

**Southeast Aquatic Resource Partnership
Southern Instream Flow Network**

**Second Annual Conference
SETTING INSTREAM FLOW STANDARDS:
WHAT DO WE NEED TO KNOW?**

December 1-3, 2009 in Nashville, TN

Overview

Continuing SIFN's work to provide information and resources to help states protect instream flow, this workshop will focus on the science needed to support recommendations for instream flow standards. Case studies from other states will be used to guide discussions about development and use of flow-ecology relationships. SIFN "Test Cases" will bring the issues close to home and serve to transition discussions to regional needs. Participants will have ample opportunity to share their questions and issues with their regional counterparts as well as with instream flow experts from around the nation.

The workshop objectives are twofold. First is to improve understanding of participants about information needs and approaches to develop useful, defensible, and protective instream flow standards. Second, research needs will be identified for each state to help meet their instream flow protection objectives. Outcomes include development of the Southern Instream Flow Research Agenda to guide researchers and funding sources towards productive research to improve the science needed to support protective state instream flow standards.

Agenda

Schedule	Topic	Speaker
Tuesday		
12:00	Register and Network (lunch provided)	
12:30	Welcome/Logistics/ Conference Overview and Expected Outcomes	Scott Robinson and Bill Reeves with SARP
12:45	Introductions and State Updates	
2:00	Setting Instream Flow Standards Mary Freeman has spent her career researching the relationship between flow and fish populations in southern rivers and is a co-author of the ELOHA method to set instream flow standards. She will address 1) protective instream flow standards 2) the use of a scientific approach to support standard selection and 3) the need for more science to support state instream flow standards.	Featured Speaker: Mary Freeman, USGS
2:30	Instream Flow Research Agenda The importance of flows for how rivers function has been established for years, but water resource managers still identify the lack of science to support instream flow standards as a priority problem for the protection of aquatic habitats. To answer this need, SARP, TNC, and Auburn University have	Mary Davis, TNC and Mike Kensler, Auburn University

	joined forces to focus research partnerships and funding through the Southern Instream Flow Research Agenda. The draft Research Agenda and initial efforts will be presented. The outcomes of the workshop will help refine the Research Agenda and focus SIFN on its implementation in 2010.	
3:00	Break and Network	
3:30	<p>State Instream Flow Objectives and Standards</p> <p>The first step in scientific endeavors is to clearly identify the problem to be solved. This session focuses on instream flow program objectives to help clarify the desired level and type of instream flow protection in each state. This will help direct discussions in the rest of the workshop about 1) approaches to set instream flow standards and 2) the availability of information and process to establish the standards to meet the program objectives.</p> <p>Case Studies</p> <ol style="list-style-type: none"> 1. Michigan (Rich Bowman) 2. Colorado (Thomas Wilding) 3. Connecticut (Mark Smith) <p>SIFN test case – Tennessee (Robbie Baker)</p> <p>Discussion</p> <ol style="list-style-type: none"> 1. Objectives: full – comprehensive or partial ecological – threshold protection 2. Scale: site – river class – state 3. Level of effort: field work – BPJ - literature – desktop 4. Standards: thresholds, percent of inflow, risk 5. Applications: protection, restoration 6. Implementation: planning, regulatory 	Speaker/Facilitator: Eloise Kendy, TNC
5:30	Adjourn and Network (Donated beer/wine/snacks for reception) Dinner on your own	
Wednesday		
8:00	Reconvene and previous day review (Q&A)	Mary Davis

8:15	<p>Flow-Ecology Relationships:the basic support for instream flow recommendations</p> <p>The objective of instream flow standards is to manage the degree of impact of flow alterations to the ecology of aquatic ecosystems. Flow-ecology relationships provide to decision-makers our current scientific understanding of the consequences of flow alterations. This presentation lays out the basic information needed to develop the x-y graphs used to describe flow-ecology relationships.</p>	Speaker: Mary Davis, TNC
8:30	<p>River Classification</p> <p>One means to improve the accuracy of instream flow criteria is to use classification to reduce variability in ecological responses to flow alteration. Classification can have several components such as hydrologic and ecological conditions. This session presents an overview of classification methods and case studies to demonstrate various approaches. The outcome of this session is recommendations for a classification system to improve comparability of flow studies and criteria across state lines.</p> <p>Case Studies</p> <ol style="list-style-type: none"> 1. Michigan (Paul Seelbach) 2. Susquehanna River (Colin Apse) <p>SIFN test case - North Carolina (Jim Henriksen, Chris Goudreau) Alabama (Pat O’Neil)</p> <p>Discussion</p> <ol style="list-style-type: none"> 1. Hydrologic conditions 2. Ecological conditions 3. Regional classes and NFHAP 4. Other management uses for river classifications <p>Outcome</p> <ol style="list-style-type: none"> 1. Classification method recommendations 2. Research needs 	Speaker/Facilitator: Mary Davis, TNC
10:30	Break/Network/Email	
11:00	<p>Special Topic: US Forest Service Instream Flow Guidelines</p> <p>The USDA, Forest Service, Southern Region Office in Atlanta, Georgia has contracted with ENTRIX to assist the USFS in (1) compiling and summarizing state water plans and (2) creating a synthesis of instream flow methods and approaches used to develop or assess instream flow needs for aquatic and riparian systems within the Eastern US. The goal is to provide the USFS management and staff with improved resources and guidance for applying environmental flow methods to manage and protect aquatic and riparian resources within and interacting with national forests. This session will introduce the project and describe how workshop participants can provide useful input from their individual states and perspectives to make the project useful and widely applicable.</p>	Speaker: Paul Leonard, Entrix and Suzanne Krieger, USFS

