Oklahoma Instream Flow Advisory Group Summary of Issues Identified by Advisory Group May 14, 2013

The following is a synopsis of the issues identified by Instream Flow (ISF) Advisory Group members through 2009-2011 ISF Advisory Group activities, OWRB Advisory Group outreach in 2013, and through discussion at the March 2013 ISF Advisory Group meeting. This synopsis is provided for informational purposes to illustrate the issues and diversity of viewpoints prevalent among the group, and does not replace the detailed input provided by Advisory Group Members. Detailed input has been compiled as-received and distributed to the Advisory Group separately. This synopsis is not presented in any order, and does not in any way approve, suggest or indicate consensus, advocate for, or advocate against the issues listed herein as identified by members of the group.

General and Procedural

- Desire for certainty in future water availability and uses
- Cannot evaluate potential implications without defining specifics of ISF program
- Concern that ISF water may/would be completely unavailable to consumptive users
- Need to better define the purpose, goals, and need for an ISF program
- Need to better define what types of flow goals are anticipated (i.e., natural flow regimes, average annual flows, low flows, historical flows, etc.)
- Do domestic use set-asides, Interstate Compact requirements, or other existing programs provide sufficient ISF? Are any existing regulatory requirements not fully being implemented that would aid in this effort?
- Need to fully characterize cost/benefit implications for both consumptive and nonconsumptive uses
- Policy decisions needed to address human needs in context of acceptable environmental impacts
- Desire for a healthy economy and a healthy environment
- Economic, social, environmental impacts are intertwined and should be evaluated together
- Ranking relative importance of aspects to protect/enhance is premature or inappropriate; existing law sets what is/isn't protected
- Moving from the general set-asides provided in the OCWP to stream specifics requires much work.
 How will the work be prioritized? Largest basin with lowest flow, scenic designated, water quality limited?
- What recurring funding will be required to maintain the program, portions of which may reside in several agencies?

Oklahoma Water Law and Permitting

- Concern that ISF may/would have priority over existing water rights
- Concern that ISF may/would have priority over future water rights
- Concern that ISF may/would impact reservoir operations
- OWRB counsel has previously indicated that the Water Board has authority to accommodate instream flows as part of its purview
- Should evaluate ISF in context of current policies and statutes; ISF program would require statutory changes
- Premature to develop a pilot program without resolution to legal/policy questions
- Regardless of the answer to this legal authority question, it appears that there is nothing that
 prevents OWRB from moving forward with data collection and construction of a flow-ecology model
- The Public Trust Doctrine allows natural resource laws to be written, changed or interpreted to benefit riverine resources
- How will stream losses to riparian users and alluvial groundwater be managed or accounted for to make sure the ISF allocation remains for its intended purposes? Require permits?
- How will the total allocation for streams be determined: by segment, at an identified critical point?
 And if at a critical point, how will that location be determined?

- Can an ISF policy be achieved within the context of the current Stream Water Law, either by direct or indirect means?
- Critically revisit the legal basis and process whereby the existing Barren Fork ISF was
 developed/implemented. How has that been administered? What is the process for review/revisit to
 validate the flow value? What has been the practical historical experience of this ISF
 implementation? Lessons learned??
- Identify what statutory, regulatory, and administrative changes would be needed to implement an ISF program.
- Applicability of ISF program (e.g., intermittent streams), and if not applicable to intermittent streams or to existing water rights, what is the policy gain and is it sufficient to support legally-defensible disparate water rights classifications?
- Since "use" is the basis of Oklahoma's water rights system, will some users, whether for consumptive or nonconsumptive use, bear a greater burden than others under an ISF regime? If so, what is the rationale for creating disparate impacts among users?
- Potential impact on groundwater permits and use in Alluvium and Terrace Aquifers

Protecting Existing and Future Consumptive Rights

- Most respondents feel existing rights should be protected
- Additional responses:
 - o Consumptive rights should be protected when possible
 - o Consumptive rights should be protected but may not have priority over ISF
 - o ISF should be driven by science and data
 - o Are protected under existing statute

Potential Benefits of ISF Programs

- Healthy ecosystems and streams, increased biodiversity
- Fewer Endangered Species Act (ESA)/Threatened and Endangered (T&E) species issues; associated economic impacts
- Maintain/enhance recreational/tourism opportunities and associated economic benefits
- Make permits, streamflows, lake levels more reliable for all users/uses
- Adequate flow to assimilate wastewater discharges and provide other water quality enhancements
- Cost of protection may be lower than cost of rehabilitation

Potential Concerns Regarding ISF Programs

- Existing and/or future consumptive use permits not met in part or in their entirety
- More groundwater use / conflicts between surface water and groundwater permits
- Creation of "artificial shortages" for consumptive users
- Perception of wasting water by allowing more to flow out of state and implications thereof
- Economic impacts of reduced water availability (or changes in location of its availability) to consumptive users and related economic development implications
- Impacts on current uses of reservoirs

Metrics for ISF Demonstration Program

- Need to assess existing programs and policies and the degree to which they address ISF goals
- Assess effectiveness, costs, and economic implications of alternate approaches for achieving ISF (cost/benefit analyses)
- Measure stream flow and reservoir levels
- Measure recreation/tourism economic benefits using established guidance/approaches
- Measure loss of income for consumptive users
- Use established metrics/surveys for ecosystem and biota health; consider approach similar to WET testing; consider indicator metrics that may be proportional to broader indices
- Price of water sold
- No single standard approach fits all basins or areas of the state
- Desktop/modeling approaches could simulate multiple years of variable hydrology
- Existing measures and programs may provide a "de facto" pilot
- Use a pilot to measure, refine, adjust program before finalizing or implementing any program

- Use legal foundation to drive metrics
- Scenic Rivers are a logical starting point, especially considering that there is already precedence for regulation of flows
- What will be an acceptable level of accuracy for the ISF determination?

Potential Approaches to Consider for ISF in Oklahoma

- · Compensate consumptive users for losses associated with ISF
- Implement different categories of protection for different types of streams
- Improve flows in a priority stream to mitigate for impacts to lower priority streams
- Use watershed groups or volunteers to collect data
- Linkages between consumptive use conservation and ISF
- Flows upstream of Reclamation reservoirs are protected as a result of Reclamation's withdrawal of all unappropriated water from future permitting, but mandatory ISF releases from reservoirs would impact contract deliveries