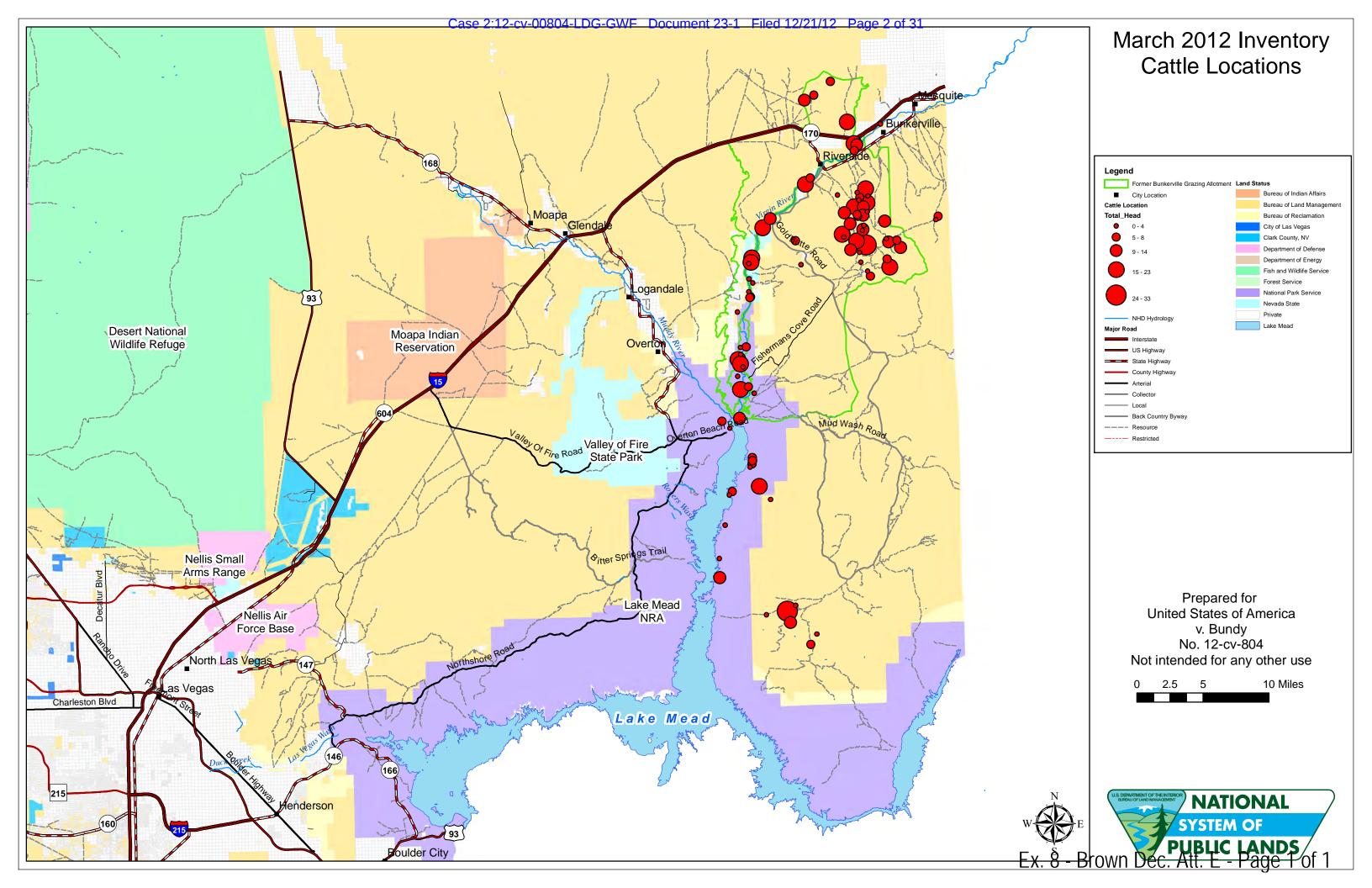
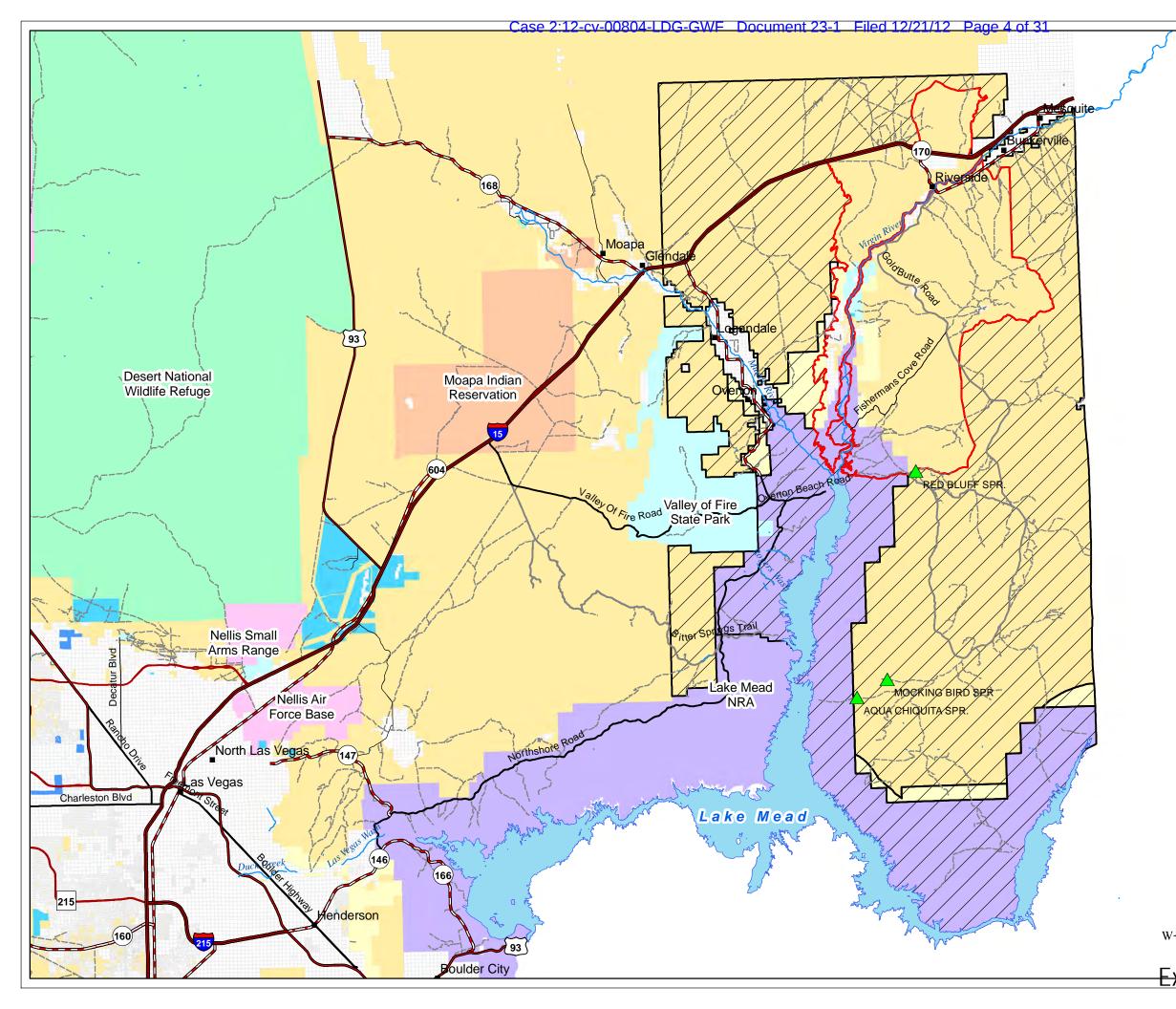
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## ATTACHMENT E



