

Instream Flows in the Spokane River

Spokane River upstream from
Sullivan Rd. Bridge
8/31/2009
327 cfs @ Post Falls

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Water Resources Program

Purpose of Rule

- Establish instream flow levels necessary to protect wildlife, fish, scenic, aesthetic, recreation, water quality and other environmental values, navigational values, and stock watering requirements;
- Meet water resource management objectives of the Spokane area watershed plans adopted under RCW 90.82;
- To protect existing water rights; and
- Establish and protect Washington State interests in the water resources of the Spokane River.

Why now?

- We've got the science now.
 - WRIA process
 - Avista 401 process
 - SVRPA study, etc.
- We've got the people now.
 - Most WRIA participants and informed people are still here
 - Rule development staff within Ecology are here and experienced
 - 10 years of outreach = an informed public
- We've got the authority now.

Instream Flow Rulemaking Authority

- Water Code, Chapter 90.03 RCW;
- Ground Water Code 90.44 RCW;
- Minimum Water Flows and Levels, Chapter 90.22 RCW;
- Water Resources Act of 1971, Chapter 90.54 RCW;
- Watershed Planning Act, Chapter 90.82 RCW;

What setting an instream flow does and does not do:

- **Does:**

- Establishes a “water right” for instream values. Rule = an appropriation of water with priority date.
- Newer rights are subject to the instream flows.

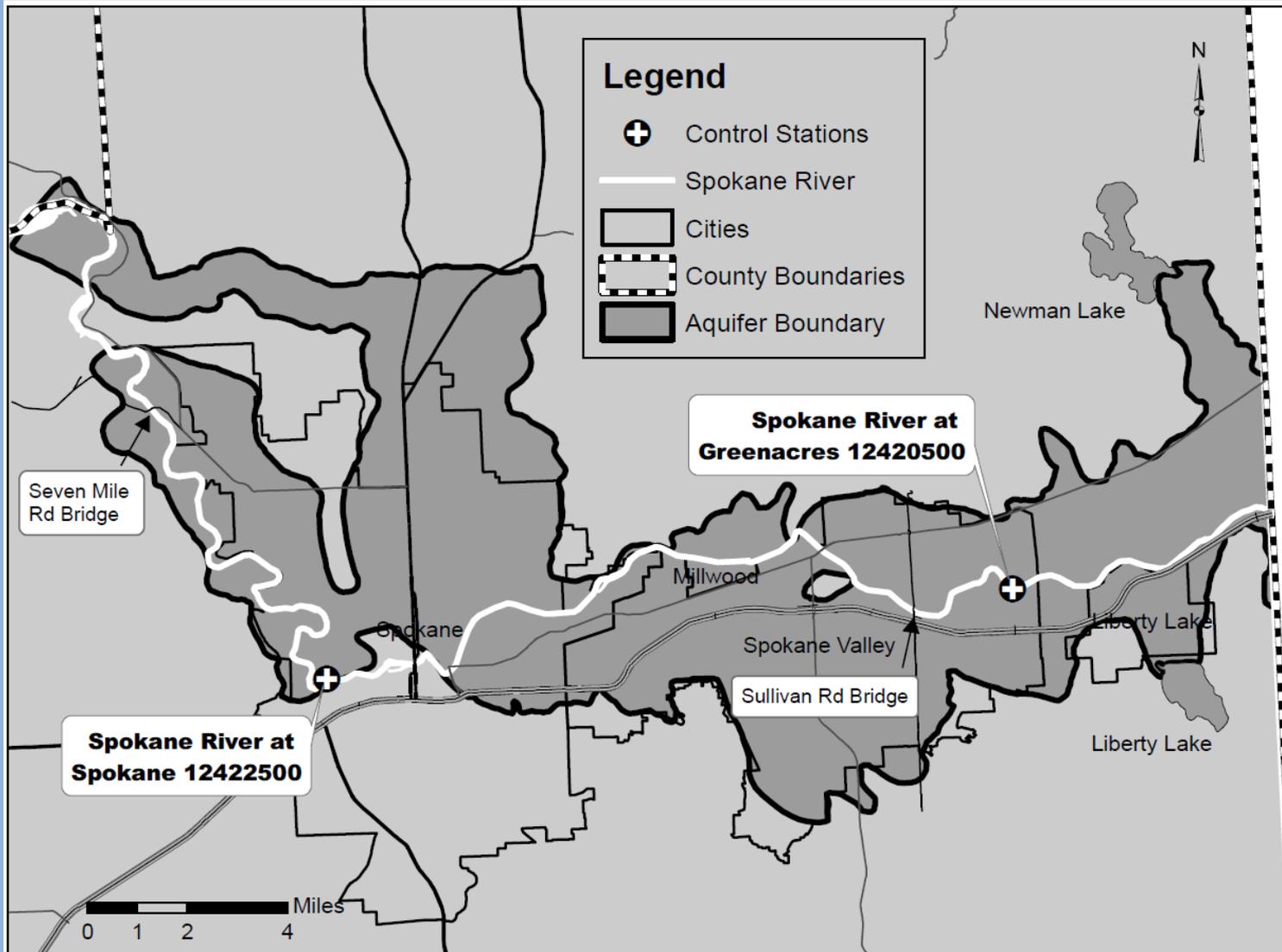
- **Does not:**

- Put water in streams. *Setting* flow \neq *achieving* flow

For example:

- Dry year: senior rights get water, instream flows are not met. Rights junior to the instream flow are interrupted.
- Wet year: senior rights get water and the instream flow is attained.

