

GOOSE CREEK WATERSHED PROJECT

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Executive Summary

The following report assesses the degree of success in a stakeholder project facilitated by Watershed Education for Communities and Local Officials (WECO). The Goose Creek Watershed Project not only encompasses a watershed that does not meet state water quality standards, but also includes the habitat of the federally-recognized endangered mussel, the Carolina heelsplitter.

The stakeholder project was intended to create a plan for the future development and management of the watershed that addressed the concerns of all affected parties. Our assessment focuses on the process of this stakeholder group and not on the outcome of the process.

The North Carolina Wildlife Resource Commission (NCWRC) hired WECO in 2000 to coordinate a stakeholder effort for the Goose Creek watershed. WECO sought out stakeholders with vested interests in the watershed and formed the Goose Creek Watershed Advisory Committee (GCWAC). For the next two years, the advisory committee participated in monthly meetings, where they were given information about the watershed and exchanged views on the watershed's development. The outcome of this work was the "Goose Creek Watershed Plan," which was presented in September 2002.

Naiad Consultants, a group of four students in the Public Administration program at North Carolina State University, was asked to assess the effectiveness of the stakeholder participation in this project. In order to assess the stakeholder process, Naiad Consultants contacted the stakeholders from the project. Eight of the twelve involved stakeholders responded. We also were in contact with Christy Perrin, the WECO project facilitator.

Our overall conclusion is that despite general satisfaction with the stakeholder process, most stakeholders were not satisfied with the outcome for multiple reasons. NCWRC had a set of expectations for what the GCWAC would recommend from the beginning of the process, despite the fact that several of the individuals and municipalities disagreed with the NCWRC's agenda and recommendations. Also, most participants felt that they did not gain anything from the project as neither the NCWRC nor the municipalities were in a position to accept the recommendations.

Even though most participants were satisfied with the process, we still believe that the process was not ideal. In fact, this project may not have been suitable for stakeholder involvement, because the NCWRC entered the process only desiring protection for the mussel rather than a community-based solution.

A main problem with the process was that the stakeholders had different opinions as to which environmental questions should be considered. The NCWRC had a very narrow question in mind, whereas many other stakeholders had broader interests; this is one reason that it was more difficult to find a solution that was satisfactory to everyone.

While the overall outcome of the Goose Creek Watershed Advisory Committee may not have been successful, the interactions formed by this effort have had some positive effects. Participants gained a greater awareness of other stakeholders, and new projects have been initiated.

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Problem Statement

While governments at all levels are increasingly interested in involving stakeholders in policy decisions, they must also become more aware of drawbacks involved with inclusive methods. Watershed Education for Communities and Local Officials (WECO) specifically works toward increasing stakeholder involvement in environmental programs at the watershed level. WECO has enlisted Naiad Consultants to review the process of stakeholder involvement for one of their projects in the Goose Creek Watershed to identify both the successes and the pitfalls of their inclusion methods. We hope to address the following questions:

- Were the stakeholders satisfied with their participation?
- Was there a way the process could have been improved?
- Was the Goose Creek Watershed Project effective in addressing any of the environmental questions being considered?

Introduction

The use of stakeholder involvement creates the potential for governing bodies to discover what the collective public and private sector find pertinent concerning a given situation. In turn, the combined enlightenment generated from the group of stakeholders can be used in crafting and implementing policy. Since the ideal model of stakeholder involvement incorporates all interests of a particular situation, the governing body should experience less resistance regarding the policy process. Furthermore, Irvin and Standsbury (2004) note that “the arguments in favor of enhancing citizen participation frequently focus on the benefits of the process itself.”