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# ATTACHMENT F





## ATTACHMENT G



Attachment G – Cattle from Motion Cameras bearing Cliven Bundy's Brand and/or earmarks

Cattle with Bundy Brand and Earmarks at Mockingbird Spring



Cow with Bundy Earmarks at Mockingbird Spring

## ATTACHMENT H

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Attachment H – Resource Damage at Camera Locations

Overgrazing and Soil Damage at Aqua Chiquita Spring (Spring is just beyond the view of the photo and trickles down into this area.)



Area around Mockingbird Spring is completely denuded (Spring is just off to the right of the photo)

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## ATTACHMENT I

#### Resource Damage Related to Trespass Cattle Grazing and Associated Water Developments in the Bunkerville Allotment, Gold Butte, Clark County, Nevada June, 2011

Bureau of Land Management Las Vegas Field Office

#### <u>Summary</u>

A cost assessment was developed for resource damage to desert tortoise habitat from a trespass cattle operation. Habitat damage for 4 representative water developments totaled 0.6 acres, and a total of \$37,350 in damage costs was assessed. BLM has documented at least 16 more water developments and will be assessing further damages. The rancher in trespass has claimed that he has developed at least 50 such sites in the area.

#### **Introduction**

The range of the desert tortoise, *Gopherus agassizii*, includes the Mojave and Sonoran deserts in southern California, southern Nevada, Arizona, the southwestern tip of Utah, and Sonora and northern Sinaloa, Mexico. The Mojave population of the desert tortoise (an administrative designation for animals living north and west of the Colorado River) was listed as threatened on April 2, 1990. Critical habitat for the Mojave population was designated on February 8, 1994 (FWS 1994). This designation included approximately 6.45 million acres of critical habitat in portions of California (4,750,000 acres), Nevada (1,220,000 acres), Arizona (339,000 acres), and Utah (129,000 acres) (59 FR 5820-5846, also see corrections in 59 FR 9032-9036). The 1998 Las Vegas Resource Management Plan designated four Areas of Critical Environmental Concern (ACEC) that overlap with designated critical habitat. This additional designation guides management decisions and adds additional protection for desert tortoise.

Loss of habitat through development associated with an increase in human population, combined with habitat damage from livestock over-grazing and offhighway vehicle use, predation of juvenile tortoises by common ravens and coyote, drought, the spread of an upper respiratory tract disease in tortoises, and illegal collection contributed to the decline of tortoise populations (FWS 1994).

Livestock can kill desert tortoises and eggs directly by trampling. Grazing can also damage soil crusts, reduce water infiltration, promote erosion, inhibit nitrogen fixation in desert plants, and provide a favorable seed bed for exotic annual vegetation. Habitat destruction and degradation is especially evident in the vicinity of livestock water sources. Off-road vehicle (ORV) use also destroys, degrades, and fragments considerable areas of desert tortoise habitat; and disturbances from both grazing and off-road vehicles facilitate the invasion of exotic plants and increased incidence of fire (Boarman 2002). In 1991, the Fish and Wildlife Service issued a 3-year section 10(a)(1)(B) incidental take permit to Clark County and the cities of Las Vegas, North Las Vegas, Henderson, and Boulder City in Nevada. As a condition of the permit, the permittees are implementing a habitat conservation plan (HCP) which provides for conservation and management of at least 400,000 acres in Clark County for the benefit of the desert tortoise (RECON 1991). Three types of mitigation measures are required by the terms of the permit:

(1) conservation and management of desert tortoise habitat,

(2) initiation of a desert tortoise research and relocation program, and

(3) imposition of a \$550-per-acre mitigation fee on projects in the permit area.

