

**2007 Environmental Evaluator's Networking Forum**  
**U.S. Environmental Protection Agency**  
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Introductory Comments – Steve Williams

Good morning and thank you for the opportunity to talk about the practical application of evaluation science. I come to you not as an expert in evaluation science but as trained wildlife biologist with 23 years of practical experience, most of which were served in administrative positions. I am currently the President of the Wildlife Management Institute, a leading conservation organization located here in Washington, DC. Prior to this position, I served as the Director of the U.S. Fish and Wildlife Service, Secretary of the Kansas Department of Wildlife and Parks, and in other positions in Pennsylvania and Massachusetts fish and wildlife agencies.

With this perspective, I would like to talk about some of the issues that I believe need attention to improve the use of evaluation science in an effort to improve the practice of conservation. These issues include: 1) a growing disconnect between the academic world and the practical world, 2) the changing nature of policy making at the federal level since the introduction of Government Performance and Results Act (GPRA) and the implementation of the Program Assessment Rating Tool (PART), 3) the lack of coordination among organizations, and 4) the integration of expertise from the natural and human dimension sciences to improve conservation.

Academic training frequently does a poor job of preparing the next generation of conservation professionals to handle real world conservation issues. Although universities do a fine job of teaching science and theory, many institutions completely miss the boat when it comes to providing practical experience and training. This issue is exacerbated by the fact that the most students come from an urban/suburban population which is predominant and growing. Most entering students have not experienced a rural lifestyle. Instead of learning about the natural world from inquisitiveness and first hand experience, they learn about the natural world through a television screen based on what a television executive chooses to present to them. Their opinions and attitudes towards conservation are a function of media coverage rather than real world experience. Today, young kids are more likely to turn over a "Gameboy" than turn over a rock to see what lies beneath.

While universities are preparing students to become the next generation of academics, conservation practitioners are facing increased resource challenges which require skills that are not taught well in a university setting. Most of the conservation challenges and opportunities are in rural settings and most are on private land. What's the result? Placing exceptionally bright, committed, and urban-raised new employees into a setting where they have no frame of reference or perspective. Directing an inexperienced, book smart, new employee to meet with a crusty, western Kansas rancher about private land management is unfair to the employee and a major annoyance to the rancher. But, it is a good way to generate ill will for your agency. While Director of the Fish and Wildlife Service, we developed a program called "Walk a Mile in my Boots" to help overcome cultural barriers and build trust between biologists and ranchers. In a

nutshell, Service employees worked side by side with ranchers to experience ranch life. In a turn about is fair play, ranchers then experienced the hectic workload of life in a Service field office. We need to do a better job of teaching employees to assess and evaluate the perspective of the land owner, the regulated entity, or the individual with whom the government interacts. The pure academic or science-based approach to conservation does not work well at the farmer's kitchen table or at the CEO's board room table.

Two examples of the academic approach to government are GPRA and PART. Now I must state that the concepts behind these tools are sound and they should lead to better government. I also know that they have forced administrators to think about their programs in a structured and disciplined manner which is good. However, the practical application of assessment and evaluation can be somewhat akin to "the good", "the bad", and "the ugly". Heightened government accountability for short term results (the "what have you done for me lately?" approach of politics) is often counter to the long term approach of conservation. This conflict can occur when hypothesis testing is precluded by the need for outcome based results or when more time is spent on administrative trivia (affectionately known at the Fish and Wildlife Service as "administrivia") than on science. When is a result an output? When is it an outcome? And when is it not worth the time or energy to find out?

### The Good

Assessment and evaluation is good when it is effective, efficient, and actually leads to better decisions. The Fish and Wildlife Service's use of PART to assess its fisheries program identified numerous weaknesses in the program and generated recommendations to improve those weaknesses. The effort prompted the fisheries community, including the sportfishing industry and conservation organizations, to rally around the federal fishery program resulting in increased appropriations to rebuild the program. In my experience, although Congress often paid little heed to PART reviews, in this case the PART analysis was instrumental in securing increased support and funding. The lesson to be learned is that PART reviews can be an effective tool to stimulate outside interest in improving or revitalizing a program.

In addition, PART or similar assessment and evaluation tools can play a critical role in addressing what I see as the biggest impediment in conservation success – the lack of a coordinated and comprehensive approach to conservation. We have all experienced the lack of coordination within and among agencies. This lack of coordination leads to wasted effort, wasted dollars, wasted time, and approaches that are not comprehensive in scope. We cannot continue to operate in a haphazard, disjointed fashion where organizations compete for finite dollars to address the seemingly infinite challenges facing our environment. Assessment and evaluation tools could play an essential role in identifying and prioritizing projects and programs that effectively tackle these challenges. In the mid-1980's, biologists across the continent recognized the plight of waterfowl – low populations due to a reduction of wetland habitat. In response, conservation organizations, the states, and the Migratory Bird Management program of the Fish and Wildlife Service developed the North American Waterfowl Management Plan and associated Joint Ventures. This comprehensive and coordinated plan for wetland habitat conservation is a major conservation success involving the U.S., Canada, and Mexico. Assessments and evaluation played a major role in developing the plan and in the decisions to fund wetland conservation projects in all three countries.

