

## 8.0 APPENDICES

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**APPENDIX A**  
**LAND ACQUISITION HISTORY**

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**Roxborough  
Fee Title (Owned) Lands**

Park	Parcel Name	County	Closing		Project Type	Purchase		Grantor	Legal Description	# of Parcels	Land Class	Conveyance Instrument*	Recordation		Foot- note #
			Date	Acres		Price	Funding Sources						(Rcpt #/Book/Page)	Partners	
Roxborough	Woodmor	Douglas	11/03/75	500	purchase	\$1,000,000	50% Parks cash, 50% LWCF	William C. Lamm, Trustee	Sec. 11-14, 23, 24 T7S, R69W	4	agriculture	trustee's deed	183306/282/37		
Roxborough	Princeville 1	Douglas	04/27/77	256	purchase	\$614,400	50% Parks cash, 50% LWCF	Princeville Corporation	Sec. 12,13,23,24 T7S, R69W	1	agriculture	WD	201588/308/358		
Roxborough	Rocky Mountain Trust	Douglas	07/16/79	17.5	purchase	\$52,500	50% Parks cash, 50% LWCF	Rocky Mountain Trust	Sec. 24, T7S, 69W	1	agriculture	WD	239115/365/679		
Roxborough	Sundance I	Douglas	03/08/84	110	purchase	\$517,000	50% Parks cash, 50% LWCF	Trust for Public Land	Sec. 24, 25 T7S, R69W	1	agriculture	WD	32399/511/785		
Roxborough	Carpenters Peak	Douglas	03/08/84	284	purchase	\$426,000	50% Parks cash, 50% LWCF	Trust for Public Land	Sec. 14, 23, T7S, R69W	1	agriculture	WD	32397/511/785		
Roxborough	Sundance II	Douglas	07/31/84	336	purchase	\$1,203,000	50% Parks cash, 50% LWCF	Trust for Public Land	Sec. 23,24,25, T7S, R69W	2	agriculture	WD	332955/532/956		1
Roxborough	Stonehenge	Douglas	06/30/86	18	purchase	\$281,000	50% Parks cash, 50% LWCF	Trust for Public Land	Sec. 23, 24 T7S, R69W	3	residential	WD	8612393/651/630		
Roxborough	Project Area 8, Stonehenge		12/19/86	8	purchase	n/a	50% Parks cash, 50% LWCF	Trust for Public Land	Sec. 23, T7S, R69W	1	residential	QCD	8702471/696/543		2
Roxborough	Holland - Rampart Range Ranch	Douglas	07/09/87	43	purchase	\$214,000	50% Parks cash, 50% LWCF	Gilligand/Howell/White/Holland	Sec. 24,25 T7S, R69W	3	agriculture	WD	8720561/734/175		
Roxborough	Goodwin lots	Douglas	07/28/87	32	purchase	\$340,000	50% Parks cash, 50% LWCF	Goodwin Properties	Sec. 25, T7S, R69W	1	agriculture	WD	8722354/737/596		
Roxborough	Roxborough Development Fund	Douglas	12/14/89	21	purchase	\$25,000	100% Parks cash	Roxborough Development Fund	Sec. 11,12,13,24, T7S, R68W	1	agriculture	WD	8930921/889/158		
Roxborough	Roxborough Drive	Douglas	05/30/90	6	HOA transfer	n/a	n/a	Roxborough Park Foundation	Southdowns @ Roxborough	1	road	QCD	9012964/914/294		
Roxborough	Southdowns	Douglas	12/22/95 & 7/10/95	628	purchase	\$2,430,000	12% lottery, 53% partners, 35% GOCO OS grant	The Conservation Fund	Sec. 11,12,13,24, T7S, R68W	11	residential	SWD	9562037/1309/895	Douglas County, others	
Roxborough	Southdowns Lot 308	Douglas		0.40	purchase	\$6,000	100% GOCO base	Joy Barber	Lot 308, Southdowns @ Roxborough	1	residential	WD			
Roxborough	Southdowns Lot 36	Douglas	05/29/97	1	donation	\$1,785	100% partners	Dave Goodwin	Lot 35 Southdowns at Roxborough	1	residential	QCD	9731912/1439/448		
Roxborough	Willow Creek South	Douglas	07/30/97	590	purchase	\$1,200,000	16% lottery, 13% GOCO base, 29% partners, 42% GOCO OS grant	Smernoff, etal	Sec. 13,19, T7S, R68W, Sec. 25, T7S, R69W	1	agriculture	SWD	9741792/1451/2377	Douglas County, others	
Roxborough	Roxborough Park South	Douglas	7/30/1997	286	Park Trust acquisition by SLB	\$915,000	100% Land Board (Park Trust)	State Land Board (grantor)	Sec. 25, 26, T7S, R71W	1	agriculture	SWD	9740225/1449/2107		
Roxborough	Rockett	Douglas	8/19/1997	160	Park Trust acquisition by SLB	\$320,000	100% Land Board (Park Trust)	State Land Board (grantor)	Sec. 25, T7S, R69W	1	agriculture	WD	199748175/1460/1547		
Roxborough	Southdowns Lot 45	Douglas	11/07/97	1	purchase	\$22,000	100% lottery	Hannum	Lot 45 Southdowns at Roxborough	1	residential	WD	9764255/1483/0095		
Roxborough	Stonehenge Lot 185	Douglas	03/24/98	0.5	donation	\$17,000	100% partners	George and Alberta Baker	Sec. 24, T7S, R69W (Lot 185, Stonehenge @ Roxborough)	1	residential	WD	9821121/1572/1642	Friends of Roxborough	3
Roxborough	Stonehenge Lot 168	Douglas	03/24/98	1.5	donation	\$30,000	100% partners	Richard and Martha Spencer	Sec. 24, T7S, R69W	1	residential	WD	9821120/1527/1641	Friends of Roxborough	3
Roxborough	Stonehenge Lots 180,183,184,186	Douglas	05/07/98	3.6	purchase	\$175,000	10% lottery, 32% GOCO base, 58% partners	Goodwin Properties	Sec. 24, T7S, R69W (Lots 180,183,184,186, Stonehenge @ Roxborough)	4	residential	WD	9836525/1549/260	Friends of Rox, Lynn Bahrych	4

**Roxborough  
Fee Title (Owned) Lands**

Park	Parcel Name	County	Closing		Project Type	Purchase		Grantor	Legal Description	# of		Conveyance Instrument*	Recordation (Rcpt #/Book/Page)	Partners	Foot-note #
			Date	Acres		Price	Funding Sources			Parcels	Land Class				
Roxborough	Stonehenge Lots 167, 188	Douglas	06/26/98	3	purchase	\$60,000	50% GOCO base, 50% partners	Richard Wiedman	Sec. 24, T7S, R69W	2	residential	WD	9850471/1568/743	Friends of Roxborough	5
Roxborough	Princeville	Douglas	09/04/98	13	purchase	\$45,000	82% GOCO base, 18% lottery	Princeville Corporation	Sec. 23, T7S, R69W	1	residential	WD	9874139/1600/714	No	
Roxborough	Treece	Douglas	4/25/2001	20	Park Trust acquisition by SLB	\$215,000	100% Land Board (Park Trust)	State Land Board (grantor)	Sec. 26, T7S, R69W	1	agriculture	WD	2001051830/2058/1280		
Roxborough	Matthiesen	Douglas	12/21/01	-3	exchange	n/a	exchange	DPOR	Sec. 24, T7S, R69W (Lots 167-168, Stonehenge @ Roxborough)	2	residential	QCD	02005478/2240/1910		6
Roxborough	Matthiesen	Douglas	12/21/01	12	exchange	n/a	exchange	David Matthiesen	Sec. 24, T7S, R69W (Lots 164, 170, 171, 190-194, Stonehenge @ Roxborough)	8	residential	conservation easement	02005477/2240/1895		
Roxborough	Brice life estate	Douglas	10/09/02	n/a	purchase	\$135,000	26% GOCO base, 74% lottery	Rocky Mountain Trust No. 1	Sec. 24, T7S, 69W	1	residential	WD	2002109239		7

**APPENDIX B**  
**WILDLIFE SPECIES**

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## Butterfly Species at Roxborough State Park

Common Name	Scientific Name
'Rustic' Arctic Blue	<i>Agriades glandon rusticus</i>
Common Roadside-Skipper	<i>Amblyscirtes vialis</i>
Delaware Skipper	<i>Anatrytone logan</i>
Hackberry Emperor	<i>Asterocampa celtis</i>
Brown Elfin	<i>Callophrys augustinus</i>
'Immaculate' Bramble Hairstreak	<i>Callophrys dumetorum affinis</i>
Western Pine Elfin	<i>Callophrys eryphon</i>
Moss' Elfin	<i>Callophrys mossii</i>
Hoary Elfin	<i>Callophrys polios</i>
Sheridan's Hairstreak	<i>Callophrys sheridanii</i>
'Hops' Spring Azure	<i>Celastrina ladon humulus</i>
Common Wood-Nymph	<i>Cercyonis pegala</i>
Gorgone Checkerspot	<i>Chlosyne gorgone</i>
Common Ringlet	<i>Coenonympha tullia</i>
Southern Dogface	<i>Colias cesonia</i>
Orange Sulphur	<i>Colias eurytheme</i>
Clouded Sulphur	<i>Colias philodice</i>
Canyonland Satyr	<i>Cyllopsis pertepida</i>
Queen	<i>Danaus gilippus</i>
Monarch	<i>Danaus plexippus</i>
Silver-spotted Skipper	<i>Epargyreus clarus</i>
Afranius Duskywing	<i>Erynnis afranius</i>
Sleepy Duskywing	<i>Erynnis brizo</i>
Funereal Duskywing	<i>Erynnis funeralis</i>
Dreamy Duskywing	<i>Erynnis icelus</i>
Pacuvius Duskywing (?)	<i>Erynnis pacuvius</i>
Persius Duskywing	<i>Erynnis persius</i>
Horace's Duskywing	<i>Erynnis horatius</i>
Large Marble	<i>Euchloe ausonides</i>
Olympia Marble	<i>Euchloe olympia</i>
Dotted Blue	<i>Euphilotes enoptes</i>
Dun Skipper	<i>Euphyes vestris</i>
Variiegated Fritillary	<i>Euptoieta claudia</i>
Western Tailed-Blue	<i>Everes amyntula</i>
Silvery Blue	<i>Glaucopsyche lygdamus</i>
Arrowhead Blue	<i>Glaucopsyche piasus</i>
Reakirt's Blue	<i>Hemiargus isola</i>
Common Branded Skipper	<i>Hesperia comma</i>
Juba Skipper	<i>Hesperia juba</i>
Leonard's Skipper	<i>Hesperia leonardus pawnee</i>
Colorado Hairstreak (State Insect)	<i>Hypaurotis crysalus</i>
Common Buckeye	<i>Junonia coenia</i>
Marine Blue	<i>Leptotes marina</i>
Weidemeyer's Admiral	<i>Limenitis weidemeyerii</i>
Melissa Blue	<i>Lycaeides melissa</i>
Tailed Copper	<i>Lycaena arota</i>
Blue Copper	<i>Lycaena heteronea</i>
Bronze Copper	<i>Lycaena hyllus</i>
Great Copper	<i>Lycaena xanthoides</i>

