

Oklahoma Comprehensive Water Plan 2011 Update

Technical Memorandum

Instream Flows in Oklahoma and the West

October 5, 2009

This study was funded through an agreement with the Oklahoma Water Resources Board under its authority to update the Oklahoma Comprehensive Water Plan, the state's long-range water planning strategy, due for submittal to the State Legislature in 2012. Results from this and other studies have been incorporated where appropriate in the OCWP's technical and policy considerations. The general goal of the OCWP is to ensure reliable water supplies for all Oklahomans through integrated and coordinated water resources planning and to provide information so that water providers, policy-makers, and water users can make informed decisions concerning the use and management of Oklahoma's water resources.

Oklahoma Comprehensive Water Plan

OCWP

*Prepared by CDM under a cooperative agreement between the
United States Army Corps of Engineers and the Oklahoma Water Resources Board*

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Acronyms

Act	Oklahoma Scenic Rivers Act
cfs	cubic feet per second
CWCB	Colorado Water Conservation Board
HIP	Hydroecological Integrity Assessment Process
IFIM	instream flow incremental methodology
ISFs	instream flows
MDS	minimum desirable streamflow
OCWP	Oklahoma Comprehensive Water Plan
ORWs	Outstanding Resource Waters
OWRB	Oklahoma Water Resources Board
PRRIP	Platte River Recovery and Implementation Program
TIFP	Texas Instream Flow Program
TMDL	total maximum daily load
U.S.	United States
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Section 1

Introduction

The majority of states in the western United States (U.S.) manage water on an appropriation system where water rights are granted for beneficial uses of water. Historically, beneficial uses of water have diverted water out of waterbodies and have been consumptive in nature to fulfill irrigation, industrial, and municipal water needs. Consumptive water use is defined as water that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment (U.S. Geological Survey [USGS] 2009). Beginning in the 1970s, a number of western states began to alter their appropriation systems to allow for new appropriation or conversion of existing stream or surface water rights to allow for instream flows (ISFs) to protect nonconsumptive uses of water. Nonconsumptive uses of water include environmental and recreational uses as well as hydropower and navigation. For purposes of this technical memorandum, recreational and environmental water needs were considered.

ISFs are quantities of water of which minimum amounts are needed to maintain a waterbody to protect nonconsumptive uses such as a fishery or riparian area. ISFs can also be designated in patterns to reflect natural hydrographs and associated aquatic life cycles. Although Oklahoma does not have a department or staff dedicated to an ISF program, ISFs are indirectly protected under existing programs and policies in the state. Previous Oklahoma Comprehensive Water Plans (OCWP) have raised the issue of and made recommendations for evaluating nonconsumptive uses including ISFs. As Oklahoma updates its OCWP, a thorough review of the state's existing programs, as well as investigation of surrounding states, was conducted to document the current status of ISFs in Oklahoma and other western states.

1.1 Purpose

The purpose of this technical memorandum is to examine the policy framework for ISFs in Oklahoma. This document characterizes existing programs and policies that protect water quantities in streams and lakes within Oklahoma and defines the range of current policies employed in surrounding states to provide insight for future policy framework and goals. The intent of this effort is not to change the current law, but rather to inform discussions that have been initiated in the OCWP public/policy process regarding these issues so as to ensure a fair, balanced, and reasonable treatment of the subject as the Oklahoma Water Resources Board (OWRB) updates the OCWP.

1.2 Report Overview

The remaining sections of this technical memorandum include:

- **Section 2 ISF Protection in Oklahoma** describes and defines existing programs and policy (e.g., domestic use protection) with regard to nonconsumptive uses in Oklahoma by identifying and describing the programs.

- **Section 3 Survey of Western States** presents the methodology used to complete the survey, the ISF programs in operation in western states, the beneficial uses protected by ISF programs, the types of ISF water rights that exist under various programs, the methodologies used by western states for quantifying ISFs, and the types of protections available through state programs.
- **Section 4 Summary** presents a synopsis of current Oklahoma policies in the framework of available western state approaches to ISFs.
- **Section 5 References**

Section 2

Instream Flow Protection in Oklahoma

Since 1975, Oklahoma has developed and updated its comprehensive water plan to look at long-term water resource needs to meet the demands of water users in the state. The OCWP provides detailed information on Oklahoma's water laws and policies. The 1995 update of the OCWP acknowledged the benefits of ISF protections and briefly discussed incidental ISF protections under current laws. The remainder of this section provides more detailed information on the laws and policies where ISFs are currently being protected in Oklahoma, particularly through policies used for appropriation of water rights, domestic use protections, the Scenic Rivers Act, reservoir releases, and interstate river compacts.

2.1 Water Rights and ISFs in Oklahoma

Stream water rights systems in the U.S. generally fall under two main categories—riparian and appropriative rights. Riparian rights follow a doctrine that recognizes a right to reasonable use of water flowing in a stream that borders one's property. Riparian rights are typically found in the eastern U.S. where water is generally more abundant. Appropriative rights were developed to resolve competing claims for water in the water scarce west and set up a system of "first in time, first in right" where the right to divert water is determined by seniority and beneficial uses.

Oklahoma's landscape and climate varies dramatically from west to east and as such, the state operates with an appropriative system with vestiges of riparian law. Appropriative rights are the foundation of Oklahoma's stream water rights system; however, riparian landowners are afforded domestic uses of water. Water rights are administered by the OWRB (with the exception of surface supplies in the Grand River Basin, which are under the jurisdiction of the Grand River Dam Authority) and appropriated by permit for the beneficial uses of water. These beneficial uses for which water may be diverted from a stream or impoundment in Oklahoma are agriculture, irrigation, water supply, hydroelectric power generation, municipal, industrial, navigation, recreation, and fish and wildlife propagation. Permits are not required for domestic use of water by riparian property owners.

The state rules (Section 785:20-1-2) describe this domestic use as the use of water by a natural individual or by a family or household for household purposes, for farm and domestic animals up to the normal grazing capacity of the land whether or not the animals are actually owned by such natural individual or family, and for the irrigation of land not exceeding a total of three (3) acres in area for the growing of gardens, orchards, and lawns [82:105.1(B)]. Domestic use also includes: (1) the use of water for agriculture purposes by natural individuals, (2) use of water for fire protection, and (3) the use of water by non-household entities for drinking water purposes, restroom use, and the watering of lawns, provided that the amount of stream water used for any such purposes does not exceed five acre-feet per year. Although ISFs are not directly recognized in Oklahoma's water use laws, ISFs are indirectly protected in Oklahoma's current water use programs and policies.

2.1.1 Appropriative Rights System

Streamflow in Oklahoma is currently afforded protection through the rule provision for determining unappropriated water availability. OWRB rules state that water available for appropriation will consider stream flows, implying that some low-flow value will be considered unavailable for diversion for beneficial uses. Rule 785:20-5-5 paragraph (a)(1) contains language regarding various factors that the OWRB will consider when appropriating new rights:

"For direct diversions from a stream, the determination of water available for appropriation shall take into consideration the mean annual precipitation run-off in the watershed above the point(s) of diversion, the mean annual flow, stream gauge measurements, domestic uses and all existing appropriations, and other designated purposes in the stream system."

Of interest relative to ISFs is the inclusion of the provision for "mean annual flow." This rule previously contained a provision that flows available less than 35 percent of the time would not be available for appropriation. The language has been changed to "mean annual flow;" however, the remaining language in the rule shows that mean annual flow is not the exclusive factor for determining water availability (Couch 2007). Although this language exists in the state rules, OWRB has adopted policies to determine the specific procedures used in determining stream water availability for issuing permits.

2.1.2 Domestic Use Protection

As presented above, some streamflow is protected by prohibiting appropriative permits that would interfere with domestic use. Again, domestic use is defined as water taken out of a stream by riparian landowners for household purposes (see legal definition in Section 2.1). Rule 785:20-5-5(a)(2) states that:

"Absent the presentation of more accurate evidence to the contrary, the Board shall estimate the amount of water required to satisfy domestic use to be six (6) acre-feet per household per year or three (3) acre-feet per non-household domestic use."

In addition to this formal rule, there is an internal policy to review USGS topographic maps and further assume that there is one household for each quarter section downstream of a diversion to the confluence of the next larger stream (Couch 2007). Essentially, this water (6 acre-feet multiplied by the number of quarter sections downstream of a diversion to the confluence of the next larger stream) is left in the stream available to freely flow through the assumed riparian properties for their domestic diversion and use. To the degree that such domestic diversion and use actually occurs, the ISF benefit will be reduced.

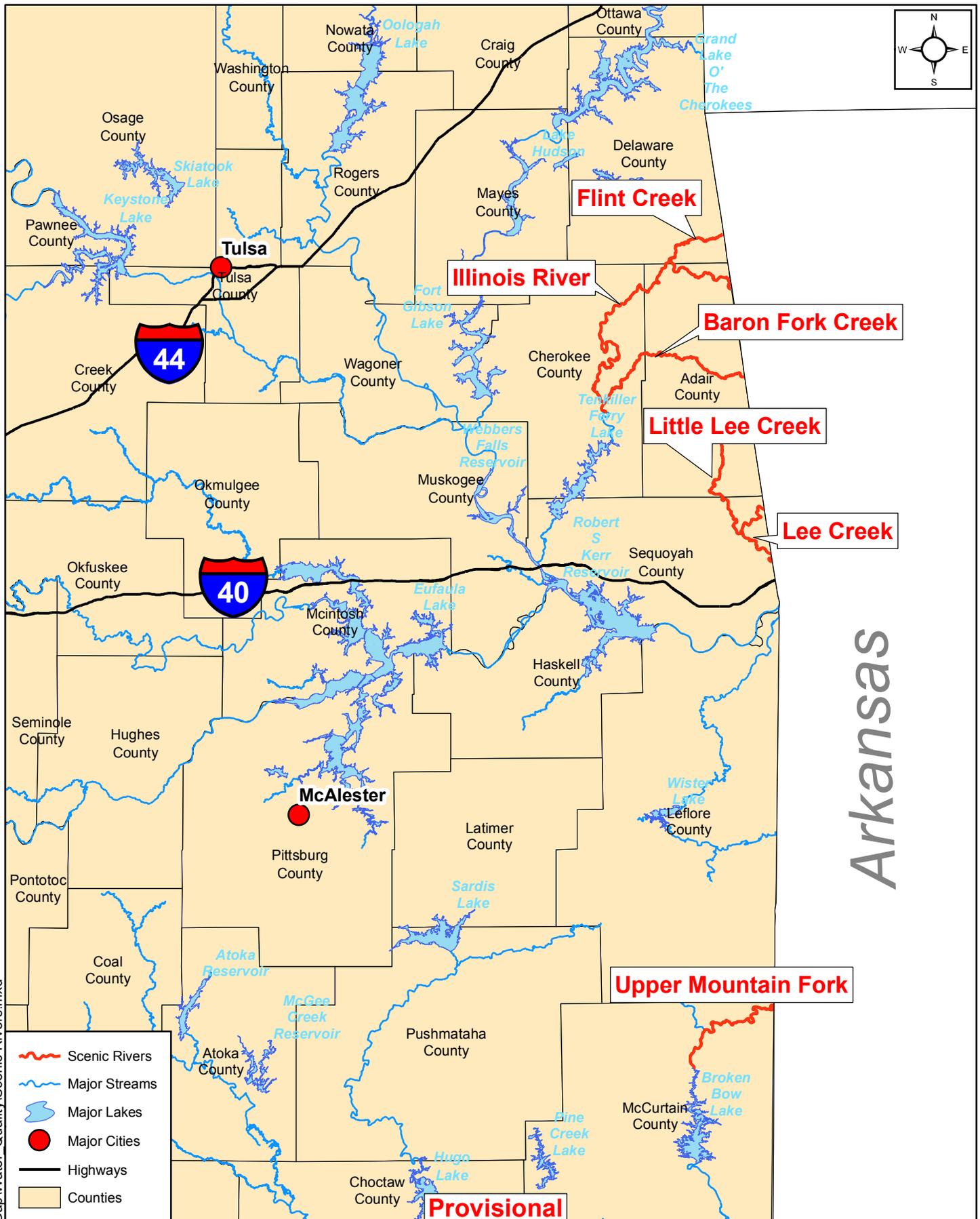
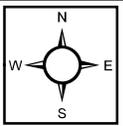
OCWP supply and demand analyses have been developed on a basin level, with the state divided into 82 different watersheds or basins. Table 2-1 quantifies the maximum ISF flows associated with domestic flow protection for each of the 82 OCWP basins. Figure 2-1 is a map of the basins provided for reference.

Table 2-1 Maximum ISF Flows Associated with Domestic Use Protection in Oklahoma

OCWP Basin #	Basin Area (acres)	Reserved Streamflow for Domestic Use (AFY)	Reserved Streamflow for Domestic Use (cfs)	OCWP Basin #	Basin Area (acres)	Reserved Streamflow for Domestic Use (AFY)	Reserved Streamflow for Domestic Use (cfs)
1	265,571	9,959	14	42	70,580	2,647	4
2	225,108	8,442	12	43	289,931	10,872	15
3	828,064	31,052	43	44	62,797	2,355	3
4	354,946	13,310	18	45	800,342	30,013	41
5	242,882	9,108	13	46	916,760	34,378	47
6	923,203	34,620	48	47	626,548	23,496	32
7	222,444	8,342	12	48	2,062,923	77,360	107
8	696,024	26,101	36	49	846,292	31,736	44
9	641,823	24,068	33	50	676,312	25,362	35
10	139,826	5,243	7	51	457,909	17,172	24
11	140,599	5,272	7	52	575,410	21,578	30
12	298,785	11,204	15	53	977,140	36,643	51
13	209,504	7,856	11	54	417,358	15,651	22
14	1,196,886	44,883	62	55	2,321,321	87,050	120
15	335,133	12,567	17	56	603,789	22,642	31
16	720,112	27,004	37	57	129,856	4,870	7
17	145,891	5,471	8	58	438,006	16,425	23
18	196,911	7,384	10	59	1,316,908	49,384	68
19	1,017,865	38,170	53	60	1,286,069	48,228	67
20	689,881	25,871	36	61	184,103	6,904	10
21	1,082,030	40,576	56	62	384,442	14,417	20
22	213,483	8,006	11	63	695,382	26,077	36
23	415,248	15,572	22	64	2,330,519	87,394	121
24	68,035	2,551	4	65	1,294,715	48,552	67
25	360,509	13,519	19	66	446,864	16,757	23
26	124,409	4,665	6	67	149,688	5,613	8
27	67,939	2,548	4	68	1,431,311	53,674	74
28	443,848	16,644	23	69	95,237	3,571	5
29	318,992	11,962	17	70	143,067	5,365	7
30	384,955	14,436	20	71	1,298,941	48,710	67
31	335,859	12,595	17	72	955,474	35,830	49
32	76,985	2,887	4	73	114,926	4,310	6
33	216,962	8,136	11	74	613,029	22,989	32
34	510,688	19,151	26	75	103,124	3,867	5
35	81,321	3,050	4	76	650,089	24,378	34
36	122,155	4,581	6	77	251,281	9,423	13
37	431,999	16,200	22	78	205,762	7,716	11
38	341,538	12,808	18	79	526,247	19,734	27
39	111,106	4,166	6	80	1,319,128	49,467	68
40	180,675	6,775	9	81	577,957	21,673	30
41	154,805	5,805	8	82	573,890	21,521	30

2.2 Scenic Rivers Act and Outstanding Resource Waters

The Oklahoma Scenic Rivers Act (Act) (82 O.S. Sections 1451-1471) contains provisions concerning the maintenance of the "free-flowing" condition of scenic rivers. The Act describes scenic streams and rivers as those that "possess... unique natural scenic beauty, water conservation, fish, wildlife, and outdoor recreation values of present and future benefit to the people of Oklahoma." There are currently six waters classified as scenic rivers in Oklahoma (Figure 2-2). They include portions of the following waterbodies:



- Scenic Rivers
- Major Streams
- Major Lakes
- Major Cities
- Highways
- Counties

Provisional

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Oklahoma COMPREHENSIVE Water PLAN

**Figure 2-2
Designated Scenic Rivers in
Oklahoma**

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Miles

- Flint Creek
- The Illinois River
- Barren Fork Creek (also referred to as Baron Fork Creek)
- Upper Mountain Fork River
- Big Lee's Creek (also referred to as Lee Creek)
- Little Lee's Creek

The Act (full text provided in Appendix A) requires that these "scenic river areas" be preserved in their free-flowing condition and prohibits any local, state, or federal agency from constructing, operating, or maintaining any dam on any of these rivers unless specifically authorized by the legislature. Exceptions are allowed for municipal and domestic use as long as these structures "will not significantly interfere with the preservation of the stream as a scenic free-flowing stream."

