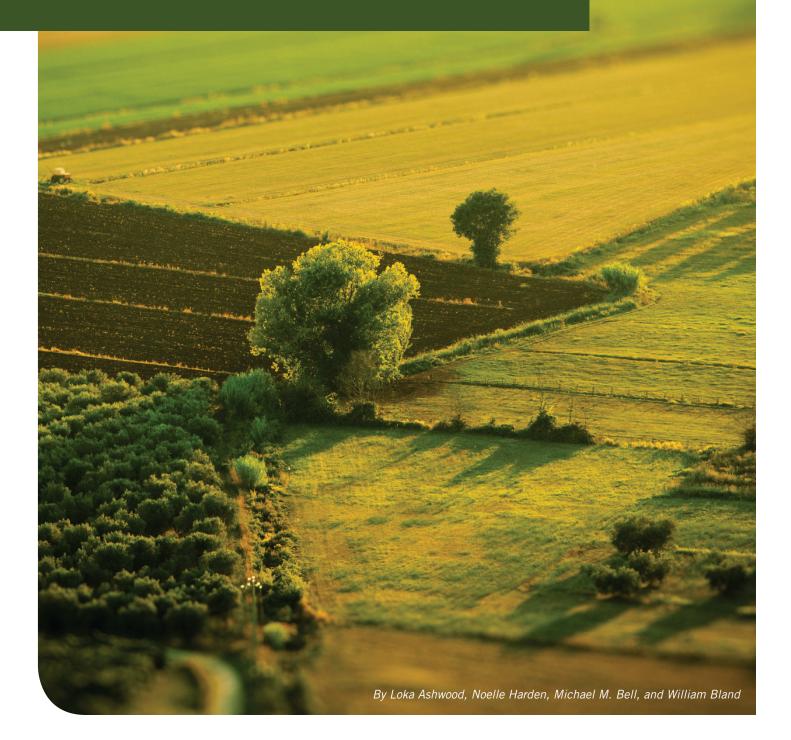
Real Problems, Real Answers: **The Green Action Plan**



Real Problems, Real Answers: The Green Action Plan

This manual is for citizens, policy makers, activists, and academics looking for inclusive ways to solve environmental problems. In tackling environmental issues, clusters of people with similar interests often get lost on a polarized spectrum that discourages different perspectives. It is not uncommon, for example, to see farmers at one end of the table and environmentalists at the other, with no space to find common ground. There is a participatory, inclusive way to encourage people with similar interests to draw on shared values and capitalize on public spaces and discourse. These groups — termed action clusters — can work together, find their roles, and address issues with benefits for the entire community in a 10-step process called the Green Action Plan (GAP). Developed through a research project on reducing runoff pollution in a watershed, GAP can be used to address a variety of environmental issues.

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Real Problems, Real Answers: The Green Action Plan

The Green Action Plan (GAP) is a general participatory model developed by an interdisciplinary academic team including researchers from sociology, agronomy, entomology, soil science, and agroecology at the University of Wisconsin-Madison. We created this model through our work in two watersheds (an area of land where all water drains into the same place) to clean up non-point sources of primarily agricultural water pollution. We found when a critical mass identifies an environmental problem, GAP can help stir action to resolve that problem. We propose GAP as a way to channel interests to identify practical solutions for environmental problems. This approach means that public participation is genuine, rather than a rubber-stamping of a preconceived project that feels co-opted by the local elite and can discourage public discourse¹. We formulated our process with critiques of existing participatory designs in mind, including unclear success rates, personal agendas, and local romanticism that can undermine the success of participatory projects². Our findings demonstrate that projects with the handprint of the community hold the potential to prompt meaningful change. We found four underlying ideas to the GAP process:

- 1. They garner rich ideas to address a socio-environmental problem.
- 2. By having actors on the landscape self-identify solutions, participation elicits more action.
- 3. Environmental problems are diffuse and require a diversity of actors to resolve them.
- 4. Resolving environmental problems with multifunctional actors can produce multifunctional solutions.

¹ See Kothari, U. and M. Minogue, (eds.). 2002. Development Theory and Practice: Critical Perspectives. Basingstoke, UK: Palgrave and McAreavey, R. 2006. Getting Close to the Action: The Micro-Politics of Rural Development. Sociologia Ruralis 46 (2): 85-103.

