Fisheries Conservation Through Instream Flow Protection and Angling Closures

### Bill Schenk

Montana Department of Fish, Wildlife and Parks

### Instream Protection Methods

- Murphy Rights (Statutory Designation)
- Water Reservations
- Water Leasing
- Storage
- Basin Closures



- Yellowstone River Basin
  - 8 municipalities
  - 14 conservation districts, and
  - 6 state and federal agencies

# (Priority date December 15, 1978)

### • Upper Missouri River Basin

- (Above Fort Peck Dam)
- 17 municipalities,
- 15 conservation districts, and
- 4 state and federal agencies.

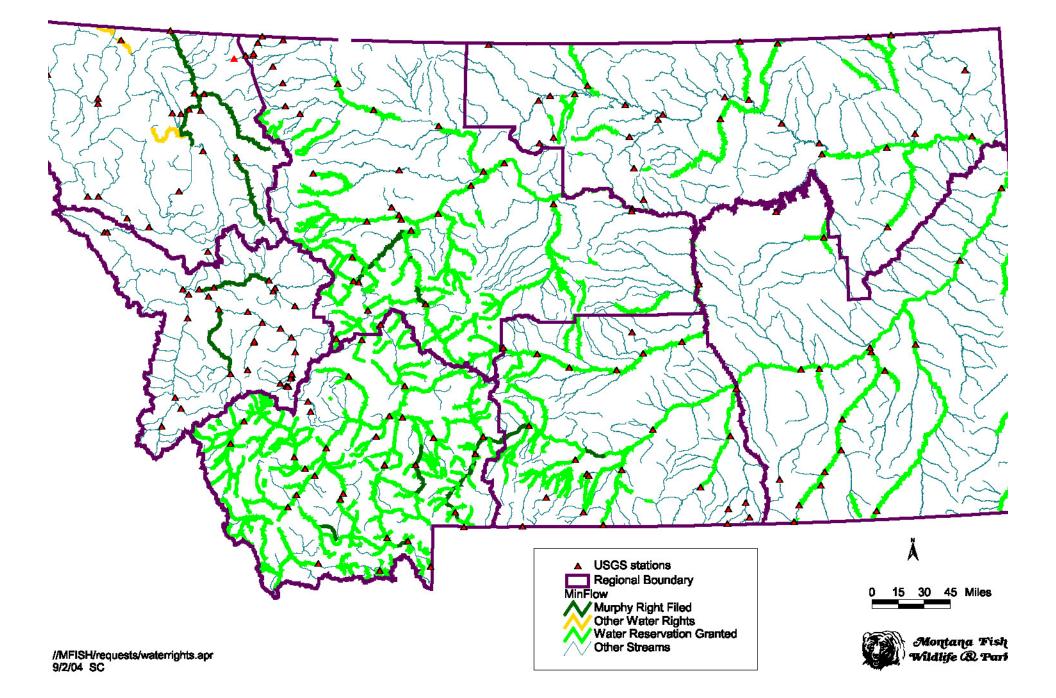
Priority date July 1, 1985

- Lower Missouri River Basin
- (Below Fort Peck Dam)
  - 9 municipalities,
  - 8 conservation districts, and
  - 1 state agency.

### Little Missouri River basin

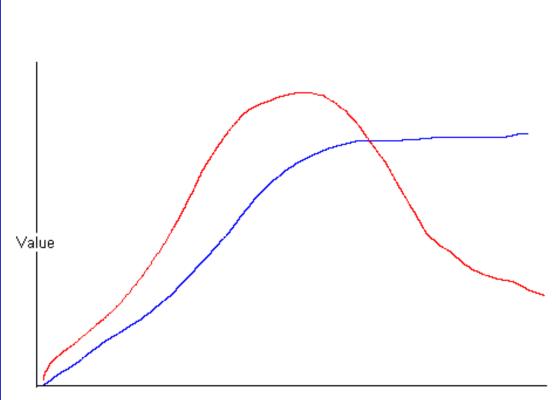
- Water Reservations granted to:
  - 2 municipalities,
  - 3 conservation districts, and
  - 1 state agency.

