

APPLICATION FOR WITHDRAWAL

**United States Department of Agriculture
Forest Service - Northern Region
Custer National Forest
Billings, Montana**

1. APPLICANT:

USDA Forest Service
Northern Region
P.O. Box 7669
Missoula, MT 59807

2. DELEGATION OF AUTHORITY:

Regional Foresters have been delegated authority by the Secretary of Agriculture and the Chief of the Forest Service for requesting withdrawals on National Forest System lands. The applicant is empowered to act on behalf of the Forest Service pursuant to 7 CFR 2.7 and delegations of authority in 7 CFR 2.60, FSM 1236.11 and FSM 2761.04.

This application is made under the authority of Section 204(d) of the Federal Land Policy and Management Act of 1976; in accordance with regulations contained in 43 CFR 2310.1-2(c). This is not a request for an emergency withdrawal, a classified withdrawal, or an extension or modification of a withdrawal, therefore items 3, 5ii, iii, and 6 of 43 CFR 2310.1-2(c) are not applicable.

3. AGENCY ADMINISTERING LANDS SUBJECT TO APPLICATION:

The requested withdrawal involves only Public Lands under the administration of the U. S. Department of Agriculture, Forest Service, which hereby consents to the application.

4. TYPE OF WITHDRAWAL REQUESTED:

The Forest Service requests withdrawal of these lands from mineral entry under the general mining laws for the purpose of limiting activities under those laws, to maintain other public values in the area, and preserve the area because of its unique geologic and historical values.

5. DESCRIPTION OF THE LANDS:

Lands applied for in this application are wholly under the administration of the Forest Service and have public domain status. The following legal description describes all lands included within the exterior boundaries of the withdrawal application, as required in 43 CFR 2310.1-2(5)(i):

Legal Description:

T. 8 S., R. 27 E., PMM

Section 3: SE $\frac{1}{4}$;

Section 10: N $\frac{1}{2}$ N $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$.

The area described contains 170 acres in Carbon County.

6. EXISTING WITHDRAWALS:

None. Public Land Order No. 6119 withdrew the described lands in Custer Nation Forest from mineral location and entry under general mining laws; however, the withdrawal expired on February 4, 2002.

7. PUBLIC PURPOSE AND PLAN OF USE:

The purpose is for the protection of Big Ice Cave and its subterranean water supply. Big Ice Cave is a unique geologic and hydrologic formation with important cultural and recreational values.

There are numerous limestone caves in the Pryor Mountains (Pryors), but only a few of these develop large quantities of perennial ice. Worldwide, ice caves in limestone are fairly unique occurrences. Big Ice Cave has the best and most unique ice development and is the most visited of any known ice caves in the Pryors. The entrance opens into an immense room of ballroom proportions of which the floor is heavily underlain with ice year round. The ice floor is 25-foot thick at the left rear of the cave where a vertical passageway provides access to other chambers below. The lower-chamber walls are studded with ice crystals exhibiting high light refraction.

The area would be disrupted significantly by mining location or mining activities.

8. EXTENT OF WITHHOLDING & SEGREGATION PERIOD:

The Forest Service requests the lands be segregated from mineral entry under the general mining laws for 2 years in accordance with 43 CFR 2310.2(a). During this period, the USDA Forest Service will prepare an environmental assessment and submit it to the Secretary of Interior in accordance with 43 CFR 2310.3-2. These documents and other records relating to this application may be examined at the Supervisors' Offices of the Custer National Forest, Custer National Forest, 1310 Main Street, Billings, MT, 59105.

9. TEMPORARY LAND USE TO BE ALLOWED DURING SEGREGATION:

The Forest Service will continue to permit uses on the affected area within the statutory authorities pertinent to National Forest System Lands and subject to discretionary approval.

10. ANALYSIS OF OTHER METHODS OF PROTECTION:

Neither a right-of-way under section 507 of the Act nor a cooperative agreement under sections 302(b) and 307(b) of the Act would protect the site from impacts related to location and development of mining claims.

11. DURATION OF THE WITHDRAWAL:

The withdrawal is proposed for 20 years duration to permit maximum public enjoyment of the recreation, wildlife, heritage, and scenery resources of the area.

12. ALTERNATIVE SITES:

The site is a unique and natural geologic site; PLO 6119 which withdrew this area on January 28, 1982 was in place for 20 years prior to its expiration. This request is for a new withdrawal to protect the same area. No other sites have these unique ice features and formations.

13. WATER NEEDS:

Surface Water Rights are not needed to fulfill the purpose of this withdrawal. The Ice Cave formations rely on underground aquifers and surface run-off for which no water rights can be obtained.

14. RECORD AVAILABILITY:

The records relating to this application for withdrawal are available at the Forest Supervisor's Office, Custer National Forest, 1310 Main Street, Billings, MT, 59105.

15. PRELIMINARY IDENTIFICATION OF MINERAL RESOURCES IN THE AREA:

Big Horn Limestone operates the existing limestone quarry east of Warren, MT. Negotiations are currently being held related to the possible sale of this quarry to Basin Electric/Dakota Coal located in Bismarck, North Dakota.

Basin Electric/Dakota Coal also holds about 410 acres of unpatented lode mining claims immediately adjacent to the existing Big Horn Limestone quarry, where high calcium limestone is currently being mined. Basin Electric/Dakota Coal has been conducting exploration activities on those claims, most of which are on National Forest System lands. This has consisted of core drilling within the claim block in order to test the grade of the limestone (its calcium content). Basin Electric/Dakota Coal operates a number of coal-fired generators in the Dakotas. High calcium limestone is often used as an air pollution abatement system in order to "scrub" sulfur compounds from emissions prior to atmospheric discharge.

In the recent past, Basin Electric/Dakota Coal has been purchasing air pollution scrubbing limestone from Big Horn Limestone. The current contract for this material is nearing termination. Basin Electric/Dakota Coal has expressed interest in a permitting and operating a new limestone mine

located within the claim block, which they control. The Forest Service, Montana Department of Environmental Quality, and the Bureau of Land Management have processed a submitted Plan of Study for Baseline Data collection. This information would be used in support of the required environmental analysis if Basin Electric/Dakota Coal submits a Plan of Operations for a limestone mine. The limestone claimed by Basin Electric/Dakota Coal appears to be of sufficient quality to qualify as locatable under the mining law and to be used in air pollution abatement applications.

In summary, there are three types of known mineral deposits in the vicinity of the Big Ice Cave. Historically, the area has been prospected for high grade uranium deposits and there may be low to moderate potential for those types of deposits in the vicinity of the Cave. There has also been recreational collecting of low-grade agate and jasper in the area. However, the most significant deposit is the high calcium limestone around Big Ice Cave that may be of high enough quality to be claimed under the 1872 Mining Law.

As demonstrated by the activity near Warren, Montana, future demand for high calcium limestone may create a moderate potential for mineral activity and claim staking for high calcium limestone elsewhere in the Pryor Mountains. Therefore, a moderate risk exists that claims could be staked and mineral activity proposed in the vicinity of Big Ice Cave should the area be opened to mineral entry.