



## Engaging People in Meaningful Problem Solving

As the field of conservation biology grows, broadens, and matures, there is increasing understanding that people are at the heart of conservation. Although science is necessary, it is not sufficient to solve today's problems. Even though countless books and papers have been written on collaboration, negotiation, consensus building, and dialogue, people really do not seem to know how to talk to one another. Something still seems to be needed in scientists' formal training and in the institutions that train them to be able to effectively solve problems. As Chamberlain et al. (2012) pointed out, "simply conducting more scientific research related to a perceived problem may not change people's problem definition or move them toward agreement because they may accept only the evidence that supports their existing beliefs and discount contrary evidence." With this conundrum in mind, we provide insights learned through our experience into how to engage people in effective environmental problem solving.

The foundation of understanding one another is to understand what motivates different individuals to do the things they do. The eight core values described by Lasswell (1971), power, enlightenment, wealth, well being, skill, affection, respect, and rectitude, capture the full range of world views and belief systems. People's actions can be explained by their search for, or lack of, these core values. As one's understanding of the eight core values broadens it becomes evident that two values are of particular importance in all human interactions. The first, power, is something those in authority tend to sequester and maintain. The second, respect, is all too often withheld in interpersonal relationships.

Real solutions often require high levels of collaboration across organizational and sector, ethnic, educational, and other boundaries. Gone are the days in the United States and Canada when stilted public consultation, mostly through a process of informing the public of up-coming events, was the well-worn practice. It has become important to know whom to engage with and how. If decision makers believe they can implement their goals without the assistance of others, then perhaps only the people who may be affected by their action need to be informed. Often, however, decision makers need others to implement decisions. At the same time, people want to have a voice in decisions that affect them. It is the convergence of these two factors that points the way

to the decision on how to engage people. A strong case can be made that solving complex problems requires the support of, and greater acceptance from, a wide array of people with different views. Moving toward collaboration would seem the logical first step for more effective engagement.

If engagement through collaboration is the best model for complex decision making, then the fundamental question becomes what is the problem to solve. Problems are rarely as they first appear. In natural resources management, the traditional view has been that problems can be viewed as objective realities to be solved by actions. However, problems usually are based on particular world views and values of the people who perceive them. People do not act in response to objective problems; rather, they are part of them. Further investigation of the context of a problem at the beginning of any collaborative problem-solving effort often reveals deep-seated issues, such as lack of trust and other obstacles to collaborative relationships.

Typically the obvious or trivial issue is the spark to the debate. More hidden from view and rarely discussed is who has the authority to decide on the outcome (Fig. 1). Grizzly bear (*Ursus arctos horribilis*) management in Banff National Park, Alberta, Canada, is a good illustration of these underlying, deep-seated problems. This population of grizzly bears is small and at risk of extirpation due to high rates of human-caused mortality and a polarized and acrimonious debate over balancing the needs of bears and people. Policy makers have struggled to reconcile conflicting demands for bear conservation, commercial development, and recreation (Chamberlain et al. 2012). Although the interaction between humans and grizzly bears was the entry point into the debate, it became increasingly evident that lack of trust, poor relationships, and wielding of agency power were the real problems (Gibeau 2012). The mandated power of the natural resource agency to make all decisions themselves was perceived as the real problem for many people (Fig. 1).

If one comes to understand what the real problems are, how one engages others in problem solving determines whether an agreed-upon outcome is reached. No single approach will work for all situations because the problems, respective interests, and surrounding circumstances vary (Cormick et al. 1996). The very essence of effective engagement and dialogue is that the process

