

BEFORE THE FISH, WILDLIFE AND PARKS COMMISSION  
OF THE STATE OF MONTANA

In the matter of the adoption of New Rules I through VI regarding angling restrictions and fishing closures )  
 ) NOTICE OF ADOPTION  
 )

TO: All Concerned Persons

1. On March 27, 2008, the Fish, Wildlife and Parks Commission (commission) published MAR Notice No. 12-341 on the proposed adoption of the above-stated rules at page 516 of the 2008 Montana Administrative Register, Issue No. 6.

2. The commission has adopted New Rule II (ARM 12.5.502), New Rule III (ARM 12.5.503), and New Rule VI (ARM 12.5.509) as proposed.

3. The commission has adopted New Rule I (ARM 12.5.501), New Rule IV (ARM 12.5.507), and New Rule V (ARM 12.5.508) as proposed but with the following changes from the original proposal, matter to be stricken interlined, new matter underlined:

NEW RULE I (12.5.501) ANGLING RESTRICTIONS AND FISHING CLOSURE DEFINITIONS (1) remains as proposed.

(2) ~~"95% exceedence level" is the daily average stream flow that is equaled or exceeded in 95% of the past years of record on that date. Flows that are of 95% exceedence or higher represent an extreme low flow condition.~~ "5th percentile of daily mean values for this day" is the daily stream flow value that, based on a scale of one hundred, indicates the percent of a distribution equal to or below it. For example, a display of daily stream flow conditions at the 5th percentile is equal to or greater than only 5 percent of the discharge values recorded on this day of the year during all years that measurements have been made. Flows that are 5th percentile or lower represent an extreme low flow condition.

NEW RULE IV (12.5.507) ANGLING RESTRICTION AND FISHING CLOSURE CRITERIA (1) and (1)(a) remain as proposed.

(b) one or more of the following environmental conditions has been determined by the department to exist:

(i) on streams managed for salmonids daily maximum water temperatures reach or exceed 73 degrees Fahrenheit at any time during the day for three consecutive days;

(ii) stream or river flows fall to or below the ~~95% daily exceedence~~ 5th percentile of daily mean values for this day flow level based upon hydrologic records for that water body;

(iii) in bull trout streams designated by the department, a daily maximum water temperature equal to or exceeding 60 degrees Fahrenheit at any time during the day for three consecutive days; or

(iv) water conditions meet the criteria for angling restrictions as stated in a Drought Management Plan.

(2) A fishing closure may be implemented when:

(a) conditions of (1) develop;

(b) dissolved oxygen is equal to or less than 4 ppm when measured in the early morning before sunrise;

(c) water conditions meet the criteria for fishing closures as stated in a Drought Management Plan; or

(d) other biological or environmental conditions such as, but not limited to, water body pollution, disease, and shifts in angling pressure exist that the department determines have the potential to adversely affect the fishery.

NEW RULE V (12.5.508) REOPENING WATERS (1) remains as proposed.

(2) The department may reopen streams managed for salmonids when the department determines in its discretion that daily maximum water temperature does not exceed 70 degrees Fahrenheit for three consecutive days.:

~~(a) daily maximum water temperature does not exceed 70 degrees Fahrenheit for three consecutive days; and~~

~~(b) eight to fourteen day climate forecast indicates improved and cooler climatic conditions.~~

(3) Streams designated by the department to have bull trout shall remain closed until the following conditions occur:

(a) daily maximum water temperature equals or does not exceed 60 degrees Fahrenheit for three consecutive days;

~~(b) eight to fourteen day climate forecast indicates improved and cooler climatic conditions; and~~

~~(c)~~(b) when flow regimes provide adequate security habitat.

