically designed to protect streams. A land use plan is a set of policies and guidelines for how land should be used and where growth should occur. Although there are master plans for Boone County and the City of Columbia, these were not designed with stream protection as a specific objective. To facilitate the plan's development, the Bonne Femme Watershed Project was organized into three committees: Steering, Policy and stakeholder.

Steering Committee—

Since most of the watershed is in Boone County's jurisdiction, the Karst Team invited county staff to participate on the team and asked the county commission to sponsor the 319 grant. In November 2001, the Boone County Commission formally applied for the grant, which was to be administered by its Planning and Building Inspection Department. The cities of Columbia and Ashland agreed to be listed as partners in the grant application. The grant was awarded in June, 2003, providing funding for a four-year period. After the grant was awarded, several members of the Southern Boone County Karst Team became the Project's Steering Committee. Members of the committee included representation from Boone County, Missouri Department of Natural Resources, Missouri Department of Conservation, Rock Bridge Memorial State Park and the USDA-Agricultural Research Service. An Urban Watershed Conservationist was hired in October 2003.

The Steering Committee directed the project and its staff. The Steering Committee provided scientific, technical and administrative assistance

to coordinate the other two committees' work. In addition, this committee formulated the project mission statement: use watershed planning as a tool to prevent further water resources degradation in order to maintain their long-term quality within the Bonne Femme watershed.

Policy Committee—

One of the first tasks of the Steering Committee was to seek input and support from local political decision-makers. The decision-making agencies that affect the timing and location of development in the watershed were invited to designate a representative to serve on the Policy Committee. The Policy Committee consisted of the following agencies and entities: Boone County Commission, Boone County Planning and Zoning Commission, Boone County Regional Sewer District, Boone County Water District #9, City of Ashland, Columbia City Council, Columbia Planning and Zoning Commission, Consolidated Public Water Supply District #1 and the University of Missouri-Columbia,

This Committee performed several key functions throughout the life of the Project. They established the make-up of the stakeholder Committee and acted as liaisons with their agencies to educate and support project goals. Since the watershed lies in many different jurisdictions, interagency coordination was important to ensure that efforts were synergistic and not counterproductive, while providing interagency communication regarding actions or planned actions within the Bonne Femme Watershed. Members provided input on the legal and political feasibility of the watershed plan's recommendations. The role of these committee members will also be crucial in acquiring the needed community support as the plan moves through legal adoption and implementation.

Stakeholder Committee—

The process used to develop this plan is rare. Often, watershed planning is done by a group of technically trained government staff and the community responds during public hearings, or planning is done by a group of citizens with vested interests. In contrast, this plan combines good technical effort with strong input from a vested group representing a broad spectrum of community interests.

From the beginning of the project, the Steering Committee felt that strong community input was crucial to the plan's success. So, the Steering Committee delegated responsibility for development of the watershed plan to the Stakeholder Committee and in the process, it adopted a support role by providing education, technical advice and facilitation of stakeholder meetings. The Policy Committee aided the stakeholders by providing a political and legal perspective.

The Policy Committee followed three Steering Committee recommendations when choosing the stakeholders:

- Select some people who do not own watershed land, but have a vested interest in the watershed because of development, recreation, or environmental protection,
- Include diverse, even adversarial, interests to provide a necessary spectrum of ideas to be considered,
- Have a Stakeholder Committee of eighteen people, with three general groups represented: business/construction, environmental and landowner.

With such a makeup, the diverse interests were well represented and the Stakeholder Committee had the needed balance to complete a plan palatable to the community. Representing the business group were individuals from construction, development, real estate, engineering, banking and other businesses. The environmental group was represented by educators, recreators and local watershed and environmental organizations. The third group represented watershed landowners, including farmers and homeowners. It should be noted that people within the three general groups often had overlapping interests and thus it was somewhat artificial to place each stakeholder into a single interest "box." The stakeholders held their first meeting in June 2004 and continued to meet on a monthly basis until completion of the plan in February 2007. To reinforce their autonomy, the Steering Committee recommended that the stakeholders elect two co-chairs, who ran the meetings and decide amongst themselves how to organize their meetings and establish voting procedures to be followed. As the stakeholders moved through the planning process, several challenges surfaced. At the first few meetings, many of them held strong, seemingly uncompromising postures. However, over time, their

postures softened so that people could still express strong opinions, but with a respect for others and a willingness to compromise. Although the stakeholders received guidance and feedback from the Steering and Policy Committees, they had the final say on the plan's content. This ensured that it was truly a product of citizen involvement and not one controlled by politicians or technical staff.

