Burning Man 2003
Special Recreation Permit
Environmental Assessment
NV-020-03-16

May 2003

Prepared by

Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area
Bureau of Land Management
Winnemucca Field Office
5100 East Winnemucca Boulevard
Winnemucca, Nevada 89445-2921
(775)-623-1500

Burning Man 2003 Special Recreation Permit
Environmental Assessment
NV-020-03-16

1 INTRODUCTION / PURPOSE AND NEED

1.1 Introduction

The Black Rock Desert Region (Map 1) is a favorite recreation area for thousands of people. Some visitors enjoy recreational pursuits individually or in small groups for casual or dispersed activities and others are involved in organized events as participants or spectators. Each year more and more people are discovering the Black Rock Desert and its many recreational opportunities. In December 2000, the 106th Congress passed The Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area (NCA) Act, (Public Law 106-554). The NCA legislation designated about 797,000 acres of public land as part of the NCA and approximately 757,500 acres as Wilderness areas. The legislation contains language that supports the permitting of large-scale events such as Burning Man: "It is expected that such permitted events will continue to be administered in accordance with the management plan for the conservation area and other applicable laws and regulations."

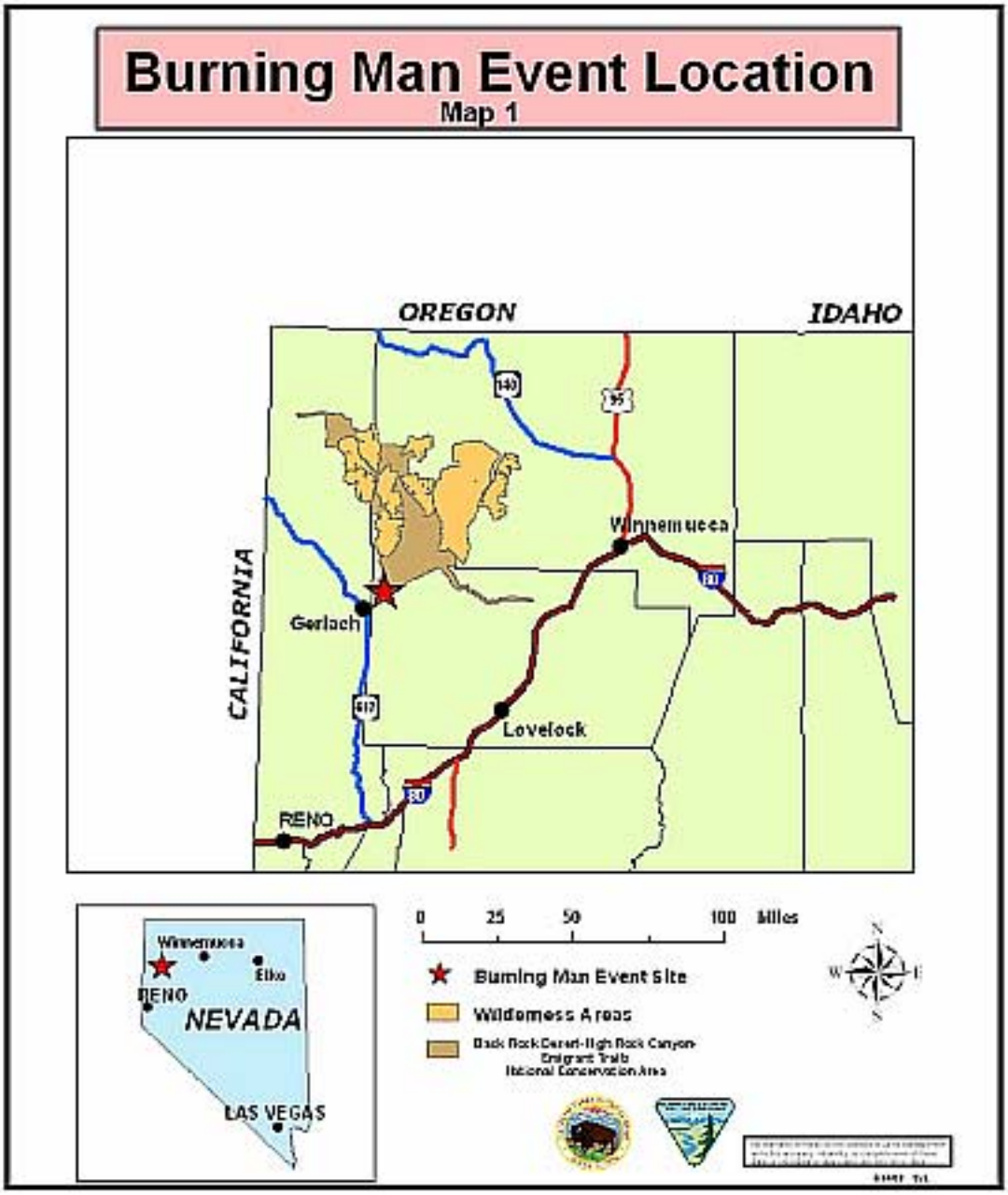
The Burning Man event was first held in 1990 and has continued on an annual basis (Table 1). Burning Man is a combination art festival, social event, and experiment in community living. The Burning Man organization, Black Rock City LLC (BRC), applied for and received a multi-year Special Recreation Permit (SRP) from BLM to conduct the event for the years of 1992-1995. The BLM completed an environmental assessment (EA) and issued the permit. Due to the increasing size of the event and issues associated with that growth, BLM completed additional environmental analysis and BRC applied for and received a second SRP from the BLM in 1996. In 1997, Burning Man was held on private land on Hualapai Flat in Washoe County, NV. In 1998 and 1999, Burning Man was moved back onto public lands at the southern end of the Black Rock Desert playa, about four miles north of Gerlach. BLM completed an environmental assessment and issued a SRP for these years. During the 2000 to 2002 period, the event was held approximately 8.5 miles northeast of Gerlach after the preparation of two EAs and the issuance of an SRP for each year.

TABLE 1: Burning Man Participant Attendance, 1990-2002

1990	**1991**	**1992**	**1993**	**1994**	**1995**
250	600	1,000	2,000	4,000	8,000
1996	**1998**	**1999**	**2000**	**2001**	**2002**
10,000	14,500	23,600	26,000	28,800	29,000

Sources: BLM Special Recreation Permit Post-Use Reports, Recreation Management Information System Reports, & Burning Man records.

MAP 1 – Burning Man Event Location



1.2 Purpose and Need for the Proposed Action

The BLM has received a special recreation permit application from Black Rock City LLC (BRC) for the Burning Man 2003 event. BLM is required to analyze the impacts of the proposed event as part of the process of evaluation of that application.

BRC proposes to conduct the event at the same location as the 2000 through 2002 events. BLM completed EAs in 2000 and 2001 for the permit. In 2002, BLM reviewed the previous EAs and issued a permit based upon the previous analysis. Since that time, new information has been collected and additional requirements have been made of BRC that have changed the potential environmental impacts.

1.3 Issues

BLM conducted public meetings and other scoping over the past several years and received extensive public comments on issues associated with the Burning Man event. The primary issues identified during scoping were:

Access – How would the Burning Man event affect public access to the playa and limit other dispersed recreation uses or other permitted events?

Playa Impacts – What impacts occur to the playa as a result of the Burning Man event?

- How much litter remains after the event?
- What contaminants are left on the playa?
- What impacts occur to biological resources on or near the playa?
- What impacts occur to air quality and the playa surface as a result of surface disturbance associated with the event?

Public Health – What impacts occur to the environment and the participants related to sanitation and public health?

- How is sewage handled?
- What is the fate of wastewater from campsites within the City?

Management of the Event – How will BLM ensure that the permit stipulations are followed?

- How will BLM determine the attendance in order to obtain the correct fees from the event?
- How will BLM monitor the conditions during and after the event?
- How will BLM enforce federal laws, State laws and other event requirements?

Socio-Economics – What is the impact of the event on local and regional communities?

Issue(s) considered but dropped from detailed analysis –

Several comments raised the issue of the event's morality. Morality is not an environmental issue and is "in the eye of the beholder." Everyone within site of the event is a participant or is involved in administration or support operations. There are no spectators. The event site is closed to non-participants and all participants pay for admission tickets. BLM ensures that all federal and State laws are enforced.

1.4 Conformance with The Land Use Plan

The Proposed Action and the No Action Alternative are in conformance with the BLM land use plan for the area. The Sonoma-Gerlach Management Framework Plan (MFP), adopted July 9, 1982, currently guides management of the Black Rock Desert (BLM, 1982). The plan provides for multiple use management of the Black Rock Desert, while promoting the following general management goal applicable to this permit application: Objective R-l is to "provide as many recreation opportunities as possible without undue environmental degradation in the Sonoma-Gerlach Resource Area." The MFP further states that it is Bureau policy to "provide a variety of outdoor recreation use on Bureau-administered lands commensurate with public needs and resources potentials and consistent with a quality environment."

Currently a comprehensive management plan is being prepared for the Black Rock Desert-High Rock Canyon Emigrant Trails NCA, which will include management for the entire Black Rock Desert. That plan will not be completed until late 2003, and therefore cannot provide guidance for this permit application.

1.5 Relationship to Statutes, Regulations and Other Plans

The Proposed Action has been reviewed for compliance with BLM policies, plans, and programs. The proposal is in conformance with the Sonoma-Gerlach Grazing EIS (BLM, 1981), the Sonoma-Gerlach Management Framework Plan (BLM, 1982) and Special Recreation Permit regulations at §43 CFR 8372. Section 5(C)(3) of the NCA legislation allows the Secretary "to permit large-scale events in defined, low impact areas of the Black Rock Desert playa." There are no known conflicts with Pershing County Planning or other State of Nevada statutes, regulations or plans.

2 DESCRIPTION OF PROPOSED ACTION AND NO ACTION ALTERNATIVES

This environmental assessment analyzes two alternatives, the Proposed Action and the No Action Alternative:

2.1 Proposed Action

The Proposed Action would result in BLM issuing a Special Recreation Permit allowing the Burning Man event on public lands in Pershing County, Nevada. A temporary city,

Black Rock City, 8.5 miles northeast of Gerlach, would be developed on the Black Rock Desert playa (see Map 2). The city would accommodate about 30,000 (±1,500) participants. The permit period would extend from July 31, 2003 to September 15, 2003 with the actual Burning Man event occurring from August 25, 2003 through September 2, 2003.