Key management actions to be implemented on the 400,000 or more acres of conservation lands include: acquisition and retirement of grazing privileges; designation of roads and trails and elimination of off-highway vehicle events over most of the conservation lands; no new landfills or intensive recreation sites; and adequate enforcement, biological monitoring, and maintenance actions needed to implement these actions. The \$550-per-acre mitigation fees are to be used to fund the conservation and mitigation measures. The permittees later pursed a long-term incidental take permit, Clark County Multiple Species Habitat Conservation Plan (MSHCP) and Environmental Impact Statement (EIS) (RECON 2000).

The Bunkerville Allotment in Gold Butte was grazed by Cliven Bundy (Bundy), under an ephemeral grazing permit. Bundy was authorized to graze between 30 and 152 head of livestock annually during the 1970's, 1980's and early 1990's. Bundy's last authorization to graze the Bunkerville Allotment ended on February 28, 1993, but he continued illegally grazing cattle on the Bunkerville Allotment. A recent cattle inventory completed by the BLM and NPS identified over 900 cattle in the Gold Butte area. In addition to cattle grazing, Bundy continued to develop and maintain water developments for cattle. In a Nevada Wildlife Commissioners meeting February 2011 Bundy claimed he had more than 50 developments in the Gold Butte area.

#### **Methodology**

Four representative water developments were selected for evaluation. These developments have been used as watering sites for cattle both historically and recently. On May 24<sup>th</sup> 2011, perennial vegetation surveys were conducted to obtain a cost estimate of the damage created from the water developments and associated focused cattle use in the Bunkerville Allotment, Gold Butte, NV. Fred Edwards (Botanist), Jessie Stegmeier (Wildlife Biologist) and Katie Kleinik (GBI Natural Resource Specialist) completed the surveys. The denuded area surrounding the water development was documented (Table 1 and Figure 1) and compared to intact vegetation close to the disturbance.

Disturbance.	
Site #	Acres of Disturbance
1	0.245
2	0.062
3	0.171
4	0.123
Total	0.601

Table 1.	Representativ	ve Water Development
	Disturbance.	-

Six 100 meter x 2 meter belt transects were used to determine the diversity and estimated number of perennial shrubs in the undisturbed plant community at least a quarter mile away from the water developments within the same ecological site (Reference Site; Figure 1). Three reference transects were more than 0.25 miles and three transects were at least 0.50 miles from the water development. The adjacent plant communities were used as a representative comparison with the disturbed areas. Due to the large number of cattle in Gold Butte area, locating pristine, truly undisturbed areas for reference sites is challenging.

#### Authorities and Results

The Code of Federal Regulations (43 CFR) states that the total penalty for trespass is as follows:

In accordance with §§ 9239.0-7,9239.0-8 and 9239.1-1 of this subpart, anyone responsible for a trespass act is liable to the United States in a civil action for damages and may be prosecuted under criminal law as provided in 9265.6 of this chapter.

The following minimum damages apply to trespass of timber and other vegetative resources and are identified as (1) Administrative Costs, (2) Restoration Labor Costs, and (3) Native Plant Materials Replacement Costs as shown below:

- (1) Administrative costs incurred by the United States as a consequence of the trespass, including vehicle, field work, report preparation, etc.
- (2) Costs associated with the implementation of rehabilitation and stabilization actions to restore areas damaged as a result of the trespass.
- (3) Twice the fair market value of the native plant materials damaged at the time of trespass when the violation was nonwillful, and 3 times the fair market value at the time of the trespass when the violation was willful.

Administrative Costs: Three renewable resources employees spent a total of 8 hours determining the resource damage and traveled approximately 162 miles at the standard rate of \$0.47/mile. The total amount for administrative cost for the

damage assessment is \$887.46. This amount does not include law enforcement costs and other administrative costs. These fees are to be paid separately.