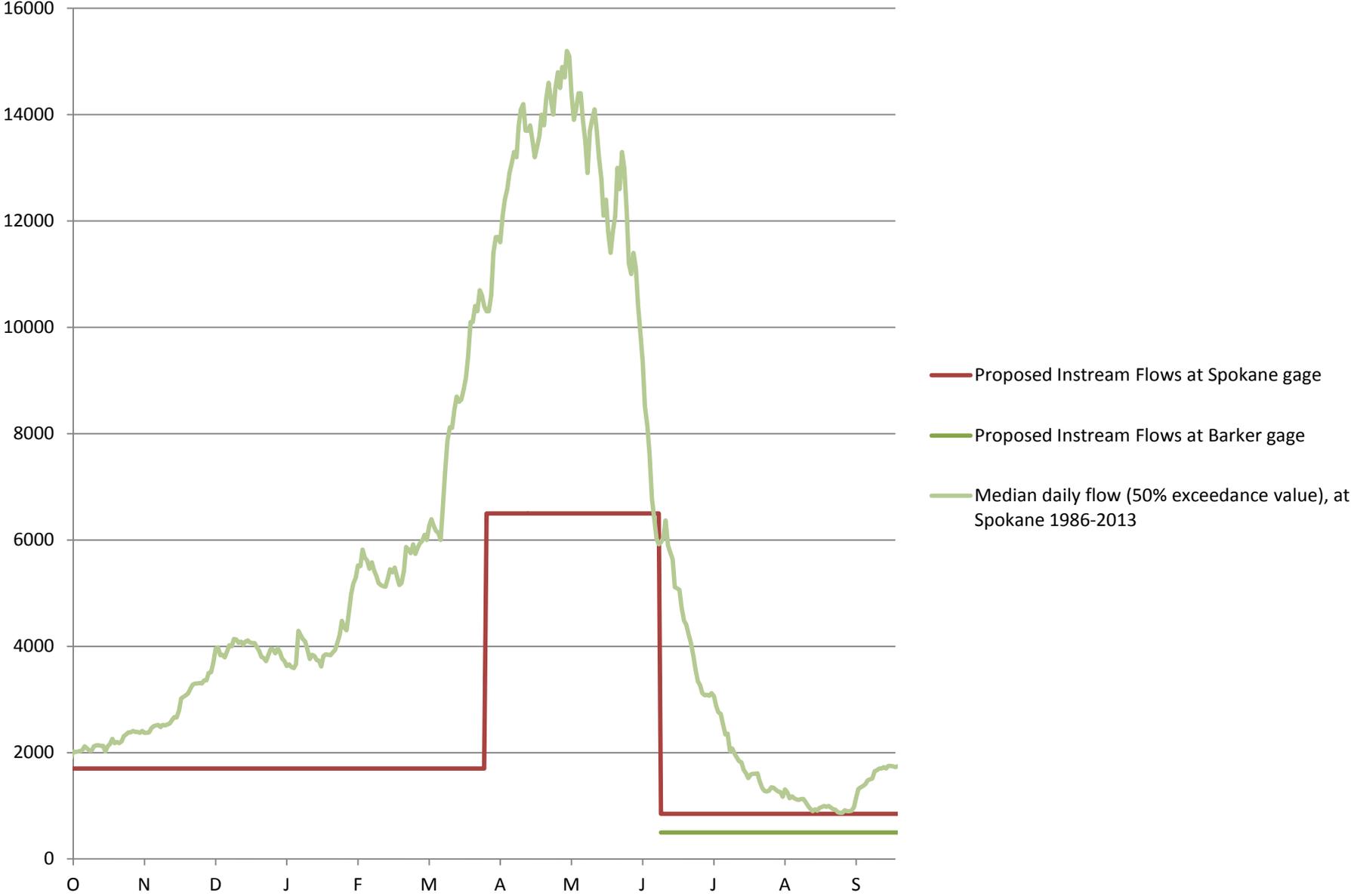
Applicability



Rule Summary: Regulatory flows in Washington

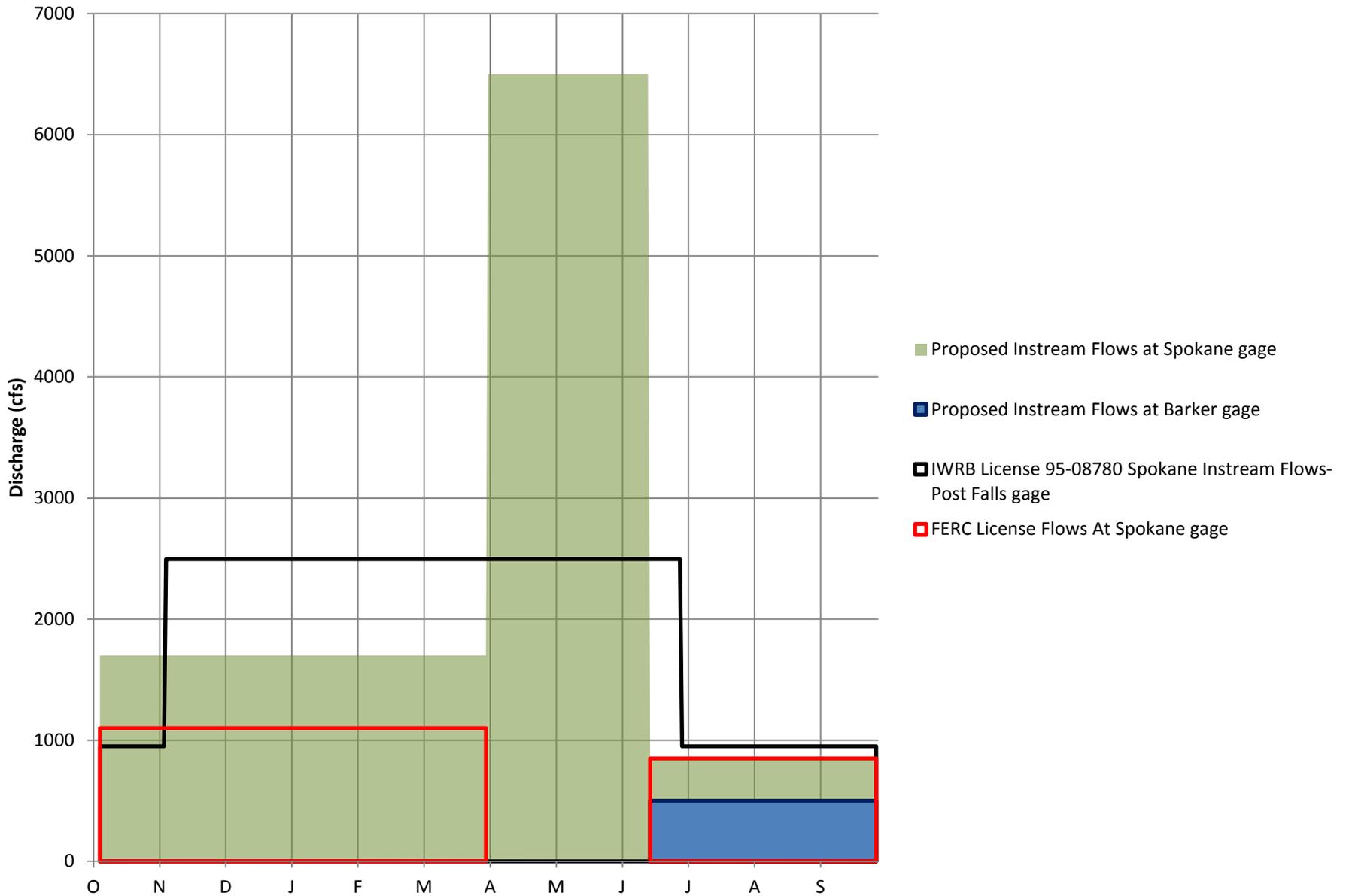
Date	FERC License Flow at Spokane Gage	Proposed Instream Flow at Spokane Gage	Proposed Instream Flow at Barker Gage
October 1-March 31	1100 cfs	1700 cfs	
April 1-June 15	TBD	6500 cfs	
June 16-September 30	850 cfs	850 cfs	500 cfs