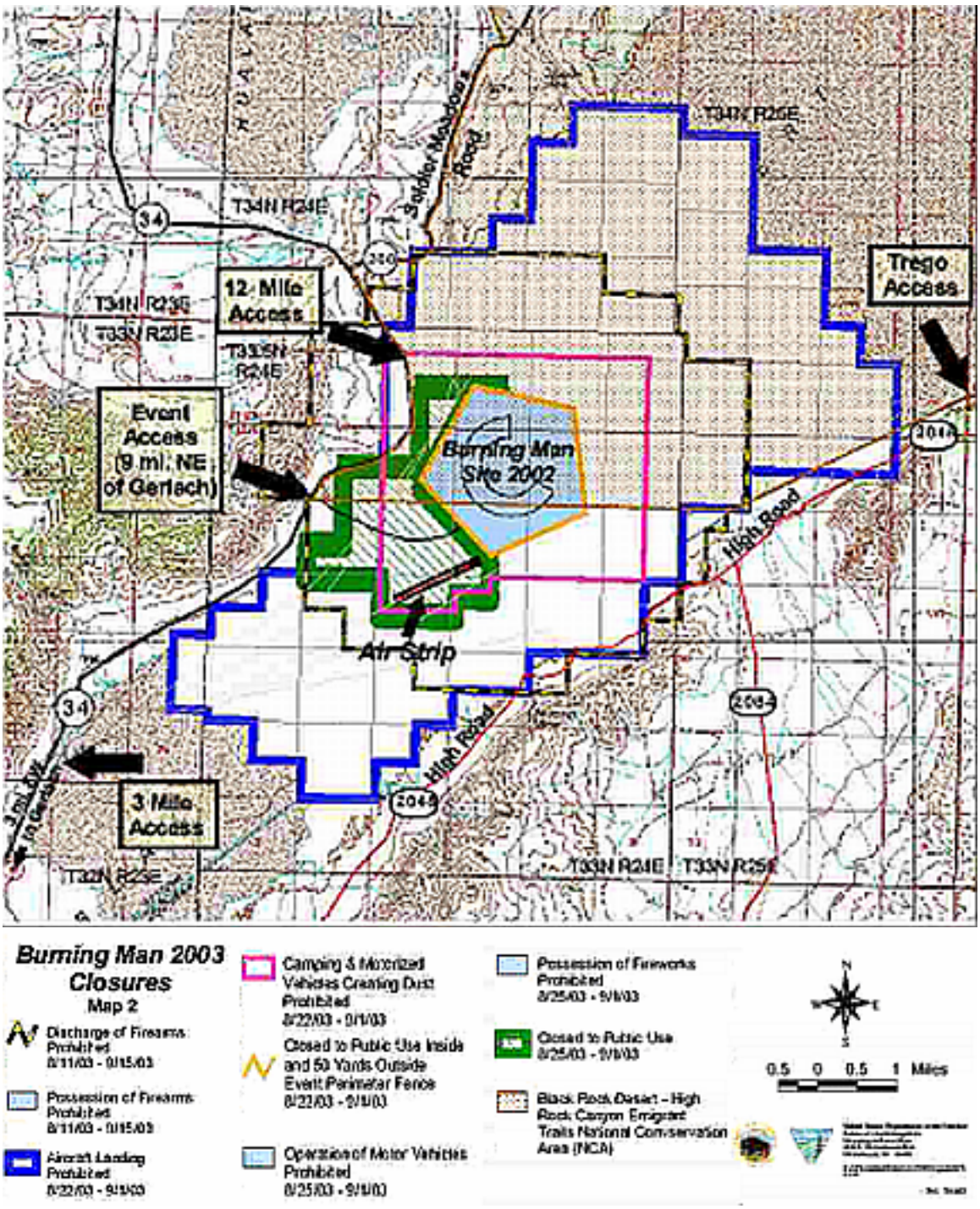
Activities associated with the Burning Man event include artistic and technological displays, entertainment events, performing arts, theme camps, spontaneous social interactions, and the burning of an 80-foot tall wood and neon-light sculpture called "The Man." Participants would also camp, ride bicycles and explore within the area permitted by this event.

The proposed 2003 site location would be at the same location as that used for the 2000 through 2002 events. Black Rock City would include residential areas, theme camps, art displays, and performance art areas. The city would be laid out in an arc centered on the sculpture of "The Man." The arc would have a radius of 4000 feet. The total area encompassed by Black Rock City within the perimeter fence would be about 2,150 acres. The residential portion of the City would include about 385 acres. Several hundred additional acres outside the perimeter fence would be used for access roads, a temporary airstrip, airport parking, BLM communications center, ticket booth, a greeter's station, and a 50-yard buffer area immediately outside and adjacent to the perimeter fence. These areas would restrict or prohibit motorized vehicle use including aircraft, camping, possession and discharge of firearms, possession of fireworks, and access and use by the general public. See Map 2 for the areas of these restrictions and closures.

The location of Black Rock City for the Proposed Action would be:

T33N, R24E, Sections 2, 3, 4, 9, 10 & 11
T33½N, R24E, Sections 33, 34, 35
Mount Diablo Base & Meridian.

MAP 2 – Burning Man 2003 Closures



The operations of the event included in the Proposed Action are summarized below. Additional details are included in the Burning Man 2003 Operating Plan (Appendix 1) and the BLM special stipulations for the event (Appendix 2). The content of both appendices are considered part of the Proposed Action.

2.1.a Event Set Up and Signing

Burning Man site preparation would include preliminary surveying and construction of the perimeter fence. Surveying would begin on July 31, 2003. The fence would be approximately seven miles in length and would be completed by August 15, 2003. The fence would be designed to prevent windblown trash from blowing across the playa and to provide event security. In addition, vehicle control signs announcing the presence of the fence would be installed at sites near the City to alert drivers several days before completion of the perimeter fence. Survey and layout of the gate area and marking of the entry road and the streets within Black Rock City would also begin on July 31, 2003.

As soon as the perimeter fence is completed, installation of additional signing for vehicle control both on and off-site, light poles, street signs, municipal structures, large sculptures, portable toilets, the Gate Area, the main entry road, and other infrastructure facilities would begin.

A small number of postholes would be dug for authorized facilities in accordance with permit stipulations. These would be approved in advance by BLM. Camp infrastructure construction would be completed by August 22, 2003, leaving three days before the event to complete work held up by unanticipated delays and for fine-tuning.

2.1.b Public Access

The Eight-Mile Access road to the playa would be used for the event, and closed to general public use. All other playa access points would remain open to the public. The City, a 50-yard buffer outside the perimeter fence, the area of the air strip and specified areas between County Road 34 and the City would be closed to the general public. There would be a 7,064-acre public camping closure surrounding the City and an 18,176-acre area where the discharge of firearms would be prohibited. See Map 2 for the areas of these closures.

2.1.c Traffic Control

Off-site traffic control would be provided at key road intersections during peak traffic periods. The access route to the City would be clearly marked with signs approved by the Nevada Department of Transportation along NV 447 and County Road 34. On-site traffic control would require participants to park their motorized vehicles and either walk or ride bicycles inside the City. Motorized vehicle use within the event would be allowed only if permitted by BRC or for administrative purposes.

2.1.d Event Security and Public Safety

1. Law Enforcement – On-Site

The BLM and the Pershing County Sheriff's Office (PSO) would provide law enforcement on site. These agencies would be focused on enforcement of federal, State and local laws and regulations as well as permit stipulations. The Burning Man Law Enforcement Agency Liaison (LEAL) would coordinate and work with the various law enforcement agencies and the Black Rock Rangers.

2. Law Enforcement – Off-Site

Law Enforcement Officers would patrol and control outside the perimeter of Black Rock City, enforcing closures to camping and shooting on public land beyond the perimeter fence (Map 2) and protecting other sensitive environmental and cultural resources outside the City including:

- Playa entrances
- High Road access to Winnemucca
- Union Pacific railroad tracks.
- Applegate-Lassen and Nobles Historic Trail routes, Trego Hot Springs, Black Rock Hot Springs, Soldier Meadows, and Double Hot Springs

The Washoe County Sheriff's Office, Pyramid Lake Tribal Police and the Nevada Highway Patrol would provide law enforcement support in their areas of jurisdiction including the towns of Gerlach and Empire.

3. Security – On-site

Burning Man would supply event security, using the Black Rock Rangers (BRR). The BRR would patrol the City, assist participants and coordinate with law enforcement officers and LEAL. There would be two BRR outposts situated within Black Rock City. The BRR would be generally be the first point of participant contact for stipulation violations, BRC regulations and other non-crime related concern within Black Rock City. Matters requiring Law Enforcement actions would be referred to BLM or PSO.

4. Communications

A central communication system would have separate communication channels for various functions including security, public safety and health, and infrastructure. BLM and BRC would operate independent communications systems from a common location. These two systems would operate 24 hours a day to provide security, emergency response and public safety.

5. Illegal Substance Policy

Black Rock City LLC has adopted an illegal substance policy and would use their communications networks to educate participants of applicable federal, state and local laws concerning the sale and use of illegal substances. The Burning Man "Survival Guide" specifically warns participants of the health risks associated by consuming illegal drugs or alcohol in a harsh environment. Information would be released indicating that federal, state, and local drug enforcement officials would be at the event and illegal activities would not be condoned.

6. Medical

Medical services would be contracted to the Regional Emergency Medical Services Authority (REMSA). A primary health care facility would be located in the center of Black Rock City. Their facility would be staffed to provide levels of care consistent with the estimated population of BRC including ambulance service, medical equipment, doctors, and certified emergency medical technicians (EMTs). Medical services would also be located at the two BRR outposts within the City.

2.1.e Resource Management

Monitoring of public lands would be conducted by BLM and others to prevent resource damage from potential participant visits to area resources near the event. BRC would charge an "in-out" fee to people who leave and return to the event. This requirement is designed to reduce the number of participants that leave the event to explore the surrounding areas on their own thus decreasing potential disturbance to surrounding resources. BLM would enforce resource related permit stipulations during and after the event. Permit stipulations as well as information provided by Burning Man include the requirement for participants to take out whatever material they bring to the event, including wastewater and sewage if they are in a camper or camp trailer.

2.1.f Fire Management

Fire suppression equipment and personnel would be available 24 hours a day to respond to camp, vehicular or structural incidents. BRC would contract fire services, which would operate under the Incident Command System for fire-related events within the Black Rock City. Fire equipment would be stationed at each end of Black Rock City during the event. Water would be stored within the City for fire suppression associated with permitted burns or emergency response.

Open fires would only be permitted by BRC in burn platforms or barrels raised above the playa surface. Campfires directly on the playa surface would not be permitted.

Art Burns, the burning of larger art structures including "The Man", would be permitted by BRC. Permitted burns would use corrugated metal sheets or fire blankets overlain with sand under the burning objects to eliminate surface scarring.

2.1.g Dust Abatement

BRC would provide two 4,000-gallon water trucks for dust suppression. These trucks would be in operation from August 20th through cleanup as needed. Water trucks would operate to suppress dust during event and the entire site after the event to decrease blowing dust. No dust control additives would be used or added to water for dust suppression activities. During the event water trucks would be labeled to indicate that the water is non-potable.

2.1.h Runway and Aircraft

The runway would be a Federal Aviation Administration (FAA) approved temporary runway facility and would be approximately 60 feet wide by 5,000 feet in length located southeast and outside the perimeter fence (Map 2). The runway would be set up in a southwest to northwest direction taking advantage of prevailing winds. The runway would be delineated by placement of orange cones and signing, to deter vehicle traffic from entering the area. Numbers at both ends of the runway would indicate compass bearing and help define boundaries. A compass rose would also be painted. The

numbers and rose would be painted on the playa surface using a calcium carbonate/water suspension that fades and breaks down in a few weeks. The painted markers would be raked or washed down following the event to obliterate them. An area for aircraft parking would be delineated outside the perimeter fence and adjacent to the runway.

Windsocks on 20-foot steel poles would be installed adjacent to the runway. Radio communication with pilots would be provided through a Common Traffic Advisory Frequency and would inform pilots of landing pattern direction and safety information. Burning Man participants in single and twin piston engine, fixed wing aircraft would be allowed to use the runway. Black Rock City would prepare a NOTAM to the Federal Aviation Administration (FAA) and post as required.

2.1.i Sanitary Facilities

In accordance with the Burning Man 2003 Operating Plan, banks of portable toilets would be distributed throughout the City. Additional toilet banks would be placed near "The Man". Each toilet would be emptied and cleaned daily with all waste material being disposed appropriately off site. Toilets would be anchored to prevent winds from toppling them.