Rehabilitation Costs: The fair market value for a commercial contractor to restore the area to predisturbance conditions is approximately \$18,500/ acre. Therefore, the estimated cost of restoring the 0.601 acre area to predisturbance conditions is \$11,118.50. This cost includes labor and equipment for soil decompaction and preparation, transplanting and maintenance, surface mulch distribution, monitoring and site maintenance. An in-depth restoration plan may be developed for the area if deemed necessary.

Value of Native Plant Materials: Six 100 meter x 2 meter belt transects (reference site) were used to determine the diversity and estimated number of perennial shrubs, cacti and yucca in the undisturbed plant community more than 0.25 miles from the water developments. The adjacent plant community is used as a representative of the trespass areas prior to disturbance. Table 3 was used to determine the cost of resource damage within the disturbance shown in Table 2. Cost of propagating replacement plants for restoration will be covered by the resource damage charge. The fair market value of destroyed resources was determined to be \$12,153.25. As stated in the Federal Code of Regulations, if the trespass is found to be nonwillful, two times the fair market value will be charged, totaling \$25,193.96. If the trespass is found to be willful three times the fair market value will be charged, totaling \$37,347.21.

Desert Tortoise Mitigation Fees: The Desert Tortoise Management Oversight Group (MOG) established a Desert Tortoise Compensation Team to prepare a report describing a proposed set of standards and uses for compensation with respect to the desert tortoise. The report was prepared for primarily for implementation by BLM, and the U.S. Fish and Wildlife Service and State wildlife agencies, when applicable (DTCT 1991). This report assists with determining compensation by rating habitat category, term of effect, existing disturbance and quality of adjacent habitat. Results of these values could multiply the base rate of \$786.00 per acre by six. The base rate, which is adjusted every year for inflation, for these four sites equals \$472.39 but could be up to \$2,361.93.

The total minimum damages for the trespass, not including other fees and administrative costs, are reflected below.

	Nonwillful	Willful
Assessment	\$887.46	\$887.46
Administrative Cost		
Resource Damage	\$24,306.50	\$36,459.75
Tortoise Mitigation Fees	\$472.39 to 2,834.32	\$472.39 to 2,834.32
TOTAL	\$25,193.96	\$37,347.21

Table 2

#### Discussion

The area immediately surrounding the water developments is severely degraded by congregated cattle use (Figure 2). Numerous cattle trails can be seen going to the developments. The soil is compacted, devoid of vegetation and showed high amounts of animal waste. The area adjacent to the denuded area consisted mainly of red brome (*Bromus rubens*) and other species known to colonize after disturbance.

These four sites are located in a wash each approximately 0.4 miles apart. The pipes run continuously from a site at the base of the mountains. The main site contains corrals, salt blocks and pipes. Site 4 did not appear to have pipes continuing north to another water development. This tank is over flowing and creating standing water and overflow continues down the wash for about 25 feet.

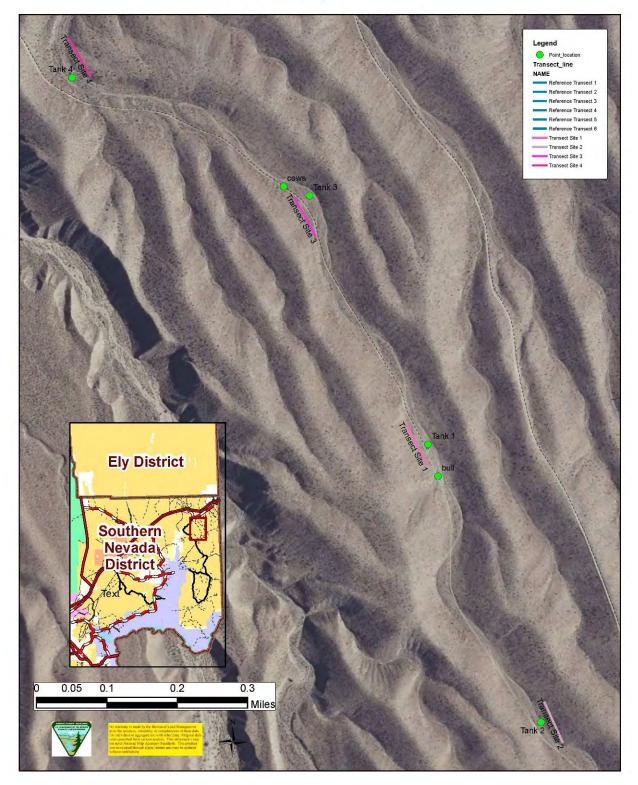
The above costs for restoration of trespasses associated with water developments could increase drastically if there are indeed 50 in the Gold Butte area as claimed by Bundy. Locating and documenting water developments are ongoing and further review of this may be needed after more are located. We currently have around 20 site documented.