Under Rule 785.20-5-5, Section (e) "Additional Factors to be Determined for Scenic Rivers and Outstanding Resource Waters," the following factors are listed for consideration when determining water available for appropriation:

- Quantity of water requested in comparison to the amount of water available for appropriation based on mean annual precipitation run-off produced with the drainage area of the watershed above the proposed point of diversion;
- Quantity of flow needed in cubic feet per second (cfs) for recreational purposes, including sustaining existing fish species in the stream;
- Existing water quality in the stream and the potential of the diversion to alter the water quality or physical characteristics of the stream; and
- Other information as deemed relevant by the OWRB.

Under these factors, the OWRB has added specific low-flow protections for Barren Fork Creek after Rural Water District 5 of Adair County requested to increase their existing direct diversion appropriation amount. In an effort to satisfy water needs while complying with the Scenic Rivers Act, OWRB conducted a study with Oklahoma State University to quantify ISF requirements. The study resulted in a target to maintain minimum flows of 50 cfs in the Barren Fork.

The 1995 OCWP specifically recommended developing a strategy to provide ISF protection for the state's designated scenic rivers. The work completed on the Barren Fork can be used as a starting point to apply similar methodologies to other scenic rivers in the state found in comparable geomorphic, hydrologic, and biological settings.

2.3 Reservoir Releases

ISFs can also refer to those flows designated for release from a reservoir to maintain the ecological health of the river. An example of a state-led incremental effort that contributes to improving stream conditions in the state of Oklahoma is the ISF demonstration project on the lower Illinois River. The demonstration project was a multi-organization initiative where Sequoyah Fuels, working with the Oklahoma Department of Wildlife and the U.S. Army Corps of Engineers (USACE) with input from the OWRB, donated storage and associated water in Lake Tenkiller to improve the lower Illinois River. With appropriate Congressional support, this initiative allowed USACE to make temporary sustained flow releases that improved conditions for the downstream cool water fishery.

2.4 Interstate River Compacts

An interstate river compact is a formal written agreement between two or more states to divide or share the waters of a river that flows in each of the states. The compact must be approved by the legislatures of each state and approved by the U.S. Congress so that it becomes an enforceable statute in each state as well as federal law. Compacts can help reduce future disagreements and possible litigation between states over the waters of an interstate river, and provide certainty to each state on what it can do under the compact to develop and use the waters of the compacted river.

Oklahoma has entered into four interstate river compacts with two compacts on the Arkansas River—one with Kansas and one with Arkansas. It also is a signatory state with New Mexico and Texas on the Canadian River Compact. It also has entered into a compact with Texas, Arkansas, and Louisiana on the Red River (Figure 2-3).



Figure 2-3
 Oklahoma's Interstate River Compacts

An interstate river compact also has obligations on each state as to how water may be diverted and stored for use in the state while allowing remaining flows to pass

downstream to other signatory states that may also have diversion or storage limitations imposed by the compact. Often, annual accounting by a compact commission is required to determine water uses under the compact and if each state complied with the compact.

From an ISF perspective, interstate compacts provide some certainty as to the minimum quantity of flow that must flow into Oklahoma from upstream compact states, and the minimum quantity of flow that must flow out of Oklahoma to downstream compact states.

Compact compliance is enforced at specific geographic locations specified in each compact, and typically the compacts contain few or no requirements for allocating the required flows among tributaries upstream of the specified compliance point. Each compact is unique in terms of its requirements for minimum flows, allowable storage capacity and quantities in storage, and sharing of shortages between states during periods of low flow. Together, these conditions make it complex and difficult to quantify the specific ISF benefits associated with interstate compact obligations. However, interstate compact obligations, with states both upstream and downstream of Oklahoma clearly do provide for significant flows that contribute to ISFs in some of the state's major river systems and their tributaries.

2.5 Other Historic and Ongoing ISF Efforts in Oklahoma

Previous documents have been produced with regard for ISFs in Oklahoma, particularly with regard to quantification. There are currently over 200 methods for evaluating ISFs, which range from those that determine "minimum flows" to those that mimic the "natural flow regime" (Turton et al. 2008). Further discussion is provided on available quantification methods in Section 3 of this document.

In 1981, Orth and Maughan of the Oklahoma Cooperative Fishery Research Unit evaluated the "Montana Method" for recommending flows in Oklahoma Streams. The Montana Method (also known as the Tenant Method) is quantification based on percentages of average annual flow using historic flow records. The research reviewed hydrographs for 24 Oklahoma streams and adjusted the seasons of application to better represent Oklahoma's characteristics. The report concluded that the Montana/Tenant method could be useful for preliminary ISF assessments in the state.

In 1999, a document was produced by the OWRB that assessed minimum ISFs and the potential for application to Oklahoma's Outstanding Resource Waters (ORWs). This document compared three widely used quantification methodologies:

- The Tenant Method (see brief description above);
- The wetted perimeter method which uses a graphical representation of the wetted perimeter of a stream versus discharge as a surrogate for physical habitat. The method selects the breakpoint of the graph as the prescribed ISF (Instream Flow Council, 2004); and

- The instream flow incremental methodology (IFIM), which is a tool that incorporates fish habitat, recreation, vegetation and offers a description, evaluation, and a comparative display of water use throughout a river system (OWRB 1999).

In addition, the document surveyed 13 western states and presented the state policies as of the late 1990s. The document concluded that IFIM could be used to set flows to protect fish species and correspondingly recreational uses. That low flow could then be set as a threshold for future appropriations from ORWs or Scenic Rivers.

Currently, an effort is in progress to further assess environmental flows for Oklahoma. A recent document (2008) was published through a joint effort of Oklahoma State University and the USGS that presented the outcomes of the initial development steps of developing and applying the Hydroecological Integrity Assessment Process (HIP). The HIP is an approach developed by the USGS to assess environmental flows in Oklahoma's perennial streams. The modeling tool identifies ten non-redundant hydrologic indices that are ecologically relevant, specific to stream classes, and characterizes the five components of the natural flow regime (magnitude, timing, frequency, duration, and rate of change and predictability of flow events) (Turton et al. 2008). The first three steps of the HIP found that streams grouped similarly by ecoregions with like characteristics of climate, geology, soils, and vegetation. The document concluded that these stream groupings will be helpful for developing environmental flow quantifications that are stream and organism specific.

Section 3

Survey of Western States

As presented in Section 2, water rights systems in the U.S. are typically either a system of prior appropriation where water rights are appropriated for beneficial uses in order of time ("first in time, first in right"), or priority of use or the riparian system where water rights are allocated among those whose property is adjacent to a body of water. The western U.S. typically follows the prior appropriation system, or a hybrid of the two that recognizes both types of rights or is based on prior appropriation with vestiges of riparian law (Table 3-1). Information on states' water rights systems provides a foundation for understanding the programs implemented throughout the west to protect ISFs and maintain natural lake levels.

Table 3-1 Water Rights Systems in the West

State	System
Alaska	Prior Appropriation
Arizona	Prior Appropriation (surface water)
California	Hybrid
Colorado	Prior Appropriation
Idaho	Prior Appropriation
Kansas	Hybrid
Montana	Prior Appropriation
Nebraska	Hybrid
Nevada	Prior Appropriation
New Mexico	Prior Appropriation
North Dakota	Hybrid
Oklahoma	Hybrid
Oregon	Hybrid
South Dakota	Prior Appropriation
Texas	Hybrid
Utah	Prior Appropriation
Washington	Hybrid
Wyoming	Prior Appropriation

3.1 Methodology

A comprehensive review of state ISF programs was conducted to characterize state-level measures available and applied for ISF protection throughout the western U.S. This review was conducted to identify the following:

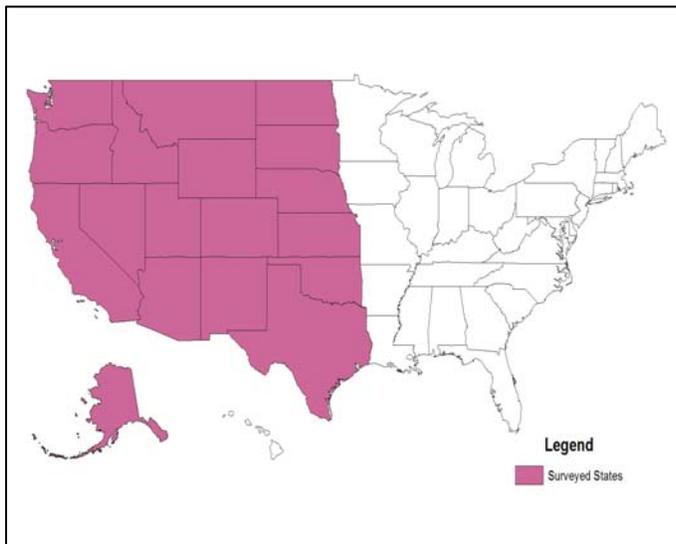


Figure 3-1
States Surveyed for ISF Information

- States that have ISF programs
- The types of beneficial uses protected by ISF programs
- The types of ISF water rights and quantification methods
- Protections available for ISFs

3.1.1 Geographic Scale

Figure 3-1 highlights the 17 western states that were surveyed for this evaluation. The geographic scale excludes Hawaii and states that are east of Oklahoma. ISF protection in Oklahoma was discussed in Section 2 of this document.

3.1.2 State Survey Development

An information-log/questionnaire was developed in order to gather consistent data from each of the surveyed states. Appendix B contains the completed information-logs from each state and is organized by state in alphabetical order. Initial ISF information was gathered from the websites of the state agencies responsible for the development and implementation of ISF programs. In addition, state agencies were contacted directly to gather supplemental information. Contact and reference information for each state ISF program is included in Appendix B. The following information was sought from each of the surveyed states:

- Is there legal recognition of ISFs?
- What are the beneficial uses of ISFs as established by statute or case law?
- With regard to ISF water rights, are new appropriations of ISFs or conversion/transfer of ISFs allowed? If so, is review required?
- Who can appropriate and/or transfer existing rights to ISFs?
- Who (what agency) authorizes and administers ISF water rights?
- What methods are used to quantify ISFs?
- What tools are available for ISF protection and do any specific protections exist (e.g., seasonal flows)?

The remainder of this section presents the results of the state surveys. Additional information can be found in Appendix B.

3.2 State Survey Results

3.2.1 States with ISF Programs

The majority of states surveyed have some form of legal recognition of ISFs (Table 3-2). The terminology used for legally recognized ISFs varies from state to state. Some examples of the varying state terminology include water rights, reservations, and environmental flows (see further discussion in Section 3.2.3). Kansas does not have ISF water rights or reservations but uses "minimum desirable streamflow" as established by legislature in 1984. Texas and California also do not have ISF water rights but issue permits for new water uses with conditions for environmental flows. Oklahoma and North Dakota are the two states considered in this

Table 3-2 States with ISF Programs

State	ISF Program
Alaska	X
Arizona	X
California	X
Colorado	X
Idaho	X
Kansas	X
Montana	X
Nebraska	X
Nevada	X
New Mexico	X
North Dakota	
Oklahoma	
Oregon	X
South Dakota	X
Texas	X
Utah	X
Washington	X
Wyoming	X

study that do not have legal definitions of ISFs; however, as presented in Section 2, Oklahoma has a number of policies that indirectly protect ISFs.

3.2.2 Types of Beneficial Uses Protected by ISF Programs

Historic requirements for appropriated water rights included the intent to divert water, the actual diversion of water, and the application of that water to a beneficial use. States determine what uses of water are acceptable and these beneficial uses are recognized and protected by law. Because beneficial uses of water have evolved to include nonconsumptive uses in many states, it is appropriate to inventory the legally recognized (through statute or law) beneficial uses for ISFs available in the western U.S. The following lists the beneficial uses of water with regard to ISFs for each of the surveyed states:

- **Alaska**—protection of fish and wildlife habitat, protection of recreation, protection of navigation, protection of sanitation and water quality (*Alaska Administrative Code 11 AAC 93.130. Issuance of a certificate of appropriation of water*).
- **Arizona**—wildlife (fish included); recreation (*Title 45-151(A) of the Arizona Revised Statutes*). The state indicated that any instream use could be approved unless it "conflicts with vested rights, is a menace to public safety, or is against the interests and welfare of the public (Norton 2009)."
- **California**—rights may be changed for the purposes of enhancing wetland habitat, enhancing fish and wildlife resources, or increasing recreation in and on the water (*California Water Code Section 1707*).
- **Colorado**—beneficial uses in Colorado are not specifically detailed but the law includes language that requires preserving the natural environment to a reasonable degree. Under definitions in the Colorado Revised Statutes (# 37-92-103), the "beneficial use" definition includes language referring to the "impoundment of water for recreational purposes, including fishery or wildlife, and also the diversion of water by a county, municipality, city and county, water district, water and sanitation district, water conservation district, or water conservancy district for recreational in-channel diversion purposes."
- **Idaho**—protection of fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, transportation and navigation values, and water quality (*Idaho Statutes 42-1501*).
- **Kansas**—not applicable. Kansas has minimum desirable streamflows as established by legislature in 1984.
- **Montana**—beneficial use is not specified by law. Some beneficial use must be established in the process for new water reservations. Fish, wildlife, recreation, and water quality have been successfully used to date. Protection of fish is the only beneficial use allowed for leases.
- **Nebraska**—fish and wildlife; recreation (*Nebraska Revised Statute 46-2,108*).

- **Nevada**—fish and wildlife; recreation (*Nevada Revised Statutes 533.023 and 533.030*).
- **New Mexico**—there is no rule or statute for ISF beneficial uses in New Mexico; however, the New Mexico Attorney General outlined fish, wildlife, recreation, and ecological purposes as uses for ISFs in its opinion in 1998.
- **North Dakota**—North Dakota does not have an ISF program.
- **Oklahoma**—refer to Section 2.
- **Oregon**—recreation, conservation, fish, and wildlife maintenance and habitat, other ecological values, pollution abatement, and navigation (*Oregon Revised Statutes 537.332 and 537.334*).
- **South Dakota**—beneficial uses in South Dakota are defined as "any use of water within or outside the state that is reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interests of the public of this state in the best utilization of water supplies" (*South Dakota Codified Laws 46-1-6(3)*). Personal communications with the state indicated that fish, wildlife, riparian areas, and aesthetics could be considered beneficial uses of water.
- **Texas**—Texas Administrative Code includes environmental considerations relating to streams and rivers that include fish and wildlife habitats, upstream/adjoining/downstream habitat, wetland function, riparian habitats, and water quality (*30 TAC 297.45-54 and Texas Water Development Board, 2008*).
- **Utah**—propagation of fish, public recreation, and reasonable preservation or enhancement of the natural stream environment (*Utah Code 73.3-30(2)(a)*).
- **Washington**—fish and wildlife maintenance and enhancement, recreational, and preservation of environmental and aesthetic values (*RCW 90.54.020(1)*).
- **Wyoming**—establish or maintain new or existing fisheries. There is debate on how to define this use (*Wyoming Statutes Title 41-3-1001*). The State Engineer believes it is the number of fish of various species and the lowest amount of water to maintain that population while the Department of Game and Fish sees it as the amount of water required to maintain a healthy habitat for normal fish populations (Annear 2009).

The above list shows that beneficial uses vary from state to state. For example, an array of uses is applicable to ISFs in Alaska while a single use is available in Wyoming. Fish and wildlife needs and recreation are the most universally accepted beneficial uses for ISFs.

3.2.3 Types of ISF Water Rights

How ISFs are protected or how rights are granted also varies by state. Most of the surveyed states, operating under the prior appropriation water rights system, either appropriate new water rights for ISFs/nonconsumptive uses or allow for existing rights to be transferred and/or converted to ISF rights. Where ISF rights are not appropriated or transferred, minimum stream flows or lake levels are set. This is often referred to as a reservation. Additionally, each state has developed a unique system for who is capable of appropriating a new ISF right or transferring an existing right to an ISF. Table 3-3 provides information on the types of ISF protections available in each of the surveyed states as well as information on parties that are able to either appropriate new rights or transfer existing rights. Each state encourages participation in their ISF programs from different entities with a wide range of agencies administering ISF water rights. This additional information is available in Appendix B within each state’s information log.