The watershed planning process involved these steps: (1) identify issues, (2) create a vision of the watershed in 2030, (3) transform the vision into achievable goals, (4) examine complimentary and conflicting aspects of the goals, (5) identify obstacles to achieving the goals, and (6) develop strategies and policy recommendations. For example, one goal developed was to "conserve recharge and karst areas with special protections." Strategies suggested for achieving this goal were to: (1) be more restrictive on the level of service scale when using stormwater manuals, (2) establish new zoning regulations, (3) devise a land purchase strategy, (4) utilize transfer of development rights and conservation easements, (5) provide tax relief incentives and (6) conduct further scientific study and water quality monitoring. The recommendations regarding this goal went into more detail and can be viewed on the project's Web site, www.CaveWatershed.org. Stakeholders decided it was appropriate to leave it to local governments to determine specifically how recommendations would be implemented.

Although the plan's focus is on protecting and preserving water quality, the stakeholders wanted to make sure this was accomplished while maintaining economic vitality and respecting community values. The plan provides policy recommendations that, if implemented, will achieve specific goals that enhance the Bonne Femme watershed while maintaining economic growth. Some stakeholders were motivated to protect streams because doing so can reduce the public and private economic cost of repairing infrastructure and flood damage and maintain ecological services.

Figure 3. Stakeholders sometimes broke out into small groups to discuss aspects of watershed planning.

Keys to Successful Stakeholder-led Watershed Planning

Although the plan has not been fully implemented, the fact that a diverse and divergent group of volunteer stakeholders stayed together to develop a plan is a great accomplishment (14 of the original 18 stakeholders worked through the entire process). One key to success was the organization of the project's committees. While it was more complicated and time-consuming to work with three different committees, each committee played an important role in the plan's successful development.

Good communication and coordination were essential to developing a community-based plan. For example, staff contacted each of the stakeholders periodically to ask for their feedback on the process and how it could be improved. Also, letting everyone know about upcoming deadlines well in advance and enforcing them enabled the process to proceed in a timely and fair manner. The diverse nature of the stakeholders allowed for a large variety of views to be considered. Having opposing viewpoints at the table from the beginning enabled them to be worked out during the process, instead of fighting over the finished product. The group's balanced nature ensured that the plan would not be skewed in any particular direction. The fact that it was completed by members of the community, who were chosen by the Policy Committee, ensured that the plan would have the needed political support for implementation.

Since the process was started by government, many of the stakeholders were initially either fearful or skeptical concerning the degree of autonomy they would have in developing the watershed plan. Some were afraid that eventual regulations would threaten their livelihood, reduce land values, or

restrict property rights. Thus, gaining their trust in the process was a crucial element. Several steps helped to gain the stakeholders' trust in the watershed planning process and in project staff, such as:

- Giving them full control over plan content
- Encouraging open dialog
- Addressing contentious issues head-on
- Responding appropriately to criticism (e.g. thoughtfully addressing it, not getting defensive)
- Following through on commitments
- Providing useful, broad-based education related to science issues, future economic growth and examples of successful plans developed in other communities
- Realizing that plan recommendations still have to go through the public process of local political adoption before they can be implemented.

In the first year of meetings, progress seemed to languish at times, but this was a necessary part of the Stakeholder Committee's development that led to their cohesion as a group and eventual ownership of the process. Over time, they took responsibility for working through conflicting opinions and became increasingly focused on achieving specific outcomes from each meeting. This early phase of the process was very challenging and frustrating because the group wanted to accomplish its objectives, but to be effective, they first needed to create a respectful, positive, working atmosphere. Patience was definitely an important virtue as stakeholders and staff sometimes dealt with issues brought forward that seemed to sidetrack the committee from their work. Stakeholders listened to and dealt with these issues in a respectful, but efficient way that retained everyone's involvement. Over time, the members got to know and trust one another, resulting in more progress and a greater sense of satisfaction at the conclusion of their meetings.

An unintended benefit of the process lagging a little was that the stakeholders came to realize they were indeed in control of the plan, not the Steering Committee. Project staff had to walk a difficult line during the stakeholder process. It was important that the group work through problems without external influence, thus, staff had to remain impartial and detached. However, if the stakeholders got mired in minutiae or encountered irreconcilable issues, staff sometimes needed to step in to help direct the meeting towards a more productive path. At times, the Steering Committee sought the advice of Community Development Specialists from the University of Missouri extension office. These skilled facilitators offered valuable suggestions for how to keep the process moving forward.

As time went on, the stakeholders were increasingly willing to compromise for the sake of progress, in part because of friendships that formed. Alliances shifted at times, depending upon the subject. For example, agricultural interests seemed to align with development interests during many discussions, but when stakeholders considered exempting agriculture from certain restrictions, it was construction industry interests who opposed and environmentalists that went along with that aspect of the recommendation. The construction interests did not feel it was fair that they would have to pay or do extra, while agriculture would not. The issue was complicated because Missouri statutes exempt agriculture from many restrictions.

