In re the Appeal of

Commission for the Preservation
 of Wild Horses, N2-92-3
 and

Wild Horse Organized Assistance, N2-92-4
 and

Nevada Department of Wildlife, N2-92-5
 and

Natural Resources Defense Council/
Sierra Club, N2-92-6
 and

American Horse Protection Association/
The Humane Society of the United States
N2-92-7

PAINTE

AFFIDAVIT OF MICHAEL M. BORMAN

MICHAEL M. BORMAN, being first sworn, says:

- 1. I reside at 584 Skyline Drive, Elko, Nevada 89801. My telephone number is (702) 753-7795.
- 2. My date of birth is September 23, 1949.
- 3. I was born in Fargo, North Dakota. I graduated from high school in Moorhead, Minnesota.
- 4. I graduated from Moorhead State University in 1973 with a Bachelor of Science in Elementary Education. I served in the United States Marine Corps from April 1969 through March 1971. I served as a Peace Corps Volunteer in the Marshall Islands as a teacher and math/science curriculum advisor from June 1974 through June 1976.
- 5. From 1977 until 1981 I attended Colorado State University and received my Master of Science in Range Ecology. My thesis research involved relationships between oak sprouts and understory productivity in southwest Colorado and identification of oak, site and soil characteristics that impact the relationship. My concentrations of study while

attending Colorado State University were range ecology and animal nutrition. During this period I worked as a range/fire technician in Shoshone, Idaho. I also participated in research projects, in addition to my thesis research, which were relevant to range ecology and grazing impacts on rangeland resources.

- 6. From 1980 through 1982 I worked as a research associate in the Range Science Department of Colorado State University on a Bureau of Land Management (BLM) sponsored project to study horse and cow nutrition and behavior under extensive pasture conditions. This study focused on foraging behavior, habitat preferences and quantity and quality of forage intake of these two species throughout the grazing season. This BLM study was part of a larger project to study competition between livestock and wild horses.
- 7. From 1983 through 1986 I worked for Oregon State University as a technical advisor in Tunisia, North Africa on the Central Tunisian Rangeland Development Project. I provided technical advise and helped implement a sheep flock improvement and nutrition program, a plant materials evaluation program for improvement of central Tunisian rangelands, and a seed production program to expand seed supplies for improvement of central Tunisian rangelands.
- 8. From 1986 until 1989 I attended Oregon State University and received my Doctor of Philosophy degree in Range Ecology. My research focused on growth characteristics and ecological

factors influencing the suitability of various perennial grass species for improving both wildlife and livestock habitats of southwestern Oregon foothills. These rangelands are currently dominated by low quality, exotic, annual plant species. My doctoral research and course work provided me with a solid foundation in rangeland resources ecology and in the physiological ecology of arid and semiarid plant species.

- 9. I have worked as a Range Scientist in a Postdoctoral Research Associate position with the Agricultural Research Service, Fort Keogh Livestock and Range Research Laboratory, Miles City, Montana. My research orientation included native and seeded plant species responses to climate, soils and grazing, and range cattle nutrition under extensive grazing conditions in the Northern Great Plains.
- 10. I have authored numerous publications and given presentations at scientific meetings relating to range resources.
- 11. I have personally inspected the Paiute Meadows allotment on 2 separate occasions. During November 1990 I spent 3 days and during April 1991 I spent 3 days driving throughout allotment observing and collecting data. I have reviewed and considered the Paiute Meadows Final Allotment Evaluation Summary prepared by BLM and dated November 22, 1991 as well as the Notice of Full Force and Effect Final Multiple Use Decision Paiute Meadows Allotment dated November 22, 1991. I also reviewed and considered monitoring data collected by the Bureau of Land

- Management and/or Western Range Service (a private consulting firm) from 1987 to present.
- 12. The Paiute Meadows allotment is located in the western portion of Humboldt County Nevada. It consists of approximately 177,096 acres of public lands and 5,170 acres of private land. Daniel H. Russell currently controls the grazing preference in the Paiute Meadows allotment to the extent of 9,932 AUM's Total Preference of which 7,827 AUM's are Active Preference and 2,105 AUM's are Suspended Non-Use. Daniel H. Russell, permittee, operates a 750 head cow-calf cattle operation which is dependent upon public lands in the Paiute Meadows allotment.
- 13. Daniel H. Russell has agreed to take 3,477 AUM's of non-use on a voluntary basis. The extent of this non-use is a 44% reduction from the active preference in the allotment. Russell has agreed to this voluntary non-use provided that excess wild horses are removed from the allotment. Russell has also agreed to implement a deferred grazing system in the allotment. This grazing system involves periodic movements of livestock to various areas of the allotment so that vegetation periodically receives rest from grazing during the growing season. The movement and control of livestock resulting from this grazing system will improve distribution and meet multiple use objectives.
- 14. Continued heavy and severe grazing use resulting from excess wild horses will negate the beneficial impacts of the

