

Clair Stalnaker

CLAIR: Okay. We're here for the afternoon session, tools, strategies, and issues from State and Provincial Fish and Wildlife Agencies. My name is [Clair Stalnaker], retired Fish and Wildlife Service and USGS. I have a terrible throat condition, so I hope you can hear me. Sunday I was out in the blowing windstorm and it rained in my ear, and I guess I'm not as healthy as I used to be to fight these things off. This session brings together members of the IFC, four from states throughout the United States, and two from Canada. We're going to change the order a little bit, but will basically follow the program. You'll have to excuse my voice. I'll try to do the best I can.

First, I want to give you some background on the IFC. Tom Annear mentioned earlier that a National Instream Flow Program Assessment was conducted by the Fish and Wildlife Service and several State resource agency people. This effort brought together for the first time representatives from each of the 50 States and the five Fish and Wildlife Service regions to really talk about instream flows. The group met during two different workshops. From that effort, the State representatives spun off a new organization called the Instream Flow Council. The idea was to create a networking organization of agency representatives dealing with instream flow issues. This would include all State and Provincial agencies from across North America. Prior to that agency representatives had been a primarily a one-man a one-woman show in most States and Provinces, with little opportunity to talk to each other and learn from each other.

The Instream Flow Council was organized to advance the effectiveness of natural resource agencies in pursuing their stewardship responsibilities.

The session this afternoon has brought together eight representatives of IFC to tell us what they have learned and how to address uncertainty based on a little over a decade of experiences gained since this organization has been in place. As Tom Annear mentioned earlier, the Instream Flow Council has published two books, the first one included a revised edition. The Instream Flow Council's first book,

that you see illustrated here, brought together the ecologic concepts of rivers and instream flows and tried to for the first time to provide a textbook on what stewardship of riverine resources and instream flows was all about.

A second book followed in the later years in which the Council brought together eight different case studies that had been fully implemented. These case studies addressed each of the basic components— legal, institutional, public involvement, hydrology, geomorphology, biology, water quality, and connectivity in each case and provides a detailed description of the processes applied in order to finally achieve what at that time was determined to be a reasonable state of protection of the riverine resource. These case studies document the entire process as implemented at the time this book was written.

Discussion among IFC members during the many years preparing these books (2002, 2004, 2006) concluded that policy often trumps science was as a focal issue, not just better ways of doing science using better techniques. As Tom Annear earlier said “We all thought, Oh, that’s what is needed, better methods. What is the best technique or approach to a different problem?” It became very clear that there is an ongoing tug of war between policy and science. That is one of the things that the group is going to talk about today.

A later initiative put forth by IFC over a period of about three years, (2006-2009) resulted in a workshop and another publication documenting the status of riverine stewardship within the States and Provinces, and the strategies they were pursuing, at that point in time.

This Instream Flow initiative was put together primarily for three purposes: 1) to identify trends and opportunities to help state and provincial fish and wildlife and management agencies develop, maintain or improve their ability to participate in water management decisions; 2) to identify trends in Fish and Wildlife Agency's flow management activities; and 3), to develop potential strategies that the

agencies (and others) who could assist the agencies in better addressing and managing water resources for the benefit of fish and wildlife.

An important part of these efforts,, was the development of 46 policy statements and 10 principles, offered as guidance for the States and Provinces as how to address the issue of stewardship of the natural resources, particularly the aquatic resources of rivers and streams. These 10 principles, illustrated here were printed on the back of first book and revised edition, and it is these principles which I've asked the six IFC representatives to keep in mind as they are giving us a report on where they've been, where they are today, and where are things still uncertain, emphasizing where there is now certainty over things that were uncertain , say, a decade ago.

I've highlighted a few of the principles for them to address. **Recognize and promote environmental stewardship.** Each agency is going to tell us a little bit about their program and how they do that. Another principle is to highlight and recognize the limitations and opportunities from a legal and institutional perspective from their particular jurisdiction, and how do they involve the public in meeting their stewardship responsibilities.

Another principle that has been talked about is to to move towards seasonal and inter-annual variability in instream flows in order to protect the resource, particularly looking at the magnitude, duration and timing of events throughout the seasons and from one year to another, how to incorporate the idea of different flow regimes for wet years, average years, and dry years, as a guiding principle, or goal to try to achieve.

We are asking the representatives today to tell us how they are struggling with this principle and how it may or may not still be on their radar. Harking back to the '80s and '90s, the flatline minimum flow was a common concept. The IFC as an organization, has professed the idea to never say "minimum flow" again and

talk about "flow regimes", both seasonally and inter-annually. Another important principle is inclusion of including all of the riverine components—the hydrology, the geomorphology, biology, water quality, and connectivity, generated the question A question is often asked. Which of these is most important?

The answer is they're all important to various degrees in different settings. And the proper response is to document for each study how you have or have not addressed each of these components. It might be very logical to acknowledge in certain cases, such as for a bedrock controlled stream, one may assume that it is not going to change and therefore you could forget about the geomorphology, however, you've got to think about the bed, sediment transport and these kinds of things.

Therefore, documenting the rationale, becomes a very important principle in developing these ideas.

We've heard about adaptive management and the idea of putting this concept within regulatory language to follow on and learn from experiments, to start experimenting in regulated systems, and to set up monitoring to learn from particular applications. Prior to the time the IFC documents were published, monitoring primarily was thought of as standardized monitoring for monitoring's sake. In other words we would understand the system only after we had carried out extensive monitoring. The concept behind adaptive management is that monitoring has to be specifically targeted. This involves describing the system from existing knowledge followed by prediction, (forecasting the likely results of specific management actions), followed by field measurements through directed monitoring, to see how well forecasts (guesses) explain the future resulting from specific management action.

I'm sorry. My voice is about to give out.

Finally then, the purpose of this series of six presentations is for the agency representatives, from their state perspective and their own personal perspectives, to give us a picture of where things are and what kind of policy adjustments have

they made, or are being pursued, in order to manage uncertainty while governing riverine resources. Considering such ideas such as codifying long-term trends, adaptive management language or the incorporation of new techniques and new science to learn how to do things? Are there regular intervals for reassessing where things are in order to learn from that, et cetera?

As Tom keeps saying, the point of this workshop is talking to others—what has been learned, what specific suggestions do these authors, from different agencies have for those coming behind so they may address the same kind of problems in the future. How others may learn from the last decade or so of experiences of these IFC members.

That's basically what I have to say as an introduction. I'm sorry, my voice is about to give out.

What we're going to do now is to introduce each speaker. You notice in your program that we are going to alter the sequence of presentations a little bit. We'll start with Kevin and end with Bev, we're going to save the best for last instead of having Bev go first. So with that, I'll introduce the first speaker, who is Kevin Maze, aquatic biologist with the Texas Park and Wildlife Department. Kevin leads the department's role in the Texas Instream Flow Program. Kevin.