2.1.j Event Take Down and Clean Up

1. On-Site

Public service messages on event radio stations as well as other means would encourage participants to clean up their sites and take their garbage home or to an approved landfill. Structure and site clean up would begin on September 4th. Structure disassembly and general on-site garbage removal would begin September 8th and would be completed within two weeks. BRC would dispose of debris in an approved landfill. Burn marks from fires would be shoveled, raked, and dragged to remove all debris and break up any hardened surface associated with baking of the playa surface. The perimeter fence would be the last structure to be removed. Dunes formed as a result of dust blowing into the perimeter fence would be dragged or graded. A detailed site inspection by BLM would occur on October 10, 2003 with a follow-up inspection-taking place in the spring of 2004. Post event debris could not exceed 33 parts per million on an area basis.

2. Off-Site

Off site clean up would include trash pickup on County Road 34 from Hualapai Valley to the town of Gerlach and on State Road 447 from the town of Wadsworth to the CA/NV border. Crews would patrol and collect all roadside trash for disposal in an approved site. If necessary, other road shoulders and sites would also be cleaned, including County Road 34 to Vya, Trego Hot Springs, and Black Rock Hot Springs. Off site clean up would follow event exit and continue for several days.

2.2 No Action Alternative

The No Action Alternative would result in BLM not issuing a Special Recreational Use Permit for Burning Man in 2003. Black Rock City would not be constructed. The No

Action Alternative may conflict with the BLM's multiple use mandate as identified in the Land Use Plan. The No Action Alternative may also be in conflict with the legislation designating the Black Rock-High Rock National Conservation Area.

3 AFFECTED ENVIRONMENT

The following critical elements that BLM policy requires be considered in all Environmental Assessments were evaluated (Table 2). Only those present and judged to be affected by either of the alternatives will be addressed in more detail this EA.

TABLE 2: Critical Elements Considered

Resource	Present	Affected	Unaffected
Air Quality	*Yes*	√	
Areas of Critical Environmental Concern	*No*		
Cultural Resources	*Yes*	√	
Environmental Justice	*No*		
Farmlands (Prime or Unique	*No*		
Floodplains	*No*		
Migratory Birds	*Yes*		√
Native American Concerns	*Yes*	√	
Noxious Weeds	*No*		
Special Status Species	*No*		
Waste (Hazardous or Solid)	*Yes*	√	
Water Quality	*Yes*	√	
Wetlands	*No*		
Wild & Scenic Rivers	*No*		
Wilderness	*No*		

3.2 Black Rock Desert-High Rock Canyon Emigrant Trails NCA

The proposed Burning Man event area is partially within the National Conservation Area (NCA). The NCA was established by legislation in 2000 (Public Law Public Law 106-554). The act includes language related to permitting of large-scale recreation events: "The Secretary may continue to permit large-scale events in defined, low impact areas of the Black Rock Desert playa in the conservation area in accordance with the management plan…"

3.3 The Black Rock Desert Playa

The Black Rock Desert landscape consists of a large barren playa and adjacent wind-formed mounds, sheet sands, dunes, alluvial slopes, terraces, foothills and mountains. The playa encompasses about 265 square miles (169,000 acres). The Proposed Action is located in the southwestern portion of the Black Rock Desert playa, where most recreation activity occurs.

The playa surface is a flat, non-vegetated ephemeral lakebed. Variations in surface relief develop seasonally. Wind and water changes the shape and size of dunes, sheets of silt and sand, and mounds.

3.4 Cultural Resources

The Black Rock Desert is rich in cultural resources. Historic events within the NCA helped to mold and change the course of American History. One major driving force behind the designation of the NCA and Wilderness was the protection of the viewshed of the Applegate-Lassen Trail, one of largest intact emigrant trails left in the U.S. Several other historic trail routes cross the Black Rock Desert. The 1843-44 John C. Fremont exploration party passed through the Black Rock Desert traveling south along the Black Rock Range to Great Boiling Springs near present-day Gerlach. Another major emigration route, the Nobles Trail, also crossed the playa. No traces of the Nobles Route remain in the vicinity of the proposed event site. During 1909, the Western Pacific Railroad built a transcontinental railroad along the southern edge of the Black Rock Desert, and the first US transcontinental telephone line also followed this route. In 1926, a portion of the silent film "The Winning of Barbara Worth" was filmed on the playa about 10 miles from the event, and features and artifacts from the early movie set still remain. During World War II and into the 1950's the Black Rock Desert served as a gunnery range for the military. Old military bullets and cartridge casings can still be found on the playa. The 2003 event would be located approximately 16.5 miles from the Applegate-Lassen Trail and adjacent to the 1852 and 1856 Nobles Routes. No artifacts are known from the proposed permit area. The event would be a temporary intrusion into the trail's viewshed and would not be an effect.

The Black Rock Desert playa is regularly disturbed by wind and water erosion as well as by vehicular traffic. Past inventories on the Black Rock Desert have demonstrated that the playa is not archeologically sensitive. Although isolated artifacts are occasionally found on the playa, these artifacts are without context due to the constant disturbance. Consequently no additional cultural resource inventories were undertaken.

3.5 Playa Sediments and Vegetation

The Burning Man event site is on the playa of the Black Rock Desert, a miscellaneous landform. The playa is composed of silty clay loam textured sediments and is alkaline in character. Because conditions are too harsh for vegetation, the material is not considered a soil.

The sediments of the playa surface are subject to displacement by winds when dry and disturbed. Winds that most commonly move the surface materials are associated with frontal passage or thunderstorms. Wind movement of sediment particles can cause the periodic formation of low, transient dunes. Wind erosion is a function of particle erodibility, surface roughness and weather conditions. Vehicle use and other disturbances on the playa alter the surface roughness. Increased roughness slows sediment particle movement across the surface, causing particles to accumulate on the windward side of low features forming transient dunes. The dunes are temporary features. The actions of wind and water over one or more winters lead to the

deterioration of the dunes. These dunes have become increasingly common over the past several years, but have been documented prior to periods of heavy human activity on the playa surface (Neal 1970).

Compaction is an increase in the density of a material associated with rolling, tamping, or vibrating thus reducing pore space. The most important factors that influence density are: (1) moisture content; (2) particle size; (3) chemical properties (the saline/sodic nature of the playa); and (4) the timing, duration, type and degree of compacting force. The playa surface texture is a silty clay loam. The silty clay loam material of the playa varies in density depending upon winter temperatures and water saturation conditions. There have been no quantitative studies of compaction conducted on the playa of the Black Rock Desert. Observations by BLM during the random debris inspections provide some information about compaction (BLM, 2003a). Plastic stakes used as plot centers were observed to be difficult to push into the playa surface in areas used as the main playa "roads". Away from the "roads" pushing plastic stakes into the surface was relatively easy, including Black Rock City.

There is no vegetation on the playa within Black Rock City.

Lake-plain terraces adjacent to the event consist of Ragtown silty clay loam, Mazuma silt loam and Isolde fine sand soils along the fringe areas of the playa. The water erosion hazard associated with these soils is 0.37 (slight) and the wind erosion hazard is 43 (slight to moderate) (USDA, NRCS, 1993).

Salt-desert shrub and salt-grass communities are the dominant vegetation types on lake-plain terraces. Vegetative cover on these sites is stable, with production and potential species composition considered healthy (BLM, undated).

3.6 Water Resources

The Burning Man event site is located within the Black Rock Desert Hydrographic Region. The site itself is situated on the terminal lake/playa surface, which receives intermittent surface water flows from the Quinn River drainage, the Mud Meadow Creek drainage and other smaller streams. Surface flows and inundation are seasonal, normally associated with springtime snowmelt and occasional thunderstorms (Sinclair, 1963).

During a normal precipitation year, the playa is partially covered with standing water during the months of March into June. The extent and duration of standing water is dependent on weather conditions, annual precipitation and temperature regimes (Welch and Preissler, 1990). The event is held in late August and early September when the playa surface is dry. The playa has been classified as a discharging playa. This designation is due to the relatively shallow water table. The maximum depth to groundwater at the site is 5-10 feet. Through evaporation and capillary forces, groundwater is actively discharged to the atmosphere, resulting in a vertical hydraulic gradient.

No springs, seeps, wells, streams, or permanent lakes are located in, or adjacent to the event boundary. Several hot springs including Great Boiling Spring, Trego, and Black

Rock Hot Springs are located adjacent to the playa but more than 7 miles from the Burning Man event site.

3.7 Air Quality

Air quality at the event location is high except during periods of localized dust storms. All areas of Humboldt and Pershing Counties are considered unclassifiable/attainment (Class II) for all pollutants (Holsher, 1998).

Air pollution associated with particulate matter in the Black Rock Desert area can come from a variety of sources including off-road vehicles, windblown dust, and smoke from wildfires. Air borne dust is the largest source of pollution. Dust events are generally short-term and do not exceed air quality standards. Dust also occurs naturally on the event location associated with frontal passage and thunderstorms. The physical location of the playa subjects the area to intense winds that are thought to funnel through the surrounding mountains onto the playa near their peak velocity.

3.8 Wildlife

The playa of the Black Rock does not support resident terrestrial wildlife species. The lack of vegetation and water during much of the year create a hostile environment for large wildlife. Large, mobile species including badger, coyote and big horn sheep have occasionally been observed on the playa, presumably crossing from mountain ranges on either side. Shorebirds may use the playa surface as a temporary spring stop on their migrations when the temporary playa lake exists. Because of the variation in the size, location and depth of the lake this use by shorebirds is infrequent, particularly at the event site because it is on a portion of the playa where the seasonal “lake” lasts for a very short time in the winter and early spring. The Nevada Division of Wildlife does not consider the playa an important stop for migrating shorebirds or waterfowl (Saake, 2000).

There are no species listed or proposed for listing under the Endangered Species Action within or nearby the permit area. A species list provided by the U.S. Fish and Wildlife Service (2000) indicates that the nearest listed species occur more than 40 miles from the City.

The playa probably supports populations of aquatic invertebrates that can persist in the playa sediments until flooding allows them to hatch from eggs, grow, and reproduce. No inventory has been conducted which would confirm their presence, abundance or diversity. The last several years of drought have not been conducive to completion of their aquatic life cycle or allow them to be visible in the surface water. Invertebrates found on other playa lakes in the region include several types of freshwater shrimp as well as other smaller invertebrates.

3.9 Waste

The playa of the Black Rock Desert has been collecting waste materials associated with human uses since the first emigrant parties crossed it. The Desert was used as a military gunnery range during and after WWII and ammunition debris is still common. Randomly located 0.1 acre transects read by BLM (2003a) provide information on solid waste on the playa (Table 3). Nineteen transects were reach outside Black Rock City and 23 transects within the City. The outside transects included areas within the perimeter fence but outside the residential area because debris conditions were very similar to those away from the event area.

TABLE 32: Playa Transect Inspections Post-Event Debris Data

Location	# items per acre	Average item size (in^2)	Total debris per acre (shown in both in^2 and ft^2)	Parts per Million (area)
Inside Black Rock City	244	0.19	46 0.32	7.3
Outside Black Rock City	26	0.69	18 0.13	2.9

Hydrocarbon wastes are also deposited on the playa from dripping vehicles. Data collected by BLM (2003b) during the 2002 event indicate that 16 percent of vehicles drip oil and this waste totaled about 15 gallons from the estimated 7500 vehicles associated with the event. Evaluation of the fate of this material suggests that it is rapidly dispersed or broken down by sunlight (Johnson, 2000; Tagget, 2000).