## Butterfly Species at Roxborough State Park

Common Name	Scientific Name
Dainty Sulphur	<i>Nathalis iole</i>
Mourning Cloak	<i>Nymphalis antiopa</i>
Milbert's Tortoiseshell	<i>Nymphalis milberti</i>
Garita Skipperling	<i>Oarisma garita</i>
Woodland Skipper	<i>Ochlodes sylvanoides</i>
Chryxus Arctic	<i>Oeneis chryxus</i>
Pale Swallowtail	<i>Papilio eurymedon</i>
Two-tailed Swallowtail	<i>Papilio multicaudata</i>
Black Swallowtail	<i>Papilio polyxenes</i>
Western Tiger Swallowtail	<i>Papilio rutulus</i>
Anise Swallowtail	<i>Papilio zelicaon</i>
Common Sootywing	<i>Pholisora catullus</i>
Field Crescent	<i>Phyciodes campestris</i>
Pale Crescent	<i>Phyciodes pallida</i>
Pearl Crescent	<i>Phyciodes tharos</i>
Cabbage White	<i>Pieris rapae</i>
Russet Skipperling	<i>Piruna pirus</i>
Acmon Blue	<i>Plebejus acmon</i>
Boisduval's Blue	<i>Plebejus icarioides</i>
Taxiles Skipper	<i>Poanes taxiles</i>
Long Dash	<i>Polites mystic</i>
Crossline Skipper	<i>Polites origenes</i>
Peck's Skipper	<i>Polites peckius</i>
Arachne Checkerspot	<i>Polydryas arachne</i>
Hoary Comma	<i>Polygonia gracilis (includes zephyrus)</i>
Satyr Comma	<i>Polygonia satyrus</i>
Western White	<i>Pontia occidentalis</i>
Checkered White	<i>Pontia protodice</i>
Spring White	<i>Pontia sisymbrii</i>
Common Checkered-Skipper	<i>Pyrgus communis</i>
Banded Hairstreak	<i>Satyrrium calanus</i>
Behr's Hairstreak	<i>Satyrrium behrii</i>
California Hairstreak	<i>Satyrrium californica</i>
Striped Hairstreak	<i>Satyrrium liparops</i>
Coral Hairstreak	<i>Satyrrium titus</i>
Aphrodite Fritillary	<i>Speyeria aphrodite</i>
Atlantis Fritillary	<i>Speyeria atlantis</i>
Callippe Fritillary (?)	<i>Speyeria callippe</i>
Coronis Fritillary	<i>Speyeria coronis (record of Ray Stanford)</i>
Edwards' Fritillary	<i>Speyeria edwardsii</i>
Mormon Fritillary	<i>Speyeria mormonia</i>
Gray Hairstreak	<i>Strymon melinus</i>
Northern Cloudywing	<i>Thorybes pylades</i>
Red Admiral	<i>Vanessa atalanta</i>
Painted Lady	<i>Vanessa cardui</i>

Notes: Nelson and Epstein (1998) and Nelson (personal communication of one species recorded by Ray Stanford). Nomenclature after Scott (1986), and for more recent species Opler and Wright (1999).

Bird Species at Roxborough State Park		
Common Name	Scientific Name	Abundance
Pacific loon	<i>Gavia pacifica</i>	1
Common loon	<i>Gavia immer</i>	R
Pied-billed grebe	<i>Podilymbus podiceps</i>	R
Western grebe	<i>Aechmophorus occidentalis</i>	R
American white pelican	<i>Pelecanus erythrorhynchos</i>	1
Double-crested cormorant	<i>Phalacrocorax auritus</i>	R
Great blue heron	<i>Ardea herodias</i>	O
White-faced ibis	<i>Plegadis chihi</i>	R
Turkey vulture (N)	<i>Cathartes aura</i>	C
Snow goose	<i>Chen caerulescens</i>	1
Canada goose	<i>Branta canadensis</i>	O
Wood duck	<i>Aix sponsa</i>	1
Gadwall	<i>Anas strepera</i>	R
American wigeon	<i>Anas americana</i>	R
Mallard (N)	<i>Anas platyrhynchos</i>	C
Blue-winged teal	<i>Anas discors</i>	1
Northern pintail	<i>Anas acuta</i>	R
Green-Winged Teal	<i>Anas crecca</i>	1
Canvasback	<i>Aythya valisineria</i>	1
Redhead	<i>Aythya americana</i>	O/R
Ring-necked duck	<i>Aythya collaris</i>	R
Lesser scaup	<i>Aythya affinis</i>	R
Surf scoter	<i>Melanitta perspicillata</i>	1
Bufflehead	<i>Bucephala albeola</i>	R
Common Goldeneye	<i>Bucephala clangula</i>	R
Common merganser	<i>Mergus merganser</i>	O
Osprey	<i>Pandion haliaetus</i>	R
Bald eagle	<i>Haliaeetus leucocephalus</i>	R
Northern harrier	<i>Circus cyaneus</i>	R
Sharp-shinned hawk	<i>Accipiter striatus</i>	R
Cooper's hawk (N)	<i>Accipiter cooperii</i>	O
Northern goshawk	<i>Accipiter gentilis</i>	R
Broad-winged hawk	<i>Buteo platypterus</i>	R
Swainson's hawk	<i>Buteo swainsoni</i>	R
Red-tailed hawk (N)	<i>Buteo jamaicensis</i>	C/O
Ferruginous hawk	<i>Buteo regalis</i>	O/R
Rough-legged hawk	<i>Buteo lagopus</i>	O/R
Golden eagle (N)	<i>Aquila chrysaetos</i>	C
American kestrel (N)	<i>Falco sparverius</i>	A/C
Merlin	<i>Falco columbarius</i>	R
Peregrine Falcon	<i>Falco peregrinus</i>	R
Prairie falcon (N)	<i>Falco mexicanus</i>	C/O
Blue grouse (N)	<i>Dendragapus obscurus</i>	R
Wild Turkey	<i>Meleagris gallopavo</i>	R
Virginia rail	<i>Rallus limicola</i>	R
Sora	<i>Porzana carolina</i>	R
American coot	<i>Fulica americana</i>	O

Bird Species at Roxborough State Park		
Common Name	Scientific Name	Abundance
Sandhill Crane	<i>Grus canadensis</i>	R
Killdeer	<i>Charadrius vociferus</i>	R
Willet	<i>Catoptrophorus semipalmatus</i>	R
Spotted sandpiper	<i>Actitis macularia</i>	R
Common snipe	<i>Gallinago gallinago</i>	R
Wilson's phalarope	<i>Phalaropus tricolor</i>	R
Franklin's gull	<i>Larus pipixcan</i>	R
Ring-billed gull	<i>Larus delawarensis</i>	O/R
California gull	<i>Larus californicus</i>	1
Rock dove	<i>Columbia livia</i>	A
Mourning dove (N)	<i>Zenaida macroura</i>	A/C
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	R
Great horned owl (N)	<i>Bubo virginianus</i>	O
Northern pygmy-owl	<i>Glaucidium gnoma</i>	1
Burrowing owl	<i>Speotyto cunicularia</i>	1
Northern saw-whet owl	<i>Aegolius acadicus</i>	1
Common nighthawk	<i>Chordeiles minor</i>	R
Common poorwill (N)	<i>Phalaenoptilus nuttallii</i>	O
Chimney swift	<i>Chaetura pelagica</i>	R
White-throated swift (N)	<i>Aeronautes saxatalis</i>	A/C
Calliope hummingbird	<i>Stellula calliope</i>	C
Broad-tailed hummingbird (N)	<i>Selasphorus platycercus</i>	C
Rufous Hummingbird	<i>Selasphorus rufus</i>	O
Belted kingfisher	<i>Ceryle alcyon</i>	O/R
Lewis' woodpecker	<i>Melanerpes lewis</i>	R
Red-naped sapsucker	<i>Sphyrapicus nuchalis</i>	R
Downy woodpecker (N)	<i>Picoides pubescens</i>	O
Hairy woodpecker	<i>Picoides villosus</i>	R
Northern flicker (N)	<i>Colaptes auratus</i>	A/C
Olive-sided flycatcher	<i>Contopus cooperi</i>	R
Western wood-pewee	<i>Contopus sordidulus</i>	O
Willow flycatcher	<i>Empidonax traillii</i>	R
Hammond's flycatcher	<i>Empidonax hammondii</i>	1
Dusky flycatcher	<i>Empidonax oberholseri</i>	R
Cordilleran flycatcher (N)	<i>Empidonax occidentalis</i>	R
Eastern phoebe	<i>Sayornis phoebe</i>	1
Say's phoebe (N)	<i>Sayornis saya</i>	C/O
Western kingbird	<i>Tyrannus verticalis</i>	O
Eastern kingbird	<i>Tyrannus tyrannus</i>	O/R
Loggerhead Shrike	<i>Lanius ludovicianus</i>	O/R
Northern shrike	<i>Lanius excubitor</i>	O/R
Plumbeous vireo	<i>Vireo plumbeus</i>	O/R
Warbling vireo	<i>Vireo gilvus</i>	O
Red-eyed vireo	<i>Vireo olivaceus</i>	R
Steller's jay	<i>Cyanocitta stelleri</i>	C/O
Blue jay (N)	<i>Cyanocitta cristata</i>	O
Western Scrub-Jay	<i>Aphelocoma californica</i>	A