11:30	<p>Special topic: The future of SIFN – Year 3 objectives and beyond The Southern Instream Flow Network is at the end of the second of the three year funding from the Multistate Conservation Grant. The activities in the third year will address the needs of SIFN membership. This session is your opportunity to direct those activities and production of the resources you need most. In addition, as there is still plenty of work to do and funds are needed to continue this effort. Your support and suggestions will help to carry SIFN into the next three years and beyond.</p>	SIFN Steering Committee
12:00	Lunch (provided)/ Network/ Email	
1:00	<p>Sources of Information for Flow-Ecology Relationships Several sources of information exist that relate ecological responses to flow alteration. One or more may be necessary to adequately support state instream flow standard recommendations. This session examines different approaches and sources of information that differ in availability, reliability, and time/cost investment.</p> <p>Note: For this session to be most productive, states need to have made at least conceptual attempts to use existing data to support flow requirements.</p> <p>Case Studies:</p> <ol style="list-style-type: none"> 1. Susquehanna - Expert-derived relationships (Colin Apse) 2. Colorado - Existing regional studies/reports/literature (Thomas Wilding) 3. Michigan - Existing statewide databases (Paul Seelbach) 	Speaker/Facilitator: Chris Konrad, USGS/TNC
2:30	Break/Network/Email	
3:00	<p>Flow-Ecology Relationships (continued)</p> <p>SIFN Test Cases –</p> <ol style="list-style-type: none"> 1. Virginia (John Kaufman) 2. Arkansas (Jeff Quinn) 3. Alabama (Pat O’Neil) <p>Discussion</p> <ol style="list-style-type: none"> 1. State information needs 2. Regional information needs <p>Outcomes</p> <ol style="list-style-type: none"> 1. Improved understanding of developing E-F relationships 2. Determine approaches to meet each state objectives 3. Recommendations for research agenda 	
5:00	Adjourn Dinner on your own	

Thursday		
8:00	Reconvene and previous day review (Q&A)	Mary Davis
8:15	<p>Relating Flow-Ecology Relationships to Instream Flow Objectives</p> <p>Before the flow-ecology relationships can be used to develop instream flow standards or for other purposes, best professional judgment is needed as to levels of ecological impacts of flow alteration. In addition, an evaluation is needed as to how the relationships support a state's instream flow objectives. The objective of this session is to describe how flow-ecology relationships can be used.</p> <p>Case Studies:</p> <ol style="list-style-type: none"> 1. Michigan (Paul Seelbach) 2. Connecticut (Colin Apse) <p>SIFN Test Case – Texas (Kevin Mayes)</p> <p>Discussion</p> <ol style="list-style-type: none"> 1. BPJ of limits to ecological impacts: thresholds, deviations, risk 2. Compiling the relationships: Building Block Method 3. Uses <ol style="list-style-type: none"> a. Compare approaches to setting flow standards b. Assess condition of rivers 4. Hand-off to stakeholders for IF policy decision <p>Outcomes</p> <ol style="list-style-type: none"> 1. Improved understanding of use of E-F Relationships 2. Criteria to prioritize approaches to meet each state objectives 3. Recommendations for research agenda 	Speaker/Facilitator: Colin Apse, TNC
10:30	Break/Network/Email	
11:00	<p>Instream Flow Research Agenda</p> <p>With improved knowledge of the scientific needs of southern water resource managers obtained through the course of the workshop, the draft Research Agenda will be reviewed. The objective of this session is to ensure that the priority research needs are recognized and resources to address those needs identified.</p> <p>Discussion</p> <ol style="list-style-type: none"> 1. State needs identified in workshop 2. Reach consensus on regional priorities 3. Identify partners and funding sources <p>Outcome</p> <ol style="list-style-type: none"> 1. Prioritized tasks to revise the draft Research Agenda 2. Obtain support for implementation 	Mary Davis, TNC and Mike Kensler, Auburn University

12:00	Adjourn and many thanks	