Table 3-3 Types of ISF Water Rights by State

State	New Appropriations (terminology) / Who can appropriate?	Transfer or Conversion / Who can transfer?
Alaska ⁽¹⁾	Yes (reservation)/anyone	No - existing right would be closed out and new appropriation would occur
Arizona	Yes (water right)/adjacent landowners (most are federal agencies)	No ⁽²⁾
California	No ⁽³⁾	Yes/any current water right holder
Colorado	Yes (water right)/Colorado Water Conservation Board	Yes/any current water right holder
Idaho	Yes (minimum streamflows)/Idaho Water Resources Board	No ⁽⁴⁾
Kansas	Yes (minimum desirable streamflows)/ Legislature	No
Montana ⁽⁵⁾	Yes (water reservation)/any public entity	Yes (leasing only)/anyone can lease their right
Nebraska ⁽⁶⁾	Yes (water right)/through permit through the 23 Natural Resource Districts and Nebraska Game and Parks Commission	Yes/anyone may apply to transfer which is temporary but renewable and can be applied up to 30 years
Nevada	Yes ⁽⁷⁾ (water right)/anyone	Yes/anyone
New Mexico	No	Yes (water right) ⁽⁸⁾
North Dakota	No	No
Oklahoma	No	No
Oregon	Yes (water right)/any state agency, new right held in trust by Oregon Water Resources Department	Yes/anyone can transfer or lease right to be held in trust by Oregon Water Resource Department
South Dakota	Yes (water right)/any legal entity, most new rights are held by the Department of Game, Fish and Parks	Yes/anyone can transfer right to a legal entity
Texas	No ⁽⁹⁾	Yes/anyone may donate their water rights to the Water Bank for conversion to instream flows. Donated rights retain their seniority.
Utah	No	Yes/Utah Department of Parks and Recreation, Utah Division of Wildlife Resources

Table 3-3 Types of ISF Water Rights by State

State	New Appropriations (terminology) / Who can appropriate?	Transfer or Conversion / Who can transfer?
Washington	Yes (water right)/Department of Ecology	Yes/individuals may transfer an existing right to be held in trust by the Department of Ecology through Trust Water Rights Program
Wyoming	Yes (water right)/State of Wyoming through the Water Development Commission	Yes/anyone but the right will then be held by the Water Development Commission

- ¹ Review required after 10 years
- ² ARS 45-172 states that water rights may be "transferred for use for...wildlife purposes, including fish," but no transfers have been attempted.
- ³ Although new appropriations are not granted for ISFs, new appropriations for consumptive uses may have ISF conditions included
- ⁴ Senior water rights may be donated to the Water Resource Board to deliver to a minimum streamflow that has already been established
- ⁵ Review is required every 10 years, although none have occurred in the last 20 years
- ⁶ Review is required every 15 years
- ⁷ Although new appropriations are allowed, they are generally not approved because most basins are fully appropriated
- ⁸ Transfers are allowed according to the Attorney General opinion, however this has not occurred due to over-appropriation throughout the state
- ⁹ No permits for ISF water rights but new water rights are conditioned by environmental flow needs determined by scientific study

3.2.4 Summary of State Programs and Protections Available for ISFs

As presented in the preceding sections, each surveyed state has developed a unique program for protecting ISFs and natural lake levels by either allowing for appropriation of new rights, transfer of existing rights, or by setting minimum desirable flows or environmental flows. The following lists the tools for protecting ISFs by state along with any specific protections being applied:

- **Alaska**—ISFs are protected through reservations. The Department of Natural Resources must review public interest criteria when adjudicating water rights with the authority to condition permits to protect fish and wildlife. ISFs can have seasonal protections.
- **Arizona**—ISFs are protected through new water rights that are in acre-feet/year with no seasonal variations.
- **California**—In addition to conditioning new and existing permits to include ISF needs and allowing for transfer/conversion of existing rights to fulfill ISF needs, California has a number of other programs available for protecting ISFs. These include the California Wild and Scenic River Act where any new appropriation from a designated stream must receive special approval; Fully Appropriated Streams where no new appropriations are allowed; Prior Adjudications where the courts have determined and assigned conditions and/or amounts of water for uses within a watershed; and State Filings that are held by the State Water Resource Control Board that are available for ISFs and retain their seniority. ISF amounts are not set with a single value but rather can be seasonal, seasonal by water year type (wet, dry, normal), and may include flushing flow values

among various other available conditions. Other examples include in-lake values to support terrestrial animals/vegetation needs.

- **Colorado**—ISF water rights may be obtained through new appropriation and the acquisition and conversion of existing rights can occur through grant, purchase, donation, bequest, devise, lease, exchange, or other contractual agreement. In addition, a short-term loan or lease of water rights can take place from individuals or the water bank to the Colorado Water Conservation Board (CWCB). Recreational flows can also be protected through in-channel diversions that can be obtained by a county, municipality, city, water district, or water conservancy district. ISF water rights in Colorado can be annual or seasonal. Specific protections are generally dictated by water availability.
- **Idaho**—ISFs are called minimum streamflows. They are all held by the Idaho Water Resources Board. They are established to protect current flows, not to restore flows to an over-appropriated stream. Minimum streamflows must be in the public interest, capable of being maintained (unappropriated water), and are established for the minimum, not optimum, flow. There are also some legislative minimum streamflows that do not have to meet the above criteria, such as for a settlement with the Nez Perce. Idaho also has a Water Transaction Program that pursues leasing of water rights for ISFs. Specific protections such as seasonal flows and general minimums are available and depend on how the minimum streamflow is written by the Water Resources Board.
- **Kansas**—Kansas does not have ISF water rights or reservations. They have minimum desirable streamflows (MDS) for most major streams, which were established by legislature in 1984. If flow drops below the MDS, junior water right holders are cut off. In addition to MDS, the Kansas Water Assurance Program purchases storage in federal reservoirs to release during low-flow periods. MDSs are monthly streamflows for each stream.
- **Montana**—Montana uses the term "water reservations" for new appropriations that are year round rights (some vary, some do not). Murphy rights are legislated ISF rights (1967) on 12 blue-ribbon trout streams. Murphy rights are also year-round rights that can have as many as six variations specified throughout the year. Leases are allowed for protection of fish. No permanent transfers are allowed. Additionally, storage water is leased out of some reservoirs for ISFs. Basin closures have been used to protect remaining ISFs in some basins. Montana has intervened in Federal Energy Regulatory Commission licenses for dams to protect peak flows and baseflows.
- **Nebraska**—Nebraska allows for the appropriation of new water rights for ISFs as well as allows transfers for ISF purposes for up to 30 years. Flows are quantified for the beginning and end of a reach and flows are determined by portion of the year.
- **Nevada**—New appropriations and interstate decrees are available to protect ISFs in Nevada. ISFs are for maximum flows and are not seasonal.

- **New Mexico**—Although water rights transfer to ISF is permissible, it has not happened to date due to over-appropriation of water throughout the state.
- **North Dakota**—North Dakota does not have an ISF program.
- **Oklahoma**—Refer to Section 2.
- **Oregon**—Oregon allows for new appropriation of ISFs as well as transfers and conversions. Additionally, 5-year, limited-time transfers can occur until certain conditions are met (e.g., property sale, need for water). Oregon also has a program for the allocation of conserved water. Where users are conserving water due to efficient practices, 75 percent of the water is allocated to irrigating new land and 25 percent of the water must go to ISFs. New appropriations are year-round and special protections vary by requesting agency. For instance, Department of Environmental Quality ISFs are general minimums while Fish and Wildlife ISFs are seasonal.
- **South Dakota**—The Department of Environment and Natural Resources Water Rights Program appropriates new ISF rights and allows for transfer of existing rights to ISFs to legal entities. ISF water rights are reviewed by the water management board, which is a judicial board on which the members represent different interests (irrigation, fish, parks, etc.). Public opinion on ISF rights is a legal requirement. Additionally, ISFs are protected in South Dakota through the Watershed Protection Group, which completes total maximum daily loads (TMDLs) and issues discharge permits that can require certain flows for dischargers. ISFs in South Dakota are not generally seasonal, although it could be done.
- **Texas**—Legislation exists in Texas to protect freshwater flows in bays and estuaries. Although there are not ISF water rights in Texas, Senate Bill 2 created an ISF program where new permits would contain environmental flow conditions as determined by scientific study. Basin-wide environmental flow needs are expected to be determined by 2016. In the interim, Senate Bill 3 has been passed that estimates environmental flow needs based on best available data through a stakeholder process. These environmental flows are referred to as "set asides." Because flow regimes are determined by studies, they reflect variability within a year as well as year to year. The case study found at the end of this section was developed by Edmond Oborny of BIO-WEST and provides further detail of the Texas program.
- **Utah**—Utah allows for the permanent or temporary acquisition of ISF rights through donation or by purchase. Utah Code authorizes the State Engineer to reject an application to appropriate water or to change use of a water right if approval would unreasonably affect public recreation or the environment. There currently are no special protections (i.e., seasonal) applied to ISFs in Utah.
- **Washington**—Minimum flows in Washington are set by administrative rule-making procedure. New ISF rights are appropriated by the Department of Ecology and transferred rights are held in trust by the Department of Ecology through the Trust

Water Rights Program. Waters in the Trust Water Rights Program retain their priority date. Additionally, water banking occurs in the state where basins are closed to new appropriations and a "cap and trade" type of system is enacted. The majority of ISF values are established for fish with seasonal rights at specific control points. It is assumed that if the fish are healthy, other beneficial uses are being satisfied.

- **Wyoming**—The state may appropriate a new right or acquire a right through voluntary transfer. Additionally, there are waterbody specific protections in practice in Wyoming. It is federally mandated that 500 cfs must be released from a reservoir to the North Platte River for delivery to Nebraska (although this is considered a "release from storage" and not an ISF water right). Another "release from storage" is required so that a mandated amount of water reaches the North Platte River from the Laramie River. A Wild and Scenic water right (for Yellowstone National Park) is applied to Clarks Fork and negotiations have occurred with the Bureau of Reclamation and the State of Idaho to shift storage for winter baseflow in the Snake River near Jackson. ISFs in Wyoming are generally based on season. Wyoming Game and Fish attempts to protect the entire winter flow, the minimum flows for spring spawning, and maintenance of the summer habitat and fall spawning flows if applicable.

3.2.5 Quantification Methods by State

In the majority of surveyed western states, there are no standard quantification requirements or procedures for the establishment of an ISF water right. In order to establish an ISF, there must be a scientifically justifiable quantification based upon the particular beneficial use. There is not, however, a standard method or procedure that must be used. As such, states have established ISFs through a variety of methods which range from those that determine a set minimum flow to those that follow a natural hydrograph with base and flushing flows. The Instream Flow Council categorizes ISF assessment techniques into three groups:

- Standard setting –sets limits or rules to define a threshold flow regime
- Incremental –analyzes single or multiple variables to enable assessment of different flow management alternatives
- Monitoring/diagnostic – assesses conditions and how they change over time

Each state program was reviewed to determine what quantification methodologies are being used to establish ISFs. States allowing appropriation of new rights for ISFs acknowledged that there are many options available and that methodologies should be species and/or stream type dependent. The most commonly used quantification tools in the western U.S. are presented in Table 3-4. Refer to Appendix B for individual state surveys.

Table 3-4 Summary of Commonly Used ISF Assessment Tools in the Western U.S.

Stream Assessment Tool	Type of Technique	Level of Effort	Description ⁽¹⁾
Duration Analysis	Standard Setting	Low	A method based on flow duration curves derived from hydrologic records
Wetted Perimeter	Standard Setting	Low	A method that uses a graphical representation of the wetted perimeter versus discharge as a surrogate for physical habitat.
Maximum Spawning Area Flow and Maximum Spawning Area (Orsborn)	Standard Setting	Low	These methods have been used to assess ISF requirements for spawning salmon
Quantifying Channel Maintenance Instream Flows	Standard Setting	Low	A method for gravel-bed streams in the western US developed by the US Forest Service
Tennant/Montana Method	Standard Setting	Low-Medium	A method based on percentages of average annual flow derived from estimated or recorded hydrologic records, and limited field measurements.
R2CROSS	Standard Setting	Medium	A single-transect hydraulic-based habitat method that represents a transect approach for quantifying minimum or base flow values for times of year when streamflow is at its lowest
Toe-Width	Standard Setting	Medium	A model used to determine flows that maximize preferred depths and velocities over suitable spawning gravel - used in Washington
IFIM	Incremental	High	A modular decision support system for assessing potential flow management schemes. The method quantifies the relative amounts of total available habitat throughout a network of stream segments for selected species.
Physical Habitat Simulation (PHABSIM)	Incremental	High	A computer program that is used for quantifying the suitable versus unsuitable hydraulic habitat attributes of selected species and life stages as a function of discharge

¹ Instream Flow Council, 2004

In addition to the ISF methods presented above, there are a number of corresponding habitat measurement and quantification methods available to identify the minimum extent of existing habitat that the ISF would be designated to protect. The following list includes a sample of protocols available:

- EPA rapid bio-assessment protocols
- State of Oklahoma bio-assessment protocols
- State of Texas assessment protocols
- State of California assessment protocols

3.2.6 Future Updates to State ISF Programs

Finally, a number of states surveyed for this report indicated current or future updates within their ISF programs that were worth noting.

- The State of California is currently working on policy for AB2121 for five northern counties, which will develop guidance for waterbodies in these counties to develop/ quantify ISFs to support anadromous fish populations. The policy also limits diversions to winter months only and does not allow for onstream dams. The new policy is expected to be adopted by the end of 2009.
- The State of Colorado recently adopted new policy that allows ISF rights to be purchased through legislated funds by the CWCB. Another legislative bill in Colorado would provide a tax incentive for those donating an existing water right to ISFs held by the CWCB. Additionally, Colorado has new legislation to remove the "use it or lose it" principle for ISF rights.
- In the State of Nebraska, the Platte River Recovery and Implementation Program (PRRIP) is currently looking at upcoming projects that would aim to meet target flows set by the U.S. Fish and Wildlife Service (USFWS) or existing ISF flow permits as often as possible. The projects may result in permits given to other entities besides NRDs and Game and Parks. There are no directly applicable precedents set for this type of stream augmentation and any upcoming work would be in new territory.
- In Nevada, U.S. Senator Harry Reid is working on an effort to get federal money to lease or purchase water in the Walker River Basin for ISFs.
- As mentioned previously, the State of Texas passed Senate Bill 3 in 2007, which set up an environmental flow allocation process for the state's seven river basin and bay systems. This work is in progress and tasks stakeholder groups with using best available data to determine environmental flow needs for a basin and to work towards fulfilling those needs if the determined amount is not available.
- The State of Washington is also working to ease the 5-year non-use relinquishment restriction to encourage conservation. The state is actively working to modernize and streamline the adjudication process and trying to implement a more official process for water banking.
- As of early 2009, the State of Wyoming had bills in both the House and Senate that will allow for temporary change of use, similar to the water leasing program in Montana.

Texas Case Study

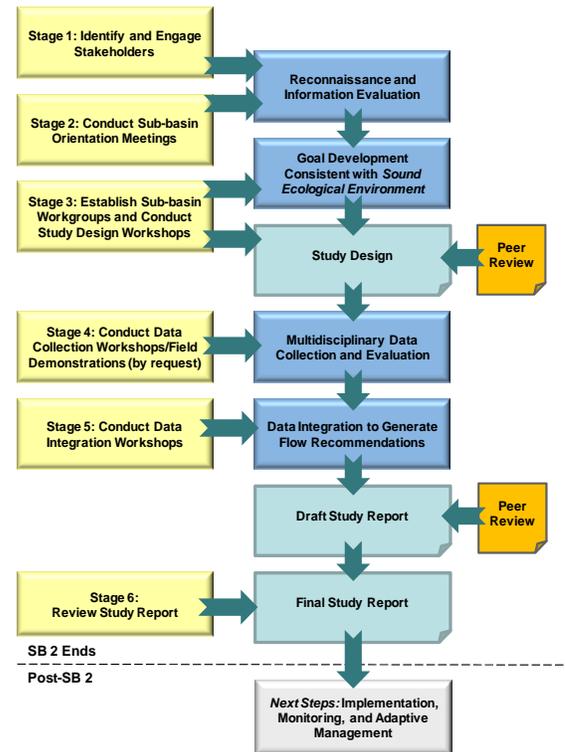
Senate Bill 2, enacted in 2001 by the 77th Texas Legislature, directed the Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, and Texas Water Development Board to "jointly establish and continuously maintain an instream flow data collection and evaluation program..." Thus, these three state agencies comprise and collectively administer the Texas Instream Flow Program (TIFP). The purpose of the TIFP is to perform scientific studies to determine flow conditions necessary for supporting a sound ecological environment in the river basins of Texas.