Proposed flows vs. 50% exceedance flows @ Spokane Gage



- Proposed Instream Flows at Spokane gage
- Proposed Instream Flows at Barker gage
- Median daily flow (50% exceedance value), at Spokane 1986-2013

Spokane River Regulatory Flows



Timing and Process



– *First notice: CR-101 – Filed January 21, 2014*



– *Draft Proposed Rule Language to Interested Persons: April 17, 2014*



– **Workshop on Draft: May 14, 2014: Centerplace, 4-7 PM: Public input through May**

– **Formal public process CR-102 begins late summer 2014**

– **Public Hearing – Fall 2014**

– **Rule Adoption- Early 2015**

More information

- Search Ecology webpage for Spokane River Rule
 - <http://www.ecy.wa.gov/programs/wr/rules/557-ov.html>
 - Sign up for listserv
 - Phone or talk to any of us
-
- **Ann Wessel – Rule writer**
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rusty.post@ecy.wa.gov
FAX: 509-329-3529

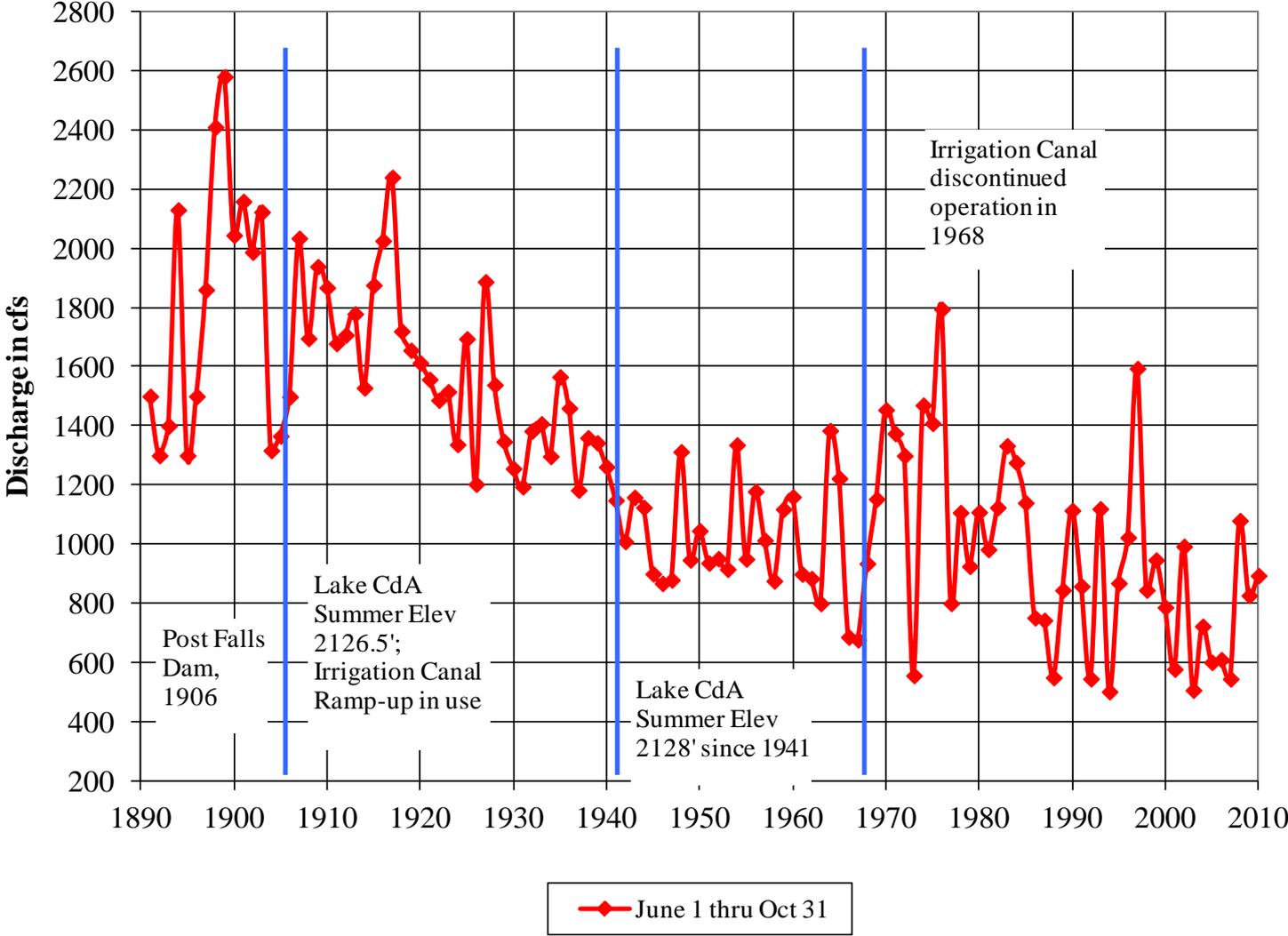
Thank you!
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Harvard Rd. Downstream
4/21/2006
19,200 cfs @ Post Falls