(Priority date July 1, 1985)



### **Instream Flow Needs**

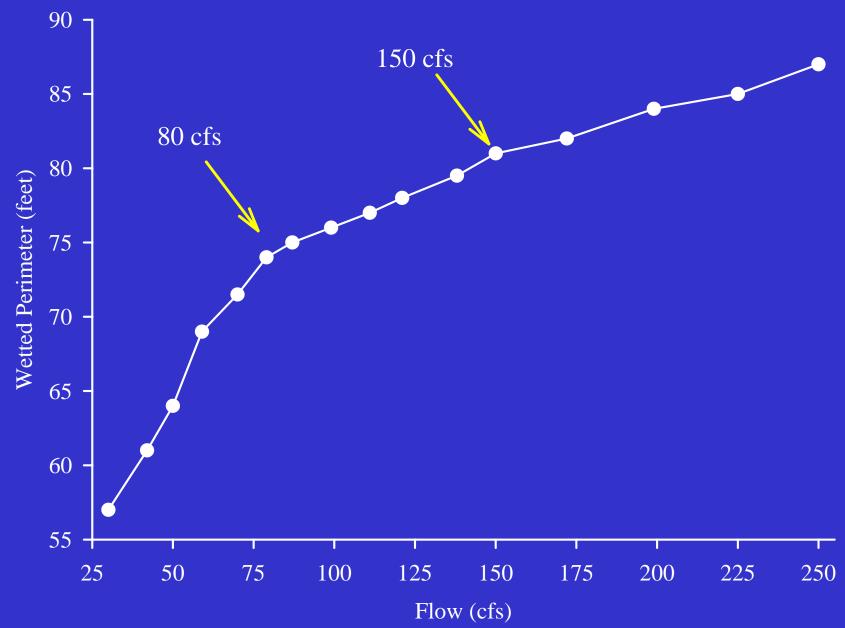
 Assumption that there is a relationship between flow and instream resource values (e.g., fish, recreation, navigation, etc.)