In 2002, a Memorandum of Agreement was signed between the agencies that provided the administrative framework for achieving the legislative directive. A Programmatic Work Plan and Technical Overview Document were prepared and submitted to the National Research Council of the National Academy of Sciences as part of scientific peer review. Revisions to the documents were made based on stakeholder input and NAS review and the Technical Overview document was published final in May 2008.

The figure shown here (TIFP 2008; Figure 4-1) provides an overview of the steps to be performed in the sub-basin studies of the TIFP and the key stages of Stakeholder involvement.

As described in the Technical Overview (TIFP 2008; Chapter 10), data integration to generate flow recommendations is an integral component of the overall study. Descriptions of flow recommendations will include four components of the hydrologic regime: subsistence flows, base flows, high flow pulses, and overbank flows (Table 10-1, TIFP 2008).

- Subsistence Flows** – The primary objective of subsistence flow recommendations is to maintain water quality criteria. Secondary objectives include providing habitat that ensures a population is able to recolonize the river system once normal, base flow rates return.
- Base Flows** – The primary objective of base flow recommendations is to ensure adequate habitat conditions, including variability, to support the natural biological community of the sub-basin. These habitat conditions are expected to vary from day to day, season to season, and year to year. This variability is essential in order to balance the distinct habitat requirements of the various key species of the sub-basin.
- High Flow Pulses** – The primary objectives of high flow pulse recommendations are to maintain important physical habitat features and longitudinal connectivity along the river channel. Many physical features of sub-basins provide important habitat during base flow conditions that cannot be maintained without suitable high flow pulses. A secondary objective for high flow pulses includes improving recruitment for riparian plant species.
- Overbank Flows** – The primary objectives of overbank flow recommendations are to maintain riparian areas and provide lateral connectivity between the river channel and active floodplains. Secondary objectives for overbank flows are to move organic debris to the main channel, providing life cycle cues for various species, and maintaining the balance of species in aquatic and riparian communities.



TIFP 2008, Figure 4-1: TIFP study components and stages of stakeholder participation.

Upon completion of TIFP studies and reports, key additional steps (Implementation, Monitoring, and Adaptive Management) will be necessary to translate recommendations into action. With passage of Senate Bill 3 in 2007, the Texas Legislature restated the importance of maintaining the health and vitality of Texas surface-water resources and further created a stakeholder process that would result in science and policy based environmental flow regime recommendations to protect instream flows and freshwater inflows on a basin-by-basin basis. Following up on Senate Bill 2, Senate Bill 3 creates a process to generate regulatory environmental flow standards based on the "the best available science." Results from the Senate Bill 2 studies will play a major role in describing "the best available science." Management strategies that are called to be ongoing, adaptive, and considerate of local issues will outline steps or policies requiring adoption by state agencies, stakeholders, and possibly the legislature to implement new flow regimes. Senate Bill 3 also regulates that these management strategies include recommendations related to monitoring and adaptively managing the aquatic environment through periodic review and refinement of flow regimes.

Section 4

Summary

The Section 3 review of ISF programs in the western U.S. revealed that the majority of western states have some form of legal recognition for ISFs and that each of these states has developed a unique program to protect low-flows through water rights, reservations, or minimum desirable streamflows. Many of these states have established that non-consumptive water uses are beneficial uses for which water can be protected and have employed various methods for quantifying ISFs.

4.1 Water Rights

Section 2 discussed Oklahoma's water rights system and the way in which ISFs are currently afforded protection under the state's water law. Beneficial uses in Oklahoma for which water may be diverted include agriculture, irrigation, water supply, hydroelectric power generation, municipal, industrial, navigation, recreation, and fish and wildlife propagation. Navigation, recreation, and fish and wildlife propagation are beneficial uses for which other states have appropriated or reserved ISFs. Because these uses are already in Oklahoma's statutes, there is the possibility to protect instream flows for these uses in the future.

Through Oklahoma's appropriative rights system, streamflows are a consideration when appropriating new rights. As discussed in Section 2.1.1, the "mean annual streamflow" language exists in the state rules and OWRB has a formal policy for the amount of water available for appropriation by permit.

4.2 Scenic Rivers Act and Outstanding Resource Waters

OWRB has acknowledged the need to protect minimum flows within the scenic rivers of the state in order to meet the needs of water users while also protecting the natural scenic, environmental, and recreational values of these rivers and streams. Specific low-flow needs have been quantified for Barren Fork Creek. The work completed on the Barren Fork could be used as a starting point to apply similar methodologies to other scenic rivers in the state found in comparable geomorphic, hydrologic, and biological settings. Additionally, Oklahoma may want to look to other western states that are currently in the process of quantifying ISF needs (e.g., Texas and California, see discussion in Section 3.2.5). Developing an implementation strategy for quantifying low-flows for Oklahoma's scenic rivers and outstanding resource waters will help Oklahoma protect its free-flowing streams and provide groundwork for any future quantification needs.

Section 5

References

- Anderson, Eric. Utah Division of Water Rights. 2009. Personal Communications.
- Annear, Tom. Wyoming Department of Game and Fish. 2009. Personal Communications.
- Annear, Tom, et al. 2004. Instream Flows for Riverine Resource Stewardship. Instream Flow Council.
- Case, Morgan. Idaho Department of Water Resources. 2009. Personal Communications.
- Charney, Sasha. Colorado Water Conservation Board. 2005. Decades Down the Road: An Analysis of Instream Flow Programs in Colorado and the Western United States.
- Copp, Ken. Kansas Department of Water Resources. 2009. Personal Communications.
- Couch, Dean. Oklahoma Water Resources Board. 2007. Personal Communications.
- Gordon, Linda. New Mexico Office of the State Engineer, Water Rights Bureau. 2009. Personal Communications.
- Herrera, Steve. California State Water Resources Board Division of Water Rights. 2009. Personal Communications.
- Hickenbottom, Kelvin. Nevada Department of Water Resources. 2009. Personal Communications.
- Instream Flow Council. 2004. Instream Flows for Riverine Resource Stewardship (Revised Edition).
- McLane, Mike. Montana Fish, Wildlife and Parks. 2009. Personal Communications.
- Oborny, Edmond. BIO-WEST. 2009. Case Study of Texas Instream Flow Program.
- Oklahoma Administrative Code. Title 785. Chapter 20. 785:20-5-5. Factors relating to statutory elements for application approval.
- Oklahoma Statutes. Title 82. Section 105.12. Approval of Application – Appeal by Protestants.
- Oklahoma Statutes. Title 82. Sections 1451-1471. Oklahoma Scenic Rivers Act.
- Oklahoma Water Resources Board. Division of Planning. 1997. Update of the Oklahoma Comprehensive Water Plan 1995.
- Oklahoma Water Resources Board. 1999. Assessment of Minimum Instream Flows and Potential for Application to Oklahoma's "ORW" Waters.

Oklahoma Water Resources Board. 2003. Oklahoma Water News. Article: New Rule Protects Flow of Scenic Barren Fork. March-April edition.

Patch, John. North Dakota State Water Commission. 2009. Personal Communications.

Norton, Barbara. Arizona Department of Water Resources. 2009. Personal Communications.

Rath, Mark. South Dakota Department of Environment and Natural Resources. 2009. Personal Communications.

Sager, Kim. Alaska Division of Mining, Land and Water. 2009. Personal Communications.

Thompson, Mike. Nebraska Department of Natural Resources Permits and Registration Division. 2009. Personal Communications.

Thurgood, Kody. Oregon Water Resources Department. 2009. Personal Communications.

Turton, Don, Bill Fisher, Titus S. Seilheimer, and Rachel A. Esralew. 2008. An Assessment of Environmental Flows for Oklahoma.

United States Department of Interior. Fish and Wildlife Service. 1983. Opportunities to Protect Instream Flows in Texas, Oklahoma, and Arkansas. FWS/OBS-83/22.

United States Geologic Survey, 2009. Water Science Glossary of Terms.
<http://ga.water.usgs.gov/edu/dictionary.html#C>

Texas Water Development Board, Texas Commission on Environmental Quality, and Texas Parks and Wildlife, 2008. Report 369. Texas Instream Flow Studies: Technical Overview.
http://www.twdb.state.tx.us/publications/reports/GroundWaterReports/GWReports/R369_InstreamFlows.pdf

Veihl, Rob. Colorado Water Conservation Board. 2009. Personal Communications.

Walsh, Brian. Washington Department of Ecology. 2009. Personal Communications.

Wentzel, Mark. Texas Water Development Board. 2009. Personal Communications.

Appendix A
Oklahoma Scenic Rivers Act

§82-1451. Short title.

Sections 1452 through 1471 of this title shall be known and may be cited as the "Scenic Rivers Act".

Added by Laws 1970, c. 68, § 1, emerg. eff. March 17, 1970. Amended by Laws 2003, c. 305, § 1, emerg. eff. May 28, 2003.

§82-1452. Preservation of certain free-flowing streams and rivers - Designation of scenic river areas.

A. The Oklahoma Legislature finds that some of the free-flowing streams and rivers of Oklahoma possess such unique natural scenic beauty, water conservation, fish, wildlife and outdoor recreational values of present and future benefit to the people of the state that it is the policy of the Legislature to preserve these areas for the benefit of the people of Oklahoma. For this purpose there are hereby designated certain "scenic river areas" to be preserved as a part of Oklahoma's diminishing resource of free-flowing rivers and streams.

B. The areas of the state designated as "scenic river areas" shall include:

1. The Flint Creek and the Illinois River above the confluence of the Barren Fork Creek in Cherokee, Adair and Delaware Counties;
2. The Barren Fork Creek in Adair and Cherokee Counties from the present alignment of Highway 59 West to the Illinois River;
3. The Upper Mountain Fork River above the 600-foot elevation level of Broken Bow Reservoir in McCurtain and LeFlore Counties;
4. Big Lee's Creek, sometimes referred to as Lee Creek, located in Sequoyah County, above the 420-foot MSL elevation, excluding that portion necessary for a dam to be built in the State of Arkansas with a crest elevation of no more than the 420-foot MSL elevation. The Oklahoma Water Resources Board shall make such classifications, designations or adjustments to Oklahoma's water quality standards as required to allow the impoundment of water by said dam; and
5. Little Lee's Creek, sometimes referred to as Little Lee Creek, located in Adair and Sequoyah Counties, beginning approximately four (4) miles east-southeast of Stilwell, Oklahoma, and ending at its conjunction with Big Lee's Creek approximately two (2) miles southwest of Short, Oklahoma.

C. The term "scenic river area" as used in the Scenic Rivers Act is defined as the stream or river and the public use and access areas located within the area designated.

Added by Laws 1970, c. 68, § 2, emerg. eff. March 17, 1970. Amended by Laws 1974, c. 56, § 1, emerg. eff. April 13, 1974; Laws 1977, c. 6, § 1, emerg. eff. Feb. 25, 1977; Laws 1986, c. 33, § 1, emerg. eff. March 21, 1986; Laws 1988, c. 203, § 9, emerg. eff. June 10, 1988; Laws 1991, c. 7, § 2, eff. July 1, 1991; Laws 1997, c. 241, § 5, eff. July 1, 1997; Laws 2003, c. 305, § 2, emerg. eff. May 28, 2003.

§82-1453. Legislative intent - Construction, operation or maintenance of dams or related projects.

A. Once an area is designated as a "scenic river area", it is the intent of the Legislature that:

1. The stream or river in the area designated be preserved in its free-flowing condition; and
2. The stream or river shall not be impounded by any large dam or structure except as specifically authorized by the Legislature.

B. No agency or official of state government shall authorize or concur in plans of local, state or federal agencies for the construction, operation, or maintenance of any dam or related project in any "scenic river area", without legislative consent, except as needed by the municipalities located in the counties or the immediate vicinity of the "scenic river area", for their own municipal or domestic water supply if such structures will not significantly interfere with the preservation of the stream as a scenic free-flowing stream.

Added by Laws 1970, c. 68, § 3, emerg. eff. March 17, 1970. Amended by Laws 1997, c. 241, § 6, eff. July 1, 1997.

§82-1454. Cooperation and support of people and state agencies - Purpose of act - Acquisition, development and maintenance of public access points, easements or park areas - Power of eminent domain prohibited.

A. It is recognized by the Legislature that an effective program for preserving the scenic beauty of the free-flowing streams and rivers designated as "scenic river areas" necessarily involves the cooperation and support of the people in the operating areas of designated "scenic river areas", as well as the people using the "scenic river areas", and the agencies of state government administering these areas.

B. The primary purpose of the Scenic Rivers Act is to encourage the preservation of the areas designated as "scenic river areas" in their natural scenic state.

C. In order to assist in the public use and enjoyment of such areas, any Scenic Rivers Commission, the Oklahoma Tourism and Recreation Department and the Oklahoma Wildlife Conservation Commission may acquire, develop and maintain public access points, easements or park areas in or near "scenic river areas". Such acquisitions shall be by private treaty only, and the use of the power of eminent domain for these purposes is specifically prohibited by the Scenic Rivers Act.

Added by Laws 1970, c. 68, § 4, emerg. eff. March 17, 1970. Amended by Laws 1993, c. 145, § 336, eff. July 1, 1993; Laws 1997, c. 241, § 7, eff. July 1, 1997.

§82-1455. Littering - Complaint - Penalty.

A. It is recognized by the Legislature that littering by people using the "scenic river areas" is one of the most immediate threats to the scenic beauty of our free-flowing streams and surrounding areas.

B. Any law enforcement, police or peace officer, game wardens or any other personnel of the Wildlife Conservation Commission, the personnel of the Tourism and Recreation Department, any landowner in the area, or any other interested party may file a complaint to enforce the provisions of the Scenic Rivers Act.

C. Any person who deliberately places, throws, drops, deposits or discards any garbage, trash, waste, rubbish, refuse, debris or other deleterious substance on or near a scenic river area shall be subject to the provisions of Section 1761.1 of Title 21 of the Oklahoma Statutes.

Added by Laws 1970, c. 68, § 5, emerg. eff. March 17, 1970. Amended by Laws 1988, c. 115, § 6, eff. Nov. 1, 1988; Laws 1991, c. 182, § 66, eff. Sept. 1, 1991; Laws 1997, c. 241, § 8, eff. July 1, 1997.

§82-1456. Property rights of private landowners.

The property rights of private landowners in and around "scenic river areas" are the same as in any other area. The unauthorized use of private property is trespassing and is subject to the penalties provided elsewhere in the statutes for such an offense.

Added by Laws 1970, c. 68, § 6, emerg. eff. March 17, 1970. Amended by Laws 1997, c. 241, § 9, eff. July 1, 1997.

§82-1457. Agencies authorized to assist in maintaining and improving water quality - Coordinated watershed restoration and protection strategy.

A. The Executive Director of the Department of Environmental Quality, the Corporation Commission, the State Department of Agriculture, the Oklahoma Water Resources Board, the Oklahoma Wildlife Conservation Commission and the Conservation Commission are hereby given the authority to assist the Scenic Rivers Commission in maintaining and improving water quality and in preventing and eliminating the pollution of waters within a "scenic river area".

B. 1. The Secretary of Environment shall coordinate with the appropriate state environmental agencies to create a coordinated watershed restoration and protection strategy for each impaired

scenic river in this state. The strategy shall be submitted to the Governor, the President Pro Tempore of the Senate and the Speaker of the House of Representatives by January 31, 2003.

2. The coordinated watershed restoration and protection strategy shall identify all permitted or registered water pollution sources and shall include but not be limited to:

- a. an overall pollutant-specific load reduction as identified in a developed total maximum daily load (TMDL), or as otherwise calculated in the absence of a developed total maximum daily load, to bring each impaired scenic river back into compliance with water quality standards,
- b. pollutant-specific load reduction goals for each state environmental agency to accomplish through its water quality protection programs,
- c. detailed compliance schedules indicating how much of the load reduction goal will be accomplished each year by each state environmental agency,
- d. industry-specific descriptions of how load reduction goals for each state environmental agency will be accomplished,
- e. an outline of innovative, cooperative intrastate and interstate strategies that will be pursued in order to expedite pollutant reductions, in particular where scenic river watersheds cross state lines. Such strategies may include nutrient trading and conservation reserve enhancement program (CREP) initiatives, and
- f. a list of all permitted or registered water pollution sources subject to the jurisdiction of each state agency within each impaired scenic river watershed. For the permitted or registered water pollution sources subject to each state environmental agency's jurisdiction, the following information shall be included:
 - (1) types of operations or organizations regulated,
 - (2) list of the registrations or permits issued,
 - (3) details on governmental assistance given, and
 - (4) details of enforcement actions undertaken.