3.10 Recreation

A diversity of recreation uses occur on the Black Rock Desert Playa, which is a favorite destination for people from surrounding communities, other areas in Nevada, and neighboring states. Recreational use on the playa can be categorized as either recreation associated with permitted activities or dispersed use. The two categories of use represent near equal shares of the total recreational use. The Burning Man event is the single largest permitted event that has occurred on the playa. Other permitted activities include amateur rocket events, land sailing competitions, a golf tournament, and guided horseback trips. Typical non-permitted uses of the playa include camping, off highway vehicle travel, land sailing, exploring the emigrant trail, and soaking in hot springs adjacent to the playa.

The Black Rock Desert playa is administered as a Special Recreation Management Area (SRMA). The SRMA was designated in response to increased recreation use, and implies intensive planning and management for recreation opportunities and resource protection. The estimated visitor use has escalated from approximately 1,200 visitor days in 1990 to almost 300,000 in 2002 (BLM, RMIS) Over 143,000 visitor days were directly associated with Burning Man. The number of visitors attending the event is provided daily to the BLM by Burning Man officials. These numbers are expressed as the daily population of Black Rock City. BLM conducts statistical sampling of individuals entering the event to validate the information provided by Burning Man.

3.11 Socio-Economics

BRC estimates that the Burning Man 2001 event had an operating budget of approximately $5.3 million. It is estimated that more than $1 million of the budget was spent in northern Nevada. The regional expenditures include contracting for medical, fire, and law enforcement; services; equipment; supplies; and rental equipment (BRC, 2001a).

The event results in over 140,000 visitor days on public lands. This is about half the total visitor use to the NCA. Based upon the numbers contained in the visitor survey for the 2001 event (BRC, 2001b), visitors to the event generate at least $3,000,000 of economic activity in northern Nevada.

In the past three years BRC contributed about $50,000 to civic causes in Gerlach including the volunteer fire department and the senior citizen's center. BRC has also contributed to civic causes in Pershing County.

BRC paid BLM $572,000 for its SRP fee in 2002. This fee was used by BLM to process the permit, assure that the permit stipulations were met and to provide law enforcement at the event. Fee proceeds above those spent to process and administer the permit are used locally to manage the NCA, support visitor services and education and for resource protection.

Visitors to the event primarily use Nevada Highway 447 between Wadsworth and Gerlach and between Cedarville, CA and Gerlach. Traffic volumes during the event period are the highest of the year on NV 447 south of Gerlach. There are seven public access points to the playa. During the event one of the seven is closed to public use.

Based on BLM random counts at the event gate indicating that vehicles are occupied by four persons on average, participant traffic is estimated at 7,500 vehicles. Factoring in the vehicles required to manage the event, up to 8,000 vehicles could be anticipated. Vehicle types range from cars and pickup trucks to larger trucks and motor homes. Numerous vehicles pull trailers. Commercial vehicle traffic is greatest before and after the event, but may also be present during the event. Generally visitor arrivals are spread over an entire week prior to the burning of "The Man", but departures occur over a two-day period. Therefore traffic volumes are highest on Sunday and Monday (Labor Day) with volumes of three to four thousand vehicles per day leaving the area.

3.12 Visual Resources

BLM uses visual resource management (VRM) in the planning area to manage the quality of the landscape by minimizing potential impacts to visual resources resulting from development or permitted activities. The playa of the Black Rock Desert is being managed as a Visual Resource Management Class II area. Class II areas must be managed to retain their Visual Quality. Permanent changes in form, line, color or texture caused by a human related activity should not be evident in the characteristic landscape. Contrasts can be present but should not attract attention.

The Black Rock region allows for long viewing distances. One of the most dominant landscape features in the area is the playa. Viewed from it's midst, the playa appears to extend in an expansive, boundless, manner in all directions. Very few human made features intrude the landscape, with the exception of the railroad and power line located along the southern edge of the playa.

3.13 Native American Concerns

The event would occur within an area that traditionally used and inhabited by the Northern Paiute people. The Pyramid Lake Reservation is located approximately 40 miles south of the permit area and the Summit Lake is approximately 60 miles north. Representatives from both reservations have voiced concerns regarding potential impacts to significant sites and increased traffic during the event period. Event related trash left in the gateway communities Nixon, Wadsworth, Sutcliffe and the Summit Lake Reservation by event participants has also been a concern. The primary access roads to the event lead directly through Nixon and Wadsworth.

4 ENVIRONMENTAL CONSEQUENCES

4.1 Cultural Resources

Proposed Action

The proposed event site is approximately 16.5 miles from the Applegate-Lassen Emigrant Trail. Therefore no direct impacts to Applegate-Lassen Trail or setting of the trail are anticipated. Although no extant surface vestiges remain from the Nobles Trail, the original route from Black Rock Hot Spring is believed to be very near the proposed event site. There is a low probability that excavation of holes or pits could expose buried historic trail artifacts. The event would be a temporary intrusion into the setting and would not be considered an effect.

Visitors outside the City could collect artifacts or inadvertently disturb cultural sites. Burning Man's efforts to encourage participants to stay at the event, including charging a substantial re-entry fee, BLM monitoring of cultural sites outside of the event and Burning Man sponsored public education efforts would minimize this potential impact.

A potential indirect impact is that increased awareness of the Black Rock Desert among the large number of participants as well as wide media coverage could lead to increased public use of the area that could impact cultural resources in the long term. Public education efforts associated with the event would help prevent these potential impacts.

No Action

Under the No Action Alternative, potential direct impacts to cultural resources, indirect visual impacts to historic landscapes, and other indirect impacts from increased awareness of the area would not occur. If a permit was not issued, it is anticipated an

unknown number of individuals would conduct an unauthorized event. This could lead to impacts to cultural resources adjacent to the 2000-2002 location of the City.

4.2 Playa Sediments & Vegetation

Proposed Action

Vehicle traffic and other disturbances would change the surface roughness and disturb the water-stabilized surface of the playa. The degree to which the surface sediments become available for wind dispersal is largely dependant upon the moisture and structure in the surface layer of the playa. Dry conditions and "fluffy" structure lead into loose playa surface layers. Disturbed surface materials can then be easily be picked up by strong winds associated with frontal passage or thunderstorms. These conditions lead to wind movement of the surface particles causing formation of transient dunes and wide dispersal of surface material in dust storms.

During the dry portions of the year, June through September, it is estimated that 5 percent (about 8,400 acres) of the playa surface would be subject to surface disturbances that allow winds to easily carry the surface sediments. Continued use by vehicles on or adjacent to 115 miles of playa "road" would disturb the surface on an additional 300 acres. The Burning Man Event would increase the amount of sediment available for movement by wind during the mid August through September period. Sediments on the entire 385-acre residential portion of the City become available for wind dispersal as well as surface materials on one third (667 acres) of the 2,000 additional acres associated with the event. The Burning Man event would increase the surface of the playa potentially subject to dust storms by about 10 percent. The increased likelihood of dust storms associated with event would be short term. Wetting rains, generally occurring in September or October, would seal the playa surface and decrease the ability of windstorms to move dust.

The potential increase in dust storms associated with the event only considers dust storms related to human disturbances. There are also dust storms that move large amounts of materials in and around the playa, but appear to be unrelated to human disturbance. It is common to observe dust blowing onto the playa from the Smoke Creek Desert to the west and from the East Arm of the Black Rock Desert to the east. Neither of these areas is subject to wide spread human disturbances; especially the East Arm since it is included in the Black Rock Desert Wilderness Area.

Wind erosion associated with the playa, including the Burning Man Event, varies depending upon surface moisture and the amount of strong winds that occur during the dry periods of the year. The entire playa is usually subject to wind erosion for three to four months each year. The maximum time period during which the Burning Man event would create increased potential for wind erosion would be six to eight weeks. Wetting rains can decrease this period to a few days. Wind erosion would be expected to create a very shallow depression at the location of Black Rock City. Observations of coins left on the playa surface within Black Rock City indicate wind erosion of up to five millimeters following the 2002 event.

Sediments moved by windstorms from the playa are primarily deposited back on the playa surface or on adjacent uplands. Increased vehicle use and other human activities yearlong alter surface roughness by creating ruts and areas of loosened sediments. Increased surface roughness decreases the distance that soil particles travel by causing playa particles to accumulate behind any vertical obstruction leading to the formation of transient dunes. During the past several years transient dunes have become common adjacent to the primary playa "roads" and also downwind of Black Rock City. No complete inventory of transient dunes has occurred but the location of transient dunes downwind of the Burning Man Event suggests that some of the transient dunes observed in the past several years are the result of disturbances associated with the event. The actual formation of transient dunes following disturbance would depend upon the number of strong wind events that occur following disturbances and prior to wetting rains. As discussed above, disturbances associated with the event would be a fraction of the total human caused disturbances on the playa over the course of a year.

Dust storms during or immediately after the event would create sediment windrows along the perimeter fence. Dragging or grading during the cleanup phase would eliminate these windrows. Event stipulations require watering of dust areas thus reducing the amount of material potentially available for wind movement.

Compaction occurs when moist sediment particles are subjected to forces that decrease the pore space. Dry and saturated materials do not readily compact. Compaction on the playa occurs primarily on the 115 miles of playa "road" which are used almost yearlong by vehicles. During the spring, when the moisture is at or near the surface, repeated passage of vehicles causes compaction of these areas. The Burning Man Event would occur during the driest part of the year and on a part of the playa that dries early in the year. Event traffic would slightly increase the potential for compaction on the playa surface in areas of high traffic volume especially the entrance road. Limited observations associated with random debris plots within and near the City indicate no evidence of compaction when compared with adjacent playa "roads". The restrictions on most traffic movement within the City including the requirement that event participants to walk or ride bicycles would reduce the potential for compaction.

The areas of vegetated soils outside Black Rock City would not be subject to impacts from the event. These areas are outside the perimeter fence. Event participants are discouraged from using these areas and the sites are patrolled on a regular basis to minimize use. Therefore there would be no impact from the event on the soils and vegetation of dunes and hummock areas adjacent to the event. Dispersed recreation use including OHV use would continue to impact a small fraction of the dune and hummock sites surrounding the entire playa.

Permitting the Burning Man event would be expected to lead to minor increases in dust storms for a short period during the fall. Permit stipulations require the watering of heavily used areas within Black Rock City. Even with this stipulation, more moveable material would be available due to Burning Man activity resulting in the potential for increased wind erosion. The wind erosion could also contribute to additional transient dunes on a small part of the playa downwind of the event. There would be little increase in compaction of the surface of the playa associated with the event. There would be no impacts to vegetation near the City.

No Action

Under the No Action Alternative, impacts from dispersed recreation would continue to be associated with wind erosion, dune formation and compaction. Over 8,400 acres of surface disturbance within the 169,000-acre playa surface would continue to be subject to accelerated erosion associated with human caused disturbance. Transient dune formation would continue near areas subject to disturbance during dry periods. Compaction associated with 115 miles of playa "road" would be expected to continue. If a permit was not issued, it is anticipated an unknown number of individuals would conduct an unauthorized event. This could lead to increases in wind erosion and transient dune formation associated with the site.

Impacts on vegetation and soils of the dune and hummock areas would be the similar to those described for the Proposed Action. The presence of an unknown number of unofficial event participants could lead camping and OHV use of dunes and hummock areas adjacent to the historic location of Black Rock City. This unauthorized, concentrated use could lead to accelerated soil erosion and localized loss of vegetation from a few hundred acres.