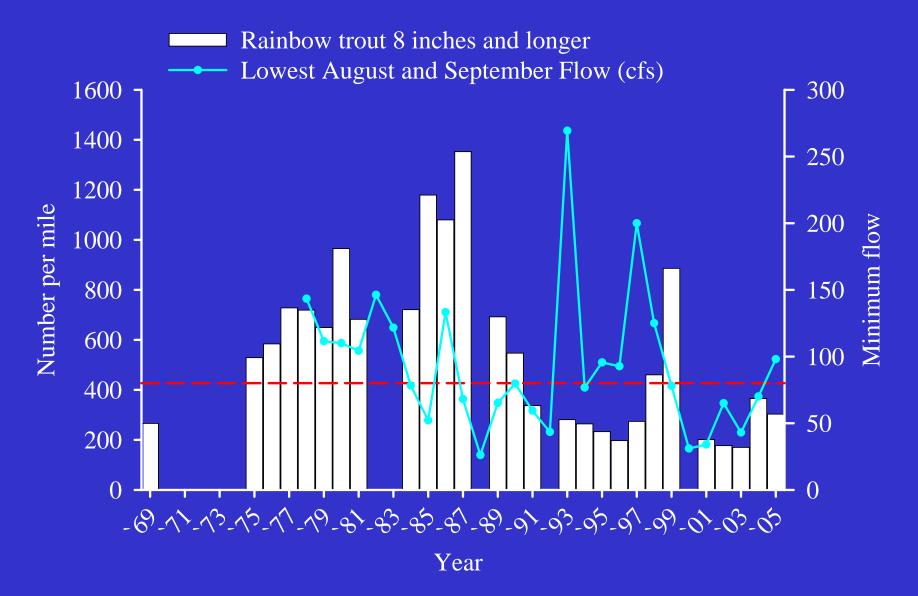
## Smith River

### **Recruitment and Summer Flows**

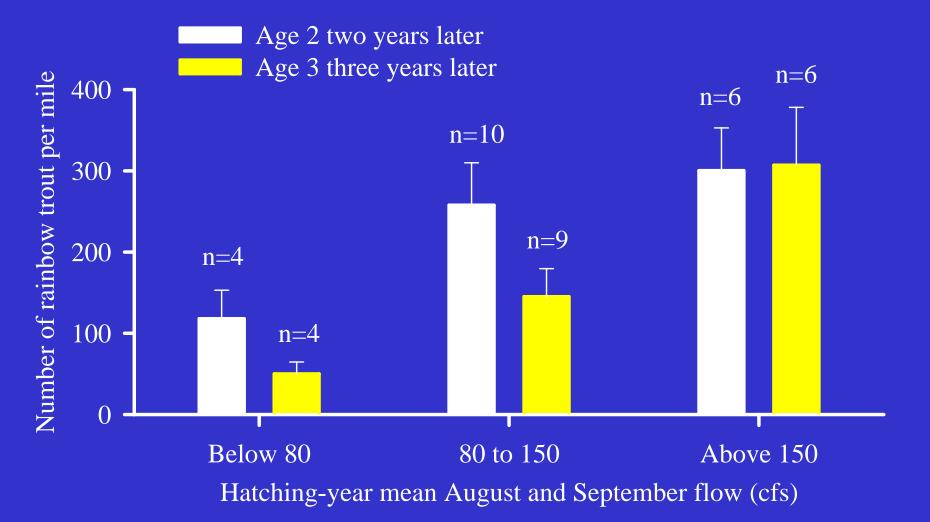
# Relationship between available habitat in riffles (wetted perimeter) and flow in the Smith River