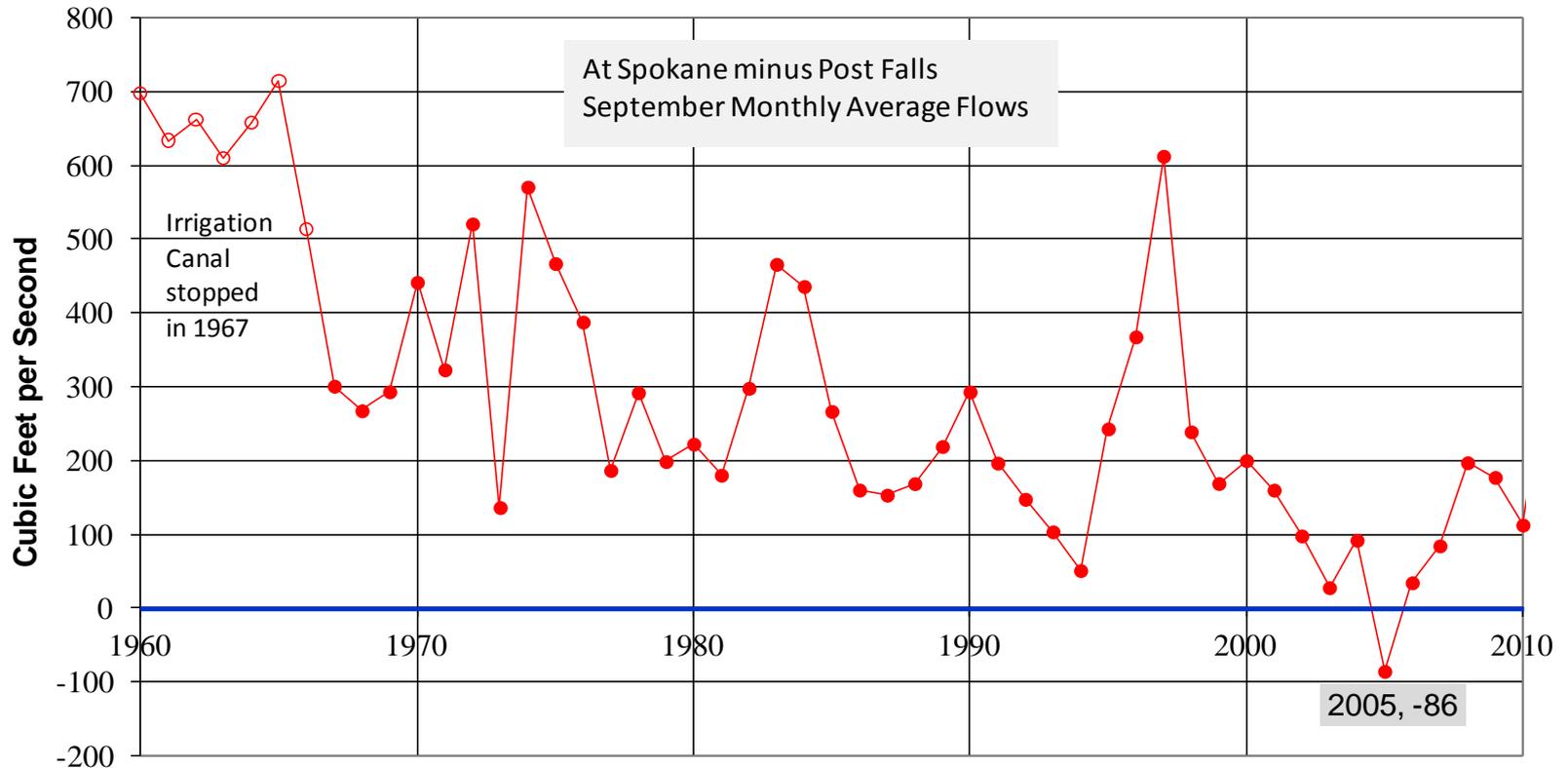
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The following slides were not part of the formal presentation but were available as illustrations to help answer questions.