² See Lee, C. 2007. Is there A Place for Private Conversation in Public Dialogue? Comparing Stakeholder Assessments of Informal Communication in Collaborative Regional Planning. American Journal of Sociology, 113 (1): 41-96; and Hajer, Maarten. 2005. Setting the Stage: A Dramaturgy of Policy Deliberation. Administration and Society 36:624–47.; and Espeland, W. N. 2000. Bureaucratizing Democracy, Democratizing Bureaucracy. Law and Social Inquiry 25:1077–1109.

1. The Problem

The first important question in the participatory process is who starts it, often framed as an either/or question of whether the government or the local community should take the first step³. The answer may fall somewhere in between. At times, the government must lead local change for success, as in government-led integration in the South during the Civil Rights Movement⁴. In the case of some land-use and environmental problems or issues, such as water pollution or building a wind farm, the government must formally notify the public. Local citizens identify other issues, such as contamination that makes residents sick. The participatory processes can be jump-started by various parties, depending on the specific issue and goals of the project.

When facilitating GAP, it is important to identify who has the power and resources. Without facing power dynamics, the identification of a problem could be sabotaged by special interests or one-size-fits-all government programs. To prevent this, we identify the point of entry into a participatory process as **the identification of an issue** that needs resolved with **a critical mass of interest** behind it. This is a pragmatic, problem-based approach. The problem can be seen as a fork-in-the-road that requires thought and demands actions.

The identified issue in this process can be as broad or as narrow as the problem defined. For example, this process could focus on water pollution, habitat destruction, farmer and rural socioeconomic viability, or local energy production, among many more issues. Using GAP to resolve critical mass problems addresses the critique that participation is an overutilized means to get people to talk without clear paths or goals. The community members who identify the problem are invested in participating and committing to action-based resolutions.

The problem can draw on national data and policy, like the U.S. Grazing Board resolutions that were both federally and locally protracted⁵, or the problem might be identified by a local group of concerned citizens. Across the U.S. in both urban and rural areas, local groups have formed to fight injustices such as pollution in New York City and Chicago⁶, chemical production⁷, and toxic waste siting⁸. These cases suggest whether a problem is identified locally or nationally, each issue still exists amidst global pressures that create a polluting industry and local impacts. Actors can draw on experiences and experts from great distances, and the problems they address emerge from many factors that transcend political boundaries.

We used GAP to tackle the problem of non-point water pollution in rural communities. Based on EPA and DNR criteria and testing, we identified two bodies of water in different states that were polluted by phosphorus. The EPA and DNR are both agencies that adhere to federal and state criteria. The federal government mandated these water bodies be listed as polluted. Our research team shared this information with the broader public. The problem was therefore identified by the government, but our research team spread awareness about the problem. After the problem is identified, the challenge in using a problembased participatory approach is to facilitate progress towards improvement and move energy towards action.

- 5 See Raymond, L. 2002, Localism in Environmental Policy: New Insights from an Old Case: *Policy Sciences*, 35: 197-201,
- 6 See Pellow, D.N. 2002. Garbage Wars: The Struggle for Environmental Justice in Chicago. Cambridge and London: The MIT Press.

8 See Cole, L.W. and S.R. Foster. 2001. From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement. New York and London: New York University Press.

³ See Fung, A. and E. O. Wright. Deepening Democracy: Institutional Innovations in Empowered Participatory Governance. London and New York: Verso.; and Stoecker, R. 1999. "Are Academics Irrelevant?" Roles for Scholars in Participatory Research." American Behavioral Scientist 42:840-854; and Jenkins, N. T. and M. I. J. Bennett. Toward an Empowerment Zone. Economic Development Quarterly 13 (1) 23-28

See Gilbert, J. 2009. Democratizing States and the Use of History. Rural Sociology. 74(): 3-24.

⁷ See Lerner, S. 2005. Diamond: A Struggle for Environmental Justice in Louisiana's Chemical Corridor. Cambridge and London: The MIT Press; and Allen, B. L. 2003. Uneasy Alchemy: Citizens and Experts in Louisiana's Chemical Corridor Disputes. Cambridge and London: The MIT Press.