Bird Species at Roxborough State Park		
Common Name	Scientific Name	Abundance
Pinyon jay	<i>Gymnorhinus cyanocephalus</i>	R
Clark's nutcracker	<i>Nucifraga columbiana</i>	1
Black-billed magpie (N)	<i>Pica pica</i>	A
American crow	<i>Corvus brachyrhynchos</i>	A/C
Common raven (N)	<i>Corvus corax</i>	C
Horned lark	<i>Eremophila alpestris</i>	R
Tree swallow (N)	<i>Tachycineta bicolor</i>	O/R
Violet-green swallow (N)	<i>Tachycineta thalassina</i>	C
Bank swallow	<i>Riparia riparia</i>	R
Cliff swallow (N)	<i>Petrochelidon pyrrhonota</i>	O
Barn swallow (N)	<i>Hirundo rustica</i>	O
Black-capped chickadee (N)	<i>Poecile atricapillus</i>	A
Mountain chickadee	<i>Poecile gambeli</i>	R
Bushtit	<i>Psaltriparus minimus</i>	R
Red-breasted nuthatch	<i>Sitta canadensis</i>	R
White-breasted nuthatch	<i>Sitta carolinensis</i>	O
Brown creeper	<i>Certhia americana</i>	O/R
Rock wren (N)	<i>Salpinctes obsoletus</i>	O/R
Canyon wren (N)	<i>Catherpes mexicanus</i>	C
House wren (N)	<i>Troglodytes aedon</i>	C
Winter wren	<i>Troglodytes troglodytes</i>	1
Golden-crowned kinglet	<i>Regulus satrapa</i>	1
Ruby-crowned kinglet	<i>Regulus calendula</i>	C/O
Blue-gray gnatcatcher (N)	<i>Polioptila caerulea</i>	O
Western bluebird (N)	<i>Sialia mexicana</i>	R
Mountain bluebird (N)	<i>Sialia currucoides</i>	O
Townsend's solitaire	<i>Myadestes townsendi</i>	O
Swainson's thrush	<i>Catharus ustulatus</i>	R
Hermit thrush	<i>Catharus guttatus</i>	R
American robin (N)	<i>Turdus migratorius</i>	A/C
Gray catbird	<i>Dumetella carolinensis</i>	O
Northern mockingbird	<i>Mimus polyglottos</i>	1
Sage thrasher	<i>Oreoscoptes montanus</i>	R
European Starling	<i>Sturnus vulgaris</i>	C/O
Bohemian waxwing	<i>Bombycilla garrulus</i>	1
Cedar waxwing	<i>Bombycilla cedrorum</i>	R
Golden-winged warbler (N)	<i>Vermivora chrysoptera</i>	R
Orange-crowned warbler	<i>Vermivora celata</i>	R
Virginia's warbler	<i>Vermivora virginiae</i>	R
Northern parula	<i>Parula americana</i>	1
Yellow warbler	<i>Dendroica petechia</i>	O
Yellow-rumped warbler	<i>Dendroica coronata</i>	O
Townsend's warbler	<i>Dendroica townsendi</i>	1
Black-and-white warbler	<i>Mniotilta varia</i>	R
Ovenbird (N)	<i>Seiurus aurocapillus</i>	O/R
Macgillivray's warbler (N)	<i>Oporornis tolmiei</i>	R
Common yellowthroat	<i>Geothlypis trichas</i>	R

Bird Species at Roxborough State Park		
Common Name	Scientific Name	Abundance
Wilson's warbler	<i>Wilsonia pusilla</i>	O
Yellow-breasted chat	<i>Icteria virens</i>	O
Western tanager	<i>Piranga ludoviciana</i>	O
Green-tailed towhee (N)	<i>Pipilo chlorurus</i>	R
Spotted towhee (N)	<i>Pipilo maculatus</i>	A/C
Chipping sparrow	<i>Spizella passerina</i>	C/O
Clay-colored sparrow	<i>Spizella pallida</i>	R
Brewer's sparrow	<i>Spizella breweri</i>	R
Vesper sparrow (N)	<i>Pooecetes gramineus</i>	C
Lark sparrow	<i>Chondestes grammacus</i>	R
Lark bunting	<i>Calamospiza melanocorys</i>	1
Savannah sparrow	<i>Passerculus sandwichensis</i>	R
Song sparrow	<i>Melospiza melodia</i>	O
Lincoln's sparrow	<i>Melospiza lincolni</i>	1
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	O
Dark-eyed junco	<i>Junco hyemalis</i>	C/O
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	1
Black-headed grosbeak (N)	<i>Pheucticus melanocephalus</i>	C/O
Lazuli bunting (N)	<i>Passerina amoena</i>	O
Indigo bunting	<i>Passerina cyanea</i>	R
Red-winged blackbird	<i>Agelaius phoeniceus</i>	O
Western meadowlark (N)	<i>Sturnella neglecta</i>	A
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	R
Common grackle (N)	<i>Quiscalus quiscula</i>	R
Brown-headed cowbird	<i>Molothrus ater</i>	C
Baltimore oriole (N)	<i>Icterus galbula</i>	O
Pine grosbeak	<i>Pinicola enucleator</i>	R
Cassin's finch	<i>Carpodacus cassinii</i>	1
Cassin's Finch	<i>Carpodacus cassinii</i>	1
House finch	<i>Carpodacus mexicanus</i>	O
Red crossbill	<i>Loxia curvirostra</i>	R
Pine siskin	<i>Carduelis pinus</i>	O
Lesser goldfinch	<i>Carduelis psaltria</i>	C/O
American goldfinch	<i>Carduelis tristis</i>	C/O
Evening grosbeak	<i>Coccothraustes vespertinus</i>	O/R
House Sparrow	<i>Passer domesticus</i>	R

Notes: Robinson (undated); nomenclature after AOU (1998).

**Key:**

(N)= nesting species

A=abundant, C=common, O=occasional, R= rare, 1 = single sighting

## Mammal Species at Roxborough State Park

Common Name	Scientific Name
Masked shrew	<i>Sorex cinereus</i>
Merriam's shrew	<i>Sorex merriami</i>
Western small-footed myotis	<i>Myotis ciliolabrum</i>
Long-eared myotis	<i>Myotis evotis</i>
Little brown myotis	X <i>Myotis lucifugus</i>
Long-legged myotis	<i>Myotis volans</i>
Silver-haired bat	<i>Lasionycteris noctivagans</i>
Big brown bat	<i>Eptesicus fuscus</i>
Townsend's big-eared bat	(CF) <i>Plecotus townsendii</i>
Hoary bat	<i>Lasiurus cinereus</i>
Eastern cottontail	X <i>Sylvilagus floridanus</i>
Mountain cottontail	X <i>Sylvilagus nuttallii</i>
Desert cottontail	X (CF) <i>Sylvilagus audubonii</i>
White-tailed jackrabbit	<i>Lepus townsendii</i>
Least chipmunk	X <i>Tamias minimus</i>
Thirteen-lined ground squirrel	X <i>Spermophilus tridecemlineatus</i>
Rock squirrel	X (CF) <i>Spermophilus variegatus</i>
Golden-mantled ground squirrel	<i>Spermophilus lateralis</i>
Black-tailed prairie dog	X <i>Cynomys ludovicianus</i>
Abert's squirrel	X (CF) <i>Sciurus aberti</i>
Fox squirrel	X <i>Sciurus niger</i>
Red squirrel	X <i>Tamiasciurus hudsonicus</i>
Northern pocket gopher	X <i>Thomomys talpoides</i>
Plains pocket gopher	X <i>Geomys bursarius</i>
Olive-backed pocket mouse	<i>Perognathus fasciatus</i>
Plains pocket mouse	<i>Perognathus flavescens</i>
Silky pocket mouse	(CF) <i>Perognathus flavus</i>
Hispid pocket mouse	X <i>Chaetodipus hispidus</i>
Ord's kangaroo rat	<i>Dipodomys ordii</i>
Plains harvest mouse	<i>Reithrodontomys montanus</i>
Western harvest mouse	<i>Reithrodontomys megalotis</i>
Rock Mouse	X <i>Peromyscus nasutus</i>
Deer mouse	X <i>Peromyscus maniculatus</i>
Northern grasshopper mouse	<i>Onychomys leucogaster</i>
Mexican woodrat	X (CF) <i>Neotoma mexicana</i>
Bushy-tailed woodrat	<i>Neotoma cinerea</i>
Meadow vole	X <i>Microtus pennsylvanicus</i>
Long-tailed vole	X <i>Microtus longicaudus</i>
Prairie vole	X <i>Microtus ochrogaster</i>
Muskrat	<i>Ondatra zibethicus</i>
Meadow jumping mouse	X <i>Zapus hudsonius preblei</i>
Porcupine	X <i>Erethizon dorsatum</i>
Coyote	X <i>Canis latrans</i>
Red fox	X <i>Vulpes vulpes</i>

## Mammal Species at Roxborough State Park

Common Name	Scientific Name
Swift fox	<i>Vulpes velox</i>
Gray fox	X (CF) <i>Urocyon cinereoargenteus</i>
Ringtail	(CF) <i>Bassariscus astutus</i>
Raccoon	X <i>Procyon lotor</i>
Black bear	X <i>Ursus americanus</i>
Ermine	<i>Mustela erminea</i>
Long-tailed weasel	X <i>Mustela frenata</i>
Mink	<i>Mustela vison</i>
Badger	X <i>Taxidea taxus</i>
Western spotted skunk	<i>Spilogale putorius</i>
Striped skunk	X <i>Mephitis mephitis</i>
Mountain lion	X <i>Felis concolor</i>
Bobcat	X <i>Lynx rufus</i>
American elk	X <i>Cervus elaphus</i>
White-tailed deer	X <i>Odocoileus virginianus</i>
Mule deer	X <i>Odocoileus hemionus</i>
<b>Introduced</b>	
House mouse	X <i>Mus musculus</i>
Norway rat	X <i>Rattus norvegicus</i>
<b>Extirpated</b>	
Bison	<i>Bison bison</i>
Gray wolf	<i>Canis lupus</i>
Grizzly bear	<i>Ursus arctos</i>
Black-footed ferret	<i>Mustela nigripes</i>

Notes: Checklist of mammals known from the park.