Spokane R at Spokane 7-Day Low Flow



Spokane River September Differences in Monthly Average Flows

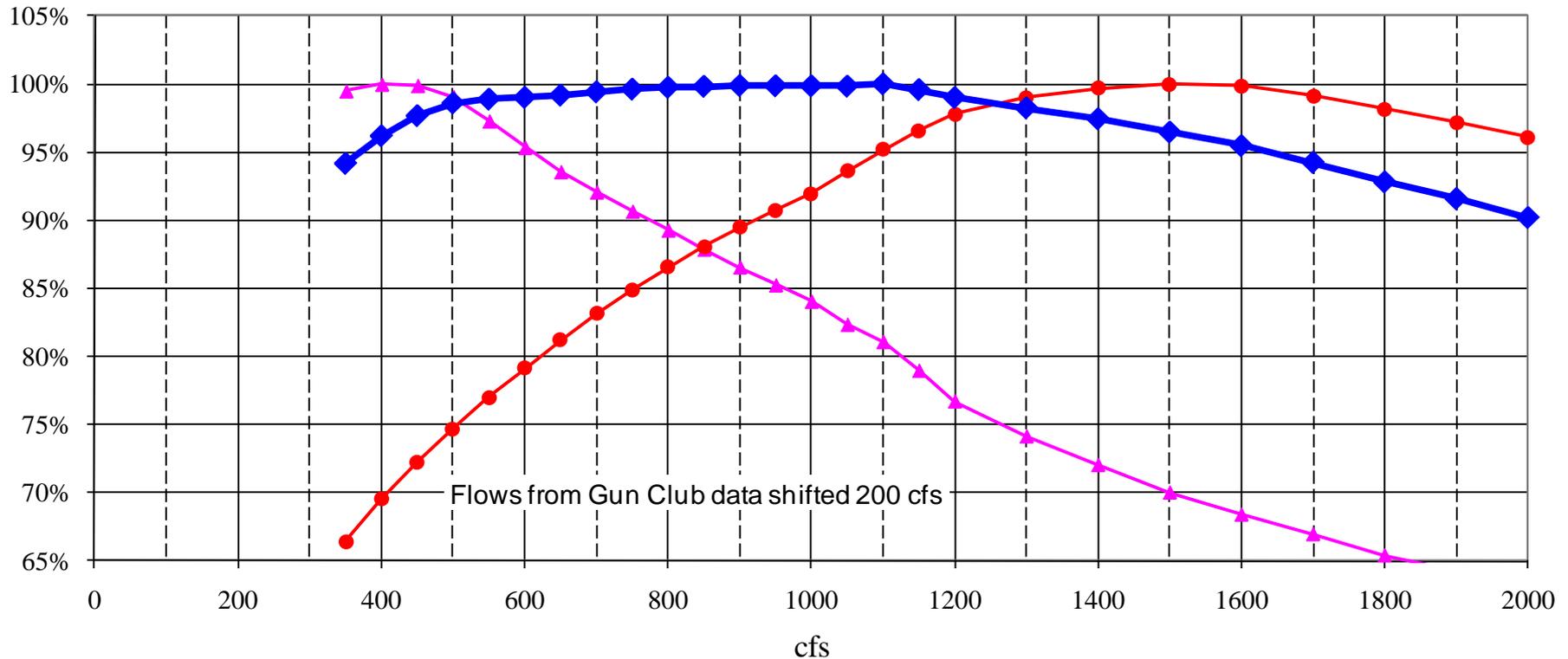


SVRP Aquifer's Contribution to the Flow in the Spokane River

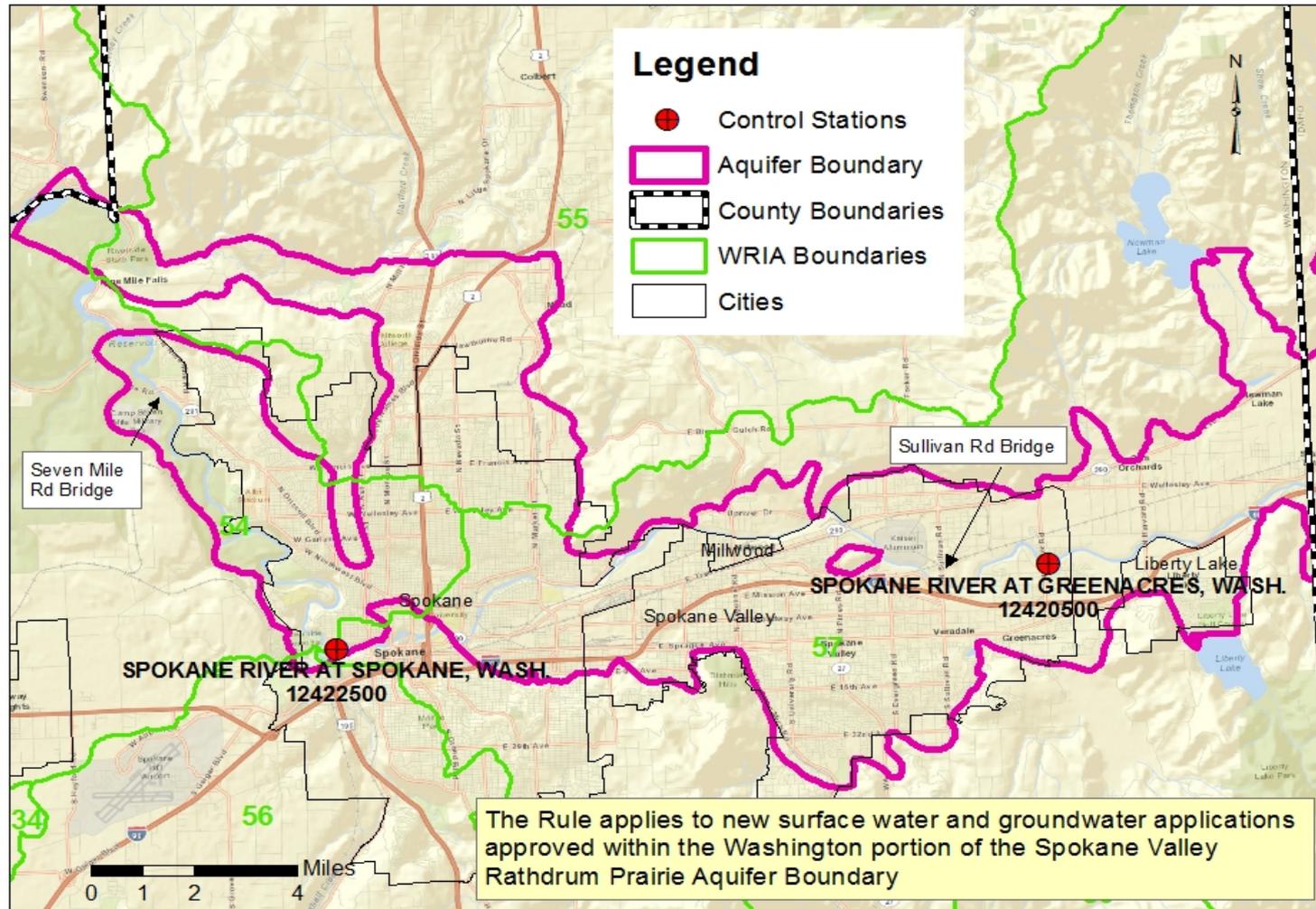
Four campaigns of fish science investigations 2000-2011

Result: June 16 -September 30 minimum flows to protect fish= 850 cfs.

**Lower Spokane River Instream Flow Data
Combined Percentages based on 'at Spokane' Flow
Weighted Proportionally to Reach Length
(20% for 'at Spokane', 80% for Gun Club)**

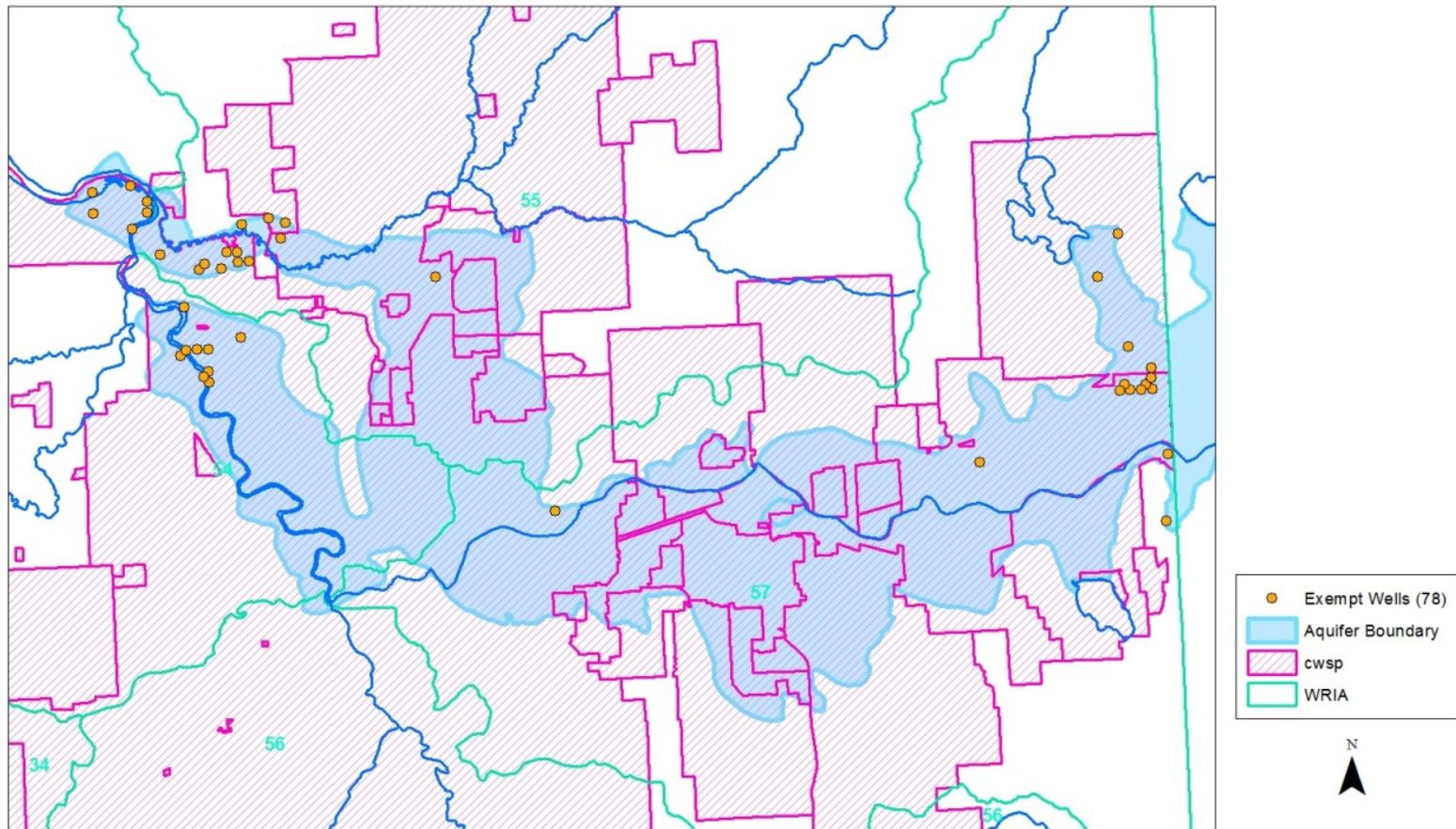


Where would the rule apply?