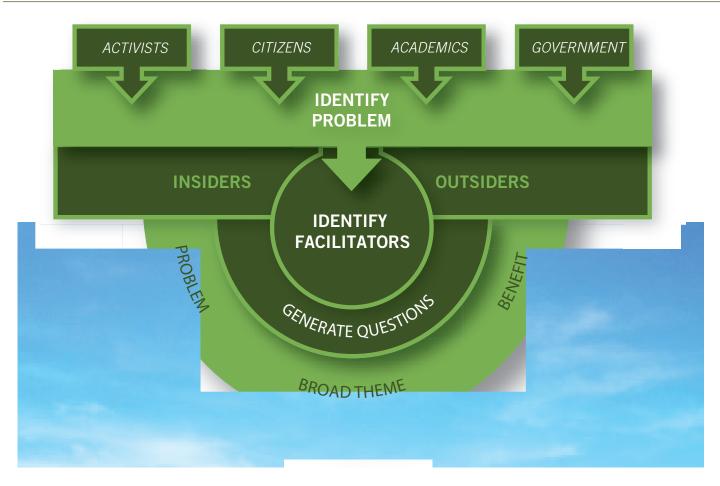


Figure 2: Action Cluster Identification





2. The Facilitator

Before forming action clusters and identifying the question, the critical mass of interested actors should select two facilitators to talk to various people to grasp the scope of the problem. The facilitators of the participatory process play a central role in ensuring that it remains inclusive. Their role is to encourage open dialogue and formulate the question(s) that get to the heart of the problem. When selecting a facilitator, participants should consider: (1) The stranger and; (2) A respected local. Our process requires at least two facilitators, and ideally participants would use both a local and an outsider. There are benefits and downfalls to each. In the early 1900s, George Simmel established that the stranger is at great advantage in a community because he or she can elicit openness and is often assumed to be neutral, an especially good quality in controversial issues. However, a local facilitator has respect from his or her community as well as geographic knowledge, integral to some cases. For example, in our work we had to learn the landscape of one unfamiliar area, much to the chagrin of participants as we encountered inaccuracies in maps. Participants may have

lost some respect for us as facilitators and lost some faith in the process. In our other case study, one of our team members has family who farm locally. This connection made some residents more willing to participate in the process because they knew the facilitator was invested locally and knowledgeable about nearby farming practices. On the other hand, as strangers in our other case study, we created a neutral space for people to openly air their grievances. Farmers and community members freely cursed over the phone about their polluting neighbors. One resident confided that a neighboring farmer had a restraining order against him for punching him in the face over alleged pollution. Another participant's buildings were burnt down in an alleged case of arson, what he attributed to a fiery zoning dispute. We were amongst the first that he called after the fire. If we were local, some participants may not have opened up to us or engaged in the process in this conflict ridden community. A mixed pairing of the stranger and the insider is the best fit for GAP facilitators.

3. Forming the Question(s)

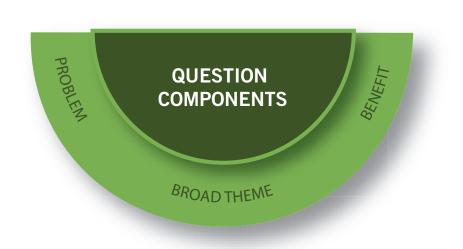
To kick start GAP, a critical mass must identify a problem and then reform it into a question (see Figure 1), transforming the negative into an opportunity for positive change. Turning a problem into a question makes it less impenetrable and moves the issue toward resolution. Composing a carefully considered question or a series of questions is a central part of the socio-environmental participatory process that helps participants focus and get to the root of the problem.

Facilitators, whether local or outside the community, must interview stakeholders to become familiar with the problem and ensure that GAP is accessible to all interested parties. In our study, we interviewed a total of 12 farmers, community members, and government workers in the watersheds to understand their angles on the water pollution. Some government workers and university researchers were aware of the pollution, but nearly all farmers and community members were not. Thus we crafted a broad question to cover the scope of the issues: "Can we reduce the phosphorus in the [insert water body] with multiple benefits?" Because the problem at this stage was general, the question was as well. Depending on the problem and the current community knowledge, the

Figure 4: Question Components

question could be more specific, but too much specificity can confine answers to the problem. Our broad question gave participants more, rather than less, room to express their ideas.

Facilitators and participants must also remember to take the negative problem and frame it more positively (See Figure 4). For example, a proposed wind farm can prompt different responses from community members. depending on its size, scope, ownership structure, density of population, and reimbursement scheme. Farmland owners may be interested in earning extra rent from housing a wind tower, while local residents may worry about sound and light pollution. The question will depend on problems that have been identified by the critical mass. It could be broad: "How do we address the conflict over the proposed wind farm with benefits for the community?" Strategies to address this question could range from scrapping the proposed wind farm to increasing the distance of the windmills from residential houses and/ or having a local energy cooperative own the wind towers with profits for community. The question allows for a range of responses across a spectrum of interests but shifts to action-oriented resolutions.