4.3 Water Resources

Proposed Action

Groundwater at the location of the City varies seasonally and is at most 5-10 feet below the surface. The upward hydraulic gradient would prevent potential contaminants from moving into the groundwater. A survey conducted during the 2002 event indicated that oil contamination of the playa surface from vehicles was minor (BLM, 2003b). Burning Man 2003 would be expected to be of similar size to the 2002 event. Further analysis of indicates that contaminants would be dispersed by wind or the seasonal lake and either diluted or photo degraded to insignificant levels (Johnson, 2000; Taffet, 2000) Therefore no impacts to groundwater would result from implementation of the Burning Man event.

Potential increased human visitation to hot springs by Burning Man participants before or after the event may cause temporary adverse impacts from human use. Event monitoring indicates that this use occurs at hot springs near the event, primarily Trego and Garrett Ranch. BLM monitoring indicates that visitor use levels at Soldier Meadows, where rare plant and animal species are associated with hot springs, decrease during the Burning Man event. Potential impacts include accelerated sedimentation of hot spring pools, intentional and unintentional alteration of channel and flow characteristics, and addition of foreign substances to water sources. BRC and BLM through the stipulations would discourage event participants from using the hot springs during the event. BLM and BRR would patrol hot springs during and immediately after the event, which would minimize potential impacts on hot springs waters and the surrounding environment.

No Action

The event would not be authorized, and impacts to springs would be similar to what occurs associated with current dispersed recreational use. If no permit were issued, an unknown number of individuals would be expected to participate in an unauthorized

event. This could lead to a large increase in dispersed recreation use at hot springs adjacent to the 2000-2002 location of the City. Additional visitors could increase sedimentation, channel and flow alterations and pollutants of hot spring water sources. Because the participants would be unconstrained, many would be expected to visit hot springs. The impacts to hot springs water and the surrounding environment could be substantially more than those anticipated for the Proposed Action.

4.4 Air Quality

Proposed Action

Activities associated with human uses on the playa including the Burning Man Event would increase airborne particulates as discussed in the Playa Sediment and Vegetation section above. Vehicle travel along dirt roads and the playa surface would create fugitive dust and the possibility of dust storms during dry periods of the year. It is estimated that the Burning Man event could increase total fugitive dust potential by about one-tenth over levels associated with all other human uses. However, these impacts would be localized in nature and would be of temporary duration. Event stipulations would require watering of heavy use areas thus reducing the potential for dust during normal wind conditions. The first wetting rains of the fall, which generally occur in September or early October, would stabilize the surface of the playa. Temporary gaseous emissions would occur from vehicle and aircraft traffic in the area. These impacts would be of short duration and would quickly dissipate. Impacts to air quality would be minor and of short duration. Air quality standards would be met.

Other air quality impacts involve burning of synthetic materials including plastics and paints, as part of public burns. Synthetics may give off dangerous vapors but the open nature of the area and constant winds would provide for rapid dispersal of vapors. These impacts would also be minimal and short term. BRC and the BLM discourage burning of synthetics through permit stipulations and participant education.

No Action

Under the No Action Alternative, impacts to air quality from dust and gaseous emissions associated would be reduced from those identified in the Proposed Action. It is estimated that opportunities for dust generation would be reduced by as much as 10 percent and vehicle emissions would be reduced by an unknown amount. Potential emissions associated with burning of synthetic materials would be minimal. If large numbers of individuals chose to hold an unauthorized event, dust levels and other emissions could approach levels identified for the Proposed Action. Air quality standards would be met.

4.5 Wildlife

Proposed Action

The event would have no measurable impacts on terrestrial wildlife. There are no resident terrestrial species on the site of the event and the restrictions of the event participants effectively limit use of the adjacent dunes and hummocks.

Impacts on aquatic species are largely unknown. There is no inventory data on presence, abundance or diversity of aquatic invertebrates that are expected to occupy the playa. Invertebrates hatch from eggs in the surface sediments when the seasonal lake wets the surface of the playa. These animals complete their life cycle and lay eggs within a few weeks when adequate water is available.

Several aspects of the Event could affect invertebrate eggs. Oil dripping from vehicles could directly kill eggs. An analysis of oil drip data suggests that hydrocarbons deposited onto the playa surface are not likely to contaminate surface sediments except for the immediate vicinity of the drip. This would minimally affect eggs within the event and over the entire playa. Oil deposited on the playa would be dispersed by wind and water, which would dilute or degrade the contaminant to non-measurable levels. The concentration of oil in the seasonal lake was estimated to be less than 50 parts per billion (BLM, 2003b). Hatchability of eggs of brine shrimp similar to those that may occupy the site indicate that egg hatch decreased at oil concentrations above 50 parts per million (Kuwabara et al, 1980). A concentration of 50 parts per million is 5,000 times higher that the projected concentration of 10 parts per billion. Surface disturbance could allow eggs to be blown from or into the site in dust storms (Pennak, 1989). Observations of coins left on the surface of the playa indicate that the net movement of dust is away from the City. This would also result in a potential decrease in egg densities at the City location. It is unknown whether transport of eggs in dust storms alters their viability. Certainly eggs transported off the playa by dust storms would be unable to hatch. Assuming that all eggs deposited on disturbed portions of the City and adjacent area would be lost, potential egg abundance would decrease about 0.6 percent over the entire playa.

No Action

Impacts on wildlife species, both terrestrial and aquatic, would be the essentially the same as described for the No Action Alternative. Participants at an unauthorized event would disturb an unknown number of acres at the historic Black Rock City.

4.6 Waste

Proposed Action

Permit stipulations require that solid waste be removed from the site. Permissible residual debris levels would not exceed 5 square feet within each 150,000-square-foot inspection transect. This is equivalent to 33 parts per million (ppm) on an area basis. During the past three years the clean up has resulted in this standard being met with debris averaging slightly less than one square foot per transect. On a standardized basis this is equivalent to 0.25 square feet per acre or 7.3 ppm. Randomly located 0.1-acre plots read within and adjacent to the City by BLM in 2003 yield similar results. Residual debris levels within the City were measured at 0.32 square feet per acre or 7.3 ppm (BLM, 2003a). Debris outside the City but within the perimeter fence was similar to

that found outside the City, indicating that most of the activities that generate debris occur within the 385 acre residential and municipal area. Debris levels were measured at 0.13 square feet per acre or 2.9 ppm. There were noticeable differences between the number of debris items and the size of debris inside and outside the City. Inside the City, debris items are more abundant but smaller than those found outside the City. The average number of items per acre plot inside the City was 244 with an average size of 0.19 square inches per item. On the general playa, there were 26 items per acre with an average size of 0.69 square inches per item.

Assuming that the 2003 clean up is similar to the 2000 through 2002 cleanups, debris on the 385 acres occupied by Black Rock City would remain at about 0.3 square feet per acre. Because the event would be held in the same location as the 2000 through 2002 events, it is likely that the overall amount of debris would remain the same as clean up crews would be expected to pick up old and new debris. Debris within the City would be about 2.5 times denser than on adjacent parts of the playa and there would be more debris items, 244 per acre inside the City compared to 26 items outside. This increase in debris would occur on about 0.25 % of the playa surface. The average item size within the City would be about one quarter the size of items found outside. Items larger than the average size within the City would be light in color when compared to outside the City. In either case, inside or outside, the debris levels are quite low. The casual visitor would not perceive a major difference between average debris conditions inside the City compared to outside.

The Proposed Action would result in limited amounts liquid wastes being deposited on the playa. A survey conducted in 2002 identified oil deposition equivalent to 5 ounces per acre within Black Rock City (BLM, 2003b). Reports by Johnson (2000) and Tagget (2000) indicate that this material would be readily absorbed in the top layer of sediment and then volatilized, dispersed as a film in the intermittent lake surface or photo-degraded within a relatively short period of time. This would be an insignificant impact.

A small percentage of the participants dispose of gray water on the playa. This activity is prohibited by BLM and BRC, but still infrequently occurs. The major component of gray water is likely to be soaps and detergents used in dish washing and bathing. These materials readily break down in the sunlight and pose insignificant impacts.

Portable toilets are placed within the City in large banks and anchored securely to the surface. Therefore it is unlikely that human wastes would spill or leak from these locations therefore there would be no measurable impact.

Hazardous and flammable liquids are also used at the event, including fuel and paints. No documented spills occurred during the 2000 through 2002 period. Spills of volatile materials would be rapidly dispersed from the playa through evaporation. Other materials would vary in their break down pathway with active cleanup potentially required. In 2003, BRC is actively managing these liquids, as part of the permitting process and the likelihood of spills of measurable quantities would be low.

No Action

Under the No Action Alternative, it would be anticipated than an unknown number of individuals would stage a non-permitted event at the location of the City. There would be no post-event cleanup so debris levels would be expected to increase over that

observed during the past several years. Gray water dumping would be expected to exceed past levels. Human waste levels on the playa or in shallow “cat-holes” would be expected to increase substantially over levels in the recent past.

4.7 Recreation

Proposed Action

Public access to the playa would be retained, with the exception of the 8-mile playa access, which would be used for the Burning Man event, and areas immediately adjacent to the permit area. All other access points to the playa, and the playa roads, that do not cross through the event area, would remain open to public use. North-South access on the West side of the event would be limited to Highway 34 between the 8-mile access and the 12-mile access. Impacts to public access at the other entrance points would be minimal, since participants would be required to use the 8-mile entrance, and there would be limited use of the other playa entrances by BLM, law enforcement, and other cooperators. Traffic congestion on the two main highways to and through the area is expected to be the greatest impact to public access. Visitors using highways 447 and 34 to access the playa and other parts of the Black Rock region, and those who are traveling through the area on these highways would be inconvenienced by traffic congestion. These impacts would be greatest during periods of ingress and egress, but increased traffic volume would also be expected before, after and throughout the event period. Some of these casual users may be displaced to other alternative routes, which would increase traffic volumes on those roads.

Dispersed recreation on the playa could also be affected by the proposed action. The Black Rock Desert playa is a remote area that attracts many users who are seeking solitude. During the permit period, those visitors who are searching for solitude on the playa would have to travel further north to areas away from the event. Visitor freedom of choice would also be impacted by closures to camping, the discharge of firearms, and landing of aircraft in areas immediately adjacent to the permit area. Monitoring and patrol of popular recreation sites, including the hot springs at Soldier Meadows, Double Hot Springs, Black Rock Hot Springs, and Trego Hot Springs shows that there is very little use of these areas by event participants during the event. The popular off-site areas would be patrolled by BLM and Burning Man staff to limit use by event participants. Some participant use would be expected to occur in these areas before and after the event, which could result in minor competition for campsites adjacent to hot springs with other area users.

The event has introduced thousands of people from throughout the world to the Black Rock area either through participation in the event and/or increased media coverage associated with the event, which may have long-term impacts to the recreational environment in the area. Resource impacts related to return visitation by event participants would likely be minimal because of the educational, safety, and low-impacts messages that are given to event participants. Future users that come as a result of their Burning Man experiences would be better educated about the values of the area than most of the visitors to the area.

Physical disturbances, such as pitting or rutting of the area surface, or debris left from the event could leave the playa in a less than ideal condition for other uses. Having a flat playa surface is critical to land sailors and land speed record attempts. Even with cleanup after the event, small portions of the playa could be less usable for these activities until wetting rains provide moisture to stabilize and level out the playa surface.