While Director of the Fish and Wildlife Service, I was faced with a petition to list the greater sage grouse. Obviously the stakes were high for the species, as well as for the habitat in which they lived. Sage grouse inhabit portions of 11 western states. Their habitat overlaps with some of the most productive energy producing areas on the continent. There was intense interest in the decision of whether to move forward with the listing process. The Service, in cooperation with state agencies and federal agencies, employed a structured decision-making process that drew heavily on assessment and evaluation of the species and its habitat. An outside expert panel, together with an internal Service review team, provided a well documented recommendation on which I made my decision. I am confident to this day that it was the appropriate decision.

### The Bad

I used to manage statewide deer populations. The result that I tried to achieve was managing deer populations at levels that were sustainable and acceptable to the public. Try to define a measurable outcome or performance measure for that long term goal. The inputs and outputs of the system changed dramatically, often, and without control. A deer in one person's backyard or orchard is a visual delight. When it walks to the neighbor's property it may be considered vermin. The harvest management system I designed was based on computer population models and the issuance of hunting permits to control deer numbers. I had one chance a year to "get it right." Nature and humans mucked with the system for the other 364 days. These complex types of natural resource management decisions are difficult to assess and evaluate for performance.

The information that decision and policy makers consider comes from multiple sources and the effectiveness of that information depends on the objectives for its use. Natural resource management must consider science and biology, sociology, economics, and politics. Further, natural resource policy decisions are rarely, if ever, based on a completely comprehensive set of facts. Instead they are based on the best science available at the time the decision must be made. With the pace of decision-making at the state or federal level, administrators usually do not have the luxury of waiting for assessments and evaluations of science or the measurable effectiveness of programs. I applaud that goal but I have rarely seen it happen.

### The Ugly

Unfortunately, assessment and evaluation is complex and expensive. It diverts time and money from on the ground work, to on the desk work. It also can become a paperwork exercise with no real practical application. I will share a case in point. At one time in my career, I became involved in a discussion with waterfowl biologists about how to assign measurable objectives to the acquisition of wetlands. Now do not forget that we all know wetlands provide a multitude of ecological values. In my mind a measurement of acres conserved was a fine objective; however, in the mind of the examiner, acres were an output not an outcome. He instructed us that an outcome was ducks produced. After numerous rounds of discussion about the difficulty of establishing that measure and the cost of verifying it, I suggested that we put down 17 ducks. My biologists challenged me to provide documentation and evidence for 17 ducks. I said it looked scientific and no one would question it. Guess what, our measurable outcome was accepted. Needless to say the demand for and acceptance of an unnecessary and expensive outcome measure somewhat clouded the utility of the evaluation process.

Evaluators must take into account the human dimension of resource management. Building trust and respect between resource managers and landowners does not translate well onto an evaluation matrix that will be scored. Although we can establish measurable biological objectives such as: wildlife produced per acre, percent recovered species, improved habitat condition; it is difficult to measure the relationships built between people. The Blackfoot Challenge project in Montana is an example of a collaborative project involving ranchers, biologists, academics, state and federal personnel, and private landowners. The simple goal is to preserve a lifestyle and an environment. The complexities arise when resource decisions have to be made concerning water use, endangered species, livestock, development, timber harvests, and more. Evaluators should be aware of more than ecological results; they should consider the personal relationships that must be built over time to produce effective management solutions to complex resource allocation problems.

### Conclusion

If I may provide a perspective from my current perch in the private sector, informed if not jaded by 20 years in government service, I have a few recommendations to consider. First, evaluation science should consider both the science and art of conservation. I am reminded of a forester friend of mine who when asked how he designs timber harvests, the resulting forest of which will not be seen in his lifetime, responded by saying, "I know what I have now, but I must dream of what I want 100 years from now." Conservation is a long-term endeavor which often is ill suited for short-term evaluation. Second, organizations must fully embrace evaluation from the top down. That means that it should be effective and efficient for all involved from the field level to the front office. If evaluation becomes another bureaucratic exercise to satisfy examiners rather than to drive decisions and policy it may be conducted but it will not produce results. Third, evaluation should be used judiciously. Before employing evaluation tools ask the question from another of my friends, "Is the juice worth the squeeze." Fourth, evaluation should be conducted by someone with evaluation expertise, not someone who just got a title change or change in a job description. Finally, the use of assessment and evaluation tools must be shown to actually drive the budget process. In government that means that the upper echelons of the administration and legislature must recognize and incorporate evaluation results into their budget decisions. In the end, we all know that budgets drive policy. Evaluation could help policy drive budgets if its effectiveness is proven in a practical manner.

Thank you for the opportunity to address the conference.