To kick start GAP, a critical mass must identify a problem and then reform it into a question, transforming the negative into an opportunity for positive change. Turning a problem into a question makes it less impenetrable and moves the issue toward resolution.

4. Identifying Action Clusters

Action clusters are the groups of people with common interests in an environmental problem defined by the biophysical and social surroundings of a particular place (Figure 2). Action clusters can facilitate environmental practices within these clustered ways of knowing and acting. The structure of GAP gives space for these boundaries to be crossed.

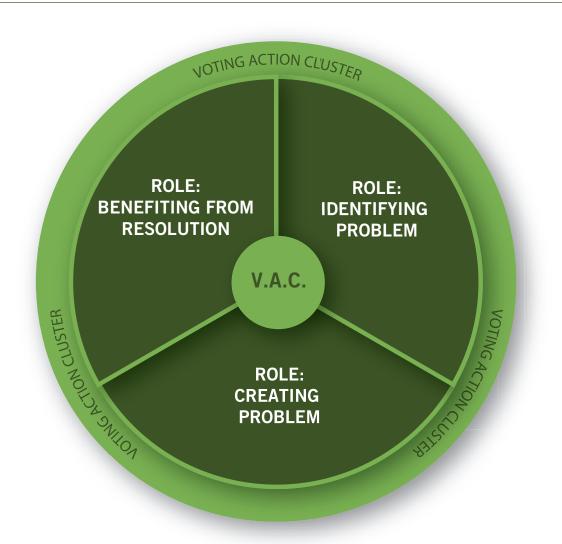
Common ecology is the background of action clusters and a central player in GAP (Figure 2). Facilitators must identify action clusters on the landscape within this common ecology, the environmental space that can be expanded or contracted based on the problem and the feasibility of the action clusters' plans. Action clusters represent diverse intentions on the landscape – some participants are pursuing livelihoods, some are pursuing economic goals, others are trying to preserve their heritage and traditions, and others a combination of these and other intentions. Recognizing that action clusters interact within a common ecology is central to binding groups and including the shared environmental resource base that is often excluded in participatory models.

In our research on non-point water pollution, we identified four action clusters: farmers and landowners, general public, university researchers and government. These four groups would not apply to every socioenvironmental problem. We suggest that regardless of the problem, government and university researchers should always be included as supporting clusters. The inclusion of these two groups is endemic to the process (Figure 2). The two to three other groups are voting clusters that define and lead the process. See Section 6 for details on the academic and government action clusters.

5. Voting Action Clusters

Facilitators must create the three voting groups by identifying people that have played a primary role in *creating*, *identifying*, *and benefiting from the resolution of the problem* (Figure 6). In the case of the privately funded wind farm, facilitators might identify farmland owners, residential property owners and the general public, depending on whether the wind farm will be funded through a co-op, federal subsidies or increases in local billing. In our case, the general public funded the science that identified the water pollution, and those using the lake and stream for recreation noticed algae blooms impacting water quality, recreation and fish habitat. Farmers and landowners in one case drew their drinking water from a polluted water body surrounded by their fields or animal operations. These are groups that have primary interests and capacities for action. Voting groups must be capped at three because too many top strategies and representatives would make action more unlikely.

Figure 5: Identifying Voting Clusters via Actor Roles



Each of the two to three action clusters meet in a space where people can voice claims separately and then integrate ideas to move toward action. A shared meeting place for grouped interests allows actors' decisions to be publicly represented. Each participant in the action cluster takes shared responsibility for the problem through a cohesive identity.

That isn't to say there will not be divergent viewpoints within a group. But diverse ideas within action clusters will motivate critical thinking in small and large group discussions and voting. After voting group meetings, the researchers meet to discuss how they can support the process. University researchers also brainstorm other ideas that could lead to a resolution. Each of these first four to five meetings should happen every week to maintain momentum. The meeting in week five or six depending on the number of voting cluster meetings, is called a resource fair where all the clusters come together (See Figure 3). This marks the beginning of a series of meetings where representatives of the action clusters continue to implement change on the landscape. The duration of the last series of meetings is decided on a case-by-case basis. In our research, these additional meetings lasted for up to a year.