The Goose Creek Watershed

The Goose Creek watershed consists of 26,880 acres of predominantly agricultural land in Union and Mecklenburg counties. It is also one of two remaining homes in North Carolina for the Carolina heelsplitter mussel, *Lasmigona decorata*, which has been listed as a Federal endangered species since June 1993 (US FWS, 1996). The water in the area does not meet water quality standards due to unstable stream banks and fecal coliform levels from construction and urban runoff (NC DENR, 1998). This “degradation of habitat and water quality due to human activities such as development, agriculture and forestry” has been implicated in the decline of Carolina heelsplitter populations (US FWS, 1996). Goose Creek is located near the ever-expanding Charlotte-Mecklenburg area; residents of Union county saw a population increase of 37% during the 1990s, “making it the third fastest growing county in North Carolina” (NC OSP, 2000). The problems faced by the Goose Creek watershed are further complicated by construction for the I-485 bypass around Charlotte, an interbasin transfer intended to supply additional water to the area, and several wastewater treatment plants necessary to facilitate burgeoning populations.

Several efforts to improve water quality were underway in local counties before and during the GCWAC process. Mecklenburg, Union, and Cabarrus counties hired CH2M Hill (an

environmental consulting firm) to “conduct an Environmental Impact Statement for the proposed wastewater treatment plant and the proposed increase in the interbasin transfers” (WECO, 2000). In 1999, Union County launched a community planning process entitled Vision 2020 designed to “build infrastructure that promotes commercial, industrial, and agricultural growth and supports residential development while producing a sustainable living environment” (WECO, 2000). Also, Union County developed an Environmental Commission in 2000 to combat construction-related erosion, and Mecklenburg County addressed water quality issues through their Surface Water Improvement and Management (SWIM) Program.

Goose Creek Watershed Advisory Committee

In an effort to protect the Carolina heelsplitter, the North Carolina Wildlife Resources Commission (NCWRC), through its Nongame and Endangered Wildlife Program and a grant from the NC Clean Water Management Trust Fund, enlisted WECO, an extension program of North Carolina State University, to “coordinate a stakeholder effort” (WECO, 2000).

In October 2000, the staff at WECO sought out various individuals within the community who had a vested interest in the outcome of any actions within the Goose Creek watershed, including members of the following primary stakeholder groups: landowners, counties, municipalities, environmentalists and land conservancies, NCWRC and the US Fish and Wildlife Service, and concerned watershed citizens (WECO, 2000). WECO staff members interviewed representatives from each of these primary groups, as well as secondary stakeholders, asking questions that sculpted six main topic areas: 1) issues of concern, 2) perceptions on growth in the area, 3) perceptions on the Carolina heelsplitter, 4) environmental issues of concern, 5) options for resolution of issues, and 6) information/data deemed necessary by stakeholders for crafting a management plan (WECO, 2000).

Based on the information gathered from these six topic areas, WECO aided the individual representatives of the Goose Creek Watershed Advisory Committee (GCWAC) in collaboration to form the Goose Creek Watershed Plan. The plan was designed to “protect the existence of the Carolina heelsplitter within the Goose Creek watershed, while also achieving other goals related to water quality and stakeholder interests as determined by the committee” (WECO, 2000).

GCWAC developed final recommendations that addressed urban stormwater runoff and urbanization impacts. In September 2002, WECO presented the Goose Creek Watershed Plan on behalf of the Goose Creek Watershed Advisory Committee to the town of Fairview, the North Carolina Bar Association, NCWRC, and the Union County Board of Commissioners. These recommendations are listed in Table 1, and can be found online at: <http://www.ces.ncsu.edu/depts/agecon/WECO/goosecreek.html>.

Although some stakeholders have attempted to implement the plan’s recommendations, NCWRC has refused to approve the plan because the recommendations did not include a 100-foot buffer zone around Goose Creek. Litigation is ongoing between the Town of Mint Hill and state agencies over proposed zoning regulations in the Goose Creek watershed (Lamb, 2005). In addition, construction of I-485 through the watershed has been halted, at least temporarily. However, Mecklenburg County and Mint Hill are attempting to reopen stakeholder negotiations with NCWRC (Rozelle, 2005).