The potential for conflict between other permitted uses, due to temporal or spatial conflicts with the Burning Man event, could conflict with other permitted activities. Requests for other permitted events could be denied or moved to other times of the year creating potential hardship for those involved in the other events. If a concurrent event were authorized, the need for additional constraints or alternative transportation plans could be necessary. There are no known conflicts between the 2003 Burning Man event and other permitted events, therefore this potential impact is not likely to occur.

No Action

Potential conflicts with other recreation users and impacts to public access would not occur under this alternative. However, if an unauthorized event were held, the impacts to recreation could exceed those of the proposed action.

4.8 Socio-Economics

Proposed Action

The estimated $1 million spent by BRC in northern Nevada would provide direct economic benefit to the area. Area businesses and contractors would receive this economic influx during a relatively short time period starting with the construction of Black Rock City in late August and proceeding through clean up in early October. In addition, visitors to the event would generate an estimated $3 million of regional economic activity during the 7-10 days of the event. Any money donated by BRC directly to local organizations should improve the financial status of these organizations and their effectiveness in improving local quality of life.

The economic benefits to northern Nevada generated by Burning Man are not without direct and indirect costs and not all businesses would benefit. Some businesses could experience increases in customer numbers requiring the short term hiring of additional staff and greater operating expenditures. The influx of customers could deplete inventories and cause temporary, localized shortages of items or services desired by area residents.

The event would be expected to cause traffic slowdowns on area highways especially on the Sunday and Monday after “The Man” is burned. Traffic could become slow and frustrating for local residents and event participants. For safety reasons, some commercial truck transportation could be suspended during the event. This disruption of transportation could have a small, short-duration, direct economic effect on businesses that are not prepared for the increased traffic. Advance publicity of the event providing dates and estimated numbers of participants would minimize the potential for any adverse economic impacts.

No Action

The No Action alternative would deprive local communities and the surrounding region of the economic benefits of the event. If an unauthorized event were held, some economic benefit would be received, but the majority of benefit would be derived from the organized aspects of the event. If an unauthorized event were to take place, the disruptions such as traffic would be less than anticipated for the Proposed Action.

4.9 Visual Resources

Proposed Action

The Black Rock Desert playa is managed as a Class II VRM area (BLM, 1981). Class II areas must be managed to retain their Visual Quality. There would be temporary visual impacts from the Burning Man. Lighting from the City would be visible for several miles at night. The 50-foot tall wood sculpture known as "The Man," would also be seen from long distances, especially at night. Visual impacts from the event would be short term, limited to the southern part of the playa and would be eliminated following take down and clean up.

No Action

Under the No Action Alternative visual impacts associated with an unauthorized event at the historic location of the Event could result in short-term impacts to visual quality similar to those discussed for the Proposed Action.

4.10 Native American Concerns

Proposed Action

Potential impacts to local tribes could include direct impact to cultural sites in the nearby area. Over the past several years, the in-out fee BRC requires of participants who leave the event and wish to come back in has decreased the number of participants venturing out into the surrounding area on their own. Continuation of this requirement would decrease the risk of inadvertent disturbance to cultural sites and artifacts to minimal levels. BRC would also be required to notify event participants that it is illegal to collect archeological artifacts, and in the unlikely event that artifacts were found that BLM be immediately notified. The stipulations also require BRC discourage use of culturally sensitive hot spring areas. BLM rangers would patrol the sensitive areas, and BRC would place monitors at each of the nearby hot springs. BLM monitoring has shown that very little participant use of the hot springs is occurring during the event, but there is some evidence that event participants use area hot springs before and after the event. Monitoring has not shown adverse impacts from this use. This trend would be expected to continue.

The event would generate additional traffic through the Pyramid Lake Indian Reservation on NV Route 447, the primary access to the event from I-80. The

additional traffic would create a need for increased law enforcement support from the Tribal Police.

The passage of thousands of vehicles through the Pyramid Lake Reservation could generate additional litter. This impact would be temporary, as BRC is required to clean up Highway 447 from Gerlach to Wadsworth, and Highway 445 from Gerlach to Sutcliffe.

The Summit Lake Indian Reservation could receive a handful of additional visitors on the dirt and gravel roads through the reservation. The event would have no traffic related impacts on the Summit Lake Reservation.

No Action

Under the No Action Alternative, potential direct impacts to Native American Values would not occur. If a permit was not issued, it is anticipated an unknown number of individuals would conduct an unauthorized event. This could lead to increased traffic and littering through the Pyramid Lake Reservation. There would be no litter pickup following the unauthorized event. There would be no impacts to the Summit Lake Reservation.

4.11 Potential Mitigation/Monitoring Measures

Mitigation is defined in the Council of Environmental Quality (CEQ) regulations §40 CFR 1508.20 and includes avoiding an impact, minimizing impacts and rectifying an impact by repairing, rehabilitation, or resting the affected environment.

No additional mitigation measures have been identified. The permit stipulations have been adjusted over the past several years to reduce potential adverse impacts.

4.12 Cumulative Impacts

Cumulative impacts are those effects on the resources of an area or region caused by the combination of existing and reasonably foreseeable future projects, which may be individually, minor, but together become significant. Although impacts from the Proposed Action are temporary, this event has occurred on an annual basis since 1990 and is proposed for the fourth year in the same location.

For discussion purposes, the cumulative impact assessment area for this Environmental Assessment would be the west arm of the Black Rock Desert. Reasonably foreseeable actions most likely to occur in the assessment area would include annual Burning Man Events, other special recreation permit (SRP) events such as amateur rocket launches and land speed record attempts and continued dispersed recreational use. Based on the types of recreational usage, there would be cumulative impacts to the playa and surrounding areas. Reasonable foreseeable impacts would occur should the Burning Man event continue to be held annually in combination with the other SRPs that occur on the playa.

Continuing to permit the Burning Man event in the same location would be expected to result in cumulative continuing wind erosion of the surface of the playa at the location of Black Rock City (385 acres). Observations of coins resting on the playa surface within the City indicate that winds are removing the surface material from the site at a rate of at least several millimeters per year. It is unknown whether or not the surface would be replaced by water borne sediments carried by runoff during dry years or dust blowing into the site from other parts of the area. This erosion would contribute to the additional potential for localized reductions in air quality associated with dust storms picking up materials from the event site.

The anticipated increase in number of visitors to the playa, including participants at permitted events, would lead to increased surface disturbance. This would lead to the potential for additional formation of transient dunes. The degree to which dune formation would actually occur is unknown but would be expected to be minor when compared to that associated with the 115 miles of existing playa "roads".

The 385 acres occupied by Black Rock City contains more debris than surrounding areas on the playa. However, the debris is smaller than surrounding areas making observation of the debris difficult for casual observers to notice small pieces of debris on the playa surface. This impact would occur on less than 0.25 percent of the playa.

Increasing numbers of visitors engaging in various dispersed recreation activities would be expected to cause some loss of solitude, but this effect is expected to be minimal because of the short duration of the event.

Increasing numbers of participants in permitted events and dispersed recreation would be expected to increase the potential for problems resulting from visitors engaged in conflicting uses (i.e. between Land Speed Record attempts and dispersed camping on the playa, Rocket Launches and golf tournaments on the playa, etc.), but for the foreseeable future these conflicts can be mitigated through the permitting process.

No cumulative impacts are anticipated associated with cultural resources, wildlife, vegetation, visual resources, Native American concerns, and water resources.

5 CONSULTATION AND COORDINATION

5.1 List of Preparers and Reviewers - Bureau of Land Management

Roger Farschon	Ecologist
Jeff Johnson	Planning and Environmental Coordinator
Dave Lefevre	Outdoor Recreation Planner
Gary Ryan	Military Liaison
Jamie Thompson	Writer-Editor
Dave Valentine	Archaeologist

5.2 Agencies Contacted or Consulted

Federal Aviation Administration
Pershing County Commissioners
Pershing County Sheriff
Washoe County Commissioners
Washoe County Sheriff
Washoe County District Health Department
Washoe County Road Department, Gerlach-Vya
Truckee Meadows Fire Protection District
Gerlach Volunteer Fire Department
Gerlach Justice of the Peace
Gerlach General Improvement District
Gerlach Citizen's Advisory Board
Regional Emergency Medical Services Authority (REMSA)
Nevada Bureau of Health Protection Services
Nevada Department of Transportation
Nevada State Historic Preservation Officer
Nevada Department of Transportation
Summit Lake Paiute Tribe
Pyramid Lake Paiute Tribe
Lovelock Paiute Tribe
McDermitt Paiute Tribe
Black Rock City L.L.C.
U.S. Fish & Wildlife Service (USF&WS)
Nevada Division of Wildlife (NDOW)

6 FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based on the analysis of the EA and implementation of stipulations and monitoring and mitigation measures identified, the quality of the human environment would not significantly be impacted as a result of implementing either alternative. Preparation of an environmental impact statement (EIS) pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) is not required for the following reasons:

- Sensitive resource values would not be adversely impacted from implementation of the proposal action.

- There would be no adverse effect on threatened or endangered, or Nevada State Sensitive Species within the project area.

- The project would not adversely affect or cause destruction of significant scientific, cultural or historical resources.

- Impacts would generally be temporary and where longer term would be localized and small scale.

- The proposed action will not adversely affect public health or safety. The project and its potential effects on the human environment are not highly uncertain and do not involve unique or unknown risks.

7 REFERENCES

BLM, 1981. Sonoma-Gerlach Grazing Environmental Impact Statement. Winnemucca District Office, Nevada.

BLM, 1982. Sonoma-Gerlach Management Framework Plan. Winnemucca District Office, Nevada.

BLM, 2003a. Personal communication from Roger Farschon on preliminary results from 0.1 acre randomly location debris plots. Winnemucca Field Office, Nevada**.**

BLM, 2003b. "Black Rock City 2002 Oil Drip Survey: Results and Management Recommendations", unpublished file report. Winnemucca Field Office, Nevada.

BLM, undated. Ecological Site Inventory. Unpublished file reports and supporting map data. Winnemucca Field Office, Nevada.

BRC, 2001a. Financial Chart for Burning Man, 2001. HYPERLINK "http://afterburn.burningman.com/" http://afterburn.burningman.com/ financial_chart.html.

BRC, 2001b. 2001 Participants Survey, Money Spent. HYPERLINK "http://afterburn.burningman" http://afterburn.burningman.com/ 2001survey/survey_money.html.

FWS, 2000. Species List for Proposed Burning Man Event - File No. 1-5-01-SP-006. U.S. Fish and Wildlife Service, Reno, Nevada.

Holsher, S., 1998. Personal communication, Nevada Department of Environmental Quality. Air Quality Division.

Johnson, Nicolas M. 2000. "Technical response to significant hazardous-substance and water-supply impacts alleged in Black Rock Rescue et al's August and September 2000 briefs appealing Permit No. BLM-NV-020-00-3". unpublished report.

Kuwabara, Katsuyoshi, Akio Nakamura, and Takashi Kashimoto, 1980. Effect of petroleum oil, pesticides, PCBs and other environmental contaminants on the hatchability of Artemia salina eggs. Bull. Environm. Contam. Toxicolo.l 25:69-74.

Neal, James T., 1970. Playa Surface Features as Indicators of Environment. Proc. 1970 Playa Lake Symposium. Texas Tech Univ. HYPERLINK "http://www.lib.ttu.edu/playa/ text/playa9.htm" http://www.lib.ttu.edu/playa/ text/playa9.htm.