Sources: Armstrong (1972), Meaney et al. (1997), Roxborough State Park (undated).

### Key

X = species recorded from the park;

(CF) = Chihuahuan fauna



**APPENDIX C**  
**VEGETATION SPECIES**

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## Plant Species at Roxborough State Park

Common Name	Scientific Name	Plant Family
Alfalfa	<i>Medicago sativa</i>	Fabaceae
Alyssum	<i>Alyssum alyssoides</i>	Brassicaceae
American Currant	<i>Ribes americanum</i>	Rosaceae
American Plum	<i>Prunus americana</i>	Rosaceae
Arctic Rush	<i>Juncus arcticus ater</i>	Juncaceae
Aspen	<i>Populus tremuloides</i>	Salicaceae
Aster	<i>Symphotrichium ericoides</i>	Asteraceae
Beaked Hazelnut	<i>Corylus cornuta</i>	Betulaceae
Bell's Twinpod	<i>Physaria bellii</i>	Brassicaceae
Big Bluestem, Turkeyfoot	<i>Andropogon gerardii</i>	Poaceae
Birdsfoot violet	<i>Viola pedatifida</i>	Violaceae
Blue Grama Grass	<i>Chondrosium gracile</i>	Poaceae
Blue Mustard	<i>Chorispora tenella</i>	Brassicaceae
Blue-Stem Willow	<i>Salix irrorata</i>	Salicaceae
Boulder Raspberry	<i>Oreobatus deliciosus</i>	Rosaceae
Bouncing Bet	<i>Saponaria officinalis</i>	Caryophyllaceae
Box-Elder Maple	<i>Negundo aceroides interius</i>	Aceraceae
Bracken Fern	<i>Pteridium aquilinum lanuginosum</i>	Hypolepidaceae
Broadleaf Cattail	<i>Typha latifolia</i>	Typhaceae
Buckbrush	<i>Ceanothus fendleri</i>	Rhamnaceae
Bull Thistle	<i>Cirsium vulgare</i>	Asteraceae
Bullrush	<i>Schoenoplectus lacustris</i>	Cyperaceae
Burdock	<i>Arctium minus</i>	Asteraceae
Canada Bluegrass	<i>Poa pratensis</i>	Poaceae
Canada Thistle	<i>Breca arvensis</i>	Asteraceae
Canada Wildrye	<i>Elymus canadensis</i>	Poaceae
Carrion Flower	<i>Smilax lasioneuron</i>	Smilacaceae
Cheatgrass	<i>Anisantha tectorum</i>	Poaceae
Chickory	<i>Cichorium intybus</i>	Asteraceae
Chokecherry	<i>Padus virginiana melanocarpa</i>	Rosaceae
Cinquefoil	<i>Potentilla gracilis</i>	Rosaceae
Common Juniper	<i>Juniperus communis alpina</i>	Cupressaceae
Crack Willow	<i>Salix fragilis</i>	Salicaceae
Curly Dock	<i>Rumex crispus</i>	Polygonaceae
Dalmatian Toadflax	<i>Linaria genistifolia dalmatica</i>	Scrophulariaceae
Dame's Rocket	<i>Hesperis matronalis</i>	Brassicaceae
Diffuse Knapweed	<i>Acosta diffusa</i>	Asteraceae
Douglas fir	<i>Pseudotsuga menziesii</i>	Pinaceae
Duckweed	<i>Lemna minuscula</i>	Lemnaceae
Field Bindweed	<i>Convolvulus arvensis</i>	Convolvulaceae
Field Mint	<i>Mentha arvensis</i>	Lamiaceae
Gambles Oak	<i>Quercus gambellii</i>	Fagaceae
Golden Currant	<i>Ribes aureum</i>	Grossulariaceae
Gooseberry	<i>Ribes inerme</i>	Grossulariaceae
Grass Fern	<i>Asplenium septentrionale</i>	Aspleniaceae
Green Needlegrass	<i>Nassella viridula</i>	Poaceae
Hawthorn	<i>Crataegus erythropoda</i>	Rosaceae
Heart-Leaved Arnica	<i>Arnica cordifolia</i>	Asteraceae
Hoary Cress	<i>Cardaria draba</i>	Brassicaceae
Hound's Tongue	<i>Cynoglossum officinale</i>	Boraginaceae
Indian Ricegrass	<i>Achnatherum hymenoides</i>	Poaceae
Iris	<i>Iris missouriensis</i>	Iridaceae
Joe-Pye Weed	<i>Eupatorium maculatum</i>	Asteraceae

## Plant Species at Roxborough State Park

Common Name	Scientific Name	Plant Family
Kentucky Bluegrass	<i>Poa compressa</i>	Poaceae
Kinnikinnick	<i>Arctostaphylos uva-ursi</i>	Ericaceae
Leafy Spruce	<i>Tithymalus esula</i>	Euphorbiaceae
Little Bluestem	<i>Schizachyrium scoparium</i>	Poaceae
Meadow Foxtail	<i>Alopecurus aequalis</i>	Poaceae
Mountain Mahogany	<i>Cercocarpus montanus</i>	Rosaceae
Mountain Willow	<i>Salix monticola</i>	Salicaceae
Mullein	<i>Verbascum thapsus</i>	Scrophulariaceae
Musk Thistle	<i>Carduus nutans</i>	Asteraceae
Myrtle Spruce	<i>Tithymalus myrsinites</i>	Euphorbiaceae
Narrowleaf Cottonwood	<i>Populus angustifolia</i>	Salicaceae
Nebraska Sedge	<i>Carex nebrascensis</i>	Cyperaceae
Needle And Thread	<i>Hesperostipa comata</i>	Poaceae
Ninebark	<i>Physocarpus monogynus</i>	Rosaceae
One-Seeded Juniper	<i>Sabina monosperma</i>	Cupressaceae
Peach-Leaved Willow	<i>Salix amygdaloides</i>	Salicaceae
Penny Cress	<i>Thlaspi arvense</i>	Brassicaceae
Plains Cottonwood	<i>Populus deltoides monilifera</i>	Salicaceae
Plantain	<i>Plantago elongata</i>	Plantaginaceae
Plumeless Thistle	<i>Carduus acanthoides</i>	Asteraceae
Poison Hemlock	<i>Conium maculatum</i>	Apiaceae
Ponderosa Pine	<i>Pinus ponderosa scopulorum</i>	Pinaceae
Porcupine Grass	<i>Hesperostipa spartea</i>	Poaceae
Prairie Dropseed	<i>Sporobolus heterolepis</i>	Poaceae
Prairie Junegrass	<i>Koeleria macrantha</i>	Poaceae
Prairied Sandreed	<i>Calamovilfa longifolia</i>	Poaceae
Prickly Lettuce	<i>Lactuca serriola</i>	Asteraceae
Purple Threeawn	<i>Aristida purpurea</i>	Poaceae
Rabbitbrush	<i>Chrysothamnus nauseosus</i>	Asteraceae
Redstem Filaree	<i>Erodium cicutarium</i>	Geraniaceae
Redtop	<i>Agrostis gigantea</i>	Poaceae
Reed Canarygrass	<i>Phalaris canariensis</i>	Poaceae
Rocky Mountain Juniper	<i>Sabina scopulorum</i>	Cupressaceae
Rocky Mountain Maple	<i>Acer glabrum</i>	Aceraceae
Russian Knapweed	<i>Acroptilon repens</i>	Asteraceae
Russian Olive	<i>Elaeagnus angustifolia</i>	Elaeagnaceae
Russian Thistle	<i>Salsola australis</i>	Chenopodiaceae
Sand Bar Willow	<i>Salix exigua</i>	Salicaceae
Saxifrage	<i>Micranthes rhomboidea</i>	Saxifragaceae
Saxifrage	<i>Micranthes oregana</i>	Saxifragaceae
Scotch Thistle	<i>Onopordum acanthium</i>	Asteraceae
Serviceberry	<i>Amelanchier alnifolia</i>	Rosaceae
Showy Milkweed	<i>Asclepias speciosa</i>	Asclepiadaceae
Sideoats Grama	<i>Bouteloua curtipendula</i>	Poaceae
Skunkbrush	<i>Rhus aromatica trilobata</i>	Anacardiaceae
Smooth Brome	<i>Bromopsis inermis</i>	Poaceae
Smooth Scouring Rush	<i>Hippochaete laevigata</i>	Equisetaceae
Snowberry	<i>Symphoricarpos albus</i>	Caprifoliaceae
Spotted Knapweed	<i>Acosta maculosa</i>	Asteraceae
St. Johnswort	<i>Hypericum perforatum</i>	Hypericaceae
Sulfur Cinquifol	<i>Potentilla recta</i>	Rosaceae
Timothy	<i>Phleum pratense</i>	Poaceae
Toad Rush	<i>Juncus bufonius</i>	Juncaceae

## Plant Species at Roxborough State Park

Common Name	Scientific Name	Plant Family
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Poaceae
Variiegated Scouring Rush	<i>Hippochaete hyemalis</i>	Equisetaceae
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	Vitaceae
Virgin's Bower	<i>Clematis ligusticifolia</i>	Ranunculaceae
Water Speedwell	<i>Veronica anagallis-aquatica</i>	Scrophulariaceae
Wax Currant	<i>Ribes cereum</i>	Grossulariaceae
Western Wheatgrass	<i>Pascopyrum smithii</i>	Poaceae
White Adder's Mouth	<i>Malaxis monophyllos brachypoda</i>	Orchidaceae
White Sweet-Clover	<i>Melilotus albus</i>	Fabaceae
Wild Grape	<i>Vitis riparia</i>	Vitaceae
Wild Hops	<i>Humulus lupulus americanus</i>	Cannabaceae
Wild Licorice	<i>Glycyrrhiza lepidota</i>	Fabaceae
Willow Herb	<i>Epilobium ciliatum glandulosum</i>	Onagraceae
Wood Lily	<i>Lilium philadelphicum</i>	Liliaceae
Wood's Rose	<i>Rosa woodsii</i>	Rosaceae
Yarrow	<i>Achillea lanulosa</i>	Asteraceae
Yellow Evening Primrose	<i>Oenothera howardii</i>	Onagraceae
Yellow Owl-Clover	<i>Orthocarpus luteus</i>	Scrophulariaceae
Yellow Rockrose	<i>Crocianthemum bicknellii</i>	Cistaceae
Yellow Sweetclover	<i>Melilotus officinale</i>	Fabaceae
Yellow Toadflax	<i>Linaria vulgaris</i>	Scrophulariaceae
Yucca	<i>Yucca glauca</i>	Agavaceae

Note: Nomenclature follows Weber (1990).

