

## **WORTHINGTON MOUNTAINS WILDERNESS STUDY AREA**

### **1. THE STUDY AREA - 47,633 acres**

The Worthington Mountains WSA (NV-040-242) is located in a remote part of the Ely District within Lincoln County in east-central Nevada. The nearest paved highway is about 15 miles to the south, and the nearest incorporated town is Alamo, Nevada, approximately 38 miles southeast. The WSA is comprised entirely of public land with no private or State inholdings.

Most of the boundary is comprised of dirt roads and jeep trails. The east boundary of the WSA is formed by a mile and a half portion of County Road 433 which connects to the Freiburg Well-Rhodes Spring Road on the west side of Garden Valley. An unnamed jeep trail along the southern terminus of the Worthington Mountains forms the southern boundary of the WSA. A dirt road traversing north-south along the alluvial slopes in Sand Spring Valley is the WSA's western boundary. The northern boundary is formed by a combination of connecting roads, section lines and unnatural man-made features near the Freiberg mining area.

### **2. RECOMMENDATION AND RATIONALE - 26,587 acres recommended for wilderness 21,046 acres recommended for nonwilderness**

The recommendation for the Worthington Mountains WSA is to designate 26,587 acres as wilderness and release 21,046 acres for uses other than wilderness. The recommendation is based on the rugged wilderness values present, the lack of competing uses or other resource values, ease of management, and public support. The incredibly steep nature of the WSA hinders almost every competing use, and the lack of private or State inholdings helps eliminate potential conflicts in the future. It is this imposing character that provides an outstanding diversity of opportunities for recreation for those willing to seek them out. Foremost among these opportunities leading to a wilderness recommendation are the spelunking opportunities in Leviathan Cave. Also included in the recommendation area are the eastern alluvial approaches of the Worthington Range which are almost totally free of man's imprints. This particular landform received strong public support which led to the wilderness recommendation. Ordinarily, alluvial bajadas are excluded because of unnaturalness or unmanageability; however, the contiguity of this feature compliments the wilderness values of the mountain range as it provides the basin portion of the basin and range province. The relative ease of management also contributed to the recommendation. With the exception of a few mining claims in the northern portion of the WSA, interest in other land uses within the WSA is low.

Several portions of the WSA were recommended for uses other than wilderness due to relatively lower wilderness values, numerous unnatural features, and manageability concerns. These areas contain noticeable roads, ways, pipelines and fence along the sparsely vegetated west bench and detract from the area's naturalness. In addition, the roads penetrating this portion allow easy access into the surrounding unroaded areas. Use would likely continue, creating additional ways even if the area were designated as wilderness. A low foothill area contributes little to the wilderness values of the area, and is physically separated from the mountain range by a canyon through which a road passes to Stink Bug Spring. Another small area is not recommended for wilderness because it is cut off from the rest of the WSA by a way that is used as access to private land just north of the WSA.

### **3. WILDERNESS CHARACTERISTICS**

**A. Naturalness:** The mountainous portion of this WSA which is recommended for wilderness has been maintained in a pristine condition largely due to the extremely rugged nature of the terrain as well as its remoteness from human populations. As a result, most of the area shows little sign of the presence of man. The east bench, also recommended for wilderness, is totally free of manmade features except for three faint

ways created solely by the occasional passage of vehicles associated with livestock grazing.

The more open west bench, recommended for uses other than wilderness has pipelines, a fenceline, and numerous roads and ways are present. While the impact of these intrusions does not greatly affect the overall natural appearance of the bench, they do significantly affect limited portions due to the straight-line configuration of the structures and roads. The lack of good screening on the sloping, low sage-covered bench contributes to the unnatural visual effect of these intrusions.

**B. Solitude:** The opportunities for solitude in the Worthington Mountains are good but not considered outstanding. Although the configuration of the WSA is several miles broad, the mountain range itself is a single narrow ridge and use would tend to concentrate along its spine. Excellent topographic screening is provided by the many side canyons but in most cases vegetative screening is sparse. Most wilderness use will tend to center around Leviathan Cave, since most people who commit the time and effort to visit the area will wish to see its best known feature. The extensive hike required to reach this destination point, however, will serve to limit use. Whether around Leviathan Cave or along the relatively open and passible ridgeline, visitors are not likely to run into many other users because of the remote and inaccessible nature of the WSA. Solitude is adversely affected by the frequent U.S. Air Force low level flight training over the WSA. Training is both subsonic and supersonic, and sometimes occurs below 500 feet above ground level.