Table 1 Goose Creek Watershed Plan recommendations (GCWAC, 2002)

<p>A. Recommendations to protect the creek from urban stormwater runoff and impacts associated with urbanization</p> <ol style="list-style-type: none">1) Protection of riparian buffers is recommended2) New developments that exceed 6% imperviousness should require stormwater Best Management Practices, including low-impact design techniques designed to minimize impacts to the hydrograph.3) Local governments and state resource agencies should better ensure the compliance and enforcement of applicable environmental regulations.4) No fill or building should be allowed in the 100-year flood plain. <p>B. Recommendations to achieve a use support rating of “fully supporting” for Goose Creek (to remove from N.C. 303(D) List)</p> <ol style="list-style-type: none">1) A comprehensive study should be implemented within a year (begun by September 2003) to identify and target sources of impairment in the watershed.2) A public education program should target watershed residents to raise awareness of the importance of water resources, how individual actions impact water resources, and to teach actions that protect and improve water resources. <p>C. Recommendations to ensure consistent and comprehensive watershed planning and management (relates to all watershed goals).</p> <ol style="list-style-type: none">1) A Watershed Board should be established consisting of local citizens to coordinate conservation efforts within the watershed and seek funding for conservation initiatives.
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Methods

Our primary goal was to identify whether the Goose Creek project satisfied the expectations of the relevant stakeholders. To ascertain stakeholder satisfaction, we applied the seven principles of stakeholder expectations in collaborative processes as identified by Tuler and Webler (1999). We contacted Goose Creek Watershed Advisory Committee Members and the facilitator from WECO, and asked them to complete a set survey (see Appendix 1). The survey addressed the seven principles as follows:

- 1) Access to the process (questions 1 and 2)
- 2) Power to influence the process and outcomes (questions 3 and 4)
- 3) Access to information (question 9)
- 4) Structural characteristics to promote constructive interactions (questions 5 and 6)
- 5) Facilitation of constructive personal behaviors (questions 7 and 8)
- 6) Adequate analysis (question 10-12)
- 7) Enabling of social conditions necessary for future processes (questions 13 and 14)

The survey also included a general question about overall stakeholder satisfaction. Our survey intentionally asked open-ended questions so that stakeholders would be able to offer suggestions for improving the process, if they had any ideas for improvement.

To establish whether GCWAC met the second condition, “power to influence outcomes,” we conducted a literature search to determine if the recommendations produced by the committee were followed by any government organization. The literature search also allowed us to get at the question of overall effectiveness of the project for addressing the environmental issue.

In addition, we examined the material provided to the committee to establish whether the third condition of “access to information” had been met, and to look for areas where the process could have been improved.

Analysis

Access to the Process

By looking at access to the process, we are primarily interested in whether all concerned stakeholders were able to take part in the discussion. Secondly we were concerned with whether the representatives were truly able to speak on behalf of their constituency and therefore represent the organization. Overall, this expectation was met. When asked if they felt every potentially important stakeholder was included, the majority of participants said “yes.” The only exception noted was a lack of representation from developers. While a few people raised this as a concern, they also were aware that developers had been invited and chose not to attend, and were therefore not actively excluded from the process.

Most participants felt that they represented their constituencies well, indicating that major stakeholder groups had access to the process through them. In some cases, participants saw their role as representing both an organization and the community in which they lived. When this occurred, individuals tended to act on behalf of their local community rather than their affiliated organization.

Power to Influence the Process and Outcomes

Power to Influence, meaning were individuals able to see the impact they were making both within the meetings and in the greater community through their participation, was probably one of the most troublesome aspects of the Goose Creek project, both in terms of the process and the outcomes. While most participants felt that they could actively take part in the Committee’s deliberations, a few felt disenfranchised, either because they believed the discussion strayed from their original expectations or because they did not see how they would be impacted by the final outcome. The most serious tensions in the process came from disagreements between municipalities and state agencies, who were already engaged in heated debates about environmental and development issues.

All participants surveyed expressed some confusion as to how the outcome documents would be used by different government agencies, and none of the participants felt that the document was currently being used by their government. This sense of powerlessness attributed to decreased attendance over the long term and frustration about this and similar types of projects.

Further discussion with the Wildlife Resource Commission (WRC) indicated that its members were most interested in bringing the municipalities to the table to discuss riparian buffers in the context of the endangered mussels. Because their vision of the process was considerably narrower from what the rest of the group believed, WRC members felt that they did not have adequate input regarding the committee's agenda. However, because WRC was the primary funding agency and their representative did not have the legal authority to agree to any document that did not follow the agency's own recommendations, the rest of the stakeholders felt they did not have an equal voice in the final outcome.