After the voting action clusters are identified, facilitators organize outreach to include all of those who fall into the respective voting cluster. In our GAP process, we identified farmers and landowners through tax parcel data for the watersheds. Our reconnaissance interviews helped us include farmers who only rented land. We sent formal letters to these groups, inviting them to a meeting to discuss their ideas for cleaning up the local water body. Outreach to the general public action cluster included personal invitations at civic meetings, phone calls to interest groups, posting 150 fliers and local press coverage before each meeting (See Table 1). Each of these outreach methods are time-consuming but necessary. We recommend use of all outreach methods as appropriate. For example, it did not make sense for our first meeting of farmers and landowners to have broad invitations through radio or newspaper advertisements. But these ads were necessary for the meeting open to all citizens interested in the water body.

Type of Outreach	Medium
Identify Those in Target Action Cluster	 Reconnaissance Interviews GIS Civic Organizations Listserv Voter Registration
Conjoin Multiple Methods for Invitation	 Newspaper Advertisement Press Release to Media: Newspaper Article Coverage Mailed Letters Email Phone Calls Flier Distribution in target areas Attending Relevant Civic Meetings Door-to-Door Visits

Table 1: Outreach for Action Cluster Meetings

Without meticulous outreach to action cluster participants, the GAP process has a weak foundation. Questions will arise about why certain people were not invited and how a particular elite came to dominate the process. In fact, this is the downfall of many participatory projects. Facilitators might be tempted to stick to inviting those who often attend such meetings and already exist on a list. But cherry-picked participants cannot represent a full cluster of interest, nor can they create a plan that will facilitate action. A key premise of the success of this process is that **those who can make change design change**. A broad range of participants at each cluster meeting encourages more action. Invitations for smaller, targeted groups, like farmers, landowners, certain civic groups, or residents in a particular geographic space, should be followed up with phone calls. Extra effort can go a long way in ensuring participation.

6. Conducting the Voting Action Cluster Meetings

The time and place of action cluster meetings are important. The location should be accessible and the venue an open room where facilitators can set up easels and hang up sheets on the walls. There should be no more than seven individuals at small tables. Dinner meetings can promote kinship over food and keep people going into the evening hours. All meetings should take place in the evenings so those who work during the day can attend. Otherwise, attendance will be skewed to retirees and those whose perspectives move the consequent GAP away from broader community intents. Because these are high-energy meetings and people are active for the duration, two hours is manageable. However, anything longer will discourage participation from the onset. Each meeting should begin with a 10-minute or less introduction that presents the problem and explains GAP.

Facilitators should give all participants a folder with an agenda and details on the breakout group process. The meetings are designed around small and large group discussions that are akin to focus groups⁹. For 45 minutes in small groups of four to seven, participants answer the question(s) identified in an attempt to prevent the domination of group stars, those accustomed to meetings and speaking publicly that can dominate large-group settings if left unchecked¹⁰. A group-appointed note taker writes ideas on easel sheets, which facilitators gather and hang on the walls for everyone's viewing. During this stage, it's important that facilitators answer questions and ensure that one person does not dominate conversations in the breakout groups and that everyone voices his or her thoughts. If one person dominates, the facilitator should steer the conversation back towards the question(s).

The group then comes together for consolidating and voting on the top strategies to address the problem. The first facilitator reads each group's strategies aloud to clarify and to lead consolidation of repeats. Most of the time consolidating the strategies is clear and the group generally agrees on strategies that overlap. In some cases, participants will disagree. If this happens, the first facilitator can ask participants to vote on consolidation by a showing of hands. The second facilitator meticulously records strategies on a laptop connected to a printer (see Table 2 for list of supplies for voting cluster meetings). This facilitator needs to be comfortable typing quickly while listening carefully to the group. The strategies are numbered and printed so participants can list the strategy number on pre-printed ballots, numbered one through five.

Handouts	Interactive Tools	Electronics	Food
Folder	Easels and Stands (one per every 4-7 participants)	Power Point Projector and screen	Evening Meal
Agenda	Pens and Easel Markers	Laptop	Candy/Snacks at each table
Breakout Group Guidelines	Markers	Printer and Printing Paper	
Ballot	Easel and Stand		
Contact Information; Resource Fair Location	Ballot Box		

Table 2: Voting Cluster Materials

9 See Patton, M.Q. 2002. *Qualitative Research and Evaluation Methods*. California, London, New Deli: Sage Publications.

10 See McAreavey, R. 2006. Getting Close to the Action: The Micro-Politics of Rural Development. Sociologia Ruralis. 46 (2): 85-103.