Pennak, Robert W., 1989. Fresh-water Invertebrates of the United States: Protozoa to Mollusca, 3rd Edition. John Wiley & Sons, New York.

Saake, Norman, 2000. Personal communication, Nevada Division of Wildlife.

Sinclair, W.C. 1963. Ground-water Appraisal of the Black Rock Desert Area, Northwestern Nevada. Nevada Department of Conservation and Natural Resources, Ground-water Resources Reconnaissance Series, Report 20. Carson City.

Taffet, Michael J., 2000. "Technical response to Notice of Appeal and further statement of reasons in support of appeal of Black Rock Rescue and John Bogard. Re: NEPA for Burning Man Event near Gerlach, Nevada—Permit No. BLM-NV-020-03-3". unpublished report.

USDA NRCS, 1993. Draft Soil Survey of Humboldt County, Nevada, West Part.

Welch, A.H., and Preissler, A.M.,1990. Geothermal Resources of the Western Arm of the Black Rock Desert. Northwestern Nevada: Part II. Aqueous Geochemistry and Hydrology, U.S. Geological Survey, Water-Resources Investigations Report 87-4062.

Appendices

Appendix 1 – Burning Man 2003 Operating Plan

(This appendix is available in hard copy only.)

Appendix 2 – BLM Special Stipulations for the Event

STIPULATIONS

Permit #NV025-03-01

As referenced by condition #13

ADMINISTRATION

1. These stipulations incorporate procedures identified in the Burning Man 2003 Operating Plan. If there is a conflict between the Operating Plan and the stipulations listed below and attached to the permit, the stipulations shall control.

2. Black Rock City LLC shall comply with all permit requirements and conditions as identified in permit # NV025-03-01, and with all applicable supplemental regulations (i.e. closure orders, fire restrictions, etc.) in effect during the event.

3. Black Rock City LLC acknowledges that this authorization may be amended only by a written document duly authorized and executed by both grantor and permittee.

4. Upon advance notice to the permittee, the BLM reserves the right to alter the terms, conditions, and stipulations of the permit at any time for reasons such as changes in policy or administrative procedure, to prevent use conflicts, to protect public safety, or to prevent resource damage.

5. The BLM, or duly authorized representative, may examine upon request any of the records including, but not limited to, financial records, contractual agreements, licenses, or other documents related to the permitted operations.

6. The permittee shall post a copy of the Permit or Operating Authorization in plain view in Center Camp where cooperators and participants have an opportunity to read it.

7. The permittee's operation and compliance with the terms, conditions and stipulations of the permit will be evaluated through performance inspections before, during and following the event.

8. Any violation of the permit terms, conditions and stipulations may be subject to penalties prescribed in 43 CFR 8372.0-7, which may include fines up to $1,000 and/or imprisonment up to 12 months, and/or administrative action. Additionally, any such violation may result in permit revocation, suspension, or probation. Violations may also be cause for the BLM to deny approval of a subsequent Permit or Operating Authorization.

9. On a rotation schedule during the event Black Rock City LLC shall provide a member of its board around the clock who is authorized to represent and act on its behalf to coordinate as needed with BLM, law enforcement and other event cooperators on issues requiring action.

10. Black Rock City LLC personnel shall meet with BLM staff and representatives from the various cooperators daily at 4:15 p.m. and at such other times and places as are needed. At these meetings Black Rock City LLC shall provide daily attendance updates and exchange other information necessary to meet the needs of BLM and event cooperators.

11. Black Rock City LLC will inform BLM law enforcement representatives of unauthorized commercial operations discovered operating at the event.

12. Meetings Required with Affected Parties.

a. Black Rock City LLC shall meet with the Pyramid Lake Paiute Tribe to address concerns and impacts to Tribal reservation resources anticipated from the Burning Man event.

b. The permittee shall confer with the Nevada Highway Patrol, and the Washoe and Pershing County Sheriff's Offices prior to the event to address State and local issues and concerns.

RESOURCE PROTECTION

13. Pits and Holes.

a. The BLM must approve in advance event pits or holes larger than 1' square, 1' in diameter, or 3' deep. Prior to digging Black Rock City LLC will provide a map to BLM showing locations of proposed pits and holes with GPS coordinates.

b. When significant moisture is present in the soil, at least one hole in an associated group of holes or in the immediate area shall be left open for a minimum of 24 hours and the authorized officer notified. The BLM may require that such holes be left open for up to 72 hours. When standing water is present in a hole, the permittee shall measure the distance between the ground surface and water surface, take and properly label a water sample and provide it to BLM.

c. Backfill dirt will be stored in containers, so that all dirt is retained. Backfill will be compacted in holes at event closure. Backfill dirt will be compacted with mechanical tampers at six-inch depth intervals to prevent formation of pit depressions. Permittee and BLM staff/volunteers shall monitor the event to assure that no unauthorized holes are dug.

14. All participants and support staff will be informed that collection, excavation or vandalism of archaeological artifacts or sites is illegal on public land. The BLM shall be notified immediately upon discovery of archaeological artifacts (objects greater than 50 years old) or human remains.

15. Black Rock City LLC shall comply with 43 CFR 7.18 and shall not make available to the public any information concerning the nature and location of any archaeological resource.

Should Black Rock City LLC discover an archaeological resource it must stop all activities in the discovery vicinity and protect the discovery until event completion or until notified otherwise by the authorized officer.

16. Black Rock City personnel will not encourage or direct participants to area hot springs for the purpose of bathing, extracting mud or water. They will also discourage travel to other historical, cultural, and geographical resources in the Black Rock Desert area during the event. All Burning Man participants are required to camp in the designated permitted area.

17. Black Rock City LLC will coordinate with BLM to provide orientation training to the Black Rock Rangers and volunteers who participate on spring patrols and event cleanup. The orientation(s) will address cultural resource protection and safety.

18. Fugitive Dust.

a. Water without additives will be used for fugitive dust control. No chemicals will be used to control fugitive dust.

b. Fugitive dust suppression efforts on roads will be performed at a minimum of once daily by watering to keep fugitive road dust at a minimum during event operation and during and after event closure.

c. Fugitive dust suppression efforts by watering will be used on the airport runway during the event as needed.

d. Before the final inspection, all disturbed areas within the event site will be watered, including the airstrip, and within the trash/security fence to fix fugitive dust to the playa surface.

e. Water trucks used for dust control will carry identification stating "Non-Potable Water"

19. Burning of objects or structures that contain plastics and/or other synthetics or any materials that release toxic fumes is prohibited. Black Rock LLC shall provide public education through the Burning Man website, radio stations, brochures and other literature to encourage compliance of this stipulation.

20. Organizers of each "Art Burn" and Black Rock City LLC are responsible for implementing procedures for the complete cleanup of each burn site, including, but not limited to:

a. Removal of ash.

b. Removal of unburned material such as nails, screws, and glass.

c. Scarification and raking with a drag device to eliminate resulting burn scars.

21. Black Rock City LLC shall inform staff and participants of the backcountry use ethic as reflected in the programs *Tread Lightly!* and *Leave No Trace* tailoring the concepts to fit a large city and encourage individual responsibility and accountability. Black Rock City LLC shall assure *Tread Lightly!* and *Leave No Trace* information is disseminated to personnel and participants in handouts, through Internet home page/website resources and other communication venues as available.

22. Black Rock City LLC will assist the BLM with researching methods to mitigate the development of burn scars and continue developing methods and techniques for effectively treating other adverse human-induced playa impacts.

INFRASTRUCTURE

23. The location approved for the 2000 event is to be utilized by Black Rock LLC for the 2003 Burning Man event.

24. The period of use authorized for this event will be August 11, 2003 - September 15, 2003. Layout is authorized beginning August 1. Construction of temporary fencing will not be initiated prior to August 8. No temporary facilities other than those required for construction are authorized prior to August 11. The event is authorized for August 25 at 0001 hours to September 1, 2003 at 2359 hours. Takedown and removal of all above ground material (items that could pose a hazard to other playa users) will be completed by September 15, 2003. The final phase of cleanup and restoration will be completed by September 26, 2003. No permanent structures will be constructed on public land.

25. Permittee shall install a 360° event perimeter/boundary trash fence and provide a 24-hour perimeter patrol within this fence during the event. Any accumulation of trash that appears to be imminently spilling over the fence or passing through a fence break will be collected. Fence breaks will be repaired immediately upon discovery. Prior to installation of facilities, permittee shall construct the southwest and southeast flanks of the perimeter fence to safely direct vehicular traffic around the site.

26. Dumpsters will be provided at the event site.

a. Black Rock City LLC is responsible for all trash removal and cleanup. Trash will be transported to an appropriate landfill and deposited accordingly.

b. Dumpsters of a size and number sufficient to accommodate the event will be utilized.

c. Dumpsters will be hauled when full to ensure proper disposal and timely rotation of full versus empty containers.

d. Burying of waste material, of any kind, is prohibited on public land.

27. The following areas of special concern will be patrolled by the Burning Man staff for cleanup of event-related trash: County Road 34 from the "8-Mile" entrance to State Route (SR) 447, SR 447 from the intersection with County Road 34 to Wadsworth and from Gerlach to the California state line, and SR 446 from Nixon to SR 445 near Sutcliffe.

28. Black Rock City LLC shall assure that during the event the permitted area is kept clean and that evidence of camping activity is removed upon completion of the event.

SIGNAGE (see also Traffic Control and Airport / Aircraft)

29. Black Rock City LLC shall provide and post signs, as determined by the authorized officer.

30. All signs manufactured by Black Rock City for use during the event will be made to standards comparable to NDOT regulations. These signs are to provide the public with information concerning closures and available playa access points during the event and are to be located at the northeast-bound lane of County Road 34 approaching the 3-Mile entrance from Gerlach and at the eastbound lane of County Road 34 approaching the 12 Mile entrance from Hualapai Flat. All signs shall be placed no later than two weeks prior to the event.

31. Black Rock City LLC shall provide signs depicting the route to the event access/exit and the access/exit turnoff on County Road 34.

TRAFFIC CONTROL (see also Signage)

32. Black Rock City LLC shall coordinate with appropriate agencies to comply with NDOT regulations on any additional event entrances/exits and flagging that are approved by the authorized officer. Such entrances/exits will be completed by such date as set by the authorized officer.

33. Traffic Management.

a. Black Rock City LLC shall coordinate with the Nevada Department of Transportation for traffic control at County Road 34 entrances/exits, the "Y" intersection of State Road 447 and County Road 34, and the towns of Gerlach and Empire during heavy traffic periods (prior to, during exit and after the event) to keep traffic moving steadily.

b. Caution signs and lighting will be placed along County Road 34 in both directions out from the event access and at other prominent or strategic locations around the event to forewarn travelers of traffic safety hazards and the event ahead.

c. Black Rock City LLC shall provide state certified flaggers to control existing traffic at junctions of event access with County Road 34 and at the junction of County Road 34 with State Route 447.

d. Permittee shall obtain a permit from the NDOT to control traffic at the junction of County Road 34 and State Route 447, and shall assure that flagging operation at the junction of the event access and County Road 34 complies with Washoe County and State of Nevada standards and regulations.

34. No access roads or trails will be constructed without authorization in writing from the authorized officer.

35. During the event, Burning Man staff and support personnel will be restricted to the existing event entrance. The 3-Mile entrance/exit will only be used in the event of contingency/ emergency traffic or as directed by the authorized officer.