Several other aspects helped to make the planning process a success. At each stakeholder meeting, staff recapped where the stakeholders were in the process, what they were going to work on and what their next meeting would cover. This gave them an understanding of where they were in the process and a sense that they were continually making progress. It was important to have educational presentations to help the stakeholders make informed decisions. The stakeholders also gave some of these presentations, which furthered their ownership of the plan. However, the need for educational presentations had to be balanced with the need for achieving tangible accomplishments at every meeting.

A key philosophy throughout the life of the project was respectful engagement. The stakeholders were strongly encouraged to avoid combative postures or belittling of members with opposing viewpoints. Conversely, conflict avoidance was also strongly discouraged. Instead, the goal was for stakeholders to feel comfortable in voicing their opposition in respectful terms and to focus on finding solutions or acceptable compromises. An important outcome of respectful engagement was that the stakeholders developed their own guiding principle—economic development could occur in an environmentally friendly manner.

It was helpful that the project staff person was officially employed by the Boone County Planning

and Building Inspection Department. This enabled him to have the benefit of his colleagues' experience with local builders and developers, learn about legal and practical questions and use county office space and equipment. It is also possible some stakeholders were more willing to trust a local governmental official than a state or federal official. Finally, being formally employed by the local government ensured that other Boone County staff were aware of the stakeholders' progress, which facilitated communications with other local governmental officials. The project was fortunate to have a watershed conservationist who was very well qualified in terms of technical knowledge, interpersonal skills and dedication.

Including the policy-makers from the beginning ensured that they would be well educated about the plan and also have a sense of ownership. Citizens sometimes write policy guidance, and then take it to the policy makers for their approval without their having been included in the process. Conversely, too often governments draw up policies and take it to the citizens for public vetting. Either way, one party is not included in the process, does not have ownership of the end product and is merely being asked to react to a proposal. This too often results in misunderstanding, distrust and emotional reactions rather than objective consideration of a plan's merits. In contrast, our planning process attempted to include both the community and its politicians from the beginning so that it would be adequately discussed as they went through the process.

To keep the public engaged as well as garner community interest and support, the Steering Committee developed several community outreach programs, including two public debates. These were well attended by the public (about 150 in attendance) and by the stakeholders. Local media reports were very positive and involved both TV and newspaper. People in the community genuinely appreciated the opportunity to hear local experts, from both sides of the development debate, deal openly and head-on with differences of opinion in a respectful manner. Thoughtful selection of the debaters and moderators, establishing strict rules, such as time limits for responses and rebuttals and carefully considered questions were crucial to the success of these debates. In addition, seminars and workshops were provided for engineers and developers, bringing in speakers from other cities, who explained the feasibility of using innovative best management practices and the economic viability of low-impact development strategies.

Intergovernmental cooperation on plan implementation is paramount to protecting streams since they cross jurisdictional boundaries. Simply having representatives of each local government entity sitting at a table together, sharing and discussing watershed issues was a huge step forward. The participation of policy committee members created a sense of ownership that resulted in the presence of at least one supporter among each local government entity. But intergovernmental cooperation did not stop there. The Project, with the help of Boone County, hosted a joint Planning and Zoning meeting among Ashland, Columbia and Boone County. This meeting was the first time all three of these Planning and Zoning Committees had ever jointly met, resulting in further intergovernmental cooperation. In addition, a joint resolution among the local governments was drafted which formalized the process of governmental coordination in implementing the watershed plan.

The Steering Committee members also worked well together, which was essential to their successfully managing project staff and adjusting to situations as they arose. Members of this committee provided technical expertise in a variety of scientific disciplines (such as hydrology, conservation and wildlife biology, watershed management and public land administration) and possessed practical experience in dealing with local politicians, developers and grass-roots organizations. Brainstorming sessions were freewheeling, thereby producing a positive environment for creative thinking and problem solving.

Several external aspects synergistically helped the stakeholders' planning effort. Local governments were mandated by the federal government to implement stormwater regulations. There was a joint Boone County-Columbia citizen task force that was working on improving stormwater management. Several stakeholders were also involved with this task force and the two groups had many similar recommendations. The Community Stormwater Education Project further helped to raise public awareness of these issues.