4. Two hearings were conducted and comments were received via letter and e-mail. Eleven written responses were received and only two people testified at the hearings. Those providing oral comment also provided corresponding written comment. Nine respondents spoke in favor of the rule package but had one or more suggestions related to a specific rule or rule subsection. One respondent spoke in general disfavor of the rule package. Another respondent provided both positive and negative responses with more emphasis on concerns of amendments as they related to their geographic area of interest. The following comments were received and appear with the commission's responses:

Comment 1: One comment recommended that New Rule I(2) express and define low flows in terms of United States Geologic Survey (USGS) 20th percentile rather than 95% exceedance. The percentile flow data is easier for the public to find.

Response 1: The recommendation for the use of percentile values rather than exceedance values is an excellent recommendation. The accessibility of the USGS that expresses stream flow statistics in terms of percentile flows aids to the transparency of the angling rules and closure process. Percentile flows and exceedance flows are both common hydrologic values to statistically compare period

of record discharges. A 95% exceedance (a stream flow that is met or exceeded 95% of the time) is equivalent to a 5th percentile daily mean for that day based upon the period of record. A percentile is a value on a scale of one hundred that indicates the percent of a distribution that is equal to or below it. For example a daily stream flow discharge of 5% is equal to or greater than only 5 percent of the discharge values recorded on that day of the year during all years that measurements have been made. The USGS considers any stream flow percentile of 25 percent or lower a below normal flow. Percentile flows are available for long term gaging sites and is available via their web site, <http://waterdata.usgs.gov/mt/nwis/sw> . (See also response #7.)

Comment 2: The commission received comments from three entities that oppose the local commissioner approval criterion implied in New Rule II(1) because the social and political conditions would influence decision-making more than environmental conditions. All recommend that the Director of Fish, Wildlife and Parks (director) be delegated the authority to make the immediate time-sensitive decisions. Director's decisions can then be revisited at special or regular commission meetings.

Response 2: The commission declines the recommendation to delegate solely to the director. By statute the commission is given the authority to set and modify angling and hunting regulations. While operating under the Drought Fishing Closure Policy, prior to the development of these rules, the department would bring a quorum of the commission membership together to rule on the modified angling regulations. Assembling this quorum in a timely fashion proved difficult. The primary purpose of New Rules I through VI is to streamline the response time by delegating the authority to a smaller decision making group. By engaging the department and at least one commissioner the process is one that can more efficiently respond to rapidly changing conditions while still recognizing the statutory requirement to keep the commission involved.

Comment 3: The commission received one comment suggesting that the commission delete references to angling pressure found in New Rule IV(1)(a) because the agency had the resources to evaluate angling pressure during or immediately prior to implementing angling restrictions or closure. It was also stated that many people believe there is too much angling pressure every year.

Response 3: Angling pressure, under these rules, is not specifically measured prior to the establishment of a special angling regulation. The department, via user surveys, evaluates angling pressure every other year. This measure of past levels of angling pressure aids in identifying water bodies where it may be necessary to more actively monitor temperature, flows, or other environmental issues that are the criteria included in New Rule IV. Temperature and flow are the real time environmental values assessed to determine if additional angling regulations are needed.

Comment 4: The commission received one comment recommending that two or more criteria found in New Rule IV must be met before the angling restrictions or closures are implemented. For example, both the threshold for high temperature and low flow must be met before modifying any angling regulation.

Response 4: Water temperatures have been the significant stimulus for restricting angling on a water body according to the policy, which these rules mirror. It is possible for temperatures to rise above 73 degrees well before flow levels reach a level of 95% exceedance (5th percentile daily mean values) for a given date and this has the potential to be detrimental to the fishery. Evaluating temperature and flow as a required combined condition would not provide adequate protection for the fishery resource. The commission is adopting New Rule IV without making the threshold criteria additive when evaluating the need to restrict angling or closing a water body.

Comment 5: One respondent stated that the 73-degree threshold defined in New Rule IV(1)(a)(i) and used to determine the need to implement the angling closure rule probably happens every year on the Yellowstone River.

