Patrick Byorth, President

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Belgrade, MT 59714

February 18, 2003

Director, Bureau of Land Management

Attn: Ms. Brenda Williams, Protest Coordinator

1620 L Street, N.W. Room 1075

Washington, DC 20036

Dear Director,

This letter provides comments from the Montana Chapter of the American Fisheries Society (MCAFS) on the final environmental impact statement (FEIS) addressing coalbed methane in Montana. The MCAFS is an organization of professional fisheries scientists and students from agencies, universities, and the private sector across Montana. Our objectives include the following: conservation, development, and wise utilization of Montana's fisheries; promoting education scientific and technological development; advancement of fisheries science and practice; and exchange and dissemination of knowledge about fish, fisheries, and related subjects. After

reviewing the FEIS, we continue to have grave concerns regarding the impacts of the development of this resource, as currently designed, on fisheries, wildlife, and Montana's aquatic resources.

During the comment period for the draft EIS, we detailed numerous issues addressing the shortcomings of this document from a fisheries perspective. That correspondence is attached for your information. Following review of the FEIS, we were gratified to see that a major deficiency, the omission of a monitoring plan, was rectified in the FEIS. Still, we remain troubled by several aspects of the FEIS and have strong doubts the preferred alternative will adequately protect water quality, fisheries, and associated aquatic life.

A significant shortcoming of the FEIS is the exclusion of bicarbonate in the prediction of effects from the preferred or other alternatives. Bicarbonate is the second most toxic of the common ions and is a common constituent in CBM-produced waters. The reliance on electrical conductivity, an integrative measure of dissolved solids, may not effectively protect beneficial uses when bicarbonate is the predominant anion. This has potential for impacting popular recreational fisheries, small stream assemblages, and recruitment of fish to the Yellowstone River.

The proliferation of evaporative storage basins under the preferred alternative presents another concern for fisheries, aquatic life, and water quality. The FEIS acknowledges that water quality may be negatively affected; however, dispersion of clay soils is expected to reduce permeability over time. Unfortunately, this prediction is conjecture with no empirical data to support it. Recent research funded by the BLM indicates that indirect discharge of concentrated salts from evaporation basins may negatively impact beneficial uses. A study funded by the BLM suggests that indirect CBM discharges can have a profound effect on fish and aquatic life. This study was presented to the MCAFS on February 13, 2003 (see attached abstract) although the BLM has not yet released the full report. Squirrel Creek, a small tributary to the Tongue River had a high level of biological integrity above CBM development in the basin as measured by fish, macroinvertebrates, and periphyton associations. This biological integrity and chemical composition changed dramatically approximately six miles downstream from this site. A lack of fish and dominance by salt tolerant macroinvertebrate and periphyton taxa indicated moderate to severe impairment of beneficial uses at this site. It is likely that CBM-produced waters were largely responsible for this decline.

Finally, small streams in the planning areas receive very little attention in the FEIS. Still, these support diverse communities of fish, macroinvertebrates, and periphyton. The BLM funded study investigating these small streams described diverse, predominantly native fish communities. Many supported fish species likely to be intolerant of salts, such as the longnose dace and mountain sucker. Extirpation of these communities due to increased salts would greatly affect the biodiversity and biological integrity of the region. The Tongue River Reservoir is a probable barrier to recolonization of many of these streams because fish would have to survive a gauntlet of introduced predaceous fish in the reservoir. These types of considerations need to be part of the planning effort associated with CBM development in this area.

In short, we continue to be concerned about the impact of CBM development on fish and aquatic life. While baseline assessments and monitoring may assist in management of produced waters, it is apparent from Squirrel Creek that deleterious effects can occur within a short period of time. Also, the FEIS does not fully address the impacts of numerous evaporative storage basins across the landscapes on water quality and fisheries. A phased approach and requirements for treatment or reinjection of produced waters is a more environmentally responsible management scenario for CBM. We appreciate your consideration of these concerns.

Sincerely,

Patrick Byorth, President

Montana Chapter, American Fisheries Society

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