C. 1. The Secretary of Environment shall coordinate with the appropriate state environmental agencies to create an annual progress report, beginning January 31, 2004, and each year thereafter. The progress report shall be submitted to the Governor, the President Pro Tempore of the Senate, and the Speaker of the House of Representatives.

2. The annual progress report shall include any revisions and updates to the information provided in the original strategy, in addition to the following:

- a. identification of all actions taken by each state environmental agency to reduce pollutant levels in each impaired scenic river watershed,
- b. identification of the sources of pollutants causing impairment or continued degradation of each impaired scenic river,
- c. outline of further steps to be taken by each state environmental agency to reduce pollutants from identified sources in order to accomplish pollutant-specific load reduction goals,
- d. an analysis of the effectiveness of the pollutant reduction efforts of each state environmental agency based upon data collected by the Oklahoma Water Resources Board's Beneficial Use Monitoring Program, the Conservation Commission's Small Watershed Rotational Monitoring Program and other appropriate monitoring data, and
- e. recommendations for further administrative, judicial or legislative actions necessary to achieve the load reduction goals assigned to each impaired scenic river watershed and to overcome any identified limitations or obstacles.

D. 1. For those impaired scenic river watersheds where a total maximum daily load (TMDL) for phosphorus has been developed, the Department of Environmental Quality shall initially allocate

a wasteload for phosphorus for discharges from wastewater treatment facilities which is achievable by the best available waste control process.

2. The annual report required by subsection C of this section shall indicate how the Department has verified that each wastewater treatment facility having a discharge has, in fact, implemented appropriate waste controls for phosphorus.

3. If the state's water quality monitoring data demonstrate that the water quality standards for phosphorus applicable to a watershed remain impaired, and only after all permitted or registered water pollution sources have also implemented the best available waste control processes for phosphorus to address the pollutant or pollutants contributing to the impairment of the watershed, the Department shall again evaluate and require regulated entities to take additional actions to achieve water quality standards for phosphorus.

E. 1. The Scenic Rivers Commission shall require all entities using scenic rivers for recreational activities, which are licensed by the Commission, to implement a program to control the amount of pollution entering an impaired scenic river watershed from such recreational activities.

2. The Scenic Rivers Commission shall include in the coordinated watershed restoration and protection strategy, and all subsequent annual reports, an identification of the pollution from recreational activities which are licensed by the Commission and those actions taken and planned to reduce the amount of pollution from entering an impaired scenic river watershed.

F. If the Legislature or the Governor finds, based on any of the annual reports required by this section, that any of the state environmental agencies have failed to appropriately protect water quality standards in an impaired scenic river watershed, the Governor and the Legislature shall take any and all necessary and appropriate action to require the agency to meet its mandated responsibilities.

Added by Laws 1970, c. 68, § 7, emerg. eff. March 17, 1970. Amended by Laws 1993, c. 145, § 335, eff. July 1, 1993; Laws 1997, c. 241, § 10, eff. July 1, 1997; Laws 2002, c. 148, § 1, emerg. eff. April 29, 2002.

§82-1458. Notice and hearing as to designation of additional scenic areas.

Before any plans for additional proposed "scenic river areas" are brought to the Legislature for consideration, the Scenic Rivers Commission and the Oklahoma Tourism and Recreation Department shall give reasonable notice in newspapers of general circulation in every county in which land and streams are situated that would be affected by the proposed "scenic river area". The notice shall include a map or drawing of the proposed area and shall give the time and place of a meeting in each county affected, at which time and place the Commission shall present their plans for the proposed area.

Added by Laws 1970, c. 68, § 8, emerg. eff. March 17, 1970. Amended by Laws 1997, c. 241, § 11, eff. July 1, 1997.

§82-1460. Scenic rivers - Statement of purpose.

The Legislature finds that the protection and development of the state's scenic river areas and adjacent and contiguous lands and quality of outstanding resource waters included within each Commission's operating area should be provided for by properly planned and executed rules promulgated by that Commission respecting public services, land use, occupancy, structures, lot and plot sizes, density of population and other activities as required for the proper protection of the aesthetic, scenic, historic, archeologic and scientific features of the said affected areas, or deemed necessary for the protection of the ecosystem and the environment from pollution, despoliation and destruction or waste of natural resources and all other factors adversely affecting the public health, safety and the general welfare so long as the rules comply with the exempt provisions of the Scenic Rivers Act pertaining to farming, ranching, forestry, silviculture and other agricultural uses.

Added by Laws 1977, c. 29, § 1, emerg. eff. May 3, 1977. Amended by Laws 1997, c. 241, § 12, eff. July 1, 1997.

§82-1461. Scenic Rivers Commissions.

A. 1. A Scenic Rivers Commission may be created pursuant to the Scenic Rivers Act for each designated scenic river area or combination of areas for which operating areas for planning and management have been delineated. Each Scenic Rivers Commission shall be organized in cooperation with local governments in accordance with procedures provided for in the Scenic Rivers Act.

2. Each Commission shall be an agency of the state and shall be named to reflect the area or areas subject to its jurisdiction.

3. State funds for each Commission shall be provided for by a separate line-item appropriation through the state agency specifically named or by direct appropriation. If funded through the named state agency, said state agency shall disburse the funds to the appropriate Scenic Rivers Commission in the amount and pursuant to the conditions prescribed by the Legislature.

B. 1. There is hereby re-created, to continue until July 1, 2009, in accordance with the provisions of the Oklahoma Sunset Law, a Scenic Rivers Commission for the Illinois River and Flint Creek Scenic River Areas within Adair, Cherokee and Delaware Counties and those portions of Barren Fork Creek within Cherokee County.

2. The operating area for the Scenic Rivers Commission for the Illinois River and Flint Creek will be limited to areas within Adair, Cherokee and Delaware Counties, and to areas within Cherokee County for Barren Fork Creek.

C. Each Commission shall consist of not less than seven (7) nor more than fifteen (15) members. The term of office for each member shall be four (4) years. Each Commission shall be composed of the following members:

1. a. The Governor shall appoint three members, one of whom shall be a representative of the Oklahoma Conservation Commission or the Oklahoma Tourism and Recreation Commission.
- b. The President Pro Tempore of the Senate shall appoint two members who shall each be a member of a statewide citizens' conservation or environmental group.
- c. The Speaker of the House of Representatives shall appoint two members who shall each be a resident of one of the counties containing the scenic river area, and one of whom shall be a representative of the agriculture industry; and
2. a. The additional members of the Scenic Rivers Commission created pursuant to this subsection and as authorized by subsection A of this section shall be elected in a nonpartisan election to represent the following:
 - (1) the registered voters who reside, own real property, or own permanent residential structures within six hundred sixty (660) feet of the Illinois River or Flint Creek within Delaware County, shall elect one member to represent them,
 - (2) the registered voters who reside, own real property, or own permanent residential structures within six hundred sixty (660) feet of the Illinois River in Adair County, Oklahoma, shall elect one member to represent them,
 - (3) the registered voters who reside, own real property, or own permanent residential structures within six hundred sixty (660) feet of the Illinois River above its confluence with the Barren Fork Creek or those portions of the Barren Fork Creek in Cherokee County shall elect one member to represent them,
 - (4) the registered voters who reside, own real property, or own permanent residential structures within six hundred sixty (660) feet of:

- (a) the Illinois River, above its confluence with the Barren Fork Creek located in Adair, Cherokee and Delaware Counties, or
 - (b) Flint Creek located within Delaware County or Barren Fork Creek within Cherokee County,
- shall elect two at-large members to represent them, and
- (5) no person shall be eligible to vote in more than one of the jurisdictional areas outlined in divisions (1), (2) and (3) of subparagraph a of this paragraph.
- b. All members elected under divisions (1), (2) and (3) of subparagraph a of this paragraph shall reside or own property within the county they represent. All at-large members elected under division (4) of subparagraph a of this paragraph shall reside or own property within Adair, Cherokee or Delaware Counties.

D. The Scenic Rivers Commission shall promulgate rules governing the procedure and conduct of elections for Commission members. Such rules shall be consistent with the purposes of general election laws except where otherwise provided for by this act.

E. 1. Vacancies on each Commission shall be filled, as applicable, by the appointing authority or by election, pursuant to the provisions of this section. Members shall serve until their respective successors shall be appointed and qualify, or be elected, unless terminated by death or resignation.

2. Each Scenic Rivers Commission shall promulgate rules consistent with the requirements of this section for replacing members who fail to attend meetings or otherwise become unable to function due to disability, death, or resignation. The replacement shall serve for the remainder of the unexpired term of the member being replaced.

F. 1. Each Commission shall be organized in cooperation with local governments in accordance with procedures provided for in the Scenic Rivers Act.

2. An interim commission consisting of the members appointed by the Governor, the President Pro Tempore of the Senate, and the Speaker of the House of Representatives shall provide for the election of additional members as provided for in paragraph 2 of subsection C of this section.

G. 1. Each Scenic Rivers Commission shall be invested with the power to:

- a. prepare and establish minimum standards for planning and other ordinances and rules for the implementation of the Scenic Rivers Act by counties, municipalities, or any other local authorities in the Commissions' operating area, and
- b. promulgate such rules and issue such orders as necessary to protect the public interest and to achieve the purposes of the Scenic Rivers Act.

2. The standards shall be developed and executed in such manner as to protect and enhance the values which caused the area to be named a scenic river area without, insofar as is consistent with said protection and enhancement, limiting other uses that do not substantially interfere with the protection, public use, and enjoyment of these values.

3. Primary emphasis in the standards shall be given to protecting the aesthetic, scenic, historic, archeologic, and scientific features of the scenic river area with due consideration being given to the orderly development of the lands adjacent and contiguous to the scenic river area.

4. Standards set pursuant to the provisions of the Scenic Rivers Act shall not be less rigid or exacting than those established by any other federal or state agency having jurisdiction in respect to the subject covered by the particular standard.

H. Each Scenic Rivers Commission may engage in or supervise the conduct of studies, make a plan or plans, receive, disburse, and allocate monies granted or appropriated to it, and do all things, whether expressly enumerated in the Scenic Rivers Act or not, which may be lawful and necessary and proper for the accomplishment of the purposes of the Scenic Rivers Act. Nothing in this section shall be interpreted as giving any Commission the power of eminent domain.

I. Each Scenic Rivers Commission, in addition, shall have the following powers and responsibilities:

1. Appoint and fix the salary of an administrator experienced in land resource planning and management who shall serve at the pleasure of the Commission and in accordance with its policies, budgets, powers, and responsibilities. Such administrator may be commissioned as a peace officer. The administrator may select, appoint, and employ individuals to fill personnel positions authorized, budgeted, and deemed necessary by the Commission to implement the purposes of the Scenic Rivers Act;

2. Act in cooperation with all federal, state, and local governments and agencies thereof to implement the purposes of the Scenic Rivers Act;

3. Elect from the Commission membership a chair and such other officers as the Commission deems necessary to conduct the affairs of the Commission. The officers shall be permitted to succeed themselves once for a total of two (2) consecutive years of service in any office. The Commission shall hold meetings not less than once each quarter, at such times as may be fixed by call of its chair or as determined by majority vote in advance of the meeting. It is the responsibility of the Commissioners to encourage general public participation in the formation and adoption of plans, standards, procedures, and regulations. The meetings of the Commission shall be open to the public. Minutes of each meeting shall be kept and filed in the office of the Commission and shall be available for public inspection during reasonable office hours;

4. Promulgate rules and issue orders necessary to the exercise of the powers of the Commission and to achieve the purposes of the Scenic Rivers Act;

5. Prepare and adopt a management plan or plans to guide and control private activities and public programs and to include varying degrees of protection and development based on the special attributes of the area;

6. Provide, where appropriate in the discretion of the Commission, for the review and consideration by the Commission of the impact on the natural and aesthetic environment within the Commission's operating area related to any existing or proposed action by public agencies, private individuals or any other activity;

7. Accept, in the name of and through the Commission, real and personal property that is granted, bequeathed, devised, or conveyed to the Commission to implement the purposes of the Scenic Rivers Act, upon such trusts and conditions as may be prescribed by the grantors or divisors, upon approval of the Commission;

8. Enter into contracts on behalf of the Commission to implement the purposes of the Scenic Rivers Act and may accept gifts and grants, whether the grants be of federal or other funds or real or personal property;

9. Identify public and private nuisances which are adverse to the purposes of the Scenic Rivers Act and take such action as permitted by law to remove the public nuisances;

10. Own and control public access points to the scenic river area, issue use permits, and purchase easements and fee title to land within the Commission's operating area. Legal title to property shall be held in the name of the individual Scenic Rivers Commission as an agency of the State of Oklahoma;

11. Review any action taken by any local, municipal, or county authority within the operating area of the Commission in an administrative adjudicatory proceeding brought upon the petition of any officer or agency of this state, including the administrator, or of any person acting in behalf of the public interest, to determine whether such action conforms to the standards promulgated by the Commission or has an adverse effect upon the proper achievement of the purposes of the Scenic Rivers Act. Upon a finding that such action does not so conform or does have such adverse effect, order that the action be nullified, superseded, or amended to the extent necessary to produce such conformity or eliminate such adverse effect, the Commission may issue such orders as may be necessary and proper to effectuate its primary order;

12. Hire an attorney or request legal assistance from the district attorney or the State Attorney General when appropriate and if there is no conflict in the legal interest of the parties;

13. Bring an action in the district court of any county of the state where service can be obtained on one or more of the defendants, to enjoin the acts or practices which appear to constitute a violation of any provision of the Scenic Rivers Act or any rule or order promulgated and to enforce compliance with the provisions of the Scenic Rivers Act or any rule or order. Upon a proper showing, a restraining order, permanent or temporary injunction, writ of mandamus, or other appropriate remedies including damages shall be granted. The court may not require the administrator or Commission to post a bond; and

14. Suspend the effectiveness of any action taken by a municipality or county within the designated operating area of such Commission when, in the exercise of alleged local functions, it appears the action has or may have an adverse effect upon the proper achievement of the purposes of the Scenic Rivers Act, whereupon all proceedings thereunder shall be held in abeyance upon receipt of written notice from the administrator pending a final determination of the Commission in regard to such action. If it is determined that such adverse effects exist, the Commission may nullify, supersede, or amend said action only to the extent necessary to achieve the purposes of the Scenic Rivers Act.

J. A Commission member to whom some private benefit, direct or indirect, financial or otherwise, may come as the result of some public action should not be a participant in that action. The possibility, not the actuality, of a conflict of interest should govern. A Commission member experiencing a conflict of interest should declare his or her interest publicly, abstain from voting on the matter should he or she have a vote, and refrain from deliberation on the matter. In addition, the Commission member should not discuss the matter with any fellow member for the purpose of influencing a decision thereon.

K. The rules and orders of the Commission shall be promulgated in compliance with all applicable provisions of the Administrative Procedures Act.

L. 1. The administrator may appoint commissioned peace officers certified by the Council on Law Enforcement Education and Training to secure such scenic river area, including all roadways and adjacent areas to the Illinois River and Flint Creek within Adair, Cherokee and Delaware Counties, and those portions of the Barren Fork Creek within Cherokee County. All persons appointed by the administrator as peace officers shall be and have the full powers and authority of peace officers of the State of Oklahoma in securing such scenic river area, including all roadways and adjacent areas to the Illinois River and Flint Creek within Adair, Delaware and Cherokee Counties, and those portions of the Barren Fork Creek within Cherokee County. All peace officers appointed by the administrator shall be in the unclassified service.

2. Peace officers who become employed under this subsection or who are transferred to the Scenic Rivers Commission pursuant to this act who have service credit in the Oklahoma Law Enforcement Retirement System may, within thirty (30) days after becoming employed or transferred, elect to continue membership in the Oklahoma Law Enforcement Retirement System; otherwise they may be eligible to enroll only in the Oklahoma Public Employees Retirement System.

3. Any peace officer who has completed twenty (20) years of service or retires from the Scenic Rivers Commission may maintain possession of his or her badge and assigned firearm.