Vegetative damage and impacts to desert tortoise habitat from livestock grazing change with distance from water sources. This pattern of change with distance from water has been shown on numerous occasions (e.g. Holscher and Woolfolk 1953, Lange 1969, Graetz and Ludwig 1978, Fusco et al. 1995; as cited in Oldemeyer 1994). Although none of the above studies occurred on ranges as arid as those in the Mojave Desert.

In addition to the six belt transects (reference site) more than half mile from water sources, we completed one 100 meter x 2 meter belt transect at each site approximately 25-50 meters from the development outside the denuded area. Late successional species, cacti and yucca was almost completely absent from these transects were compared to the reference site (Figure 4). This supports the assumption that impacts from livestock grazing, even in arid climates, changes with distance from water developments/sources but more data is needed. The degree of livestock impacting areas around water developments outside the denuded area was not calculated for trespass amount in this exercise, only for limited comparison. The damage from the outer edge of the denuded area to approximately half mile from water sources will require more data collection and may result in additional fees.

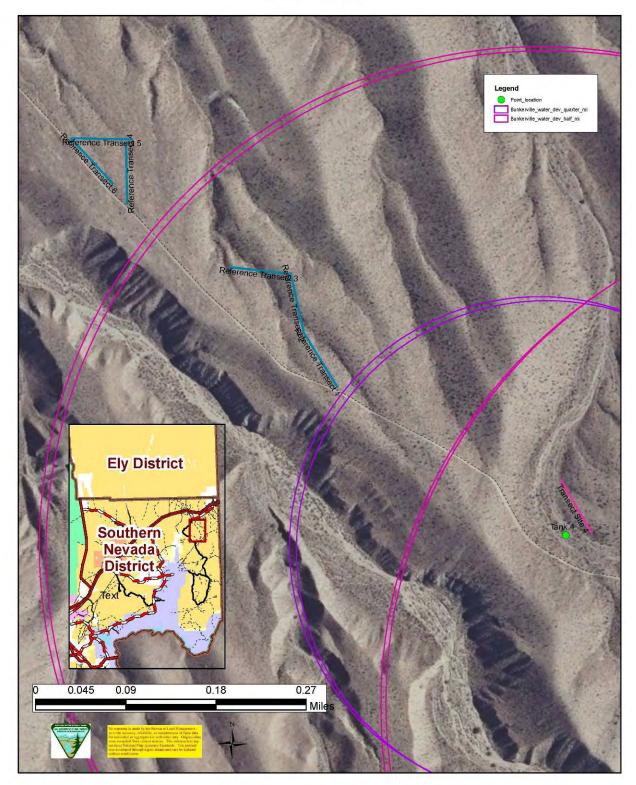
While completing these surveys, cattle with Bundy's brands and ear marks were documented at or near the water developments (Figure 3). An additional site with other livestock management structures (corrals, salt blocks, piping, supplemental forage, etc.) was unable to be surveyed due to cattle occupancy.