Participants use ballots to anonymously vote in their top five strategies to solve the problem and their top five choices for representatives to speak for their action cluster. These voted-in representatives are invited to action meetings after the series of five meetings is over. They are charged with pursuing the top strategies of their cluster on behalf of the group. A representative board is not elected for the government or university researchers, which have formal positions that often allow them to attend meetings or self-designate their future participation.

7. Government and Academic Action Clusters

The academic cluster meeting follows the voting cluster meetings. We took an interdisciplinary approach to inviting university researchers to discuss phosphorus pollution, and this approach proved vital. Most problems, if conceived of broadly enough, are interdisciplinary. Since the purpose of the GAP process is to find solutions with multiple benefits, participants must tackle the problem from multiple angles. In a case study with fewer disciplines represented, the discussion was stale and participation waned more quickly over the lifetime of the project.

The issue of phosphorus pollution is a question of soil science (What soil has more phosphorus?), agronomy (How much manure applied is too much manure?), landscape history (What land use changes have led us to this situation?), geography (Why is the watershed bounded in this way?) and sociology (What human choices and behaviors are perpetuating this problem?). To reach out to a broad group of university researchers, we sent emails to department chairs at universities within 20 miles of the water body, inviting them to attend meetings and asking them for recommendations of others interested in the issue. We also used online academic profiles to invite others. All researcher invitations were made through email, often followed by phone calls.

Our university researcher meetings were 1.5 hours rather than 2 hours because the meetings did not require formal voting. The university researcher meeting starts with a presentation of the problem and process, followed by a review and discussion of the top five voting cluster strategies from each meeting. If the group is small, use handouts rather than a Powerpoint presentation to promote a more intimate discussion. If the project attracts more researchers, facilitators may want to divide the group into smaller discussion groups and use easels to record responses to the strategies and ways universities can support them. The facilitators should guide the researchers to discuss top strategies by cluster, asking for opinions on the effectiveness of the strategies and whether or how university researchers can support the strategies. In one of our case studies, a researcher's participation aided him in receiving a grant.

The government action cluster meets after the university researcher cluster. The goal of this meeting is to find out how the government can support the strategies identified by the voting clusters. The government cluster is a direct connection to voters through publicly elected officials, and top strategies from voting clusters are a direct voice of the people involved in the problem. Some strategies may also be eligible for government funding, so these meetings are an opportunity for officials to become familiar with the problem and the process, and to decide their role in it. In some cases, officials might share information about existing programs or apply for specific grants that could help solve the problem. When funding is unavailable, officials could use other creative means to support the public goals. For example, some government workers in our research made the red tape on federal grants stretch to fit locally identified ideas to clean up the water. Facilitators should invite government officials with emails or phone calls. Depending on the topic, government attendance will vary. Use breakout groups with larger numbers of participants. In our case studies we held government meetings at one table.

Government agency representatives and university researchers have autonomous roles within the clusters. This is not to say that an agency representative or a researcher cannot also be a citizen. In both of our case studies, some government workers and researchers attended the voting cluster meetings. University researcher and government clusters do not vote. Their purpose is to support the strategies of action clusters. Government workers can decide not to participate but must do so if they have a program that mandates funding certain strategies. University researchers can also decide not to participate. Grant opportunities, however, are the carrots for them to get involved. Community participation is increasingly required in grant applications, so researchers will be better positioned to receive funding if they can show public involvement. Instead of electing individuals to represent the university researcher cluster in subsequent meetings, university researchers simply act in their individual capacities to support the strategies.

The beauty and the frustration of the GAP process is that the results cannot be preconceived. Will you have an action cluster or two so torn that it cannot move forward? You likely will.

8. Expecting the Unexpected

The beauty and the frustration of the GAP process is that the results cannot be preconceived. Will you have an action cluster or two so torn that it cannot move forward? You likely will. See, for example, Table 3 and Table 4. These are the strategies that were identified by farmers and landowners in our two watersheds, which we have renamed Agraria and Ruritania to protect the identity of participants. In Agraria, where farmers cooperated, they took responsibility for the phosphorus water pollution. They identified erosion control as their number one strategy to solve the problem. In Ruritania, where animosity amongst farmers was prevalent, the top strategy was to increase monitoring, which can be beneficial but is not necessarily a course of action where farmers and landowners take responsibility for pollution.