How does this affect existing rights, and what about permit exempt wells?

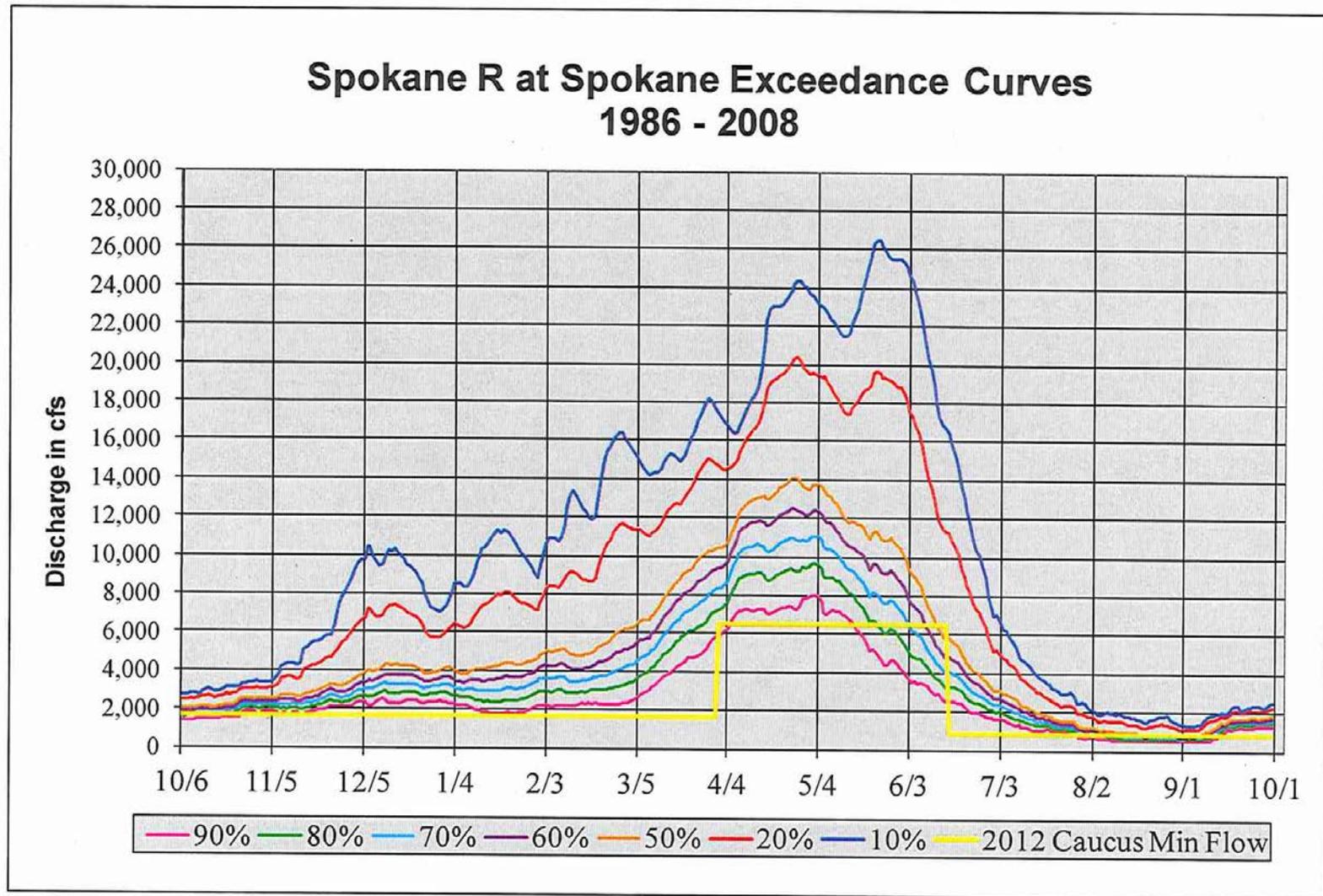
Domestic Exempt Wells drilled over the SVRPA
2002-present



State Caucus Recommended Minimum Instream Flows at the Spokane Gage

- October 1-March 31 1,700 cfs
- April 1-June 15 6,500 cfs
- June 16-September 30 850 cfs

How do proposed flows relate to river flow now?