36. The 3-Mile and 12-Mile access roads will remain open to allow for other dispersed recreation use and general access. Black Rock City oversight personnel will not encourage or direct event participants to use these access roads to access the Burning Man 2003 event.

37. Following the burning of the "Man", Black Rock City LLC shall ensure coordination with appropriate law enforcement agencies to facilitate the exit process.

AIRPORT / AIRCRAFT

38. Black Rock City LLC shall assign an Aircraft Runway Manager, who will strictly control arrival and departure protocols, parking and over flight rules.

39. An aircraft runway will be located outside the Black Rock City boundaries with a taxiway leading to a separate pilot camping area, as identified in the Burning Man 2003 Operating Plan. With the exception of this authorized Burning Man landing runway (for the use of Burning Man clientele, law enforcement and emergency medical services) aircraft are prohibited from landing on the playa for five miles in all directions from the event boundary during the event.

a. A runway 5000 feet long by 60 feet wide is approved and will be marked on the existing playa surface. No surface disturbance beyond removal of transient dunes to assure safety is authorized.

b. The runway use will be limited to single and twin piston-engine, fixed-wing aircraft. No cargo or supply shipments will be allowed.

c. The runway will be marked to make it visible to pilots and also to alert surface traffic to avoid it. The marking will be removed at event completion.

d. Reflective signs will be installed at prominent or strategic locations around the event airport and fenced entry approach road to forewarn playa travelers of safety hazards.

e. Aviation windsocks are to be placed at each end of the runway to provide pilots with a visual reference of wind speed and direction, and to alert other recreational users on the playa of an operational runway. The windsocks are to be removed at event completion.

f. Numbers at both ends of the runway will indicate compass bearing and help define the runway boundaries. These numbers will be painted on the playa surface using a calcium carbonate/water suspension. At event completion, the playa surface containing the numbers will be raked or scarified to obliterate the numbers.

g. Black Rock City LLC shall meet all necessary requirements of the NDOT and the Federal Aviation Agency concerning the runway operation, to include submission of Notices to Airmen (NOTAMS) as appropriate.

h. Black Rock City LLC shall report to FAA authorities and military bases of any non-event aircraft operating in an unsafe manner.

40. Black Rock City LLC shall assure radio communications with event-related aircraft.

a. A Common Traffic Advisory Frequency (122.9 MHz) will be used to inform pilots of landing pattern direction and safety information.

b. This radio communication will be in effect 24 hours a day for the duration of the event.

PUBLIC HEALTH AND SAFETY (See also Signage, Traffic Control, & Airport / Aircraft)

41. Black Rock City LLC shall implement a controlled substance use policy. This policy will be posted and maintained on all public information boards and relayed to participants through other available means. The illegal substance policy as identified in the "Burning Man 2003 Operating Plan" will be observed.

42. Black Rock City LLC shall assume responsibility for public safety and health during all phases of the event, including, but not limited, to the following:

a. Black Rock City LLC shall provide state-certified emergency services at the event. At a minimum, medical personnel will be state-certified paramedics.

b. Inspecting the permitted area for any existing or new hazardous conditions, e.g., changing weather conditions or other hazards that present risks to employees and/or participants.

c. Coordination with appropriate county and state health departments, and the Black Rock City LLC toilet contractor to provide the proper number of toilets for the peak anticipated 2003 event population.

i. A contingency plan for additional toilets will be in place in case the anticipated population exceeds estimates. ii. A minimum of two toilets each will be located in the communities of Gerlach and Empire to reduce impacts on local sewer systems. iii. Toilet locations will be coordinated with the communities involved.

d. Water used for public bathing, including water stored in portable wading pools, and drinking water shall be approved (certified) by the Nevada Bureau of Health Protection Services and Washoe/Pershing County District Health Departments in advance.

e. Black Rock City LLC shall submit a detailed written report to its insurance company and to BLM immediately upon learning of any incident related to the event that occurs before, during or after the event that could possibly result in a liability claim.

43. Burying or discharge of waste material, including grey and black water, is prohibited.

44. Black Rock City LLC/Burning Man shall abide by fire restriction orders, except for the following as officially approved by Black Rock City LLC in coordination with BLM: official art burns, fireworks events, and open fires within the Burning Man event area that are to be contained on supplied fire pans and fire barrels. Fires not contained on raised platforms, fire pans, or barrels are prohibited. Fire restriction orders may be in effect. Black Rock City LLC will take reasonable precautions to suppress brush and grass fires at the event access from County Road 34.

45. The use of personal fireworks or sale of fireworks is prohibited. A sign stating this, approved in writing in advance by the authorized officer, will be prominently placed at the site entrance by the permittee no later than August 24, 2003. Black Rock City LLC shall take reasonable precautions to prevent the sale and/or distribution of fireworks.

46. Only fireworks and pyrotechnics planned, scheduled and approved by Black Rock City LLC in coordination with law enforcement are permitted. Use of any unapproved explosive, fire or incendiary device, is prohibited.

47. With the exception of county, state and federal certified law enforcement personnel under the color of law, possession of firearms is prohibited within the fenced event boundary during the event period. Discharge of firearms will be prohibited for two miles in all directions from the event boundary. An entrance sign to this effect, approved by the authorized officer, shall be placed by the permittee no later than August 24, 2003.

48. During the event, with the exception of BLM-authorized event management-related camps, public camping is prohibited within an eleven and one-eighth square mile area encompassing the event.

49. Black Rock City LLC and "art burn" organizers will coordinate with the event fire contractor and law enforcement points-of-contact. Black Rock City LLC shall prepare and deliver for review a detailed schedule of sanctioned fireworks and art burn events at the daily cooperators coordination meeting, prior to the event/burn. The schedule will include a detailed description of the event/burn, name of responsible person, map location, and approximate time of each event/burn.

50. Operation of motorized vehicles within the event area shall be in accordance with applicable laws, regulations, policies, and stipulations, and in accordance with supplementary rules developed by Black Rock City LLC. Such use shall be restricted to open streets within the City, with the following exceptions: Art vehicles registered with Black Rock City LLC, Black Rock City LLC staff and support; BLM, medical, law enforcement, and firefighting vehicles; and motorized skateboards with/without handles.

a. Black Rock City LLC shall encourage pedestrian traffic and use of bicycles within the event boundary fence.

b. "Art Cars" shall be registered with Burning Man/Black Rock City LLC and must provide evidence of registration at all times.

c. Black Rock City will make educational materials available to participants prior to the event that explain the need to inspect vehicles and repair or modify those with drips of oil or other fluids. Black Rock City LLC will also train staff involved with greeting participants to identify vehicles likely to have an increased risk of oil or fluid drips, to inspect those vehicles, and suggest / or take appropriate actions.

d. No motor vehicles of any kind are allowed within the walk-in camping area.

e. Participants shall use the designated entrance lane to access the event.

f. The following are authorized to drive on the south side of the entranceway (within 100' of the south fence line).

i. Permittee's green transportation bus (a.k.a. Green Tortoise).

ii. Emergency, law enforcement and authorized BLM support staff vehicles.

iii. Black Rock City LLC staff and support personnel authorized by Black Rock City LLC. Permittee shall notify law enforcement of the identities of such authorized persons.

EMERGENCY SITUATIONS

51. If an emergency occurs that is covered in the contingency plan, that plan will take effect and Black Rock City LLC shall defer (and report to) the county law enforcement department with jurisdiction over the area in which the emergency has taken place.

52. Black Rock City LLC shall provide a radio station to disseminate public service information, travel advisories and emergency information as necessary.

53. Black Rock City LLC shall cooperate in the implementation of an incident command system (ICS), and shall defer to the Pershing County Sheriff, who will serve as IC for emergencies under any condition including those that would cause event termination (heavy rain, natural disaster, social unrest).

a. Emergency Services would be implemented to:

i. Respond with emergency disaster procedures and/or

ii. Respond with crowd control procedures.

b. All individuals, vehicles and property that could safely evacuate the event area would be compelled to exit the event/area by the best route available.

c. If an environmental problem occurred requiring event shutdown and/or evacuation:

i. All individuals and vehicles that could be safely evacuated would receive assistance from available participating agencies.

ii. At such times as favorable conditions permit, a reasonable time frame would be established by Incident Command in consultation with BLM management to facilitate safe removal of people, vehicles and event property.

iii. A second time frame would be developed by BLM management to facilitate total event cleanup and final closeout inspection.

d. If a breakdown of social structure occurs and crowd control procedures are implemented:

i. All individuals and vehicles that could be safely evacuated would receive assistance from participating agencies, as available.

ii. The incident commander would determine when the situation/conditions were contained and controlled and allow a resumption of event activities or event shutdown and exit.

iii. At such times as favorable conditions permit, a reasonable time frame would be determined by Incident Command in consultation with BLM management to facilitate safe removal of people, vehicles and event property.

iv. A second time frame would be developed by BLM management to facilitate total event area cleanup and final closeout inspection.

e. Information regarding Burning Man emergency procedures shall be disseminated by the Burning Man Website, the *Burning Man Survival Guide*, the Burning Man Greeter function, the Black Rock City Radio Station and, if needed, other media.

54. In cooperation with emergency services providers and law enforcement agencies Black Rock City LLC shall, upon learning of them, notify BLM of all accidents related to the event that occur before, during, and after the event, that result in the loss of consciousness, an injury disabling individuals for 24 hours or more, or that require transport to a medical facility for medical treatment. Black Rock City LLC shall provide a written summary report of daily medical cases associated with the event to BLM and Pershing County at the cooperators meeting each day during the event; and no later than November 1, 2003 shall provide a written final statistical report of such medical cases to BLM and Pershing County. In case of human death, the County Sheriff shall be notified immediately, and the BLM shall be notified immediately after the Sheriff is notified.

55. Black Rock City LLC shall provide a minimum of two structural/brush-type fire engines, National Wildfire Coordinating Group (NWCG) type 3-6. Engines and staff must meet NWCG or NWSA (National Wildfire Suppression Association) standards for personnel and equipment. These fire engines will be strategically placed within Black Rock City as determined necessary by the Black Rock City LLC fire contractor.

FEES

56. Fee payments* will occur in five installments:

Due Date	Action		Amount	
5/01/03		Payment 1	-	$ 30,000
6/02/03		Payment 2	-	$ 60,000
8/08/03		Payment 3	-	$ 75,000
8/23/02		Payment 4	-	$135,000
9/20/02		Payment 5	-	$_____(to be determined)
	Total		-	$_____(to be determined)

*Fee payment amounts shown are based on projected attendance; the payment 5 amount and the total shall be based on actual attendance.

POST EVENT INSPECTIONS

57. Permittee shall make personnel available the following spring, after seasonal weathering, to inspect the site with BLM to determine any latent adverse impacts, such as pit depressions, bumps, depressions from roadways, ruts from vehicular traffic, or surfacing buried materials, to ensure that the site is in pre-event condition.

58. Inspect the event site through the use of at least three randomly placed transects throughout the site and a measurable cleaning standard. The inspecting party will intensively collect debris found on the ground within the transects. Post-Event Cleanup Standard: For any random transect 100 feet wide by 1,500 feet long (150,000 square feet), any collected debris laid out in a single layer will not exceed five square feet (the measuring gauge is a square 2.23 feet on a side measuring a total of 5 square feet). No more than 50% of the debris may be of organic composition.

59. An extension for the completion of the cleanup will be considered only if weather interferes with access to the site for cleanup purposes. The permittee shall make a written request to the authorized officer immediately upon such an occurrence.