In terms of ability to influence future outcomes, the final Goose Creek Watershed Plan has had little to no impact. Union County is in the process of creating new stormwater regulations (Union County, 2005), but the draft does not indicate that the GCWAC had been consulted. In fact, the regulations directly conflict with the committee's recommendations, such as allowing development in the 100-year flood plain. Similarly, Mecklenburg County appears to have formed its own Storm Water Advisory Committee, and does not list the Goose Creek Watershed Plan as a resource or previous study (Mecklenburg County, 2005). Furthermore, the two major issues that made the Goose Creek watershed a critical situation – the endangered status of the Carolina heelsplitter and the construction of Charlotte's I-485 loop – are still unresolved (Henderson 2005 and Bonner 2003).

Access to Information

Because environmental problems are often complex, stakeholders must have access to pertinent scientific, political, and economic information in order to be satisfied with the decision they make. One of the products of the Goose Creek project was a watershed policy options resource guide titled "Watershed Management Options: A Toolkit for Water Resource Protection and Improvement" (WECO, 2002) that WECO compiled to assist the Committee. Additionally, WECO had technical expertise from either the university or state agencies at every meeting. This presentation of information was well received by the Committee members: all survey participants reported that they were provided accurate and relevant information about policy options. Only one participant felt that the information was possibly "hard to decipher and dated." While more current information may now be available online, we concluded that participants had adequate access to both information and personnel who were able to answer questions.

Structural Characteristics to Promote Constructive Interactions

By structural characteristics, Tuler and Webler (1999) intended both the physical environment and the social environment. In terms of physical environment, the facilitator explained that the community saw churches as being more neutral venues than government offices, so churches were chosen as the appropriate venue for the meetings. Neither the facilitator nor the participants felt that opening meetings to all public, including reporters,

impacted people's willingness to share. All participants reported that they were respected at meetings, which is the hallmark of a constructive environment. Therefore, we conclude that stakeholders were satisfied with the structural characteristics of the process.

Facilitation of Constructive Personal Behaviors

Facilitation of constructive personal behaviors, within the context of stakeholder meetings, was one of the strengths of the Goose Creek project. All participants indicated that they felt WECO, and Christy Perrin in particular, acted as a neutral facilitator. Additionally, all the participants felt that the consensus approach was the right approach to take. This is surprising to some extent, considering that dissenting opinions were addressed in the final document. While full consensus may not have been reached on some issues, some participants expressed that this outcome was better than the alternatives, which could have included litigation or large public meetings (such as hearings).

Adequate Analysis

Adequate analysis means that both time and expertise were available to create a quality product. Most participants felt that two years was an adequate time frame to reach a final outcome. However, one participant suggested that conditions around the watershed had changed so considerably during the two years that GCWAC could have prolonged the meetings to address these changes. Despite these changes, GCWAC did manage to accomplish what was initially intended within the two-year time frame.

Participants disagreed as to whether the analysis was adequate for a few key issues. One participant expressed a desire for more time dedicated to discussing financial policies, such as property tax waivers for mandatory buffers. On the opposite side, another participant expressed that too much analysis was being done on peripheral issues that didn't affect stormwater or the endangered species. Finally, one participant added that while the technical policies were thoroughly considered, more thought could go into political feasibility policies. There was a sense that many topics discussed could never actually be implemented due to the political climate in the area. While there was some concern that the agenda was not comprehensive enough, or too comprehensive, the committee did address their primary areas of concern and was able to put forth recommendations on their chief concern of urban stormwater runoff.

Enabling of Social Conditions Necessary for Future Processes

Even if the Committee's final recommendations were not adopted, it is possible to consider the project successful if it led to better future relations between stakeholders. The responses from participants seem to be mixed in this regard. Most participants felt that this process did not broaden their understanding of other watershed concerns, and several participants have had little to no contact with other participants following the Committee's final report.

A few participants have gone on to have productive interactions. The Wildlife Resource Commission has begun a new collaboration project for Goose Creek (NCWRC, 2005), and some of the original participants have become active in this new endeavor.