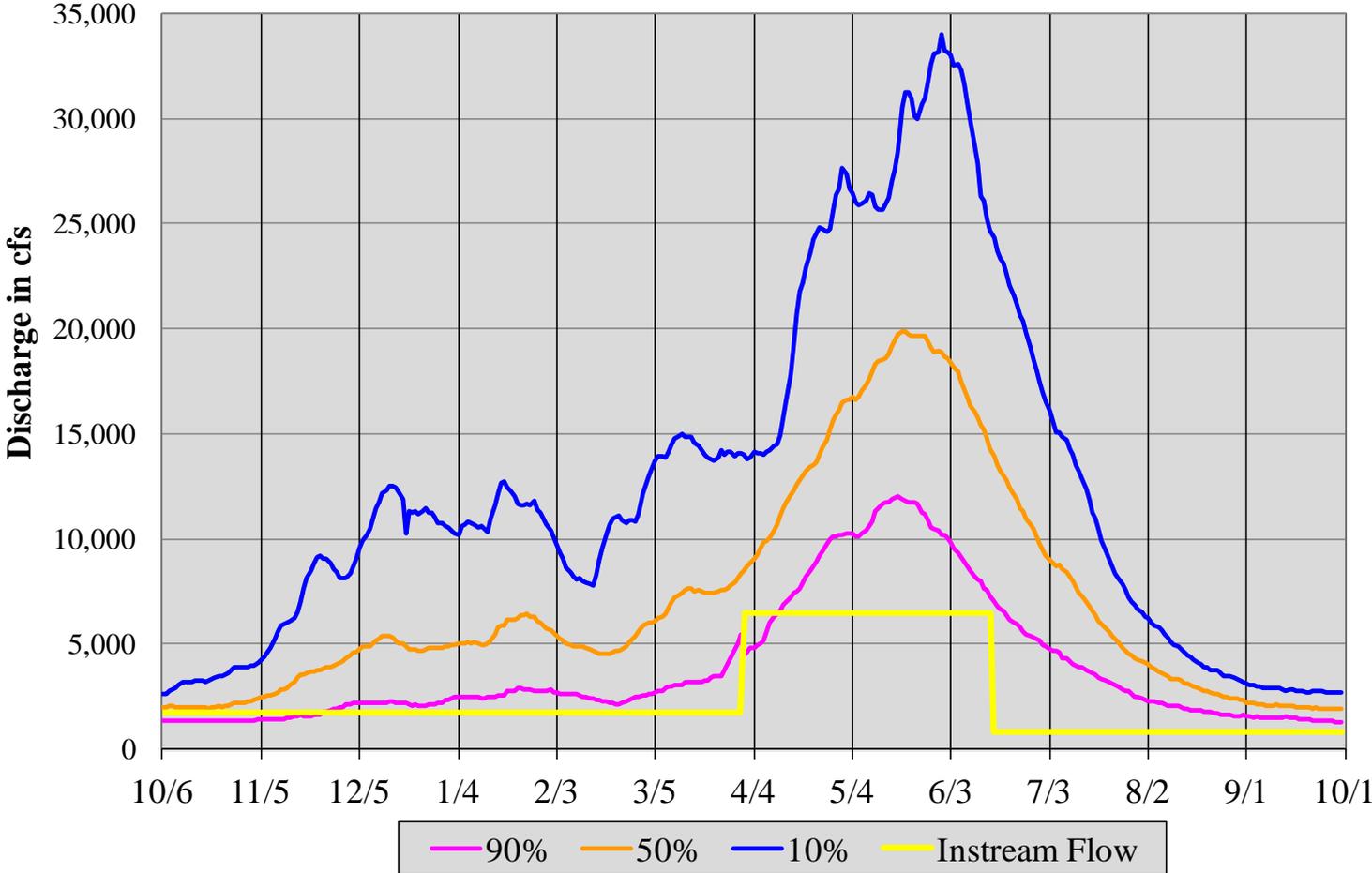


4/ Figure 4. Exceedance hydrographs and recommended instream flows at USGS gauge 12422500 (Spokane River at Spokane).

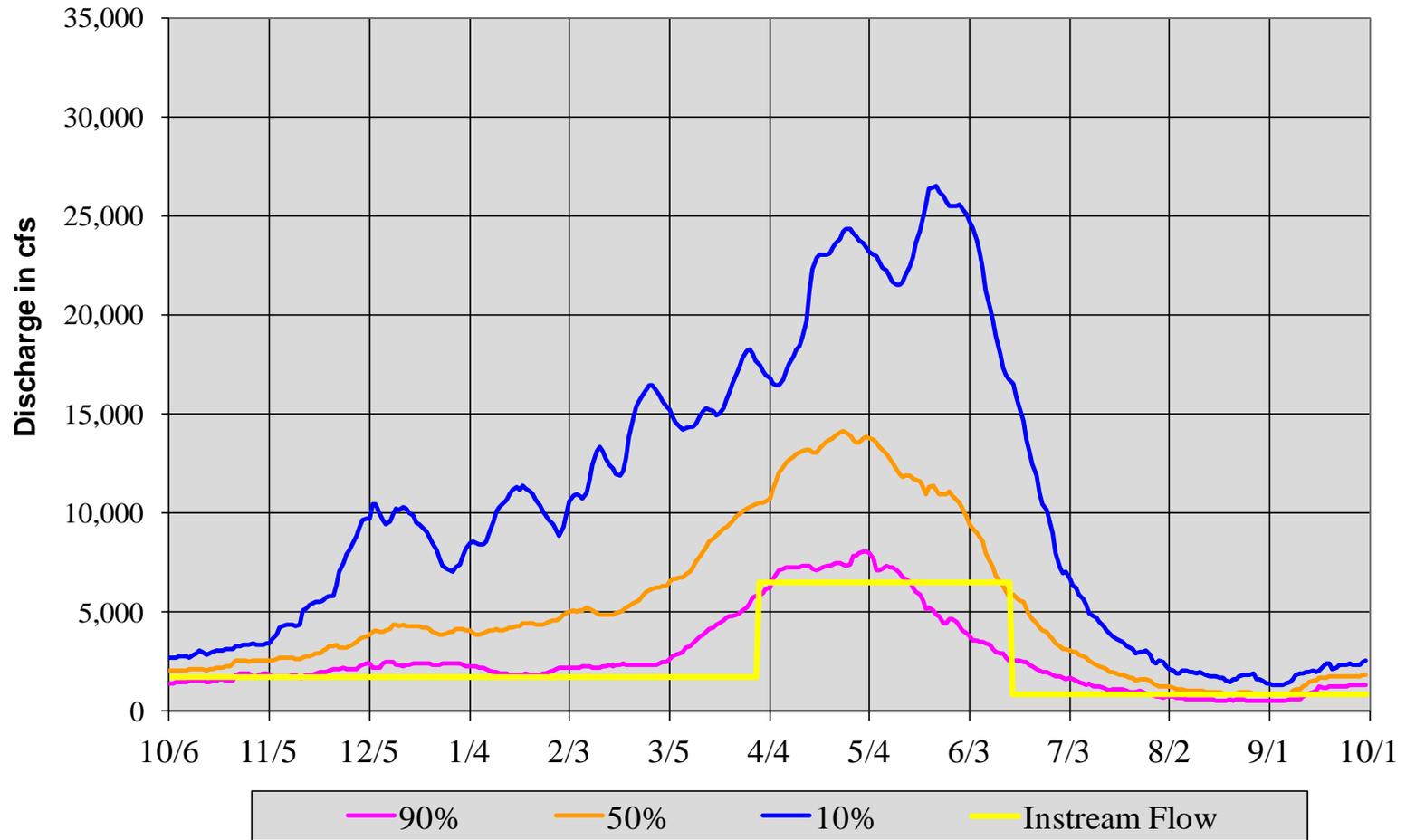
Prior to the Post Falls Dam, Lake Coeur d'Alene used to drain all summer, with Spokane River flows being higher than under 'current' conditions