Conflict is a great challenge to GAP, and will probably be present in a cluster no matter what the topic or how the process is going. In Ruritania, even with proactive government clusters, farmers and non-farming landowners were sometimes at odds, even to the point of alleged arson towards the end of our research. The government helped to implement individual solutions on the landscape, but the tension within the voting clusters prevented collaborative work. They were divided over large concentrated animal feeding operations. In Agraria, farmers and landowners did not have comparable animal operations, and were able to work towards the shared goal of cleaning up the water. They were able to identify solutions together, even though the government action cluster was divided. There are likely to be differences across any socioenvironmental participatory process. The strength of GAP is that different clusters represent a multitude of interests, giving the space for certain clusters to be less active without compromising the entire process.

In cases of disagreement among participants, GAP also provides a space to dissipate the conflict. Bringing divergent interests together gives the opportunity for those concerns to be voiced and mulled over. In our research, our meetings provided a rare opportunity for adversaries to publicly confront and address local problems. GAP's orientation towards solution moves conflict toward action. Even gathering information can encourage action because participants gain knowledge that gives them confidence in the process and in finding solutions. Facilitators must collect this information and provide it to the action clusters at the resource fair (See Section 5.4). Again, this is time consuming, but essential to the process.

1. Erosion Control

- Cost share for all practices
- Filter strips around creeks
- Maintain waterways
- Improve grassways to control runoff
- Dry dams
- Terraces
- Livestock waste management structures
- Harvestable biomass
- Willow trees
- Stone for erosion control

2. More CRP

- Needs more incentives
- Use for buffer and filter strips around the creeks and streams
- Harvestable biomass (minimum yearly)
- Grass in low areas

3. Conservation Tillage

- Promote no-till
- Strip tillage
- Use strips to plant in rows previously applied with phosphorus

4. Bioenergy Feedstock

- Multiple benefits for the community and farmers
- Switchgrass
- Miscanthus
- Pennycress
- Orchard Grass
- Grass in low areas

5. Get more information

- What was phosphorus level in 1968?
- Is the phosphorus all from soil?
- Do they test in the spring or fall?
- Would dredging help, or making the lake bigger?
- Phosphorus content of sludge
- Lake 1 and Lake 2 phosphorus level
- *Note: Place specific references have been renamed

Table 4: Top Strategies from Farmer/Landowner Meeting in Ruritania

1. More monitoring

- More intensive downstream monitoring
- More monitoring and testing
- More monitoring on sod farms, larger dairies, Landfill

2. Erosion Control

- Buffer and filter strips
- Filter strips between creek and land; farmers need to be compensated

3. Fertilizer application methods

- Monitor distance of application
- Inject manure applied within 1/2 mile of creek
- If sludge is dumped, it should be plowed under immediately no matter how far from the creek

4. Get more information

- Tributary from city, what is it contributing?
- Sewage treatment facility, dead wildlife contribution
- More info about septic tanks
- Learn about existing laws for feedlots
- Where does sludge go when septic service picks it up?

5. Restrict residential use of phosphorus

* Note: Place specific references have been renamed

9. Resource Fair

The resource fair is the opportunity for all the action clusters to come together, exchange information, and forge alliances (See Figure 3). In one of our case studies, the resource fair consisted of presentations from experts and government workers. This proved to be dull. In our next resource fair, each "expert" staffed a table to encourage informal communication between voting action cluster participants, university researchers, government workers, non-profits and other resource providers. This informal space helped better foster connections.

Resource providers will vary based on the strategies identified by voting clusters. In the case of Agraria, we included the director of a bioenergy non-profit project, an academic with cover crop knowledge and funding ideas, and government officials from NRCS and USDA. The interaction of farmers and local concerned citizens was also valuable.

10. Follow Up and Participant Investment in GAP

In our research, we found it necessary to arrange monthly meetings of participants after going through the GAP process. These meetings provided a collective space where representatives could move the strategies toward action. In the case of Agraria, this ongoing exchange proved fruitful. For example, a biologist poured over maps with farmers to site grass plantings. This led to siting a place for perennial grass as part of a first step towards thinking about broader bioenergy production. It also led to planning a field day in conjunction with local implement dealers to showcase equipment to reduce phosphorus leeching. In Ruritania, citizen representatives in cooperation with the government are working on water monitoring programs, an important step towards spreading awareness.