Conversely, there have also been negative interactions between participants. In particular, the Town of Mint Hill is currently in litigation with state agencies over development

zoning in the watershed area. While details of the litigation are not precisely related to the Goose Creek Watershed Advisory Committee, a clear sense of mistrust between the parties stemmed from the municipalities' belief that the state would adopt their recommendations, while the state agencies saw the committee as advisory role only. The Union County representative, who questioned the state agency's role in getting anything accomplished at the local level, also expressed this sense of mistrust.

Conclusions and Recommendations

We conclude by addressing each of the three points raised in the initial problem statement. While our analysis allows us to get at the question of stakeholder satisfaction most thoroughly, we feel that we also were able to draw conclusions about the effectiveness of the project and how to improve the process.

Were the stakeholders satisfied with their participation?

While participants felt that the process was educational and properly conducted, there was an overall dissatisfaction with the project. We can divide this by the three major groups of stakeholders: state agencies, local municipalities, and private citizens.

State agencies, namely the WRC, were providing the funding for this venture, and thus felt they had the most to gain. They had the highest initial expectations (preserving an endangered species) and thus were most likely to be disappointed with the outcome. The WRC chose to send an educational coordinator as their representative, rather than someone who had authority to act on any of the Committee's recommendations. Additionally, the WRC was developing their own recommendations while Committee deliberations were ongoing. During an interview with the WRC, it became clear that their goal for collaborative processes was more to gain buy-in for their own recommendations to save the mussel than to produce a novel set of recommendations that address overall watershed concerns. Because this stakeholder group held different goals than the rest of the participants, and did not necessarily express their expectations to the representative they sent, there was no way they could be satisfied with the project. This group would have been better served if WECO had insisted on a representative who had access to agency management and power to sway agency decisions.

Local municipalities had the unique position of holding most of the power in this group. While the Committee members could recommend anything they wanted, it was the local municipalities that would actually be acting on the development and zoning requirements. The municipalities were dissatisfied because they did not necessarily want any recommendations presented to them and could easily see that the Committee could not enforce any recommendations they made. Several participants suggested that if their municipality had been the ones hiring WECO, their participation would have been more worthwhile. In the future, it would be worth WECO's time to solicit projects from local municipalities rather than state agencies because: 1) local municipalities have more power to act on recommendations, 2) local municipalities are seen as more trustworthy than state agencies, in the eyes of several participants, and 3) local municipalities are less likely to have the technical expertise that WECO can provide and thus the committee's product is less likely to be redundant.

Finally, private citizens were dissatisfied because they could not see how their efforts would affect future policies. While including citizens in advisory panels is a noble goal, it is important to have a government willing to listen to the advice. “There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process” (Arnstein, 1969). With this project, private citizens were confronted with opposing municipalities and state agencies, which made it difficult for them to see how they fit into the equation. When issues were voiced that addressed the individual citizen, such as property tax reductions for riparian buffers, they were ignored. WECO could help empower individual citizens in the discussion by ensuring that their finished product will be applied by some municipality *a priori*, and by providing support for citizens to contact their peers. For example, a participant who was a farmer knew he was supposed to be representative of landowners, but did not really feel that he could speak on behalf of all farmers. If WECO helped develop informal communication channels so other farmers knew to speak with the participant about their concerns, the participant would be in a better position to represent his stakeholder group.

Was there a way the process could have been improved?

All participants agreed that the conduct of the meetings was excellent. The problem was not with how GCWAC met, but rather with whether they should have convened in the first place. This is a problem with the initial issue assessment.

At first reading, the issue assessment looked like a complete document, including an analysis of the stakeholders and their alternatives to collaboration. However, the document makes a very large assumption that did not hold true. It was assumed that because WRC approached WECO with this project that the WRC was eager for a collaborative effort and saw it as their best alternative. While the WRC did see the need to get local buy-in for their campaign to save the endangered mussel’s habitat, their idea of what the collaborative process would entail was considerably different than what WECO was attempting to provide.