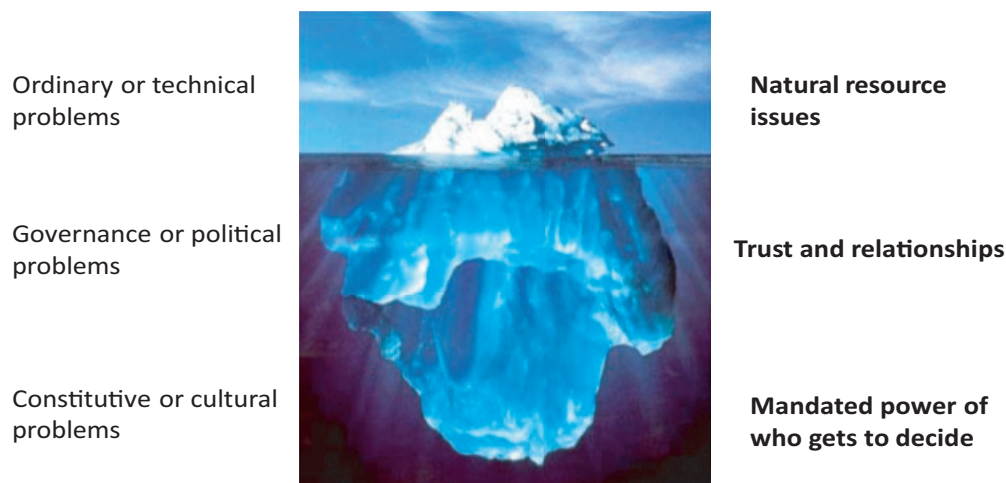


Figure 1. Structure of the hidden problems beneath superficial issues (credit Susan G. Clark). Reprinted with permission from *The Wildlife Society* (Gibeau, M. L. 2012. *Of bears, chess and checkers: moving away from pure science to solve problems. The Wildlife Professional* 6: 62-64).

is participant driven. So if confronted by a problem, one must understand the social process in which the problem is embedded. Ten guiding principles are fundamental to the processes of collaboration and obtaining consensus. They are that an engagement process needs to be purpose driven, is to be inclusive of a variety of interests, has voluntary participation, is designed by those who are participating, has flexibility built into it, provides equal opportunity for all to participate, ensures there is respect for the various viewpoints, provides accountability to each other and those who are being represented throughout the engagement process, keeps to time limits and includes a path forward for implementation (Cormick et al. 1996).

We think three of these principles are essential in all collaborative dialogue: self design, implementation, and accountability. Designing a specific approach to a collaborative process among people who disagree substantially or express strongly held opposing views is a powerful way to accomplish three things: to begin shifting from rhetoric to dialogue, to determine whether it is feasible to have a dialogue (If people cannot agree how to talk, how will they be able to talk?), and to recognize issues of real importance to the people who disagree. Engagement processes often end in a written or verbal agreement. However, if an implementation plan is not developed in writing and publicly committed to by those engaged in the debate, the agreement may not result in action.

Undertaking processes that fully engage all parties requires a great deal of effort. This effort is enhanced if each of the parties is truly representing a wider set of interests. This means that the people engaged in the discussions are accountable both to their constituency and to those with whom they have agreed to collaborate.

In more than 25 years of working with people who would rather not engage with others with whom they

have strong differences of opinion, we have learned four operational lessons. First, get people to talk. It can be flattering to be regarded as the one person who can solve the problem. However, we learned that the only predictor of a solution is how the people with opposing views begin a discussion or the problem-solving process. Begin well, and one has created a basis for good discussion. Begin poorly, and the process of engagement will never recover.

Second, the final stages of collaborative problem solving are fragile. During the discussions, there is a need to integrate ideas and suggestions. Toward the end, concrete outcomes of the discussion are required. Just because one has reached an agreement does not mean one is finished. Creating the means to ensure implementation is crucial for success.

Third, an independent facilitator or process manager can generally aid complex decision making because they have an objective perspective on the problem and the people involved. Facilitation is typically directed at the structure of the collaboration (e.g., who participates, duration of participation, flexibility, implementation, and power balance), agreement on guidelines for engagement, and agreement on the topics of the dialogue.

Fourth, whether one is a scientist, an enforcement officer, a land manager, or a planner in dialogue with others to solve a problem, one needs to be aware of the social context within which one is working. To be a good problem solver and to collaborate effectively, it is necessary to constantly improve one's problem-solving and communication skills. Decades have been spent improving biological and other scientific skills, but little attention has been paid to social problem-solving and decision-making skills.

We propose six personal capabilities that are useful when trying to solve a problem through collaboration

and dialogue. First, determine what is relevant to solving the problem and identify the boundaries of relevant ecological and social systems. Second, be self-aware, self-reflective, and curious. Third, be willing to ask, what if so as to creatively generate useful options, hypotheses, and alternate solutions. Fourth, be sensitive to others' interests and emotions. Fifth, recognize feedback loops and the relation among the issues. Sixth, be able to balance many tasks.

As with everything else, processes to engage people are episodic. Knowing when and how to construct an effective engagement process is critical. Often such processes lead to the opening of possibilities for a wider range of people to have a more powerful voice in issues that really matter to them. A well-constructed engagement process that preserves the rights of the participants to have a voice can lead to more effective democracy in action.

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