**Plants of Interest at Roxborough State Park**  
**Vickey Trammel, Volunteer Naturalist**  
**2002**

**Introduction**

*The following plant species are either rare or of interest in the park. They need to be protected during trail maintenance and rerouting.*

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
Wild sarsaparilla	Aralia nudicaulis	Upper Willow Creek.
Dwarf milkweed	Asclepias pumila	South Downs
Malefern	Dryopteris filix-mas	N.E. facing ravines in Fountain formation.
Forked spleenwort	Asplenium septentrionale	In the valley between Lyons Ridge and Dakota Hogback, north of lower self-serve.
Big sagebrush	Seriphidium tridentatum	Willow Creek Ranch, just east of top of South Rim Trail.
Brittlefern	Cystopteris fragilis	Same.
Hedgehog cactus	Echinocereus viridiflorus	Same.
Mountain ball cactus	Pediocactus simpsonii	Willow Creek Trail, as it climbs up into Fountain rocks, left side as you go south.
Nipple cactus	Coryphantha vivipara	Willow Creek Trail, as it climbs up into Fountain rocks, left side as you go south.
Venus looking-glass	Triodanus perfoliata	Aspen groove near old Pershaw cabin and Upper Willow Creek.
Frostweed	Crocyanthemum bicknellii	Wet meadow in front in front of the Aspen grove, Foutnain valley Trail.
Hedge binweed	Calystegia sepium	Carpenter Peak area.
Little gentian	Gentianella acuta	In open area just above lower parking area.
Roxborough currant	Ribes americanum	Upper Willow Creek.
Colorado columbine	Aquilegia coerulea	West side of Fountain Valley Trail in the wet meadow, both sides of trail.
Plains larkspur	Delphinium carolinianum	East side of Willow Creek Trail in oak, left side of trail as you go north, just before coming to the creek.
Monkshood	Aconitum columbianum	
Wild iris	Iris missouriensis	
Dragonhead	Dracocephalum parviflorum	
Purple poppymallow	Calirhoe involucrata	Right along road between lower and upper parking lots on right side as you go up. Also just outside the Dakota hogback along the road.
Green bpg orchis	Coeloglossum viride	Upper Willow Creek in wetland.
Spotted coral-root orchid	Corallorhiza maculata	
Rattlesnake-plantain	Goodyera oblongifolia	Upper Willow Creek along trail.
Tearthumb	Truellum sagillatum	Sedge meadow.
Miner's lettuce	Claytonia rubra	Willow Creek Trail, as you approach Fountain formation, on the left going south.
Shootingstar	Dodecatheon pulchellum	Upper Willow Creek in wetland.
Northern anemone	Anemonidium canadense	South of ford, Little Willow Creek.
Mountain-ash	Sorbus scopulina	Upper Willow Creek.
Bog saxifrage	Micranthes oregana	
Snowball saxifrage	Micranthes rhombioidea	
Lousewort	Pedicularis canadensis	Upper Willow Creek.
Little club-moss	Selaginella mutica	

Common Name	Scientific Name	Location
Underwood little club-moss	<i>Selaginella underwoodii</i>	
Carrionflower	<i>Smilax lasioneuron</i>	Northern most area of park, in Fountain rocks.
Twistedstalk	<i>Streptopus fassetii</i>	Upper Willow Creek.
Birdfoot violet	<i>Viola pedatifida</i>	Willow Creek Trail, just after crossing western most bridge, on the right.
Fragile prickly pear	<i>Opuntia fragilis</i>	to right of 2nd bench on WC.





**APPENDIX D**  
**SPECIAL STATUS SPECIES**

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# Roxborough State Park Potential Special Status Faunal and Plant Species List

## Roxborough State Park Potential Threatened and Endangered Species List

March 5, 2010

Scientific Name	Common Name	Threatened Status <sup>1</sup>	Probability of Occurrence <sup>2</sup>
<b>FISH</b>			
<i>Oncorhynchus clarki stomias</i>	Greenback Cutthroat Trout	FT, ST	Low, but consider downstream impact
<b>AMPHIBIANS</b>			
<i>Rana pipiens</i>	Northern Leopard Frog	SC	High
<i>Bufo boreas boreas</i>	Boreal Toad	SE	Moderate
<b>REPTILES</b>			
<i>Thamnophis sirtalis</i>	Common Garter Snake	SC	High
<b>BIRDS</b>			
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl	FT, ST	High
<i>Athene cunicularia</i>	Burrowing owl	ST	High
<i>Haliaeetus leucocephalus</i>	Bald Eagle	ST	Moderate
<i>Charadrius montanus</i>	Mountain Plover	SC	High
<i>Buteo regalis</i>	Ferruginous Hawk	SC	Moderate
<i>Sterna antillarum</i>	Interior Least Tern	FE, SE	Low
<i>Charadrius melodus circumcinctus</i>	Piping Plover	FT, ST	Low
<i>Tympanuchus phasianellus jamesii</i>	Plains Sharp-tailed Grouse	SE	Moderate
<i>Falco peregrinus anatum</i>	American Peregrine Falcon	SC	High
<i>Grus canadensis tabida</i>	Greater Sandhill Crane	SC	Moderate
<b>MAMMALS</b>			
<i>Zapus hudsonius preblei</i>	Preble's Meadow Jumping Mouse	FT, ST	High
<i>Thomomys talpoides macrotis</i>	Northern Pocket Gopher	SC	Moderate
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	SC	High
<i>Mustela nigripes</i>	Black-footed ferret	FE, SE	Low
<b>BUTTERFLY</b>			
<i>Hesperia leonardus</i>	Pawnee montane skipper	FT	Low
<b>Plants</b>			
<i>Spiranthes diluvialis</i>	Ute Ladies Tresses Orchid	FT	Moderate
<i>Gaura neomexicana</i>	Colorado butterfly plant	FT	Moderate

<sup>1</sup>FE - Federally Listed as Endangered

FT - Federally Listed as Threatened

FC - Federal Candidate Species for Listing

SE - State Listed as Endangered in Colorado

ST - State Listed as Threatened in Colorado

SC - State Listed as a Species of Concern in Colorado

<sup>2</sup>High - Found within Roxborough

Moderate - Found within Douglas County

Low - Found in the Foothills Region

### Reference:

Colorado Division of Wildlife. Oct., 15 2007. CDOW website accessed on March 5, 2010 at URL:  
<http://wildlife.state.co.us/WildlifeSpecies/SpeciesOfConcern/ThreatenedEndangeredList/>



**APPENDIX E**  
**ASSET INVENTORY**

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Appendix E - Asset Inventory

Location	Address	Title	City	Postal Code	Agency #	Agency Region	Active Location	Occupancy	Owned	Building Year	Renovation Year	Stories	Total Area	Flood Zone	Basement	Construction Class	Automotive Repair	Chemicals	Commercial Cooking	Explosives, Blasting	Flammable, comb liq	Hazardous Gases	Hazardous Materials	Laboratories	L.P.Gas
NRPO0600	4751 ROXBOROUGH DRIVE	ROXBOROUGH VISITOR CENTER	LITTLETON	80125	RX01	HP	Y	OFF	Y	1986	1986	1	4000	X	N	B	N	N	N	N	N	N	N	N	N
NRPO0601	4751 ROXBOROUGH DRIVE	ENTRANCE STATION	LITTLETON	80125	RX02	HP	Y	OFF	Y	1985	1985	1	400	X	N	D	N	N	N	N	N	N	N	N	N
NRPO0602	4751 ROXBOROUGH DRIVE	PERSSE PLACE STONE HOUSE	LITTLETON	80125	RX03	HP	Y	OTH	Y	1903	1992	1	1600	X	Y	C	N	N	N	N	N	N	N	N	N
NRPO7323	11500 ROXBOROUGH PARK RC	CHATFIELD GARAGE	LITTLETON	80125	RX04	HP	Y	SHP	Y	2000	2000	1	468		N	D	N	N	N	N	N	N	N	N	N
NRPO9626	4751 ROXBOROUGH DRIVE	SUNDANCE RANCH HOUSE	LITTLETON	80125	RX05	HP	Y	OTH	Y	1913	2005	1		X	Y	D	N	N	N	N	N	N	N	N	N

Location	Painting	Poisons	Radiation	Shops, Mech/Wood	Welding	Miscellaneous	No Hazards	General Comments	Burglar Alarm	Smoke Detector	Sprinklered	Fire Alarm	No Protection	Central Station Alarm	Other Protection	Start Dt	Building Value	Contents Value	EDP Value	Library Contents Value	BI Value	Fine Art Value	Total Value
NRPO0600	N	N	N	N	N	N	Y	Remodeled 2009	Y	Y	N	Y	N	N	N	1/1/2010	1,500,000.00	87,021.00	0.00	0.00	0.00	0.00	1,587,021.00
NRPO0601	N	N	N	N	N	N	Y		N		N	N	Y	N	N	1/1/2010	2,099.00	2,176.00	0.00	0.00	0.00	0.00	4,275.00
NRPO0602	N	N	N	N	N	N	Y		N		N	N	Y	N	N	1/1/2010	231,761.00	20,680.00	0.00	0.00	0.00	0.00	252,441.00
NRPO7323	N	N	N	N	N	N	Y		N		N	N	Y	N	N	1/1/2010	22,784.00	16,689.00	0.00	0.00	0.00	0.00	39,473.00
NRPO9626	N	N	N	N	N	N	Y		N		N	N	Y	N	N	1/1/2010	85,440.00	5,170.00	0.00	0.00	0.00	0.00	90,610.00