In fact, we think a major problem may reside in WECO’s name. While “education” is part of the collaborative process, and a very important goal for a part of the NC Cooperative Extension program, it has connotations of being a one-sided transmission of information. The local WRC officials seemed to view GCWAC as an “educational” exercise and not necessarily as an active process that would provide meaningful change. Reading through the issue assessment, there is a heavy emphasis on gathering data, providing technical information, and educating stakeholders; there is much less mention of what the final product would be and how it would be implemented. In this way, it is understandable that WRC would see the process as an opportunity to present their side of the story to local constituencies, but miss the fact that the final goal would be to provide a community based solution, rather than a mussel-based solution.

To prevent further misunderstandings, WECO should make sure that whatever agency hiring them is aware of the implications of true stakeholder involvement. It is not safe to assume that because an agency approaches WECO eager to have “stakeholder involvement” that they are envisioning a consensus process. In addition, WECO needs to ensure that the party charged to enact the final recommendations is just as eager to have consensus as some of the less powerful stakeholders.

Was the Goose Creek Watershed Project effective in addressing any of the environmental questions being considered?

Part of the problem with this project was that different stakeholders had different ideas about which environmental questions were being considered. The WRC had originally intended that preservation of endangered mollusks would be the only environmental question of interest. Given that limited focus, this project was a failure.

However, many members of the community were interested in broader questions of sustainable development. These members found the gathering of information about those questions to be a useful endeavor. Local municipalities got a better sense of what their community members wanted in terms of environmental regulations, and local landowners were provided with more information on what they could do, such as selling conservation easements. Also, several participants expressed that just bringing attention to the watershed, and presenting information to municipalities was an improvement over the current situation.

Our overall recommendation to WECO is that it more clearly evaluates its assumptions in its initial Issue Assessment. The consensus process that WECO espouses is a valuable technique, and in the right conditions, can accomplish great things by bringing members of the community together for complex issues. However, as exemplified in Goose Creek, there are situations where even a well executed stakeholder involvement effort can not solve the problem. In cases where individual stakeholders are not in a position to compromise, such as when Endangered Species are involved, a consensus approach of focusing on the common interests may not be enough.

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Appendix

Appendix 1: Goose Creek Watershed Collaboration Survey

The following stakeholders responded to our survey through either phone or email contact.

Charles Burdick, Mecklenburg County Landowner/ NC Wildlife Federation
Christie Putnam, Union County Stormwater
Robert McCoy, Landowner
Rusty Rozelle, Mecklenburg Dep. of Environment
Steve Haigler, Union County Landowner/ Farmer
Sonia Perillo, Catawba Land Conservancy
Todd Hill, Mint Hill Town Manager
Tonya Moore, Educational Coordinator for NC Wildlife Resources Commission
Christy Perrin, WECO facilitator

- 1) Did you feel that the Committee included representatives from all necessary stakeholder groups? If not, whom would you add to the committee?
- 2) Did you feel that you were an appropriate representative for your constituency?
- 3) Did you feel that that the Committee's recommendations would be acted on? If so, by whom? If not, who should have acted on the Committee's recommendations?
- 4) Did you feel that you were active in the Committee's deliberations? Did you feel that you could influence the agenda of the meetings?
- 5) Did you feel that any individual or constituency had a disproportionate contribution to the final outcome?
- 6) Were individuals at the meeting respectful of differing opinions?
- 7) Do you think the consensus approach led to a better solution than could have been established through other forms of negotiation?
- 8) Did you feel that the WECO facilitator was a neutral party?
- 9) Were you provided all the political, regulatory, and scientific information you felt was important?
- 10) Did you find the information provided relevant to the situation at Goose Creek?
- 11) Did you feel the Committee had enough time to adequately address the issue of the Goose Creek watershed?

12) Were the possible policy options presented to you feasible for your community? Was there a policy option you think should have been considered, but wasn't?

13) Have you interacted with any other member of the Committee since the project's end in regards to Goose Creek or other environmental issues? If so, did your participation on the Committee contribute to the interaction?

14) Did your participation on the Committee make you more aware of other stakeholders in your community?

15) Do you feel the Committee was successful? What would you change about the process? (Please feel free to add any additional comments you had on the Goose Creek Watershed Advisory Committee here.)