Spokane R at Spokane Exceedance Curves 1891-1906



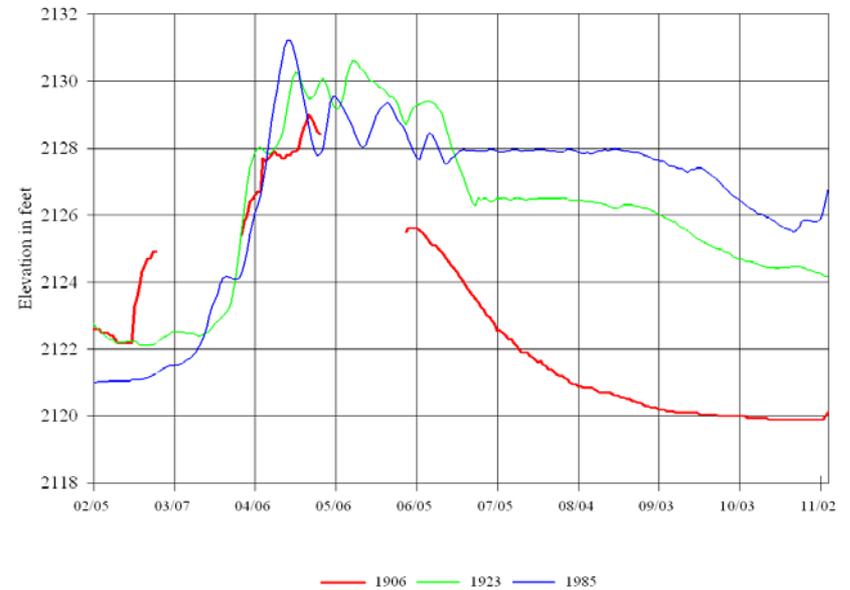
Spokane R at Spokane Exceedance Curves 1986 - 2008



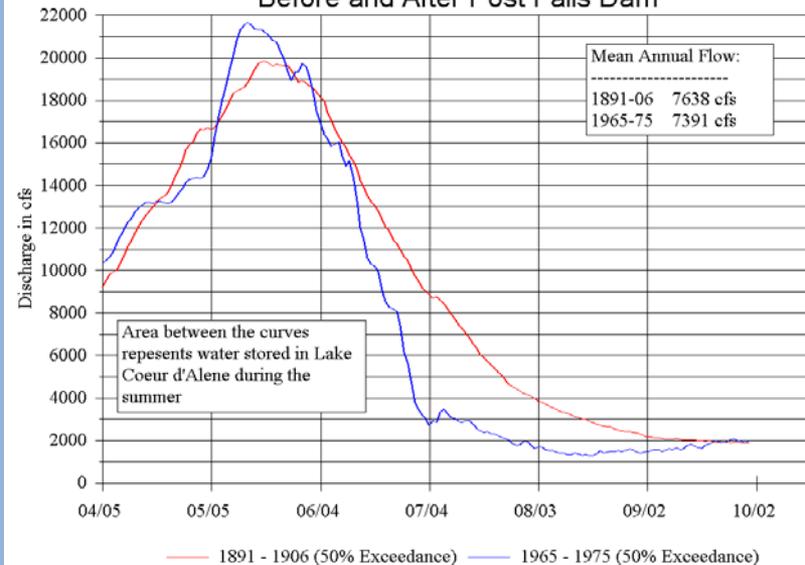
Post Falls Dam changed the seasonal hydrograph for both Lake Coeur d'Alene and the Spokane River



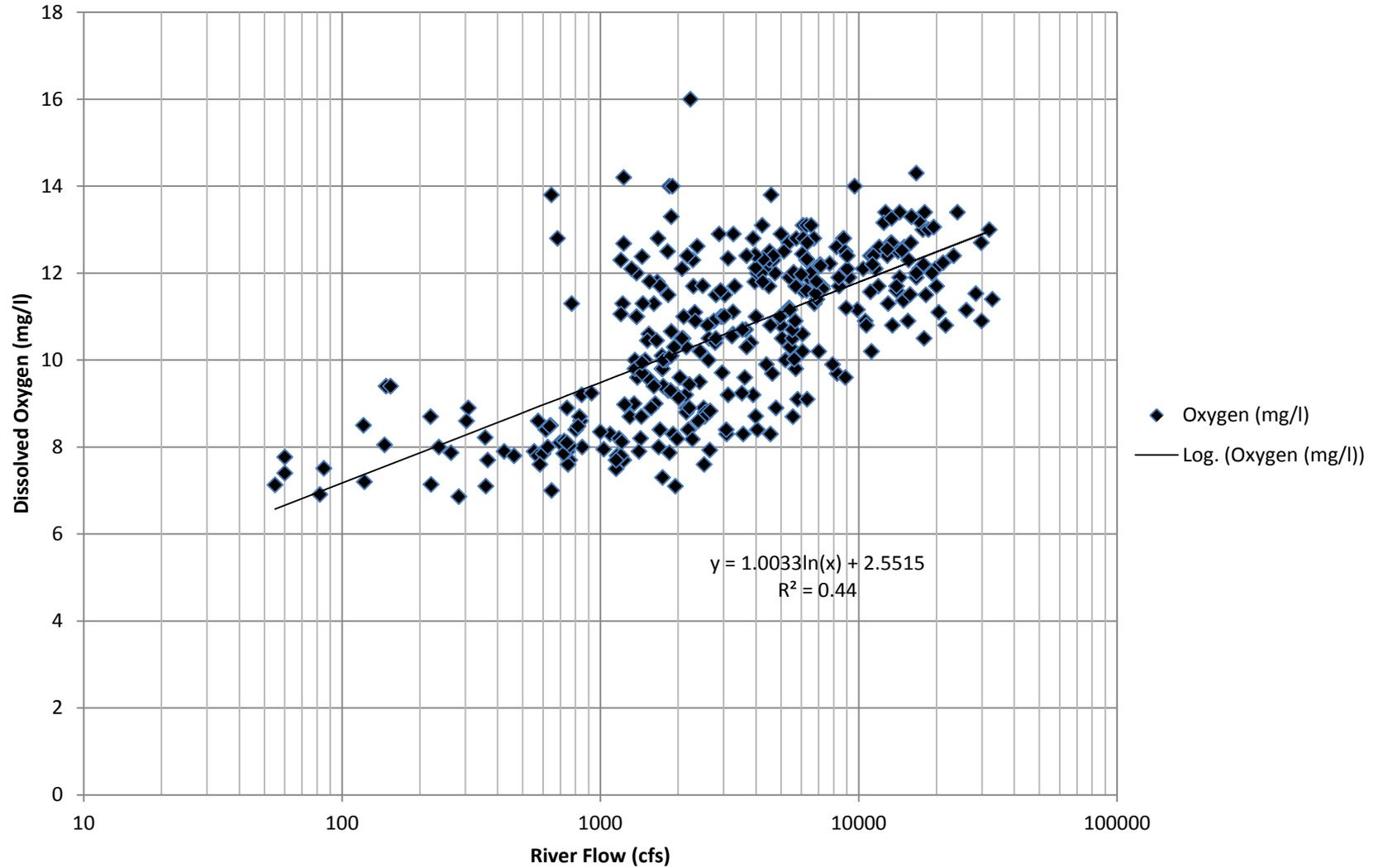
Lake Coeur d'Alene Elevation



Spokane R at Spokane Ave Daily Flow Before and After Post Falls Dam



Dissolved Oxygen and River Flow: Stateline Ecology data:1959-2009



Dissolved Oxygen and River Flow-Riverside State Park Ecology data: 2003-2009