### Adult rainbow trout and low summer flows

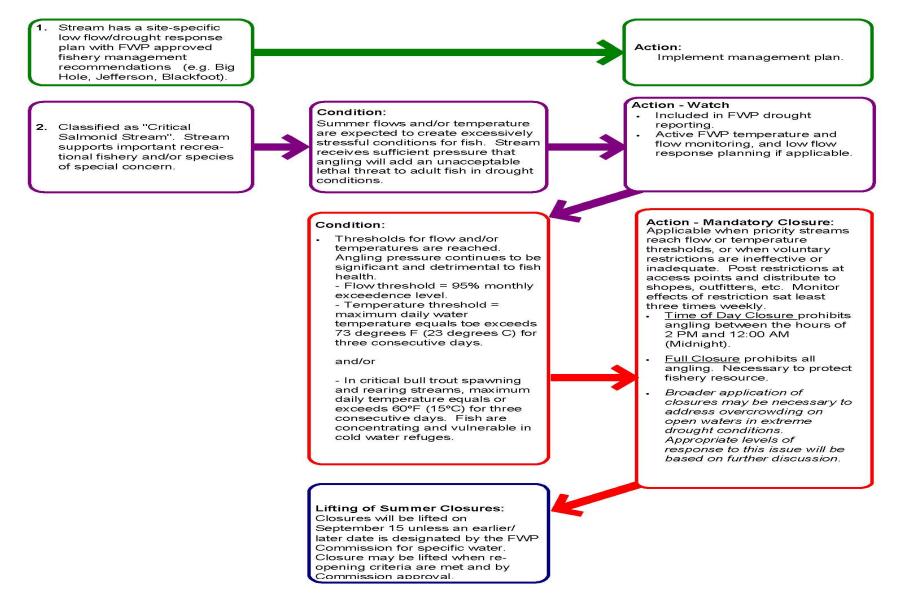


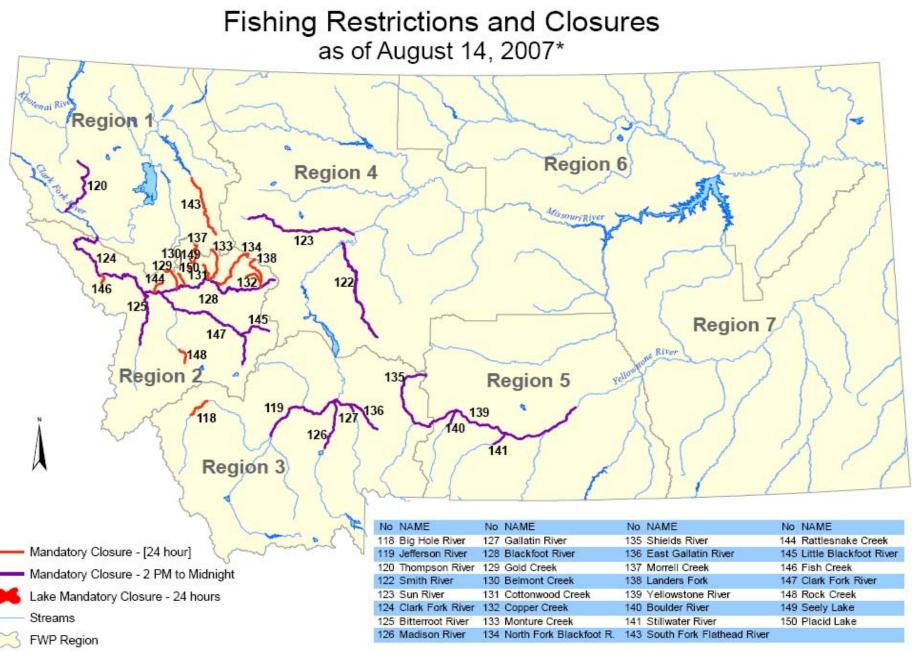
### Relationship between rainbow trout recruitment and average hatching-year flow during August and September in the Smith River



#### **FWP Fishing Closure Considerations Flow Chart**

For Cold Water Streams in Summer Low Flow Conditions





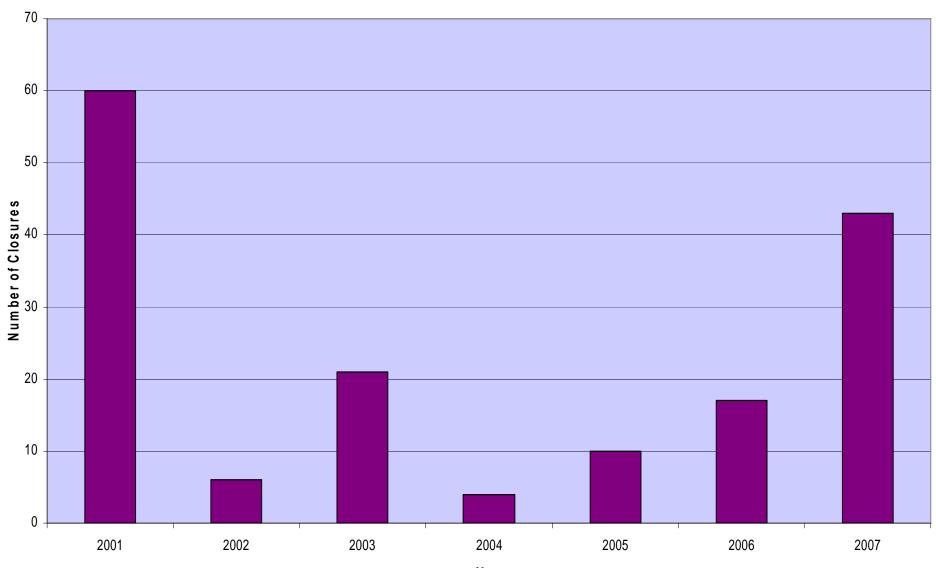
\*Map is updated as new closures are posted.

Refer to http://fwp.mt.gov/fishing/guide/waterclosure.aspx for a current list of all active closures. Rev.14



#### Fishing Closures - Recent History

Number of Fishing Closures



Year

Local Planning Areas

- Nearly 50 local planning groups / watershed groups.
- Collaborative, multistakeholder & often consensus based decision making.
- Management focus vs. quantification of rights.