4. The administrator is authorized to employ seasonal personnel, including commissioned peace officers certified by the Council on Law Enforcement Education and Training throughout the calendar year to secure such scenic river area, including all roadways and adjacent areas to the Illinois River and Flint Creek within Adair, Cherokee and Delaware Counties, and those portions of the Barren Fork Creek within Cherokee County. Project labor employed by the Scenic Rivers Commission for a period of time necessary to complete a project shall be in the unclassified service of the state as provided by the Oklahoma Personnel Act. Such employees shall not be entitled to paid leave, paid holidays, retirement, health, dental or life insurance, and shall be exempt from any laws, rules or practices providing such benefits. The administrator shall submit in its annual budget reporting a summary of the use of project labor that shall include the number of workers employed under the provisions of this section and the total wages paid to these employees.

Added by Laws 1977, c. 29, § 2, emerg. eff. May 3, 1977. Amended by Laws 1980, c. 271, § 1, emerg. eff. June 9, 1980; Laws 1983, c. 332, § 1, emerg. eff. June 29, 1983; Laws 1984, c. 73, § 1, operative July 1, 1984; Laws 1985, c. 23, § 1, operative July 1, 1985; Laws 1989, c. 147, § 1, emerg. eff. May 1, 1989; Laws 1990, c. 205, § 1, emerg. eff. May 10, 1990; Laws 1991, c. 7, § 1, eff. July 1, 1991; Laws 1993, c. 331, § 4, eff. July 1, 1993; Laws 1997, c. 241, § 13, eff. July 1, 1997; Laws 2001, c. 82, § 1, eff. July 1, 2001; Laws 2001, c. 355, § 19, emerg. eff. June 1, 2001; Laws 2003, c. 192, § 1, emerg. eff. May 7, 2003.

NOTE: Laws 1997, c. 31, § 1 repealed by Laws 1998, c. 5, § 29, emerg. eff. March 4, 1998. Laws 2003, c. 15, § 1 repealed by Laws 2004, c. 5, § 107, emerg. eff. March 1, 2004.

§82-1462. Oklahoma Tourism and Recreation Department - Power and duties.

The Oklahoma Tourism and Recreation Department shall:

1. Establish procedures for organizing and certifying Scenic Rivers Commissions to administer a resource management program for designated scenic river areas and adjacent lands, consistent with the purposes of the Scenic Rivers Act. No Commission shall be certified as an agency of the state to exercise the powers provided for in the Scenic Rivers Act until an interim commission has formulated procedures for holding an election for the additional Commission members. No Scenic Rivers Commission shall be established unless otherwise provided for in the Scenic Rivers Act or recommended for organization by one of the following methods:

- a. a resolution signed by two or more counties or one county and a city or conservation district of an adjoining county statutorily defined as part of the designated scenic river area, or
- b. a resolution signed by at least one county statutorily defined as part of the designated scenic river area and a state agency, or
- c. a petition signed by five hundred (500) registered voters residing in any county statutorily defined as a part of the designated scenic river area;

2. Disburse line-item or other state appropriations to certified Scenic Rivers Commissions established in accordance with the Scenic Rivers Act and provide upon request, if funds and resources are available, technical assistance to said Commissions in the planning and administration of resource management programs within its operating areas;

3. Prepare procedures for review and comment by appropriate state and local agencies on proposed management plans, standards, and developments identified by a Scenic Rivers Commission as having a significant impact within its operating area; and

4. Establish, as provided in subsection C of Section 1461 of this title, a Scenic Rivers Commission for the Flint Creek, Illinois River Scenic River Areas, and those portions of Barren Fork Creek within Cherokee County.

Added by Laws 1977, c. 29, § 3, emerg. eff. May 3, 1977. Amended by Laws 1983, c. 332, § 2, emerg. eff. June 29, 1983; Laws 1989, c. 147, § 2, emerg. eff. May 1, 1989; Laws 1990, c. 205, § 2, emerg. eff. May 10, 1990; Laws 1997, c. 241, § 14, eff. July 1, 1997.

§82-1462A. Scenic River commissions funds.

A. The Director of State Finance is hereby authorized to establish a special fund in the State Treasury for each Scenic Rivers Commission.

B. Said fund shall consist of all monies received by the Commission under statutory authority or appropriated for its use. The fund shall be a continuing fund not subject to fiscal year limitations.

C. Monies accruing to the credit of the fund shall be expended pursuant to laws of the state in carrying out the duties and responsibilities of the Commission, and without legislative appropriation.

D. Warrants for expenditure from the fund shall be made pursuant to claims prepared by the Administrator of the Scenic Rivers Commission and approved by the Director of State Finance for payment.

Added by Laws 1978, c. 276, § 18, emerg. eff. May 10, 1978. Amended by Laws 1997, c. 241, § 15, eff. July 1, 1997; Laws 2003, c. 192, § 2, emerg. eff. May 7, 2003.

§82-1462B. Scenic River commissions Petty Cash Funds.

A. The Director of State Finance is hereby authorized to establish a Petty Cash Fund for each Scenic Rivers Commission in an amount not to exceed Five Hundred Dollars (\$500.00).

B. The fund shall be established and replenished from any monies available to a Scenic Rivers Commission for operating expenses.

C. The Director of State Finance shall prescribe all forms, systems and procedures for administering a Petty Cash Fund so established.

Added by Laws 1978, c. 276, § 19, emerg. eff. May 10, 1978. Amended by Laws 1997, c. 241, § 16, eff. July 1, 1997; Laws 2003, c. 192, § 3, emerg. eff. May 7, 2003.

§82-1462C. Fees collected pursuant to Section 1470 - Scenic Rivers Commission Revolving Fund.

A. The fees collected pursuant to the provisions of subsection B of Section 1470 of this title shall be used to purchase additional public access areas along the Flint Creek and Illinois River Scenic River Areas within Adair, Cherokee and Delaware Counties and those portions of Barren Fork Creek within Cherokee County or for the general operations of the Commission.

B. 1. For these purposes, there is hereby created in the State Treasury a revolving fund for the Scenic Rivers Commission, to be designated the "Scenic Rivers Commission Revolving Fund".

2. The fund shall be a continuing fund, not subject to fiscal year limitations, and shall consist of all monies received by the Scenic Rivers Commission from all fees. All monies accruing to the credit of said fund are hereby appropriated and may be budgeted and expended by the Scenic Rivers Commission for the purpose of performing the duties imposed by law upon the Scenic Rivers Commission.

3. Expenditures from said fund shall be made upon warrants issued by the State Treasurer against claims filed as prescribed by law with the Director of State Finance for approval and payment.

Added by Laws 1983, c. 332, § 5, emerg. eff. June 29, 1983. Amended by Laws 1984, c. 293, § 9, operative July 1, 1984; Laws 1989, c. 147, § 3, emerg. eff. May 1, 1989; Laws 1990, c. 205, § 3, emerg. eff. May 10, 1990; Laws 1997, c. 241, § 17, eff. July 1, 1997; Laws 2003, c. 192, § 4, emerg. eff. May 7, 2003.

§82-1463. Dissolution of Scenic River Commission.

A. Each Scenic Rivers Commission may be dissolved by a resolution passed by an affirmative vote of two-thirds (2/3) of the members of the Scenic Rivers Commission.

B. Upon the dissolution of a Commission, the title to all real property and other property and funds shall vest in the State of Oklahoma.

Added by Laws 1977, c. 29, § 4, emerg. eff. May 3, 1977. Amended by Laws 1997, c. 241, § 18, eff. July 1, 1997; Laws 2003, c. 192, § 5, emerg. eff. May 7, 2003.

§82-1464. Construction of act.

A. Nothing in the Scenic Rivers Act shall be construed to unduly restrict or adversely affect the use of property within the jurisdiction of any Scenic Rivers Commission for farming, ranching, forestry, silviculture and other agricultural uses so long as they are not inconsistent with the purposes of the Scenic Rivers Act.

B. Present farming, ranching, forestry, silviculture and other agricultural uses and practices, including existing building and replacement structures, are hereby exempt from the provisions of any Scenic Rivers Commission.

C. The Scenic Rivers Act shall not be construed in any way to affect existing rights between a landowner and utility or pipeline companies.

Added by Laws 1977, c. 29, § 5, emerg. eff. May 3, 1977. Amended by Laws 1997, c. 241, § 19, eff. July 1, 1997; Laws 2003, c. 305, § 3, emerg. eff. May 28, 2003.

§82-1465. Powers of cities, incorporated towns and counties.

A. All cities and incorporated towns and counties that make up a part of a jurisdiction of a certified Scenic Rivers Commission are hereby invested with full power to plan, zone and enact all ordinances and regulations that are necessary and proper to carry out the purposes of the Scenic Rivers Act.

B. The cities, incorporated towns and counties shall follow their respective general procedures in the conduct of legislative functions.

C. In exercising planning and zoning functions, said cities, incorporated towns and counties shall utilize the organization and procedures available to cities and incorporated towns under the general planning and zoning laws of the state. Provided that, when a county exercises the powers provided by the Scenic Rivers Act, the board of county commissioners of that county shall perform the obligations and exercise the powers in the same manner as a local legislative body or mayor of a city, incorporated town or municipality.

Added by Laws 1977, c. 29, § 6, emerg. eff. May 3, 1977. Amended by Laws 1997, c. 241, § 20, eff. July 1, 1997.

§82-1466. Authority to provide funds for Commission.

Each county, city, incorporated town or other governmental entity that makes up a part of the operating area of a Scenic Rivers Commission is hereby authorized to grant or otherwise provide funds for the operation of the Commission.

Added by Laws 1977, c. 29, § 7, emerg. eff. May 3, 1977. Amended by Laws 1997, c. 241, § 21, eff. July 1, 1997.

§82-1467. Violations.

Any person who willfully violates any rule or order issued pursuant to the Scenic Rivers Act, except such rules or orders as relate solely to procedural matters, upon conviction thereof, shall be guilty of a misdemeanor.

Added by Laws 1977, c. 29, § 8, emerg. eff. May 3, 1977. Amended by Laws 1997, c. 241, § 22, eff. July 1, 1997.

§82-1468. Review of acts by Scenic Rivers Commission.

Action taken hereunder by any Scenic Rivers Commission or by its administrator may be reviewed in the district court of the county in which the office of the Commission is located or the county in which the property affected is located and in accordance with the standards established by the Administrative Procedures Act of this state.

Added by Laws 1977, c. 29, § 9, emerg. eff. May 3, 1977. Amended by Laws 1997, c. 241, § 23, eff. July 1, 1997.

§82-1469. Application of law - Policy.

A. It is hereby declared to be the policy of the State of Oklahoma to develop in an orderly and expeditious manner the Scenic Rivers Commissions contemplated in the Scenic Rivers Act.

B. For such purposes, the provisions of the Scenic Rivers Act shall apply only to the Illinois River and Flint Creek within Adair, Cherokee and Delaware Counties and those portions of Barren Fork Creek within Cherokee County and the operating areas of the Scenic Rivers Commission established pursuant to subsection C of Section 1461 of this title.

Added by Laws 1977, c. 29, § 10, emerg. eff. May 3, 1977. Amended by Laws 1980, c. 271, § 2, emerg. eff. June 9, 1980; Laws 1983, c. 332, § 3, emerg. eff. June 29, 1983; Laws. 1989, c. 147, §

4, emerg. eff. May 1, 1989; Laws 1990, c. 205, § 4, emerg. eff. May 10, 1990; Laws 1997, c. 241, § 24, eff. July 1, 1997; Laws 2003, c. 192, § 6, emerg. eff. May 7, 2003.

§82-1470. User fees.

A. 1. The Scenic Rivers Commission for the Flint Creek and Illinois River within Adair, Cherokee and Delaware Counties and those portions of Barren Fork Creek within Cherokee County is authorized and directed to charge an annual use fee of Thirty-five Dollars (\$35.00) per commercially owned and operated flotation device.

2. The operation of a commercial flotation device without displaying a proper Oklahoma Scenic Rivers Commission license is subject to a fine not to exceed One Hundred Dollars (\$100.00). The penalty will be assessed upon the owner or operator of the commercial flotation device business and not upon the individual renting the commercial flotation device.

B. The Scenic Rivers Commission for the Flint Creek and Illinois River within Adair, Cherokee and Delaware Counties and those portions of Barren Fork Creek within Cherokee County Scenic River Areas shall promulgate rules and regulations for the collection and administration of the fees imposed pursuant to the provisions of this section in accordance with the Administrative Procedures Act.

C. The Commission may establish a fee for use of camping sites located in public use and access areas controlled by the Commission. The fee charged by the Commission shall not exceed the rate charged by the Oklahoma Tourism and Recreation Department for camping sites. The Commission is authorized to promulgate rules to implement such fee pursuant to Article I of the Administrative Procedures Act.

D. The administrator of the Scenic Rivers Commission is authorized to be commissioned as a peace officer after completion of all required training for the purpose of supervision of peace officers employed by the Commission and such administrator may be utilized for any law enforcement purpose as may be necessary.

E. For the purposes of this section, "commercial flotation device" means a canoe, boat, kayak, inner tube, raft or other similar device suitable for the transportation of a person or persons on waterways which is available for hire by the public for use on waterways within the operating area of the Oklahoma Scenic Rivers Commission.

Added by Laws 1980, c. 354, § 19, emerg. eff. June 25, 1980. Amended by Laws 1983, c. 332, § 4, emerg. eff. June 29, 1983; Laws 1987, c. 208, § 105, operative July 1, 1987; Laws 1987, c. 236, § 100, emerg. eff. July 20, 1987; Laws 1989, c. 147, § 5, emerg. eff. May 1, 1989; Laws 1989, c. 249, § 37, emerg. eff. July 1, 1989; Laws 1990, c. 205, § 5, emerg. eff. May 10, 1990; Laws 1993, c. 61, § 1, emerg. eff. April 12, 1993; Laws 1997, c. 241, § 25, eff. July 1, 1997; Laws 2000, c. 318, § 2, emerg. eff. June 5, 2000; Laws 2001, c. 76, § 1, emerg. eff. April 11, 2001; Laws 2001, c. 355, § 20, emerg. eff. June 1, 2001; Laws 2003, c. 192, § 7, emerg. eff. May 7, 2003; Laws 2003, c. 364, § 1, eff. July 1, 2003; Laws 2008, c. 301, § 2, eff. Jan. 1, 2009.

§82-1471. Collection of fees.

Fees assessed in subsection B of Section 1470 of this title shall be collected year round. Added by Laws 1985, c. 23, § 2, operative July 1, 1985. Amended by Laws 1997, c. 241, § 26, eff. July 1, 1997; Laws 2001, c. 76, § 2, emerg. eff. April 11, 2001.

Appendix B

Survey of Western States

State: **Alaska**

Department: **Division of Mining, Land, and Water**

Contact Info: **Kim Sager, 907-269-2033**

<http://dnr.alaska.gov/mlw/water/wrfact.htm>

Are instream flows legally recognized? Yes.

Does special status exist for instream flow rights? Instream flows are referred to as reservations. Rights are for diversion/removal of water.

What are the beneficial uses of instream flows as established by statute or case law?

Protection of fish and wildlife habitat, migration, and propagation, Sanitation and water quality, Recreation and Parks, Navigation and Transport

Alaska Administrative Code 11 AAC 93.130. Issuance of a certificate of appropriation of water

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes.
- **Transfer or conversion to ISF allowed?** Has not been done yet/no official channel. Would close out water right and designate new appropriation.
- **Reviews required?** Every 10 years

Who can appropriate ISF water rights? Anyone. **Who can transfer existing rights to ISF?** N/A

Who proposes, reviews, or provides official input on ISF Water rights? Anyone

Who authorizes and administers ISF water rights? Division of Mining, Land, &Water

What tools are available for ISF protection? Reservations, DNR must review public interest criteria when adjudicating water rights, with the authority to condition permits to protect fish and wildlife

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

Seasonal protections

How are ISFs quantified? Alaska modified Tennant/Montana Method and Duration

Analysis are most commonly used but not required. In Alaska, there are no standard quantification requirements or procedures for the establishment of an instream flow right. In order to establish an instream flow there must be a justifiable quantification based upon the particular beneficial use. There is not, however, a standard method or procedure that must be used (Western States Water Laws, 2001).

Any future changes in the works? None

State: **Arizona**

Department: **Arizona Department of Water Resources (ADWR)**

Contact info: **Barbara Norton, 1-602-771-8500**

<http://www.azwater.gov/AzDWR/SurfaceWater/SurfaceWaterRights/default.htm>

Any landowner adjacent to surface water can apply for an ISF right. If application is approved, one year of Q data must be submitted before appropriation. After permit to appropriate, holder must demonstrate for four years that water is being used consistent with permit. At that point, ADWR gives a certificate of water right with priority date of application date="perfected right". ADWR publishes this manual about ISF water rights:

http://www.adwr.state.az.us/dwr/content/Find_by_Program/Hydrology/Surface_Water_and_Recharge_Section_files/A_Guide_to_Filing_Applications_for_Instream_Flow_Water_Rights_in_Arizona.pdf

Are instream flows legally recognized? Yes.