**C. Primitive and Unconfined Recreation:** Outstanding opportunities for recreation exist in the portion of the WSA recommended for wilderness. Leviathan Cave provides outstanding opportunities for spelunking with many different cave features. The arduous climb to the cave from the base of the mountain is itself an adventure which forms an integral part of the experience of the cave. The craggy nature of the peaks along the ridgeline interspersed with contorted conifers and lichen covered rocks, hidden pockets of ponderosa pines in the drainages, provide a remote setting in which high quality opportunities for hiking, nature study, primitive backpacking, camping, rock climbing, and photography can be enjoyed. This is a different kind of wilderness. It's appeal doesn't come from brilliant fall color or high mountain streams. Instead, austerity and ruggedness are its hallmarks.

The nonwilderness portion of the WSA offers recreation opportunities of a much lower quality than the area recommended for wilderness because is it unforested and relatively featureless and exists more as a barrier to be crossed to achieve access to the mountains rather than as a recreation destination.

**D. Special Features:** There are three known caves more than 100 feet deep in the extensive limestone deposits of the WSA. Leviathan Cave, already described, is the largest of these. Jinx and Lavender Caves are much smaller and are located in the same part of the mountain range as is Leviathan Cave. Potential is very high for the discovery of additional caves. Bristlecone pines occur in the higher elevations of the Worthington Mountains WSA, widely and sparsely scattered over at least 2,000 acres. Among those which have been dated in the area, the oldest is over 2,100 years old. Scattered ponderosa pines occur in the north end of the WSA and although not an unusual species, their occurrence in this part of Nevada is noteworthy. Although the WSA has never undergone an archaeological inventory, several prehistoric artifacts have been reported. Among these are an Indian sandal, a metate, and a hunting blind.

#### **4. MANAGEABILITY**

The area recommended for wilderness and nonwilderness are manageable as wilderness in the long term with little cost or effort. There are no private lands located within the entire WSA. Slight manageability problems could be met in the north end of the WSA where it abuts the Freiburg Mining District. Currently there is no production from the area and exploration interest is very low; however, claims staked throughout the mining district overlap onto the area recommended for wilderness. The eastern alluvial approaches included in the recommended wilderness are open, sagebrush covered country. Manageability of this area presents little difficulty due to the absence of competing resource uses (except livestock grazing) and the lack of existing

access and limited traffic in the valley.

The nonwilderness areas would be manageable, but with some difficulty. Several access routes penetrate deeply into the area, lending easy access to unroaded adjacent areas. The relative remoteness of this area from administrative headquarters would incur high costs for ground patrol. Aerial reconnaissance patrols would be conducted at some risk since this airspace is an active military operating area.

## **5. ENERGY AND MINERAL RESOURCE VALUES**

The U.S. Geological Survey and the Bureau of Mines prepared a mineral assessment for the Worthington Mountains WSA in 1987 (U.S. Geological Survey Bulletin 1728-A). The report rates the majority of the area recommended for wilderness as having a low potential for the occurrence of all metals. One small area flanking Worthington Peak on the north end of the area recommended for wilderness was identified as having moderate potential for the occurrence of base (copper, lead, zinc) and precious (silver and gold) metals. The mineral potential is associated with limestone replacement deposits which are known to occur within the Freiburg Mining District adjacent to the WSA. Most surface deposits have been mined, and small underground deposits are not economically attractive.

Energy resources are unknown in this region and the geologic environment is not favorable for the occurrence of these resources.

## **6. SUMMARY OF WSA-SPECIFIC PUBLIC COMMENTS**

During the inventory phase two comments were received mentioning that there are mineral values present in the WSA. Issues raised during the study phase included the presence of wilderness values such as spelunking in Leviathan Cave, the scenic limestone cliffs, bristlecone pine and bighorn sheep habitat, and mineral potential.

During public review of draft wilderness recommendations 31 comments were received specifically addressing the Worthington Mountains WSA. In general, all 31 commentors supported wilderness designation for all or part of the WSA. The main points mentioned in support of this area as wilderness were outstanding limestone ridges, Leviathan Cave, bristlecone pine, need to protect the undeveloped alluvial fans and valley portions of the unit which are essential to its scenic and ecological integrity, archaeological values, and the area's manageability. Mineral potential in the north of the unit was the reason given for favoring a reduced wilderness proposal.

The Governor of Nevada as well as the Divisions of State Lands, Parks, Forestry, the Department of Wildlife, and Historic Preservation and Archeology, supported wilderness. The Lincoln County Conservation District supported wilderness "due to the unique topography, land forms and Indian culture, as long as the rights of existing mineral location is not curtailed."

One letter was received on the final wilderness recommendation from the Environmental Protection Agency which supported the BLM's wilderness proposal.