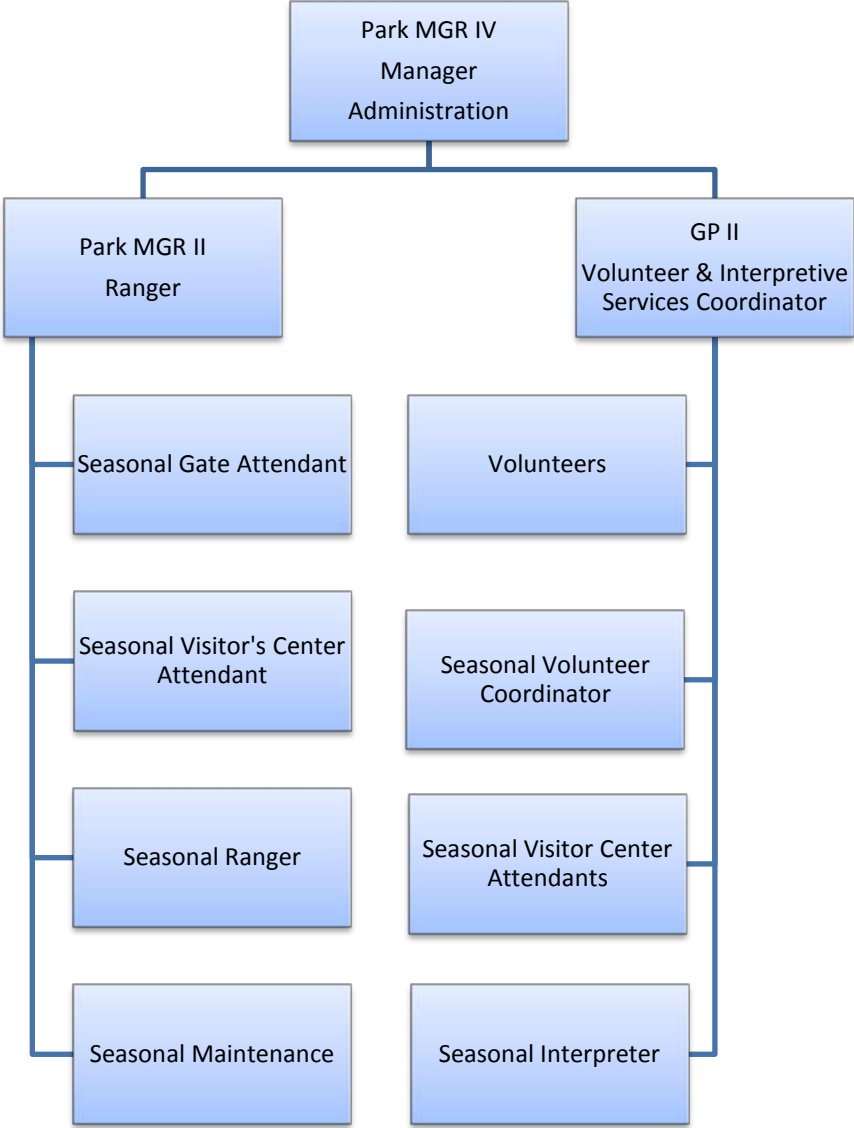


**APPENDIX F**  
**STAFF ORGANIZATIONAL CHART**

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# Roxborough State Park Organizational Chart



## Staff Responsibilities

### PARK MANAGER

Supervises Ranger & GP II  
Budgets & Accounting  
Policy / Procedures  
Community / Landowner  
Relations  
Work Programming  
Planning & Development  
Purchasing / Grants  
Human Resources Mgmt.  
Media Relations  
Liaison w/ Government  
Agencies  
Risk Management  
Law Enforcement  
Locks & Key Control  
Special Events Mgmt.  
KRONOS Approvals  
EDSYS Entry  
GIS Development  
Training & Safety Officer  
Radios  
Liaison w/ Court & LE  
Agencies  
Liaison w/ DOW  
Liaison w/ Natural Areas  
Staff Scheduling  
Evidence Custodian  
LE Records & LECS  
Firearms Instructor  
Sign Program  
COFRS, Accounting &  
Receiving

### RANGER

TEMP Hiring & Termination  
Supervises TEMP Rangers  
TEMP, LE, Safety & Training  
Budget  
Pest Control  
Entrance Operations  
SS Revenue Management  
CUR & PARKS Consignment  
Land Patrol  
Training  
Fire Extinguishers  
EMS Budget & Liaison  
Resource Management  
Supervises Maintenance,  
Youth Corps  
Supervises COV's  
Buildings & Grounds  
Equipment Operation  
Snow Removal  
Vehicle Repairs & Service  
Inventory Control  
Tools & Equipment  
Janitorial Supplies  
Water License  
Weed Control  
Customer Service  
Special Projects

### GEN PROFESSIONAL II

TEMP Hiring &  
Termination  
Supervises VC Staff  
Training  
TEMP Budget  
Interpretive Programs  
Fleet Management  
Equipment Operation  
Snow Removal  
Supervises GOCO Vol.  
Interpreter  
TEMP Processing  
Marketing Efforts  
TEMP Payroll  
KRONOS Entry  
ProCard Allocation  
Customer Service  
Volunteer / Interp Budget  
Special Projects  
VC Management  
WebMaster  
Interp. Library &  
Resources  
PARKS Store  
Management

**APPENDIX G**  
**FINANCIAL ANALYSIS**

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## APPENDIX G.

### ROXBOROUGH FINANCIAL ASSESSMENT

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The Roxborough State Park Financial Assessment presents a financial model that projects potential capital costs, incremental new operational costs and potential additional revenue generated by select park enhancements over a 30-year analysis period. Park enhancement opportunities for Roxborough State Park include a prioritized list of:

- Improvements to existing facilities and infrastructure;
- New facilities and infrastructure; and
- Rehabilitation efforts and natural resource restoration projects that will help achieve the goals outlined for the park.

The complete list of park enhancements is included in Chapter 5.0 of the Roxborough State Park Management Plan. In general, enhancement opportunities evaluated in the Financial Assessment include those that may impact park visitation, operations and revenue. The purpose of the financial analysis is to provide insight on some of the short- and long-term financial considerations associated with various enhancement opportunities.

Included in this assessment is: (1) a summary discussion of current Roxborough State Park visitation characteristics and market considerations; (2) a financial model of park enhancement opportunities; and (3) a documentation of assumptions that underlie the financial analysis.

### Market Considerations

The following is a discussion of Roxborough State Park elements and visitation characteristics that informed the selection of park enhancement opportunities.

**Park Characteristics.** Roxborough State Park is a 3,294-acre, day-use park located on the edge of the foothills 25 miles southwest of Denver. In 1975, Colorado State Parks purchased 500 acres of Roxborough property, forming Roxborough State Park. Since then, portions of Roxborough have been declared a State Natural Area, a National Natural Landmark and a National Archaeological District. Since opening to the public, Roxborough has grown to its current size through targeted property acquisition by State Parks and the help of active citizen groups, such as the Roxborough Park Foundation and Friends of Roxborough.

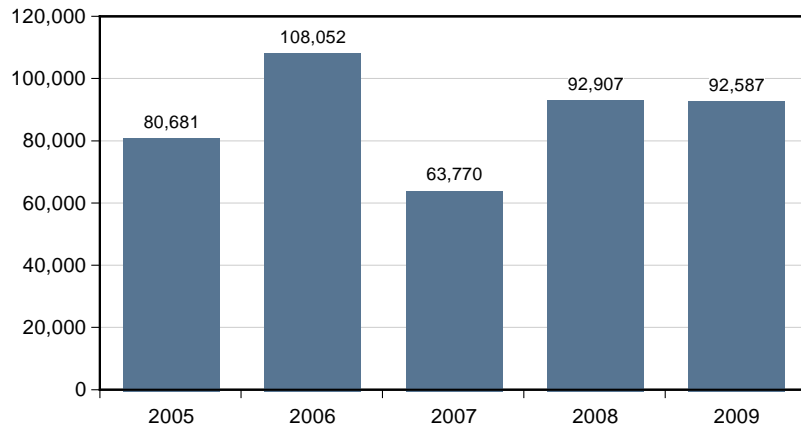
Roxborough State Park contains unique geologic formations, diverse mountain-prairie ecosystems, a hiking trail network and an education-oriented visitor center located a short drive from most locations in the Denver Metropolitan Area. Because of its natural amenities, geologic significance and relative proximity to a large population center, the park has developed a popular series of educational and interpretive programs. In addition to education-related visitation, the park is popular for casual hikes and self-guided interpretation. The park also schedules small concerts and other events at the newly renovated visitor center.

From a market perspective, the enhancement opportunities contained in the park management plan are designed to provide further support to education-oriented group visitation and also to expand the park’s attractiveness to other forms of group events. Also included in the park enhancement opportunities is the construction of about 3.2 miles of interpretive hiking trails in the Southdowns area of the park. This represents an increase of about 20 percent in State Parks-managed trail mileage in the park, which would occur primarily in the Southdowns area.

**Visitation Characteristics.** The park attracted approximately 92,600 visitors in fiscal year 2009, which is roughly similar to visitation in fiscal year 2008 (92,900 visitors). The following exhibit shows Roxborough State Park visitation from 2004 to 2009.

**Exhibit J-1.**  
**Roxborough State Park Visitation,**  
**Fiscal Year**  
**2005 to 2009**

Source:  
 Colorado Division of State Parks, Roxborough State  
 Fiscal Year End Park Manager Reports, 2005-2009.