Facilitators sustained the project by following up with action cluster participants after the fair. In our research, one-on-one conversations with farmers helped ensure that the strategies played out on the landscape. For example, outreach spurred two farmers to create a grass waterway that extended across both of their property lines. The number of follow-up meetings will depend on your process, the willingness of participants, and the length of time necessary to achieve goals. Agraria meetings have continued for a year, and we anticipate a few more meetings will be necessary. In Ruritania, the meetings did not last as long because leadership gradually dissolved and citizen monitoring was absorbed by other groups.

Results of our GAP process evaluation show that the 59 farmers and landowners who filled out evaluations (out of 80 who attended) and 24 community members who filled out evaluations (out of 29 who attended) felt the process gave them a voice, and that the strategies selected were effective (See Chart 1 and Chart 2). We measured participants' responses on a Likert scale of one to five with Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) or Strongly Disagree (1). Those who responded on average felt they had a chance to speak and were optimistic that the strategies could (be implemented or lead to change) in the watersheds.

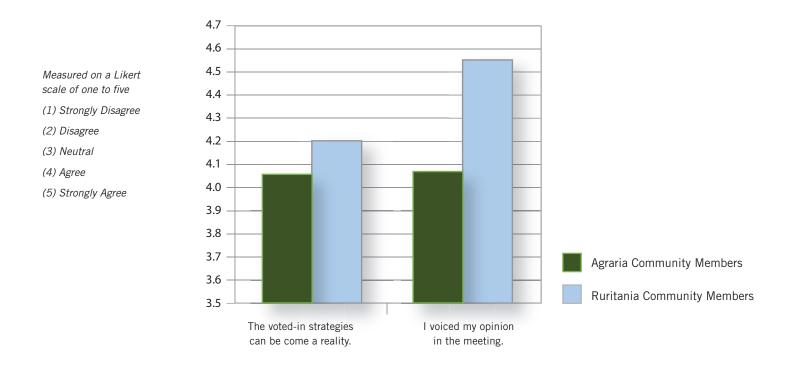
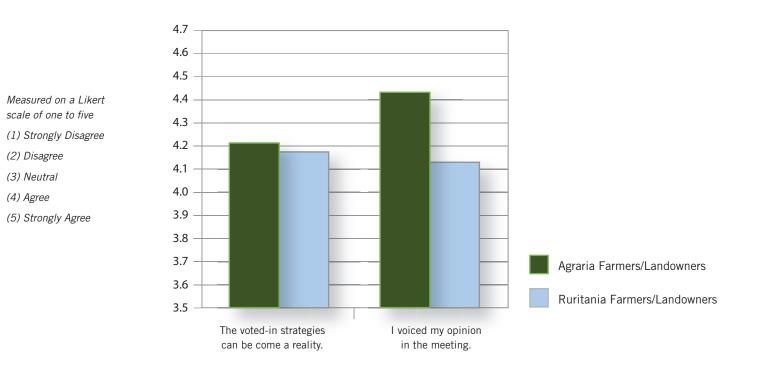


Chart 2: Farmer and Landowner Voting Cluster Evaluation of Meeting



Summing Up: 10 Steps in the GAP Process

- **1.** A critical mass brings a problem to light and identifies GAP to work toward resolving the problem.
- 2. The critical mass identifies at least two facilitators to guide the process.
- **3.** Facilitators interview interested actors and turn the problem into a question or series of questions.
- 4. Facilitators identify action clusters.
- **5.** Facilitators arrange a series of voting action cluster meetings and reach out to potential participants.
- **6.** The voting action clusters meet in weeks one, two, and possibly three of the process, developing and voting on the strategies to resolve the problem.
- 7. University researcher and government action clusters meet in the two weeks following these voting cluster meetings to add resources to voted-in strategies.
- **8.** Facilitators organize a resource fair where the action clusters come together to combine resources with action capacity to achieve strategies.
- **9.** Some clusters may become stagnant while other work toward action on the landscape.
- **10.** Facilitators continue individual outreach and host meetings with representative boards from voting clusters, as well as government agency workers and university researchers to implement strategies.

Additional Resources

For more information on GAP, including sample materials, check out: www.iira.org/watershed

For more information on facilitating, check out: www.mindtools.com/pages/article/RoleofAFacilitator.htm

For more information on the authors, check out: www.drs.wisc.edu www.soils.wisc.edu/soils/index.php www.agroecology.wisc.edu

For more information on policies to promote rural areas, visit the Illinois Institute for Rural Affairs at: www.iira.org

Notes	

For more information visit

www.iira.org/watershed