livestock grazing system. Unless wild horse populations are reduced to the thriving natural ecological balance level of 50 head, excess wild horses will graze areas designated for rest from livestock grazing and the vegetation will continue to be defoliated.

- 15. Livestock grazing can be controlled by changing the season of use, time of use and numbers of livestock as well as by other methods. Riding and salting and other techniques can be used to improve livestock distribution and range management. However, the only method for controlling wild horse grazing is by changing the number of wild horses. The wild and free-roaming nature of wild horses as well as the relevant regulations prevent the Bureau of Land Management (BLM) from modifying or changing the timing of grazing use or the season of grazing use by wild horses. There are few, and in many cases no, practical methods for improving the distribution of wild horse grazing.
- 16. The agreed upon livestock grazing system should benefit riparian areas if excess wild horses are removed from the allotment. Grazing systems and changing the season of use are useful and practical tools for improving the condition of riparian and upland areas (Managing Grazing of Riparian Areas in the Intermountain Region, W.P. Clary and B.F. Webster, 1989, USDA Forest Service General Technical Report INT-263).
- 17. For purposes of evaluation and the grazing management, BLM has separated the Paiute Meadows allotment into 2 areas, that

north of Paiute Creek and that south of Paiute Creek. The areas are not fenced separately. The south area consists of roughly 40-45% of the acreage in Paiute Meadows allotment. The area south of Paiute Creek has not been grazed by livestock for at least 6 years. Riding and some natural boundaries have been used to keep livestock from using the area south of Paiute Creek. During 1988, 1989, 1990 and 1991 livestock have used the area north of Paiute Creek. Use by livestock during these years has been at or below 4350 AUM's.

- 18. Monitoring data has shown that substantial areas south of Paiute Creek have consistently received grazing use from wild horses at heavy or severe levels from 1987 to present. Heavy use levels correspond to utilization of 61-80% of the current years growth of important forage species, and severe use levels correspond to 81-100% utilization.
- 19. Overgrazing refers to continued heavy grazing which exceeds the recovery capacity of the forage plants and creates deterioration of the grazing lands. Continued heavy or severe utilization will reduce the vigor of grazed plants and even kill them if defoliation is severe and prolonged (Vallentine, J.F., 1990, Grazing Management, Academic Press, Inc. San Diego, CA, pp. 329-331).
- 20. Monitoring data have indicated that areas south of Paiute Creek have received heavy utilization in November at the end of the growing season for at least the last two years. Monitoring data also showed that utilization in the area south

- of Paiute Creek increased by 27 percentage points from November 1990 to April 1991. Utilization will continue to increase this winter and early spring.
- Use by wild horses in the Paiute Meadows allotment has tripled since the last gather in January 1988. Use by livestock has remained well below active preference. In the 1990 grazing year, 60% or more of the grazing in the Paiute Meadows allotment was attributable to wild horses. In the 1991 grazing year, pending February 29, 1992, wild horses may account for 66% of the grazing in the allotment. Use in the area south of Paiute Creek was entirely a result of wild horse grazing. Population levels of wild horses have continued to grow. Unless wild horses numbers are reduced and controlled, important forage species, especially browse species such as White Sage (Winterfat) that are desired by wildlife, will be lost and no improvement in riparian areas can occur. White Sage in areas south of Paiute Creek have been grazed so heavily that the woody portion of the plants are less than one inch in height. Normally the woody portions of mature White Sage plants are 6 or more inches high. Wild horses must be reduced to the thriving ecological balance of 50 head to stop resource deterioration.

The statements made in the Affidavit of Michael M. Borman dated January 23, 1992 are accurate and correct as written.

SUBSCRIBED and SWORN to before me this 23 day of January, 1992.

DEBI McGHiE

Notary Public - Glats of Novada

Life County, Novada

My appointment caption Jan. 2, 1625

NOTARY PUBLIC in and

State of Nevada

Residing at: Elko

My Comm. Exp.: 112-195