

## United States Department of the Interior

BUREAU OF LAND MANAGEMENT Colorado State Office 2850 Youngfield Street Lakewood, Colorado 80215-7210 www.co.blm.gov



In Reply Refer To: 7250 (CO-932)

Ms. Linda Bassi Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, Colorado 80203 JAN 1 4 2016

Dear Ms. Bassi:

The Bureau of Land Management (BLM) is writing this letter to formally communicate its instream flow recommendation for Piceance Creek, located in Water Division 6.

Location and Land Status. Piceance Creek is tributary to the White River approximately 19 miles northwest of Meeker. This recommendation covers the stream reach beginning at the confluence with the Dry Fork and extends downstream to the confluence with the White River. Approximately 61 percent of the 7.72-mile reach is publically owned, while the remaining 39 percent is privately owned. Of the 61 percent of the reach that is publicly owned, 59 percent is managed by BLM and 41 percent is managed by Colorado Parks and Wildlife (CPW).

**Biological Summary.** Piceance Creek is a moderate gradient stream in a canyon with variable widths. In some locations, there is sufficient width in the canyon bottom for the stream to meander over time. In other locations, stream movement is confined by bedrock. As such, the stream has a stable channel but has a highly variable substrate size. The stream has a good mix of riffle, run and pool habitat to support native fish populations. Water quality, water temperatures and food sources are also suitable for native species.

Fishery surveys indicate that the creek supports self-sustaining populations of flannelmouth suckers, speckled dace and mountain sucker. Fish surveys have confirmed the presence of flannelmouth suckers during the fall, meaning that this species uses the creek year-round and not just during the spring spawning season. Very few significant tributaries enter the White River at the low elevations that are required for flannelmouth sucker habitat. Accordingly, this tributary provides a very important extension of the flannelmouth sucker habitat in the White River. The creek is also known to provide habitat for leopard frogs, which appear on BLM's sensitive species list.

The creek supports a riparian community comprised of willows, sedges and rushes. The riparian community has been impacted by historic grazing practices but is now on an upward trend.

**R2Cross Analysis.** BLM and CPW collected the following R2Cross data from Piceance Creek. Note that the selection of critical riffles was designed to reflect the high variability in riffle width along this segment.

Cross Section Date	Discharge Rate	Top Width	Winter Flow Recommendation (meets 2 of 3 hydraulic criteria)	Summer Flow Recommendation (meets 3 of 3 hydraulic criteria)
06/21/2005 #1	11.05 cfs	26.3 feet	Out of confidence interval	4.89 cfs
07/05/2006 #1	2.32 cfs	19.7 feet	5.00 cfs	5.00 cfs
09/18/2000 #1	4.63 cfs	29.2 feet	3.76 cfs	Out of confidence interval
09/18/2000 #2	3.82 cfs	34.0 feet	5.48 cfs	Out of confidence interval
09/12/2012 #2	5.36 cfs	19.7 feet	2.12 cfs	2.74 cfs
09/12/2012 #3	5.78 cfs	23.5 feet	3.29 cfs	3.79 cfs

Averages:

3.93 cfs

4.10 cfs

BLM's data analysis, coordinated with CPW, indicates that the following flows are needed to protect the fishery and natural environment to a reasonable degree.

4.0 cubic feet per second is recommended from January 1 to December 31. In most of the cross sections collected, the recommended flow rates are driven by the average depth and average velocity criteria. Protecting average velocity for spawning habitat is important, because many portions of this reach that are suitable for spawning are low gradient. Some portions of this reach have a high width-to-depth ratio, so it is also important to maintain sufficient depth for fish passage and the overwintering of fish. BLM believes that maintaining 4.0 cfs will maintain acceptable physical habitat characteristics over a wide variety of riffle widths, and will also serve to keep pools sufficiently free of ice to allow the overwintering of fish.

Water Availability. BLM is aware of two surface diversions within this reach, the White River Mesa Ditch and Burch Ditch No. 2. In addition, there are a high number of decreed diversions located upstream on Piceance Creek and its tributaries. BLM recommends using USGS gage 09306222 (Piceance Creek at White River, CO) as an indicator of water availability. This gage has a long period of record, and its records incorporate all the impacts to stream flows associated with upstream ditch diversions and return flows. This gage shows that the recommended 4.0 cfs flow rate is available substantially in excess of 50 percent of the time, which is the standard the Colorado Water Conservation Board (CWCB) uses for water availability.

Relationship to Management Plans. The White River Resource Management Plan identifies management of streams supporting sensitive fish species as a priority for BLM. The plan specifies that BLM will work to improve riparian and aquatic conditions in these streams, and will also work to prevent surface disturbances close to them. In addition, the plan specifies that BLM will work with the CWCB to appropriate instream flow water rights to protect these fisheries. The objective of this cooperation is to protect habitats for sensitive species, thereby avoiding the listing of the species under the Endangered Species Act.

Data sheets, R2Cross output, fishery survey information and photographs of the cross section were included with BLM's draft recommendation in January 2013. We thank both CPW and the CWCB for their cooperation in this effort.

If you have any questions regarding our instream flow recommendation, please contact Roy Smith at 303-239-3940.

Sincerely,

Brian St. George

Deputy State Director

Resources and Fire

cc: Keith Sauter, White River Field Office Kent Walter, White River Field Office