June 23, 2008 655 N. Cedar St. Laramie WY 82072 (307) 742-9299

Environmental Quality Council 122 W. 25th Street, Herschler Bldg., Rm. 1714 Cheyenne, WY 82002

FILED JUN 2 4 2008 Terri A. Lorenzon, Director Environmental Quality Council

Dear EQC:

I am writing in support of the petition to designate the Sand Creek area as Rare and Uncommon. Comments here specifically address the importance of the site for protection of rare plants. I am a botanist and conservation biologist, and have worked in Wyoming and western South Dakota since 1977. I was the Botanist/Coordinator of the Wyoming Natural Diversity Database (1986-1992), Public Lands Protection Planner with the Wyoming Nature Conservancy (1992-1994), and Ecologist with the Black Hills Community Inventory (1996-1998). Currently I am a freelance botanist. My projects have included general inventories, rare plant surveys and assessments, rare plant monitoring, natural area assessment, and vegetation classification, characterization and mapping.

I've done many projects in the Black Hills, and was involved in natural area evaluation during Forest planning in the early 1990's, which included the Sand Creek area. This area had been identified as a high-priority site for conservation of rare plants by the multi-agency Wyoming Natural Areas Needs Workshop held in 1984, and was included also in a rare plant survey of the northern Black Hills (Ode and Marriott 1990). In 1990 I did a more focused survey of the site, and completed a Suitability Investigation Report for the Forest Service (Marriott 1991). Due to the exceptional flora of the site, Special Botanical Area (SBA) designation was recommended for the Upper Sand Creek area by the Wyoming Natural Diversity Database and the Wyoming Nature Conservancy,.

The gulches and drainages of the northern Black Hills are rich in rare plant species, including many that are relicts from the cooler wetter times of the last ice age. These are referred to as "disjuncts" ... populations now isolated from the main range of the species, generally to the north. The northern Hills also support many plant species near the edge of their overall range, referred to as "peripherals". The Sand Creek drainage includes an especially high concentration of rare plants, both disjuncts and peripherals, and is exemplary of the "Botanical Crossroads" nature of the Black Hills.

In our rare plant survey of the northern Black Hills, Upper Sand Creek had the largest number of rare plant populations of any site surveyed (Ode and Marriott 1990). The site assessment in 1990 documented populations of ten plant species that were rare enough to be under consideration for designation as Sensitive for Region 2 of the Forest Service (Marriott et al. 1990). A lot of survey has been done in the northern Black Hills since that time, and yet the Sand Creek are is still considered one of the most significant rare plant hot spots, and as well as

one with less management impact than other similar sites on the Forest. Nine plant species currently designated Region 2 Sensitive or Species of Local Concern grow in the Upper Sand Creek Botanical Area; an additional two are found nearby with high potential habitat within the Botanical Area. These are species sufficiently rare or threatened that viability has been recognized as a management concern by the Forest Service.

During evaluation of the Sand Creek natural area in 1990, mining was identified as a potentially serious threat. At that time there were an estimated 42 hardrock mining claims in the area. The potential for mining remains high (see for example the letter from the Crook County Board of Commissioners to the Council filed June 5, 2008). Destruction from hardrock mining can be extensive, as is clearly seen across the state line in the Lead - Deadwood area, and it is impossible to recreate these ecosystems through reclamation. Every possible protection is needed if mining becomes a reality. This is why the Rare and Uncommon designation is critical. I urge you to consider the Sand Creek area, which has long been recognized as an exceptional botanical area, for designation as Rare and Uncommon.

Sincerely,

[sent electronically]

Hollis Marriott

Marriott, H.J., C. Freeman, M. Fritz, T. Naumann and D. Ode. 1990. Candidate sensitive plant species, USDA Forest Service, Region 2.

Marriott, H.J. 1991. Suitability investigation report for a proposed Upper Sand Creek Special Botanical Area, Black Hills National Forest. Prepared for Black Hills National Forest by the Wyoming Natural Diversity Database, The Nature Conservancy.

Ode, D. and H.J. Marriott. 1990. Sensitive plant inventory of the northwestern Black Hills. Prepared for Black Hills National Forest by the South Dakota Natural Heritage Program, Dept. of Game, Fish and Parks, Pierre, and the Wyoming Natural Diversity Database, The Nature Conservancy, Laramie.