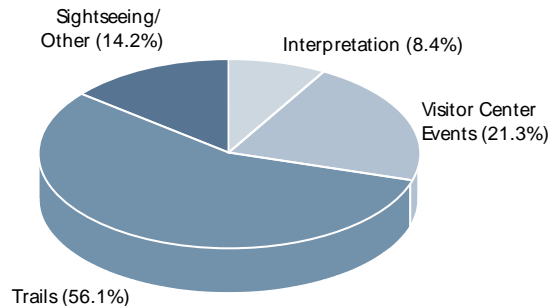


In general, park visitation has been relatively volatile over the past five years, ranging between 60,000 in 2007 and 108,000 in 2006. Visitation has been more stable over the last two years, at about 93,000 visitors in fiscal year 2008 and 2009.

The following exhibit shows the average percentage of park visitation by activity at Roxborough from fiscal year 2005 to 2009. In general, there are three types of Roxborough visitors: (1) visitors who come to Roxborough for hiking recreation; (2) visitors who come to Roxborough for interpretation, environmental education or other organized events; and (3) general sightseers.

**Exhibit J-2.**  
**Roxborough State Park, Average**  
**Visitation Percentage**  
**by Activity, Fiscal Year**  
**2005 to 2009**

Source:  
 Colorado Division of State Parks, Roxborough State  
 Fiscal Year End Park Manager Reports, 2005-2009.



Hiking-based visitation generally accounts for over half of annual Roxborough visitation. Hiking visitation includes just those visitors who come for exercise and leisure based hiking recreation.



Outdoor interpretation and environmental education accounts for roughly 8 percent of visitation between fiscal year 2005 and 2009. This includes attendance at regularly scheduled guided interpretive hikes and other programs led by Roxborough rangers and naturalists. Roxborough visitor center educational and entertainment events make up an additional 20 percent of total visitation. Sightseeing and other visitation account for the remaining 14 percent of total annual visitation over the 5-year period.

The above data indicate that about 85 percent of Roxborough visitors engage in either trail use at the park or attend scheduled park education or entertainment events.

## **Proposed Revenue-Generating Park Improvements**

The following discussion of proposed revenue-generating park enhancement opportunities explains the underlying rationale for select park improvements, which are proposed to improve the visitor experience for current and future trail users and park event attendees.

**Park event facilities.** State Parks is considering developing an Event Facility Shelter (EE/EFS) at Roxborough. State Parks is considering two types of EE/EFS: a full amenity version; and one with more modest amenities. A description of each is provided below:

**Full amenity EE/EFS.** The full amenity EE/EFS would be available for rental to any interested party of 80 people or less for group picnics, retreats, education-related events, corporate events, wedding receptions and other events. The proposed full amenity EE/EFS would include water, electric, restrooms, adjacent parking (40 spaces) and gas grills for cookouts. A small wedding ceremony site would be incorporated into EE/EFS so the facility could accommodate wedding ceremonies as well as receptions.

**Modest amenity EE/EFS.** The modest amenity EE/EFS is similar to the full amenity EE/EFS, but slightly smaller in scale. The modest amenity EE/EFS would accommodate groups of up to 60 and provide parking for 30 vehicles. Electric, gas grills and vault toilets would be available at the modest amenity EE/EFS. No running water would be provided at the modest amenity EE/EFS.

Based on the historical performance of similar facilities at nearby Castlewood Canyon and Golden Gate State Parks, the relative proximity of Roxborough to the Denver Metropolitan Area and already strong event- and education-related visitation, State Parks believes the proposed event facility will be a popular amenity. The following exhibit shows event-related facility gross revenue at Golden Gate and Castlewood Canyon State Parks, which forms the basis of revenue projections for proposed event facilities at Roxborough.

**Exhibit J-3.**

**Event Characteristics and Event Related Gross Revenue, Golden Gate and Castlewood Canyon State Parks, Fiscal Year 2008 to 2009**

Park/ Year	Gross Revenue	Events	Revenue Per Event	Visitors	Visitors Per Event
Golden Gate 09	\$12,012	35	\$343	2,728	78
Golden Gate 08	\$13,378	52	\$257	3,655	70
Castlewood 09	\$18,620	97	\$192	7,149	74
Castlewood 08	\$21,240	90	\$236	6,431	71
Average	\$16,313	69	\$257	4,991	73

Note: Gross revenue includes facility rental fees and wedding-related special use permits. Required visitor entrance fees are not included in the above table.

Source: Colorado Division of State Parks.

Over the last two years, Golden Gate and Castlewood Canyon State Parks have averaged over \$16,000 in event-related gross revenue, or about \$260 per event. Events have directly contributed to an average of 5,000 annual visitors to each park, which also generates park entrance fee revenue in addition to direct event related facility rental revenue.

The financial model on page J-6 and J-7 projects event related revenue and facility operations costs at Roxborough State Park based on average performance of the above comparable parks and Parks Staff input on expected operations costs. The facilities at Castlewood Canyon and Golden Gate State Parks most closely resemble the modest amenity EE/EFS described above. Revenue projections in the financial model for the modest amenity EE/EFS are based on the average activity and revenue at Golden Gate and Castlewood Canyon. In comparison with the modest amenity EE/EFS, the full amenity EE/EFS is estimated to generate 25 percent more events and State Parks is expecting to charge 25 percent more per event than the comparable parks.

**New park trails.** State Parks is currently considering development of about three new trail segments for hiking, totaling about 3.5 miles. The proposed trail development would increase overall trail mileage by about 20 percent. Two of the three trail segments are located in the Southdowns area on the eastern side of the park. This area is currently inaccessible from the main park road due to lack of trails from the main park entrance road.

Proposed trail development would include educational signage on the prairie ecosystem as well as geologic and paleontologic features of the South Downs area. The trail would provide connections to the Sharptail and South Rim trails.

The Southdowns trails would also include the construction of a trailhead and parking space for 30 cars.<sup>1</sup>

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<sup>1</sup> Between the EE/EFS and the new trailhead parking at South Downs, State Parks is proposing expanding parking at Roxborough by about 60-70 spaces.

A third, specialized trail, targeted toward visitors with disabilities, is proposed near the visitor center. This ½-mile “sensory” trail will provide interpretive opportunities for visitors with mobility and other physical disabilities.

State Parks projects that there will be a modest increase in visitation associated with new trail construction (about 5 percent, or 4,380 additional visitors).

## **Financial Model**

The Roxborough State Park financial model allows for the integration of assumptions regarding project construction and facility-based revenue generation and demonstrates the degree to which park enhancements contribute to the financial viability of the park. Visitation, operating revenue and expenditure data were obtained from comparable state parks, current Roxborough State Park performance and estimates from State Parks staff. Capital expenditure data were obtained from State Parks staff as well. Several standard financial measures were calculated for select park improvements including projected annual net cash flow and return on investment.

The financial projections use past performance at Roxborough, Castlewood Canyon and Golden Gate State Parks. Actual performance at Roxborough State Park may vary from model projections if conditions at the park vary from historic conditions or comparable parks.

The Park financial model shown in Exhibit J-4 on the following page has four components: Capital Costs, Operating Costs, Operating Revenue and an Investment Analysis. All applicable enhancement opportunities are assigned a capital cost in the model. Enhancement opportunities that provide the park with additional revenue generation opportunity are assigned operating costs and annual revenue according to past Roxborough and comparable park performance and input from State Parks staff.

Descriptions of park improvement capital and operating costs and associated annual revenue are included in the notes that follow the financial model.