Figure 1 A: Water Development Sites



Water Development Sites

Figure 1 B: Reference Site with Six Transects



**Reference Site** 

Trespassed Acreage =		0.601				
Species	Scientific Name	Common Name	Average # Plants /acre	Commercial Cost per Plant	Estimated Number in trespass	Total Cost
AMDU 1 gal	Ambrosia dumosa 1 gal	White Bursage 1 gal	354	4.00	213.00	852.00
AMDU 5 gal	Ambrosia dumosa 5 gal	White Bursage 5 gal	472	9.75	284.00	2,769.00
KRER 1 gal	Krameria erecta 1 gal	Littleleaf ratany 1 gal	24	4.00	14.00	56.00
KRER 5 gal	Krameria erecta 5 gal	Littleleaf ratany 5 gal	108	9.75	65.00	633.75
YUSH	Yucca shedigera	Mojave Yucca	98	70.00	59.00	4,130.00
EPVI 1 gal	Ephedra viridis 1 gal	Mormon Tea 1 gal	0	4.00	0.00	0.00
EPVI 5 gal	Ephedra viridis 5 gal	Mormon Tea 5 gal	13	9.75	8.00	78.00
LATR 1 gal	Larrea tridentata 1 gal	Creosote 1 gal	3	4.00	2.00	8.00
LATR 5 gal	Larrea tridentata 5 gal	Creosote 5 gal	256	9.75	154.00	1,501.50
PSFR 1 gal	Psorothamnus fremontii 1 gal	Indigo Bush 1 gal	3	4.00	2.00	8.00
PSFR 5 gal	Psorothamnus fremontii 5 gal	Indigo Bush 5 gal	10	9.75	6.00	58.50
EPNE 1 gal	Ephedra nevadensis 1 gal	Nevada Jointfir 1 gal	27	4.00	16.00	64.00
EPNE 5 gal	Ephedra nevadensis 5 gal	Nevada Jointfir 5 gal	10	9.75	6.00	58.50
CYAC	Cylindropuntia acanthocarpa	Buckhorn Cholla	44	20.00	26.00	520.00
ОРВА	Opuntia basilaris	Beavertail	7	20.00	4.00	80.00
ECPO	Echinocactus polycephalus	Cottontop	3	20.00	2.00	40.00
CYRA	Cylindropuntia ramosissima	Pencil Cholla	3	20.00	2.00	40.00
FECY	Ferocactus cylindraceus	Barrel Cactus	20	100.00	12.00	1,200.00
ERIN 1 gal	Eriogonum inflatum 1 gal	Desert Trumpet 1 gal	24	4.00	14.00	56.00
ERIN 5 gal	Eriogonum inflatum 5 gal	Desert Trumpet 5 gal	0	9.75	0.00	0.00
SPAM 1 gal	Spheralcea ambigua 1 gal	Desert Globemallow 1 gal	17	4.00	10.00	40.00
SPAM 5 gal	Spheralcea ambigua 5 gal	Desert Globemallow 5 gal	7	9.75	4.00	39.00
LYAN 1 gal	Lycium andersonii		7	4.00	4.00	16.00
LYAN 5 gal	Lycium andersonii		10	9.75	6.00	58.50
					Total Resource Damage Costs	\$12,153.2 5
					Resouce Damage X 2 (if nonwillful)	\$24,306.5 0

#### Table 3 Reference Site Perennial Shrubs

Resouce

Damage X 3 (if willful)