Response 5: The Yellowstone River is a long and dynamic river flowing through multiple microclimates. The proposed rules focus upon the salmonid fishery found in the upper river. The USGS Gage 06192500, Yellowstone River near Livingston, has an approved period of record for mean daily temperatures from November 11, 1999 to September 30, 2007. During this six-year period of record, which corresponds to a period of drought, there were only eleven days where the maximum daily temperature was greater than 73 degrees Fahrenheit. Ten of the eleven days occurred during the period of July 18, 2007 to August 3, 2007. Under the past policy, reflected in these rules, angling in the upper Yellowstone has been restricted once during this six year period. Therefore, based upon this scientific data and experience with fishery management the commission has used 73-degree threshold successfully in the past and will continue this practice.

Comment 6: The commission received one comment recommending that the temperature thresholds expressed in New Rule IV(1)(a)(i) should be higher for the Yellowstone River. It was recommended that the temperature threshold for closure be increased from 73 degrees Fahrenheit to 75 degrees Fahrenheit.

Response 6: Optimal temperatures for rainbow and brown trout range from 61-64 degrees Fahrenheit. At 66 degrees Fahrenheit, angler catch declines and fish begin movement to cold-water refuges. At 73 degrees excessive metabolic rates threaten growth and survival. At 77 degrees Fahrenheit, high mortality occurs. At 75 degrees Fahrenheit, threshold provides less of a buffer between environmental conditions causing stress and conditions that are likely affected increased mortality.

Comment 7: The commission received one comment supporting the criteria found in New Rule IV used to trigger an evaluation of and need to implement angling restrictions or closure. However, they also thought that the 95% exceedance flow is

a bit too low. The commission was urged to revisit this criterion and consider adoption of the 75% exceedance flow. As noted in comment 1 another review suggested that we use the 20th percentile or 80% exceedance.

Response 7: The 95% exceedance, or 5% percentile daily mean flow, is admittedly a very low stream flow condition. This value reflects the department's current policy and management actions over the past six years of drought. The commission will retain the flow level in New Rule IV.

Comment 8: The commission received one comment to amend New Rule IV(2)(a) and current policy as it applies to the Thompson River. It was recommended that Thompson River should be subject to the full closure when the lower Thompson River temperatures reach 70 degrees Fahrenheit for three consecutive days.

Response 8: A statewide standard for angling restrictions and closures for stream and rivers supporting salmonids lessens confusion with angling public and maintains transparency of process. In those watersheds where a detailed drought plan is desired the proposed rules allow for the adoption of a local Drought Management Plan that have more specific management criteria. Under these plans anglers, water users, and other community members develop a multifaceted drought plan that incorporates more detailed and basin specific management criteria and also actively aid the implementation of these plans.

Comment 9: In reference to Rule IV(2)(b) support for the closure criteria was expressed, although questions were raised relative to the dissolved oxygen standard. Commenter noted that the four parts per million (ppm) dissolved oxygen trigger is vague as to where and exactly when in the early morning dissolved oxygen will be measured. It was suggested that this subsection could be fleshed out a little.

Response 9: Dissolved oxygen levels are lowest during nonsunlight hours, typically in response to aquatic plant respiration cycles. In most instances dissolved oxygen conditions are at their lowest level at dawn. New Rule IV(2)(b) requires measurement of dissolved oxygen in the early morning before sunrise. Where dissolved oxygen levels are measured will depend upon both the water body and its existing instrumentation. Some USGS gage sites currently collect dissolved oxygen data. However, the collection of dissolved oxygen data is more likely to occur in specific river reaches where there is an active water quality-monitoring project or in reaches known to have water quality issues during low water. In those instances placement of instrumentation will be in response to standard operating procedures for data collection.

Comment 10: One respondent noted that the "other environmental conditions" criteria, New Rule IV(2)(d), are too vague and FWP might consider specifying what some of these criteria could be.

