

October 21, 2010

Wyoming Environmental Quality Council
Herschler Bldg. Room 1714
122 W 25th St.
Cheyenne, Wyoming 82002

FILED
OCT 27 2010
Jim Ruby, Executive Secretary
Environmental Quality Council

Dear Council Members:

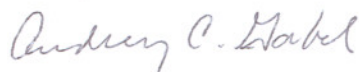
I am writing to support Biodiversity Conservation Alliance's petition to the Environmental Quality Council requesting designation of upper Sand Creek as a very rare or uncommon area because of its botanical value. This petition requests protection from mining exploration and subsequent mining of the area. Timing for making the decision to protect this area is critical as a Canadian company has purchased mineral claims in the headwaters of Sand Creek. Sand Creek is the only road less area left in the Black Hills and the largest botanical area. It contains eastern deciduous, Rocky Mountain, and boreal flora all of which contribute to its enormous biological diversity. Yet we know its unique vegetation and plant diversity has not yet been completely and thoroughly surveyed. Previously unreported species are yet to be discovered and these species may play a vital role in the ecosystem!

I can provide an example of just one species yet to be discovered. Several years ago while hiking in the headwaters of this area, I collected a green alga I had never seen before. It was in a fast flowing part of the stream. I identified this alga to the genus *Prasiola*, which includes species that are marine, species found in wet terrestrial areas, and species that live in rapidly flowing, fresh water streams. I sent my specimen to a phycologist to validate genus identification and to determine the species. It was verified to be *Prasiola*, but sexual reproductive structures that are needed to determine species were not present.

There are fresh water species reported from the United States, but to my knowledge none reported from the Black Hills. Prescott (Prescott, G. W. 1970. How to know the freshwater algae. Wm. C. Brown Company, Dubuque, Iowa. 348 pp.) and Smith (Smith, G. M. 1950. The fresh-water algae of the United States. McGraw-Hill Company, New York. 717 pp.) list the following species from fresh waters: *P. calophylla*, *P. crista*, *P. fluvialis*, *P. mexicana* and *P. nevadense*.

Botanical areas occupy a very small percentage of the Black Hills National Forest. It is unthinkable to sacrifice these priceless areas for destructive surface mining. I strongly urge you to designate upper Sand Creek as a very rare and uncommon area.

Yours truly,



Audrey C. Gabel, Ph.D.
agabel@rushmore.com

903 Spartan Drive, Spearfish, SD 57783
605-642-0989