#### Watershed Group List

**Big Hole Watershed Committee Big Spring Creek Watershed Partnership Bitter Root Water Forum** Blackfoot Challenge - Blackfoot River Watershed **Bobtail Creek Watershed Group Buffalo Rapids Watershed Project Bullhead Water Ouality Project Careless Creek Watershed Cedar Creek Watershed Project** Deep Creek Watershed **Devil's Kitchen Management Team** East Pioneer Experimental Stewardship Committee Elk Creek Watershed Council **Flathead Basin Commission** Flint Creek Watershed Kootenai River Network, Inc. Lake Creek Partnership Lonesome Lake Coordinated Resource Management Group Lower Missouri River - Coordinated Resource Mananagement Milk River Watershed Nevada Creek Watershed Prospect Creek Rock Creek Trust **Ruby Valley Watershed Program Snowline Grazing Association - CRM** Sourdough Creek Stone Creek Sun River Watershed Sweathouse Creek **Teton River Watershed Group Tri-State Implementation Council Upper Clark Fork River Basin Steering Committee** Upper Shields Upper Tenmile Watershed Steering Group Upper Yellowstone River Task Force White Pine Creek

# Blackfoot Emergency Drought Response Plan



- 3,185 surface water rights in basin.
- 40% (1,270 water rights) > 1 cfs (448 gpm)/65% irrigators.
- 10% of these water rights are on the Blackfoot river mainstem.
   DNRC water rights data base - 2000

### **Plan Premise:**

Shared Sacrifice
Voluntary actions
Equity and Parity in participation:

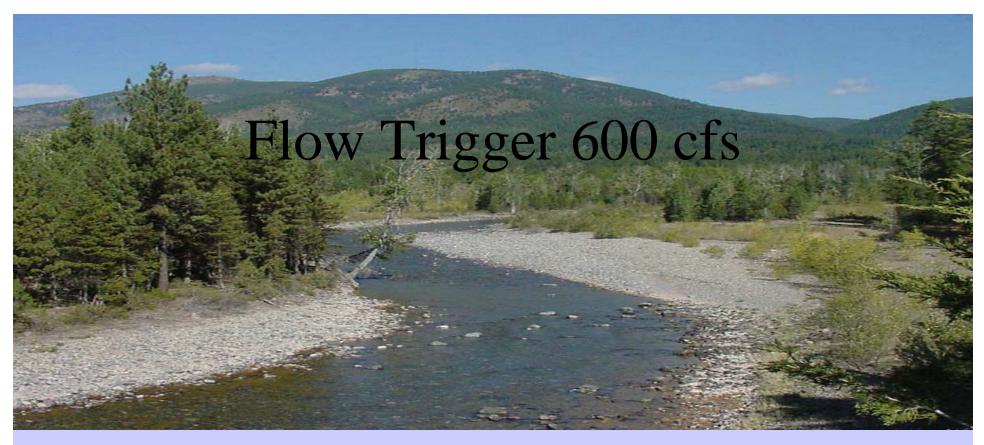
Junior and Senior water users
Multiple users and uses
Basin-wide participation

- In-stream flow water right at Bonner, MT - Contact Plan Participants to implement **Conservation Plans.** Confer with FWP regarding low flow & temperature conditions. -FWP/DNRC begin monitoring river/streams - Drought Committee recommends "Call List" to FWP. - FWP reviews/issues Murphy Right "Call."

Flow Trigger

700 cfs

St. Altartak



- Committee convenes and confirms participation.
- Voluntary fishing restrictions implemented.
- Anglers & Outfitters asked to reduce fishing pressures
- Based upon temperatures mandatory restrictions on fishing & angling.
- Additional "Call" on core "bull trout" tributaries

# Flow Trigger 450 cfs

- Emergency Meeting of Drought Committee called.
- Close core Bull Trout streams and reaches to all fishing.
- Request participation or additional participation, especially to senior water users.
- Evaluate junior users and determine if additional "Calls" should be made by FWP.

# Storage

- 10,000 A.F. Dedicated storage in Painted Rocks; 2,000 in Como
- Goal: 402 cfs at **Bell Crossing**





**Painted Rocks** Reservoir