Ultimately, the stakeholders were the ones who accomplished the task of creating a positive working environment that enabled them to craft an excellent plan. The Project was fortunate to have a

group of dedicated individuals who were willing to put in long hours and work hard to find common ground. Even the best-designed organizational approach can collapse without people willing to put in the needed effort. Most likely, the request to serve by a local politician enhanced the stakeholders' perception that their task was important, would have a positive impact on their community and sustained them through the challenges they faced in developing the watershed plan.

Room for Improvement

In retrospect, the biggest mistake that staff made was not having a clear road map for how the stakeholders would complete the process. Staff thought that the stakeholders would take full charge of the form of the plan as well as its content. However, since they did not initiate the process, the stakeholders needed a clear outline for the plan. After several months "spinning their wheels" and wondering where they were headed, the Steering Committee developed a clear outline for the stakeholders to follow. This provided them with a clear structure for the plan process, while leaving them the responsibility to fill in its content.

Public Comment and Plan Addendum

After completion of the plan, an open house was held in early March 2007 in which the plan was introduced to the public, followed by a seven-week public comment period. During this period, staff gave educational presentations about the plan to various interest groups and held a series of public meetings. There were public notifications in local newspapers, press releases and numerous media articles covering the plan. In addition, notification of the public comment period was mailed to all watershed landowners. Although this was an unprecedented effort to gather public comments about the plan, only four comments were submitted—perhaps an indication that the plan was well received by the community. These comments were forwarded to the stakeholders for their response. Both the public comments and stakeholder responses were incorporated into a plan addendum. On June 1, 2007, the plan and its addendum were sent to local agencies for adoption and implementation.

Adoption and Implementation: Next Steps for the Watershed Plan

As of November 16, 2007, several local governments and entities have adopted the plan. The primary governing body of the watershed, the Boone County Commission, adopted the plan by resolution on November 13, 2007. Actions that led up to this decision included a unanimous recommendation from the Boone County Planning and Zoning Commission and endorsement by the Boone County Regional Sewer District board. The Board of Aldermen for the City of Ashland unanimously adopted the plan by resolution. The Columbia City Council held a work session on the plan and later referred it to their Planning and Zoning Commission for further public hearings. Columbia's Planning and Zoning Commission unanimously recommended adoption of the plan to the City Council. The City of Columbia has not yet voted on adoption of the Bonne Femme Watershed Plan, but the support of its Planning and Zoning Committee bodes well for its eventual adoption.

Plan adoption is a very important step, but implementation is where "the rubber meets the road." The watershed plan provides guidance, but the details of new ordinances and programs will be determined during the implementation stage. These details are crucial to the effectiveness of any recommendations implemented. Stakeholders felt strongly that enforcement, maintenance and evaluation will be essential to the success of any measures implemented. To help local governments with the implementation stage, the Steering Committee intends to host a facilitated implementation workshop. The Policy Committee has also discussed using some of the remaining cost-share funds to hire a consultant to create new ordinances and zoning regulations, delineate karst areas and 100-year flood plains and develop needed programs to implement the plan's recommendations. These funds will help governments by offsetting the costs of having existing staff develop details of the plan's implementation. Using Project funds to help move the plan forward also shows respect for the stakeholders' hard work in crafting it. Continued involvement by stakeholders through building community support and speaking at public hearings will be important for making sure the plan gets implemented. In addition, stakeholders will

hold local governments accountable by asking for annual reports on their progress.

Conclusion

Successful watershed planning is essential to protection of surface and groundwater quality and aquatic ecosystems, but it is also essential to achieve planned growth that meets the economic and quality of life goals of a community. Development of a watershed plan that is likely to be adopted by a community and its local governments is a daunting task that requires organizational skills, forethought and the dedication of those involved in the process. The approach taken by the Bonne Femme Watershed Project appears, so far, to be successful, based on the level of community and political support for the watershed plan. The project placed the task of watershed planning squarely and fully in the hands of stakeholders who represented the diverse interests of business, environmentalists and landowners. It was challenging for this diverse group to work together through a long and difficult process, but they managed to produce a quality plan. They were supported by a Steering Committee that provided technical and organizational expertise and a Policy Committee with a vested interest in their success. Educational outreach and scientific research laid the foundation for this successful process. Keys to success of this stakeholder-led watershed planning effort included: the organizational structure of the project as a whole, representation of diverse stakeholder interests, willingness to employ respectful engagement in dealing with contentious issues, dedication to reaching compromise, Policy Committee selection of the stakeholders, interest in the outcome among local governments and politicians, giving full control of the planning process to the stakeholders, providing an outline to serve as a "road map" for staying on task, providing progress reports, adherence to deadlines, fostering trust and respect in all three committees, building relationships, patience and dedication. This stakeholder-led watershed planning process and these keys to success can be implemented in any watershed, to the benefit of the watershed's aquatic resources.

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