5

\$36,459.7

			Average #
Species	Scientific Name	Common Name	Plants/acre
AMDU 1 gal	Ambrosia dumosa 1 gal	White Bursage 1 gal	395
AMDU 5 gal	Ambrosia dumosa 5 gal	White Bursage 5 gal	440
KRER 1 gal	Krameria erecta 1 gal	Littleleaf ratany 1 gal	47
KRER 5 gal	Krameria erecta 5 gal	Littleleaf ratany 5 gal	81
YUSH	Yucca shedigera	Mojave Yucca	61
ENVI 1 gal	Ephedra viridis 1 gal	Mormon Tea 1 gal	51
ENVI 5 gal	Ephedra viridis 5 gal	Mormon Tea 5 gal	67
LATR 1 gal	Larrea tridentata 1 gal	Creosote 1 gal	20
LATR 5 gal	Larrea tridentata 5 gal	Creosote 5 gal	111
THMO 1 gal	Psorothamnus fremontii 1 gal	Indigo Bush 1 gal	0
THMO 5 gal	Psorothamnus fremontii 5 gal	Indigo Bush 5 gal	34
BAMU 1 gal	Ephedra nevadensis 1 gal	Nevada Jointfir 1 gal	20
BAMU 5 gal	Ephedra nevadensis 5 gal	Nevada Jointfir 5 gal	0
CYAC	Cylindropuntia acanthocarpa	Buckhorn Cholla	40
ОРВА	Opuntia basilaris	Beavertail	20
ECPO	Echinocactus polycephalus	Cottontop	0
CYRA	Cylindropuntia ramosissima	Pencil Cholla	0
FECY	Ferocactus cylindraceus	Barrel Cactus	0
STPA 1 gal	Eriogonum inflatum 1 gal	Desert Trumpet 1 gal	0
STPA 5 gal	Eriogonum inflatum 5 gal	Desert Trumpet 5 gal	20
SPAM 1 gal	Spheralcea ambigua 1 gal	Desert Globemallow 1 gal	51
SPAM 5 gal	Spheralcea ambigua 5 gal	Desert Globemallow 5 gal	0
LYAN 1 gal	Lycium andersonii		20
LYAN 5 gal	Lycium andersonii		61

### Table 4 Belt Transect Data, 25-50 meters from Water Development

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Figure 2 A: Site 1



Figure 2 C: Site 3



Figure 2 B: Site 2







Figure 2 E: Reference Site



Figure 3 Cattle with Bundy's Ear Marks and Brands at Water Development



Literature Cited

- U.S. Fish and Wildlife Service (FWS. 1994. Desert tortoise (Mojave population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 73 pgs plus appendices.
- Boarman, W. I. 2002. Threats to Desert Tortoise Populations: A Critical Review of the Literature. Prepared by U.S. Geological Survey for the West Mojave Planning Team, Bureau of Land Management. 86 pgs.
- RECON. 1991. Short-Term Habitat Conservation Plan for the Desert Tortoise in Las Vegas Valley, Clark County, Nevada. Prepared for Clark County, Las Vegas.
- RECON. 2000. Final Clark County Multiple Species Habitat Conservation Plan and Environmental Impact Statement for Issuance of a Permit to Allow Incidental Take of 79 Species in Clark County, Nevada. Prepared for Clark County, Las Vegas.
- Oldemeyer, J.L. 1994. Livestock grazing and the desert tortoise in the Mojave Desert. In: R.B. Bury and D.J. Germano (eds.). Biology of North American Tortoises. Fish and Wildlife Research 13. : U.S. Department of the Interior, National Biological Survey. 95-103 p.
- Desert Tortoise Compensation Team (DTCT). 1991. Compensation for the Desert Tortoise. Prepared for the Desert Tortoise Management Oversight Group. 16 pgs.

## ATTACHMENT J



Attachment J – Resource Damage from Cattle

Quail Spring – water quality decline and soil disturbance





Relict Leopard Frog in cattle disturbance

## ATTACHMENT K

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Attachment K. Photographs of cattle inside restoration site



Note Bundy Earmarks and restoration planting cones around cattle



Note Bundy Earmarks (Virgin River in background)



Bundy Earmarks inside fence - Virgin River and Riverside Bridge in background





## ATTACHMENT L

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Attachment L Photographs of Damage from cattle inside restoration site.



Location where cattle took down the fence and entered the site



Soil and vegetation distrubance



Native grasses and forbs grazed down to the soil



Cattle Trailing and soil disturbance