What are the beneficial uses of instream flows as established by statute or case law? A.R.S. § 45-141(B). Per A.R.S. § 45-151(A) beneficial uses are: domestic (which includes the watering of gardens and lawns not exceeding one-half acre), municipal, irrigation, stockwatering, water power, recreation, wildlife including fish, nonrecoverable water storage, and mining uses.

ISF does not necessarily go by beneficial uses. Could approve anything unless it "conflicts with vested rights, is a menace to public safety, or is against the interests and welfare of the public."

Types of ISF Water rights:

- **Are new appropriations allowed? Yes**
- **Transfer or conversion to ISF allowed? No.** According to BLM (<http://www.blm.gov/nstc/WaterLaws/arizona.html>): "It is still unclear whether existing water rights can be transferred to instream flow rights. The law states that water rights may be "transferred for use for ... wildlife purposes, including fish" (ARS 45-172), but no instream flow transfers have been attempted. There have been several temporary leases of stored water to augment stream flows, but these leases occurred outside of the transfer process."
- **Reviews required? No.**

Who can appropriate ISF water rights? Any adjacent landowner to stream. Most are federal agencies. **Who can transfer existing rights to ISF?** No one.

Who proposes, reviews, or provides official input on ISF Water rights? Any adjacent landowner can propose. Reviewed by ADWR, AZ Game and Fish Dept comments.

Who authorizes and administers ISF water rights? ADWR. Local sheriffs and county attorney enforce all water rights.

What tools are available for ISF protection? Only ISF water rights

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)? All rights are in ac-ft/year, no seasonal protections

What methods are used to quantify ISFs? ISFs are applied for with a monthly need specified. The applicant has two years to submit a justification. No particular method is required.

Any future changes in the works? Unknown.

State: California

Department: SWRCB – Division of Water Rights

Contact info: Steve Herrera, (916) 341-5337, SHerrera@waterboards.ca.gov,

http://www.waterboards.ca.gov/waterrights/water_issues/programs/

Are instream flows legally recognized? Yes – not a freestanding right but all water right permits are conditioned with instream flow requirements for minimum flow needs

What are the beneficial uses of instream flows as established by statute or case law?

California Water Code 1707 Permits can be changed for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in, or on, the water .

Types of ISF Water rights:

- **Are new appropriations allowed?** No, new appropriations contain provisions for ISFs
- **Transfer or conversion to ISF allowed?** Yes, transfer is allowed but typically done on large scale and not very often. Conversion of existing water rights to ISFs is allowed.
- **Reviews required?** Compliance is reviewed by requiring progress report submittal from water users...progress reports typically reviewed by SWRCB on triennial cycle.

Who proposes, reviews, or provides official input on ISF Water rights? The SWRCB along with California Fish and Game and occasionally the National Marine Fisheries Service

Who authorizes and administers ISF water rights? SWRCB – Division of Water Rights

What tools are available for ISF protection?

- California Wild and Scenic River Act – water may still be appropriated from designated streams but must retain wild and scenic nature of the waterbody and appropriation requires special approval
- Fully Appropriated Streams – SWRCB has designated some streams as “Fully Appropriated”. No new appropriations allowed – usually during summer months
- Prior Adjudications – situations exist where the court has previously determined/assigned the conditions/amounts for water use within a watershed
- State Filings – SWRCB holds priority rights in reserve. Rights appropriated from State Filings retain their seniority
- Misc – Administrative review of new and existing water permits to include protective conditions for ISFs and ability to convert existing rights to fulfill ISF needs

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

Yes, ISF amounts are not set with a single value but rather can be seasonal, seasonal by water year type (wet, dry, normal), and may include flushing flow values among various other

available conditions. Other examples include in-lake values to support terrestrial animals/vegetation needs.

What methods are used to quantify ISFs? California is required to provide protection of the public trust resources (public trust doctrine) and ISF scientific studies are conducted with this in mind. ISF studies vary in the state based on fish species present and hydrologic condition (e.g., coastal basins are rain only and contain salmon and steelhead while Sierra basins have snowfall/melt and trout). ISF flows are quantified based on fish and wildlife needs and include flows required to satisfy vested water rights downstream. IFIM and PHABSIM have been used in the past but are not required.

Any future changes in the works? The state is currently working on policy for AB2121 for 5 northern counties which will develop guidance for waterbodies in these counties to develop/quantify ISFs to support anadromous fish populations. The policy also limits diversions to winter months only and does not allow for onstream dams. The new policy is expected to be adopted by the end of 2009. Further information on this policy can be found at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/

California Water Code 1707.

(a) (1) Any person entitled to the use of water, whether based upon an appropriative, riparian, or other right, may petition the board pursuant to this chapter, Chapter 6.6 (commencing with Section 1435) or Chapter 10.5 (commencing with Section 1725) for a change for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in, or on, the water.

(2) The petition may be submitted for any of the purposes described in paragraph (1) and may, but is not required to, be submitted in combination with a petition to make any other change authorized pursuant to this part. The petition shall specify the time, location, and scope of the requested change, and other relevant information relating thereto.

(b) The board may approve the petition filed pursuant to subdivision (a), subject to any terms and conditions which, in the board's judgment, will best develop, conserve, and utilize, in the public interest, the water proposed to be used as part of the change, whether or not the proposed use involves a diversion of water, if the board determines that the proposed change meets all of the following requirements:

- (1) Will not increase the amount of water the person is entitled to use.
- (2) Will not unreasonably affect any legal user of water.
- (3) Otherwise meets the requirements of this division.

(c) (1) Upon the request of the petitioner, the board may specify, as part of its approval of the petition, that the water that is subject to the approval pursuant to this section shall be in addition to water that is required, if any, to be used for instream purposes to satisfy any applicable federal, state, or local regulatory requirements governing water quantity, water quality, instream flows, fish and wildlife, wetlands, recreation, and other instream beneficial uses. If the request is approved by the board, state and local agencies, as well as the courts, shall not credit the water subject to that petition towards compliance with any of the regulatory requirements described in this subdivision. A federal agency shall comply with the requirement imposed by this paragraph to the extent required by federal law, or to the extent that it chooses to comply.

(2) For the purposes of this subdivision, "requirements" includes requirements or obligations that have not been formally established or allocated at the time of the petition, and obligations under any agreement entered into to meet those requirements. Neither any petition filed pursuant to this section nor any documents or statements made in connection therewith shall be construed or used as an admission, evidence, or indication of any obligation to meet any of the requirements described in this subdivision.

(d) Except as provided in subdivision (c), water that is subject to a petition granted pursuant to this section shall be used to meet, in whole or in part, any requirement described in subdivision (c) if any of these requirements exist. The water shall be credited to the petitioner, or to any other person or entity designated by the petitioner, whenever that person or entity has, or may have, obligations to meet one or more of the requirements described in subdivision (c). The water shall be credited towards compliance with any requirements described in subdivision (c), by state and local agencies, as well as the courts. A federal agency shall comply with the requirement imposed by this subdivision to the extent required by federal law, or to the extent that it chooses to comply.

State: **Colorado**

Department: **Colorado Water Conservation Board (CWCB)**

Contact info: **Rob Veihl, 303.866.3441 x3237**

<http://cwcb.state.co.us/StreamAndLake/>

Are instream flows legally recognized? Yes

What are the beneficial uses of instream flows as established by statute or case law?

Beneficial uses in Colorado are not specifically detailed but the law includes language "to preserve the natural environment to a reasonable degree." In addition, recreational in-channel diversions (RICDs) (for entities such as municipalities and water districts) were added to Colorado's beneficial uses in 2001. RICDs are managed under a separate department.

Under definitions in the Colorado Revised Statutes (# 37-92-103), the "beneficial use" definition includes language referring to the "impoundment of water for recreational purposes, including fishery or wildlife, and also the diversion of water by a county, municipality, city and county, water district, water and sanitation district, water conservation district, or water conservancy district for recreational in-channel diversion purposes".

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes – CWCB only
- **Transfer or conversion to ISF allowed?** Yes – through grant, purchase, donation, bequest, devise, lease, exchange or other contractual agreement
- **Reviews required?** No

Who proposes, reviews, or provides official input on ISF Water rights? Anyone may propose an ISF water right. Public comment is sought. Transferred rights would go before the water court and the use for the waterbody would be changed to instream flow

Who authorizes and administers ISF water rights? CWCB

What tools are available for ISF protection?

- New appropriation
- RICDs for county, municipality, city, water district, or water conservancy district
- Acquisition of existing rights
- Loan or lease of existing rights to CWCB

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

ISFs may be annual or seasonal – depends on water availability

What methods are used to quantify ISFs? In order to quantify an instream flow water right, the CWCB requires a multiple cross-section survey using the R2Cross methodology, averaging

the survey results, and providing a written quantification recommendation to the board (Western States Water Laws, 2001).

What methods are used to quantify ISFs? Colorado has historically used R2CROSS to set ISFs.

Any future changes in the works? Water acquisition bill passed last year to provide \$ for purchase of ISF rights. Current bill to provide a tax benefit for those that donate existing rights to ISF.

Program Details: <http://cwcwebblink.state.co.us/ElectronicFile.aspx?docid=128488>

State: **Idaho**

Department: **Idaho Dept of Water Resources**

Contact info: **Morgan Case, 208.287.4838, Morgan.Case@idwr.idaho.gov**

<http://www.idwr.idaho.gov/WaterManagement/WaterRights/default.htm>

ISF water rights are called Minimum Streamflows. They are all held by the ID Water Resources Board. They are established to protect current flows, not to restore flows to an over-appropriated stream. Minimum streamflows must be in the public interest, capable of being maintained unappropriated water), established for the minimum flow, not the optimum. There are also some legislative minimum streamflows, which do not have to meet the above criteria, such as for a settlement with the Nez Perce.

Are instream flows legally recognized? Yes.

What are the beneficial uses of instream flows as established by statute or case law? Fish, wildlife, other aquatic life, recreation, aesthetics, transportation/navigation, water quality

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes.
- **Transfer or conversion to ISF allowed?** Not directly. Can donate a senior water right to the Water Resource Board to deliver to a minimum streamflow that has already been established. Will retain priority date.
- **Reviews required?** No.

Who can appropriate ISF water rights? Idaho Water Resources Board **Who can transfer existing rights to ISF?** Anyone can transfer, but it will be held by Water Resource Board

Who proposes, reviews, or provides official input on ISF Water rights? Anyone can propose. Dept of Fish and Game, Dept of Parks and Rec and other state agencies review/provide input.

Who authorizes and administers ISF water rights? Idaho Water Resource Board authorizes. IDWR administers. Idaho is currently working on improving their monitoring network to better enforce minimum streamflows.

What tools are available for ISF protection? Water Transactions Programs pursue leasing of water rights for ISF

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)? Both, depends on how the Minimum Streamflow was written by the Water Resource Board.

What methods are used to set the minimum streamflow? As with any water right in Idaho, the holder is limited to the minimum amount necessary for the beneficial use. When applying for a new instream flow right, the board must quantify the minimum amount necessary for the beneficial use indicated. In practice, however, the Water Resources Board most

often applies for all unappropriated water in a stream segment in order to protect aesthetic beauty and preserve the natural habitat (Western States Water Laws, 2001). Previous surveys indicated that ID has used IFIM, Tennant, Wetted Perimeter and expert testimony to minimum streamflows.

Any future changes in the works? Unknown.

State: **Kansas**

Department: **Department of Water Resources**

Contact info: **Ken Copp (pronounced 'cope') 785-296-6864**

<http://www.ksda.gov/appropriation/content/301>

Ken Copp also recommended Nate Westrup at Kansas Water Office 785-296-3185 as a reference for the Water Assurance program, etc. Kansas does not have ISF water rights or reservations. They have minimum desirable streamflows (MDS) for most major streams, which were established by legislature in 1984. If flow drops below min desirable streamflow, junior water right holders are cut off.

Are instream flows legally recognized? N/A

Does special status exist for instream flow rights? N/A

What are the beneficial uses of instream flows as established by statute or case law? N/A, MDS established by legislature and enforcement based on priority date

Types of ISF Water rights:

- **Are new appropriations allowed?** Would have to be passed by legislature
- **Transfer or conversion to ISF allowed?** No
- **Reviews required?** No

Who can appropriate ISF water rights? Legislature **Who can transfer existing rights to ISF?** N/A

Who proposes, reviews, or provides official input on ISF Water rights? DWR and Kansas water office monitor flows as a joint effort. KWO makes the call that flows are below MDS and DWR notifies junior holders to stop withdrawing water.

Who authorizes and administers ISF water rights? Legislature authorizes, DWR administers

What tools are available for ISF protection? In addition to MDS, KS Water Assurance Program. Storage is purchased in Federal reservoirs to release during low flow periods. KWO administers this program.

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)? MDS is a monthly streamflow for each stream

What methods are used to set the minimum streamflow? Minimum desirable streamflows were established by legislature in 1984. The process involved an interagency technical advisory committee (TAC) convened by the Kansas Water Office in the mid-1980's. The agencies with representation included the Kansas Water Office (KWO), the Kansas Department of Health and Environment (KDHE), the Kansas Department of Wildlife and Parks (KDWP), the Division of Water Resources (DWR) of the Kansas State Board of Agriculture (the agency which later

became the Kansas Department of Agriculture) and the Kansas Groundwater Management Districts Association (KGMDA). Each agency had input to the process. Statistical analyses of streamflows (flow duration, 7- and 14-day lowest mean flow, 7Q10, etc.) were examined for each stream under consideration (those were originally chosen by the Kansas Water Office and included in the Minimum Desirable Streamflows subsection of the Kansas Water Plan). The TAC attempted to reach consensus, but ultimately the KWO decided what numbers to recommend to the Legislature. The original concept was not to “create water” where it did not already exist, nor to protect streamflows during a major drought. The idea was to withhold from appropriation the amount of water deemed necessary to establish and maintain such minimum flows during all but major droughts. Acknowledgement of the extent of current appropriations of water was a factor; no attempt was made to curtail existing appropriations, but rather to provide a mechanism to control or regulate new appropriations. This did not mean that additional water rights could not be granted, but if they were they could be regulated or administered when flows became deficient. Generally, flow values were chosen that approximated base flow conditions. Typically these were flow duration values which were exceeded between 80 to 90% of the time, but there were other considerations as well, such as state-line flow requirements from interstate river compacts, e.g., the Big Blue River Compact between Kansas and Nebraska.

Any future changes in the works? Unknown

State: **Montana**

Department: **Montana Fish, Wildlife, and Parks**

Contact info: **Mike McLane, 406-444-1563**

http://dnrc.mt.gov/wrd/water_rts/default.asp

<http://fwp.mt.gov/default.html>

MT uses the term “water reservations” for new appropriations. Murphy rights are legislated ISF rights (1967) on 12 blue-ribbon trout streams. Leases are allowed for protection of fish. No permanent transfer.

Are instream flows legally recognized? Yes.

What are the beneficial uses of instream flows as established by statute or case law?

Beneficial use is not specified by law. Some beneficial use must be established in the process for new water reservations. Fish, wildlife, recreation and water quality are the uses that have been used successfully so far. Protection of fish is the only beneficial use allowed for leases.

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes, as a “water reservation”. Often based on wetted perimeter inflection point
(http://dnrc.mt.gov/rwrcc/Compacts/usdacompact/wetted_perimeter.pdf)
- **Transfer or conversion to ISF allowed?** Leasing only, no permanent transfer.
- **Reviews required?** Reviews are required to be done by DNRC every 10 years, but none have been done in at least 20 years.

Who can appropriate ISF water rights? Any public entity (fed, state, municipality) **Who can transfer existing rights to ISF?** Anyone can lease their right. Leased rights can be held by FWP or NGOs, such as MT Trout Unlimited or MT Water Trust.

Who proposes, reviews, or provides official input on ISF Water rights? Public entities propose. Any stakeholder provides input (right holder on the stream, NGOs, etc)

Who authorizes and administers ISF water rights? Dept of Natural Resources and Conservation

What tools are available for ISF protection? Water is leased out of some reservoirs for ISFs. Basin closures have been used to protect remaining ISFs in some basins. State has intervened in Fed Energy Regulatory Commission licenses for dams to protect peak flows and baseflows.

