

DRAFT INSTREAM FLOW RECOMMENDATION – SUBJECT TO CHANGE

Mr. Rob Viehl
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

Dear Mr. Viehl:

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

Location and Land Status. Wheeler Creek is tributary to South Fork Big Creek near the community of Pearl in North Park. This recommendation covers the stream reach from the headwaters on Independence Mountain to the headgate of the Akers Ditch, a distance of approximately 3.0 miles. Approximately 2.0 miles of the stream segment is located on lands managed by BLM, while the remaining 1.0 mile is located on privately owned lands.

Biological Summary. Wheeler Creek is a moderate gradient stream with small to medium-sized substrate. The upper part of the creek flows through gently sloping forested areas, and the lower portions of the creek flow through meadow habitat. The riparian community is composed of spruce, alder and multiple species of willow. The stream provides a good mixture of undercut banks, run, and riffles for fish habitat. Fishery surveys indicate that the stream supports a self-sustaining population of brook trout with a variety of age classes.

R2Cross Analysis. BLM collected the following R2Cross data from the creek:

Date	Discharge	Top Width	Winter (2 of 3 criteria hydraulic criteria)	Summer (3 of 3 criteria hydraulic criteria)
07/16/2020 #1	0.44 cfs	6.55 feet	1.10 cfs	Out of range
06/16/2021 #1	0.89 cfs	6.10 feet	0.62 cfs	0.89 cfs
06/16/2021 #2	0.77 cfs	4.29 feet	0.65 cfs	1.10 cfs
Averages:			0.79 cfs	1.00 cfs

BLM's data analysis of this data indicates that the following flows are needed to protect the fishery and natural environment to a reasonable degree.

1.0 cfs is recommended for high temperature period, from May 1 through November 30. This recommendation is driven by the wetted perimeter criteria. BLM believes that providing this flow will ensure sufficient physical habitat availability for spawning during October and November, and for providing habitat for fry that have emerged prior to May 1, in March and April.

0.8 cfs is recommended for the remainder of the year, from December 1 through

April 30. This recommendation is driven by the average depth criteria. This flow rate should provide sufficient water circulation to prevent total icing in pools that are critical for overwintering fish and will provide sufficient habitat for fry that emerge in March and April.

Water Availability. BLM is not aware of any water rights within the proposed instream flow reach.

The BLM recommends using a variety of data sources to confirm water availability. BLM is not aware of any historical gage data on Wheeler Creek or for the larger South Fork Big Creek watershed in which Wheeler Creek is located. First, the use of Streamstats can provide an estimate of natural water availability. Second, an analysis of diversion records for the Akers Ditch and other downstream water rights can provide an estimate of streamflow with the caveat that the downstream ditches may not divert all of the water available in Wheeler Creek.

Relationship to Management Plans. BLM is very interested in instream flow protection for Wheeler Creek because it is one of the few fisheries managed by BLM in North Park. In addition, the creek is experiencing the effects of a 2015 fire within the watershed that appears to be delivering additional sediment to the creek. Under the current resource management plan, the Wheeler Creek watershed is being managed to recover from the fire, so any land disturbing projects that are implemented are designed to avoid the riparian corridor and avoid additional erosion. The watershed will continue to be managed for dispersed recreational use and livestock grazing.

Data sheets, R2Cross output, fishery survey information, and photographs of the cross section were included with BLM's draft recommendation in February 2022. BLM thanks both the Division of Wildlife and the Colorado Water Conservation Board 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,

Alan Bittner
Deputy State Director
Resources and Fire

cc: Paula Belcher, Kremmling Field Office
Acting Manager, Kremmling Field Office
Elijah Waters, Northwest District Office