Response 10: In response to public comment asking that environmental conditions be clarified the wording, "such as but not limited to, water pollution, disease and

shifts in angling pressure" have been added to New Rule IV(2)(d) after the phrase, "other biological or environmental conditions".

Comment 11: Support was given to the re-opening provisions and criteria of New Rule V(2)(a) related to water temperatures not exceeding 70 degrees Fahrenheit. However one respondent suggested that the reference to weather forecast criteria be deleted (see comment 12) and that the time period for maintaining the 70 degrees Fahrenheit at any time of day be extended from 3 to 4 consecutive days.

Response 11: New Rule IV Reopening Waters (2)(a) lists as a criteria for lifting angling restrictions or closures a cooling of waters to 70 degrees Fahrenheit for three consecutive days. FWP examined USGS maximum daily temperature data for several salmonid streams in the Yellowstone, Missouri, and Clark Fork drainages. These data showed that after temperatures fell below 70 degrees Fahrenheit for three consecutive days stream temperatures could again rise to higher levels. The daily maximum temperatures did rise above 70 but no instance was found where the maximum daily stream temperature rose to or above the 73 degree threshold. Therefore, it appears unlikely that once stream temperatures fall to 70 degrees Fahrenheit for three consecutive days that environmental conditions would trigger additional closure or restriction.

Comment 12: After reviewing New Rule V(2)(b) and (3)(b) four respondents suggested the commission eliminate reference to and reliance on weather forecast data. One comment noted that if this forecast criterion is used, a reliable and standardized data source, such as National Oceanic and Atmospheric Administration, should be noted.

Response 12: Based upon public response and the agency's examination of temperature criteria on several salmonid rivers it appears that the existing maximum daily stream flow conditions, in the preponderance of situations, are likely to provide adequate evidence of improved conditions and lifting of angling restrictions or closure. The inclusion of weather forecast data criteria in this rule is unnecessary.

Comment 13: The commission received one comment suggesting the commission consider establishing a phone number that would provide up-to-date information on stream closures and reopening and add this notification method to New Rule VI(1).

Response 13: Angling restrictions and closures are announced through press releases, posted at fishing access sites, and posted on the department's website. During office hours, agency staff is available to assist cliental. Automated telephone technology has been replaced with cell phones many of which can access internet data sources including the department's web site. Based upon past agency utilization of this automated telephone technology the expense to both the provider and user are greater. Additionally adding this notice methodology is less efficient than the currently available internet access.

Comment 14: The commission received one comment stating that they were uncomfortable with automatic reopening on Sept. 15 found in New Rule V(1). They noted that data, water temperatures, and flow should guide reopening of waters to angling not fixed calendar dates.

Response 14: Evaluation of stream temperature conditions indicated that by September 15 the length of daylight hours has shortened considerably making it difficult for seasonal climatic conditions to raise water body temperatures above the temperature thresholds that would suggest the need for continued implementation of angling restriction or closure. Considering these fall climatic conditions these criteria allow streams to be opened to angling without doing special notices, postings, or press releases.

Comment 15: During a public informational meeting held in Livingston, Montana, prior to the notice period but after New Rules I through VI were sent, meeting participants expressed concern that the temperature threshold listed in New Rule IV(1)(i) would apply to cool and warm water fisheries of the Yellowstone and lower Missouri Rivers.

Response 15: While not expressed via written comment or during either of the two hearings, the commission and department wish to avoid any future confusion related to the applicability of this standard and criteria. The 73 degree Fahrenheit criteria are targeted at salmonids and the streams management for those species. Therefore, language has been added to New Rule IV(1)(i) to reflect this concern.

/s/ Steve Doherty  
Steve Doherty, Chairman  
Fish, Wildlife and Parks Commission

/s/ Rebecca Jakes Dockter  
Rebecca Jakes Dockter  
Rule Reviewer

Certified to the Secretary of State June 16, 2008.