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)? Water reservations are year round rights, some vary, and some do not). Murphy rights- year round, vary (as many as 6 per year specified). Leases – depend on original right, generally seasonal irrigation right.

What methods are used to set ISFs? Wetted-perimeter, Tennant/MT methods are most commonly used for Missouri River flow regimes. More complex approaches and combinations of approaches are used for Yellowstone waters and Murphy Rights. PHABSIM has been used. The approach should be dependent on what you are aiming to protect – a simplified method to provide adequate feeding area for trout may not protect some warm-water fish that needs pools to reproduce.

Any future changes in the works? Unknown.

State: **North Dakota**

Department: **North Dakota State Water Commission**

Contact info: **John Patch, 701-328-3440, jpatch@nd.gov**

*North Dakota does not recognize ISF as a beneficial use and does not allow instream flow water rights.
Would like to hear the result of these efforts as they would also like to start allowing for ISFs.*

State: Nebraska

Department: Department of Natural Resources – Permits & Registrations Division

Contact info: Mike Thompson mike.thompson@nebraska.gov, (402) 471-2363,

<http://www.dnr.state.ne.us/docs/surface.html>

Are instream flows legally recognized? Yes

What are the beneficial uses of instream flows as established by statute or case law?

Fish/Wildlife and Recreation (*Nebraska Revised Statute 46-2,108*)

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes, but only available by permit through the 23 Natural Resource Districts (NRDs) in the state and the Nebraska Game and Parks Commission.

Chapter 46-2108.1(c) An instream appropriation may be obtained only by the Game and Parks Commission or a natural resources district and only for that amount of water necessary for recreation or fish and wildlife

- **Transfer or conversion to ISF allowed?** Yes, anyone may apply to transfer/convert a natural flow/storage use to instream use. Transfers are temporary but renewable and can be applied up to 30 years.
- **Reviews required?** New appropriations by NRDs or Game and Parks are subject to review every 15 years for validation (is use still justified? Is quantity still appropriate?).

Who proposes, reviews, or provides official input on ISF water rights? See above

Who authorizes and administers ISF water rights? Nebraska Department of Natural Resources – Director (administration of existing rights is accomplished through the Department’s Field Offices)

What tools are available for ISF protection?

- Instream appropriation
- Transfer of existing rights to ISF use for up to 30 years

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

Flows are quantified for the beginning and end of a reach and flows are determined by portion of the year.

Chapter 46-2110: The application shall include the locations on the stream at which the need for instream flows begins and ends and the time of year when instream flows are most critical.

What methods are used to set ISFs? ISFs are set based on applicant proposal – no defined or required methodology

Any future changes in the works? The Platter River Recovery and Implementation Program (PRRIP) is currently looking at upcoming projects that would aim to meet target flows set by the U.S. Fish and Wildlife Service or existing instream flow permits as often as possible. The projects may result in permits given to other entities besides NRDs and Game and Parks. There are no directly applicable precedents set for this type of stream augmentation and any upcoming work would be in new territory.

Instream flow laws can be found in Chapter 46-2108 through 46-2119:

<http://www.nebraskalegislature.gov/> search laws

State: **New Mexico**

Department: **Office of the State Engineer, Water Rights Bureau**

Contact info: **Linda Gordon, (505) 827-6120**

Are instream flows legally recognized? Yes, but no ISF water rights to date because almost all streams over-appropriated. NM Attorney General released an opinion allowing water rights to be transferred to ISF.

What are the beneficial uses of instream flows as established by statute or case law? Fish, wildlife, recreation, ecological purposes, as outlined by NM Attorney General. No rule, statute or case law

Types of ISF Water rights:

- **Are new appropriations allowed?** No.
- **Transfer or conversion to ISF allowed?** Allowed according to Attorney General opinion, according to Linda Gordon “wouldn’t be looked on favorably” due to over-appropriation of most basins.
- **Reviews required?** N/A

State: Nevada

Department: Division of Water Resources

Contact info: Kelvin Hickenbottom, 775-684-2817

<http://water.nv.gov/Water%20Rights/Water%20Law/waterlaw.cfm>

Are instream flows legally recognized? Yes

What are the beneficial uses of instream flows as established by statute or case law? Fish, wildlife, recreation (*Nevada Revised Statutes 533.023 and 533.030*)

Types of ISF Water rights:

- **Are new appropriations allowed?** New appropriations are allowed, but not generally approved because most basins are fully appropriated.
- **Transfer or conversion to ISF allowed?** Yes.
- **Reviews required?** No.

Who can appropriate ISF water rights? Who can transfer existing rights to ISF? Anyone.

Who proposes, reviews, or provides official input on ISF Water rights? Any entity can propose

Who authorizes and administers ISF water rights? Division of Water Resources. Or Federal Water Master, in the case of an interstate decree right (adjudicated by a court as in case of a dispute)

What tools are available for ISF protection? Interstate decrees

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)? ISFs are for a maximum flow. Not seasonal

What methods are used to set ISFs? Reservoir levels are set using upstream gages coupled with stage/storage relationship based on bathymetric survey...ISFs in streams are set with downstream appropriated rights in mind.

Any future changes in the works? Senator Harry Reid is working on an effort get federal money to lease/purchase water in the Walker River (ends in a terminal lake) basin for ISFs.

State: **Oregon**

Department: **Oregon Water Resources Dept (OWRD)**

Contact info: **Kody Thurgood, 503-986-0892**

<http://www.wrd.state.or.us/OWRD/WR/index.shtml>

Are instream flows legally recognized? Yes.

What are the beneficial uses of instream flows as established by statute or case law? Fish, wildlife, riparian areas, recreation, aesthetics, water quality/pollution abatement *Oregon Revised Statutes 537.332 and 537.334*

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes.
- **Transfer or conversion to ISF allowed?** Yes. Can also do time-limited transfer (until certain condition is met, such as selling property, needing water again), 5-year lease.
- **Reviews required?** No.

Who can appropriate ISF water rights? Any state agency. Right then held in trust by OWRD.

Who can transfer existing rights to ISF? Anyone, but transfer or lease held in trust by OWRD. Conservation groups are very active in securing leases.

Who proposes, reviews, or provides official input on ISF Water rights? Any state agency

Who authorizes and administers ISF water rights? OWRD

What tools are available for ISF protection? Allocation of Conserved Water – if user saves water due to increased efficiency, can use 75% toward irrigating new land, 25% must go to ISFs (program has put 50 cfs, 16292 ac-ft back in stream).

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

New appropriations are year-round, whether or not they vary depends on requesting agency (i.e., DEQ are general minimums, F&W are seasonal)

What methods are used to set ISFs? Oregon method – precursor to PHABSIM

Any future changes in the works? No.

State: **South Dakota**

Department: **Department of Environment and Natural Resources (DENR)**

Contact info: **Mark Rath, 605-773-4270**

<http://denr.sd.gov/des/wr/wr.aspx>

Are instream flows legally recognized? Yes

What are the beneficial uses of instream flows as established by statute or case law? Fish, wildlife, riparian areas, aesthetics

beneficial uses in South Dakota are defined as "any use of water within or outside the state, that is reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interests of the public of this state in the best utilization of water supplies" (*South Dakota Codified Laws 46-1-6(3)*)

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes.
- **Transfer or conversion to ISF allowed?** Yes.
- **Reviews required?** No.

Who can appropriate ISF water rights? Must be a legal entity. Most are held by Dept of Game, Fish and Parks, but some are held by private foundations.

Who can transfer existing rights to ISF? Anyone, but the holder must be a legal entity.

Who proposes, reviews, or provides official input on ISF Water rights? DENR reviews, then goes in front of the Water Management Board, which is a judicial board on which the members represent different interests (for instance, irrigation, Fish, Wildlife & Parks). There is a legal advertisement requirement to solicit public opinions.

Who authorizes and administers ISF water rights? DENR Water Rights Program

What tools are available for ISF protection? Watershed Protection Group in DENR. NPDES permitting that requires certain flows for discharges. TMDL.

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)? Not generally seasonal, though it could be done

What methods are used to set ISFs? SD attempts to retain some amount of water instream to satisfy domestic uses. ISFs are only available based on water remaining after appropriation for senior water rights. Base flows have been determined using USGS gages.

Any future changes in the works? Unknown.

State: Texas

Department: Texas Water Development Board (TWDB)

Contact info: Mark Wentzel, mark.wentzel@twdb.state.tx.us

Are instream flows legally recognized? Yes, this is in process. There are not ISF water rights in Texas. Senate Bill 2 created an ISF program where new permits will contain environmental flow conditions as determined by scientific study. Basin-wide environmental flow needs are expected to be determined by 2016. In the interim, Senate Bill 3 has been passed that estimates environmental flow needs based on best available data through a stakeholder process. Refers to environmental flows as “set asides”.

What are the beneficial uses of instream flows as established by statute or case law? Fish and wildlife habitats, upstream/adjoining/downstream habitat, wetland function, riparian habitats, water quality (from table 2-1 on page 12 of “Texas Instream Flow Studies: Technical Overview” http://www.twdb.state.tx.us/publications/reports/GroundWaterReports/GWReports/R369_InstreamFlows.pdf)

Types of ISF Water rights:

- **Are new appropriations allowed?** See above. No permits for ISF water rights, but new water rights will be conditioned by environmental flow needs determined by scientific study
- **Transfer or conversion to ISF allowed?** Yes. Anyone may donate their water rights to the Water Bank for conversion to instream flows. Donated rights retain their seniority.
- **Reviews required?**

Who proposes, reviews, or provides official input on ISF Water rights? TWDB and Texas Parks and Wildlife provide input/review. New “set asides” determined by basin stakeholder groups.

Who authorizes and administers ISF water rights? TCEQ

What tools are available for ISF protection? See 2005 report

- Legislation exists to protect freshwater flows in bays and estuaries
- Studies are performed for segment or basin and environmental flow levels condition new permits

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

Flow regimes are determined by studies which reflect variability within a year as well as year to year.

What methods are used to set ISF? Scientific studies are currently being conducted to determine ISFs...see question 1.

Any future changes in the works? Senate Bill 3 passed in 2007 and set up an environmental flows allocation process for the state's seven river basin and bay systems. This work is in progress and tasks stakeholder groups with using best available data to determine environmental flow needs for a basin and to work towards fulfilling those needs if the determined amount is not available.

Web sites with information:

TWDB – <http://www.twdb.state.tx.us/InstreamFlows/index.html>

TCEQ – http://www.tceq.state.tx.us/permitting/water_supply/water_rights/eflows/group.html

State: **Utah**

Department: **Division of Water Rights** <http://www.waterrights.utah.gov/>

Contact info: **Eric Anderson**, (801) 538-4750, ericanderson@utah.gov

Are instream flows legally recognized? Yes

What are the beneficial uses of instream flows as established by statute or case law?

Beneficial uses are established in statutes. There is a beneficial use for “instream flow” ...no specifics.

From Glossary of terms on Utah Water Rights website: Beneficial uses are purposes including but not limited to, domestic, municipal, irrigation, hydropower generation, industrial, commercial, recreation, fish propagation, and stockwatering; it is the basis, measure and limit of a water right

Types of ISF Water rights:

- **Are new appropriations allowed?** New appropriations are not allowed
- **Transfer or conversion to ISF allowed?** Transfer or conversion of existing perfected rights is allowed for surface water within the same basin
- **Reviews required?** Prior to conversion or transfer, historic use is reviewed. Once the right is perfected (certificate of beneficial use issued by the State Engineer), no review is required.

Who proposes, reviews, or provides official input on ISF water rights? Utah Department of Parks and Recreation, Utah Division of Wildlife Resources. Additionally, since 2008 fishing groups may modify an existing perfect right by filing a fixed time change application (1-10 years) for instream flow to protect three native species: the Bonneville Cutthroat, Colorado River Cutthroat, and the Yellowstone Cutthroat. Fishing Groups must first get written approval from the Division of Wildlife Resources prior to submitting the application. These modifications are location and season specific.

Who authorizes and administers ISF water rights? Utah State Engineer’s Office authorizes and DWR or Parks and Recreation manage the instream flow.

What tools are available for ISF protection?

- Permanent or temporary acquisition of ISF rights through donation or by purchase
- Utah Code authorizes the State Engineer to reject an application to appropriate water or to change use of a water right if approval would unreasonably affect public recreation or the environment

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)? No specific protections at this time

What methods are used to set ISFs? ISFs are not appropriated – amount of water is determined based on amount transferred or converted.

Any future changes in the works? No known changes at this time. Changes dictated by legislative session.

State: **Washington**

Department: **Department of Ecology**

Contact info: **Brian Walsh, (360) 407-6647, bwal461@ecy.wa.gov**

<http://www.ecy.wa.gov/PROGRAMS/wr/rights/water-right-home.html>

Are instream flows legally recognized? Yes.

What are the beneficial uses of instream flows as established by statute or case law? Fish, wildlife, recreation, aesthetics, water quality

fish and wildlife maintenance and enhancement, recreational, and preservation of environmental and aesthetic values (*RCW 90.54.020(1)*)

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes.
- **Transfer or conversion to ISF allowed?** Yes.
- **Reviews required?** No.

Who can appropriate ISF water rights? Department of Ecology

Who can transfer existing rights to ISF? Individuals. Rights then held in trust by Dept of Ecology through Trust Water Rights Program

Who proposes, reviews, or provides official input on ISF water rights? Department of Fish and Wildlife, tribes, health department, watershed groups, other stakeholders. WA has stakeholder/community watershed group-driven approach. Groups propose ISF water rights, receive grants and assistance from the state to develop proposal

Who authorizes and administers ISF water rights? Dept of Ecology

What tools are available for ISF protection? Minimum flows set through administrative rule-making procedure. Trust Water Rights Program allows transfers of existing rights to ISF (retain priority dates). Water banking- basins closed to new appropriations, "cap and trade" type system enacted.

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

Seasonal ISF rights at specific control points. Values are established mostly through fish.

Assumed that if fish are healthy, other beneficial uses satisfied.

What methods are used to set ISFs? IFIM/PHABSIM, Toe-Width method - current efforts being conducted to refine Toe-Width method.

Any future changes in the works? Relinquishment, currently 5 years of non-use. Trying to ease that restriction to encourage conservation. Trying to modernize and streamline adjudication process. Trying to install more official process for water banking.

State: **Wyoming**

Department: **Wyoming Department of Game and Fish**

Contact info: **Tom Annear**

information available at: <http://gf.state.wy.us/fish/instreamflow/index.asp>

Are instream flows legally recognized? Yes, by statute.

The standard of proof for instream flow new appropriations is higher than with other water rights. Game and Fish does studies to determine timing and amounts of water required. Water Development Commission does a feasibility study to determine that water is available (under the assumption that all users call for water at the same time). Public hearings are required for approval.

What are the beneficial uses of instream flows as established by statute or case law? Existing fisheries (some dispute as to how this is defined... State engineer believes it is # of fish of various species and the lowest amount of water to maintain that population, G&F sees it as water required to maintain a healthy habitat for normal populations of fish).

Types of ISF Water rights:

- **Are new appropriations allowed?** Yes.
- **Transfer or conversion to ISF allowed?** Allowed. To date there have been no transfers from consumptive uses because the right would have to be donated to the state with no possibility of recovering the right if water needed again. 3 transfers have been from fish hatcheries which shut down.
- **Reviews required?** No.

Who can appropriate ISF water rights? State of Wyoming, through Water Development Commission (the transferred rights are held by Game and Fish as they were originally G&F's rights) **Who can transfer existing rights to ISF?** Anyone, though right will then be held by Water Development Commission

Who proposes, reviews, or provides official input on ISF water rights? WY Dept G&F

Who authorizes and administers ISF water rights? Water Development Commission

What tools are available for ISF protection? There are protections to some specific waterbodies. Examples: N. Platte- federally mandated 500 cfs must be released from a reservoir for delivery to NB (considered "release from storage", not ISF right). Laramie R- mandated amount must reach N. Platte as required by ESA (also "release from storage"). Clarks Fork of the Yellowstone- "Wild and Scenic" water right, up to 25 year flood. Snake River near Jackson- negotiated with Bureau of Reclamation and State of Idaho to shift storage for winter baseflow.

Do specific protections exist for instream flows (i.e., seasonal flows, general minimums)?

Generally based on season. G&F tries to protect entire winter flow, min for spring spawning, summer habitat maintenance flow, fall spawning flows, if applicable

Any future changes in the works? Bills in both House and Senate to allow temporary change of use, comparable to water leasing program in Montana.