**Exhibit J-4.**  
**Roxborough State Park Financial Model—Capital Expenditure**

I. CAPITAL EXPENDITURES																
BREAkdOWN BY FACILITY																
EO #	Item Description	2010 Priority	CIP Criteria*	Unit Price	Unit	Existing Facility/	New Park	Event Facility	Event Facility	Event Facility	Event Facility	Trail	Total 1 **	Total 2**	Total 3**	Total 4**
						Park Improvements	Facilities	Shelter (Vis Center)	Shelter (South)	Shelter (Vis Center)	Shelter (South)	Construction	Full Amenity EFS Visitor Center	Full Amenity EFS South Site	Modest EFS Visitor Center	Modest EFS South Site
***All Capital Costs Include Associated Site Development Costs***																
EO1	Stabilize Park Entrance Road (Paved, 0.12 mi) (1)	High	Improve Access & Opportunity, Roads	\$ 90	S.Y.	1,690							\$ 152,064	\$ 152,064	\$ 152,064	\$ 152,064
EO2	Improve Park Entrance Station (2)	High	Health & Safety, Improve Efficiency	35,000	EA.	1							35,000	35,000	35,000	35,000
EO3	Stabilize and Interpret Historic Structures (3)	High	Health & Safety, Improve Access & Opportunity													
	Stabilize Structures		Health & Safety, Improve Access & Opportunity	50,000	EA.	3							150,000	150,000	150,000	150,000
	Interpretive Signage		Health & Safety, Improve Access & Opportunity	2,500	EA.	1							2,500	2,500	2,500	2,500
EO4	Water Treatment Facility (4)	High	Health & Safety	150,000	EA.		1						150,000	150,000	150,000	150,000
EO5	Add Picnic Tables (5)	High	Improve Access & Opportunity	500	EA.		5						2,500	2,500	2,500	2,500
EO6	Environmental Education/Event Facility Shelter and Associated Site Work (Full Amenities) (6)		Improve Access & Opportunity, Rev. Enhance													
	Parking (Asphalt, 40 Spaces)		Improve Access & Opportunity, Rev. Enhance	90	S.Y.			2,821	2,821				253,908	253,908	-	-
	Event Facility Shelter (water, electric, grills and attached restrooms)		Improve Access & Opportunity, Rev. Enhance	234	S.F.			2,000	2,000				468,000	468,000	-	-
	Ceremony Site		Improve Access & Opportunity, Rev. Enhance	35,000	EA.				1				-	35,000	-	-
	Site Prep (scrapping, grading, revegetation)		Improve Access & Opportunity, Rev. Enhance	70,000	EA.			1	1				70,000	70,000	-	-
	Environmental Education/Event Facility Shelter and Associated Site Work (Modest Amenities) (7)	High	Improve Access & Opportunity, Rev. Enhance													
	Parking (Asphalt, 30 Spaces)		Improve Access & Opportunity, Rev. Enhance	90	S.Y.					2,116	2,116		-	-	190,431	190,431
	Event Facility Shelter (electric, grills)		Improve Access & Opportunity, Rev. Enhance	125	S.F.					1,500	1,500		-	-	187,500	187,500
	Ceremony Site		Improve Access & Opportunity, Rev. Enhance	35,000	EA.						1		-	-	-	35,000
	Vault Toilet		Improve Access & Opportunity, Rev. Enhance	40,000	EA.					1	1		-	-	40,000	40,000
	Site Prep (scrapping, grading, revegetation)		Improve Access & Opportunity, Rev. Enhance	45,000	EA.					1	1		-	-	45,000	45,000
EO7	Southdowns Trailhead and Interpretive Hiking Trails (8)	Low	Improve Access & Opportunity													
	Trails through Southdowns (3.2 mi)		Improve Access & Opportunity	6	L.F.							16,896	101,376	101,376	101,376	101,376
	Interpretive Signage		Improve Access & Opportunity	2,500	EA.							4	10,000	10,000	10,000	10,000
	Parking Lot South (Gravel 32 spaces) Option 2 from Roxborough Trail Plan		Improve Access & Opportunity	45	S.Y.							2,200	99,000	99,000	99,000	99,000
	Vault Toilet		Improve Access & Opportunity	40,000	EA.							1	40,000	40,000	40,000	40,000
	Trailhead		Improve Access & Opportunity	25,000	EA.							1	25,000	25,000	25,000	25,000
EO8	New Maintenance Building/Compound (9)	Medium	Improve Efficiency													
	Maintenance Structure		Improve Efficiency	100	S.F.		1,000						100,000	100,000	100,000	100,000
	Road (1/4 mi)		Improve Efficiency	75	S.Y.		3,520						264,000	264,000	264,000	264,000
	Utilities		Improve Efficiency	50,000	EA.		1						50,000	50,000	50,000	50,000
EO9	Vault Toilet adjacent to Persse Place (10)	Medium	Improve Access & Opportunity	40,000	EA.		1						40,000	40,000	40,000	40,000
EO10	Sensory Trail near Visitor Center (11)	Medium	Improve Access & Opportunity													
	Trail (about 0.2 miles)		Improve Access & Opportunity	6	L.F.							1,056	6,336	6,336	6,336	6,336
	Interpretive Signage		Improve Access & Opportunity	2,500	EA.							2	5,000	5,000	5,000	5,000
EO11	Prairie/Grassland Restoration (12)	High	Rehabilitation and Restoration	250	AC.	195							48,750	48,750	48,750	48,750
EO12	Prescribed Burning for Ecological Restoration (12)	High	Rehabilitation and Restoration	250	AC.	300							75,000	75,000	75,000	75,000
SUBTOTAL						\$ 463,314	\$ 606,500	\$ 791,908	\$ 826,908	\$ 462,931	\$ 497,931	\$ 286,712	\$ 2,148,434	\$ 2,183,434	\$ 1,819,457	\$ 1,854,457
Mobilization 5%						23,166	30,325	39,595	41,345	23,147	24,897	14,336	107,422	109,172	90,973	92,723
Contingencies 15%						69,497	90,975	118,786	124,036	69,440	74,690	43,007	322,265	327,515	272,919	278,169
TOTAL CAPITAL COST						\$ 555,977	\$ 727,800	\$ 950,290	\$ 992,290	\$ 555,517	\$ 597,517	\$ 344,054	\$ 2,578,121	\$ 2,620,121	\$ 2,183,348	\$ 2,225,348

Note: (\*) CIP Criteria developed for the purposes of the Roxborough State Park Management Plan. In the future, the Division of State Parks may adopt a different set of standard criteria.  
(\*\*) State Parks is currently considering two different types of EE/EFS (full amenity and modest amenity) at two different sites. Each total represents a different combination of EE/EFS amenities and site.

Source: BBC Research & Consulting; Colorado State Parks.

**Exhibit J-5.**  
**Roxborough State Park Financial Model—Incremental Operating Costs, Operating Revenue and Investment Analysis**

		BREAKDOWN BY FACILITY											
		Existing Facility	New Park	Event Facility	Event Facility	Event Facility	Event Facility	Trail	Total 1 **	Total 2**	Total 3**	Total 4**	
		Improvements	Facilities	Shelter (Vis Center)	Shelter (South)	Shelter (Vis Center)	Shelter (South)	Construction	Full Amenity EFS	Full Amenity EFS	Modest EFS	Modest EFS	
				Full Amenity	Full Amenity	Modest Amenity	Modest Amenity		Visitor Center	South Site	Visitor Center	South Site	
<b>II.</b>	<b>INCREMENTAL OPERATING COSTS</b>												
	New Full Time Staff (13)		0.25	0.25	0.25				0.5	0.5	0.25	0.25	
	Average Annual Salary		\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	
	Benefits		\$ 5,670	\$ 5,670	\$ 5,670	\$ -	\$ -	\$ -	\$ 11,340	\$ 11,340	\$ 5,670	\$ 5,670	
	Incremental Full Time Labor Cost	\$ -	\$ 21,420	\$ 21,420	\$ 21,420	\$ -	\$ -	\$ -	\$ 42,840	\$ 42,840	\$ 21,420	\$ 21,420	
	New Seasonal Staff (14)		0.33	0.33	0.33	0.33	0.33		0.7	0.7	0.7	0.7	
	Hourly Wage	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	
	Increased Annual Hours		347	347	347	347	347		693	693	693	693	
	Incremental Total Labor Cost	\$ 3,467	\$ -	\$ 3,467	\$ 3,467	\$ 3,467	\$ 3,467	\$ -	\$ 4,622	\$ 4,622	\$ 4,622	\$ 4,622	
	Utilities (15)		\$ 3,600	\$ 500	\$ 500	\$ 500	\$ 500		\$ 4,100	\$ 4,100	\$ 4,100	\$ 4,100	
	Annual Operations and Maintenance (16)	\$ 6,950	\$ 7,241	\$ 11,879	\$ 12,404	\$ 6,944	\$ 7,469	\$ 4,301	\$ 30,370	\$ 30,895	\$ 25,436	\$ 25,961	
	Total Incremental Costs	\$ 10,416	\$ 32,261	\$ 37,265	\$ 37,790	\$ 10,911	\$ 11,436	\$ 4,301	\$ 81,932	\$ 82,457	\$ 55,578	\$ 56,103	
<b>III.</b>	<b>INCREMENTAL REVENUE</b>												
	Group Picnic and Event Revenue (17)			\$ 27,708	\$ 27,708	\$ 17,733	\$ 17,733		\$ 27,708	\$ 27,708	\$ 17,733	\$ 17,733	
	Incremental Annual Visitation (18)			6,296	6,296	4,140	4,140	4,380	10,676	10,676	8,520	8,520	
	Avg Gate Rev per Visitor (19)			\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	
	Subtotal Gate Revenue	\$ -	\$ -	\$ 9,381	\$ 9,381	\$ 6,169	\$ 6,169	\$ 6,526	\$ 15,907	\$ 15,907	\$ 12,695	\$ 12,695	
	Total Incremental Operating Revenue	\$ -	\$ -	\$ 37,089	\$ 37,089	\$ 23,902	\$ 23,902	\$ 6,526	\$ 43,615	\$ 43,615	\$ 30,428	\$ 30,428	
<b>IV.</b>	<b>INVESTMENT ANALYSIS (20)</b>												
	Annual Net Cash Flow	\$ (10,416)	\$ (32,261)	\$ (176)	\$ (701)	\$ 12,991	\$ 12,466	\$ 2,225	\$ (38,317)	\$ (38,842)	\$ (25,150)	\$ (25,675)	
	Initial Investment	\$ 555,977	\$ 727,800	\$ 950,290	\$ 992,290	\$ 555,517	\$ 597,517	\$ 344,054	\$ 2,578,121	\$ 2,620,121	\$ 2,183,348	\$ 2,225,348	
	Break-Even Revenue	\$ 42,569	\$ 74,350	\$ 92,221	\$ 95,174	\$ 43,036	\$ 45,990	\$ 24,197	\$ 231,025	\$ 233,979	\$ 181,841	\$ 184,795	
	Pay Back (years)	-	-	(5,392)	(1,415)	43	48	-	(67)	(67)	(87)	(87)	
	Return on Investment (ROI)	-1.87%	-4.43%	-0.02%	-0.07%	2.34%	2.09%	0.65%	-1.49%	-1.48%	-1.15%	-1.15%	
	Net Present Value (NPV) (includes initial investment)	\$ (736,000)	\$ (1,286,000)	\$ (953,000)	\$ (1,004,000)	\$ (331,000)	\$ (382,000)	\$ (306,000)	\$ (3,241,000)	\$ (3,292,000)	\$ (2,618,000)	\$ (2,669,000)	
	Net Present Value (NPV) (excludes initial investment)	\$ (180,000)	\$ (558,000)	\$ (3,000)	\$ (12,000)	\$ 225,000	\$ 216,000	\$ 38,000	\$ (663,000)	\$ (672,000)	\$ (435,000)	\$ (444,000)	
	DISCOUNT RATE	4.0%											

Note: (\*\*\*) State Parks is currently considering two different types of EE/EFS (full amenity and modest amenity) at two different sites. Each total represents a different combination of EE/EFS amenities and site.

Source: BBC Research & Consulting; Colorado State Parks.

## Financial Analysis Notes

The following notes describe cost derivation and other assumptions that underlie the preceding financial model.

**Capital Costs.** Park capital costs include the initial costs spent on park buildings, roads, trails and other park facilities. The following notes accompany Exhibit J-4, Roxborough State Park Financial Analysis on page J-6 and J-7.

- (1) Includes a 0.12-mile of paving overlay from the park entrance to the entrance station. Cost estimate obtained from State Parks staff.
- (2) The current park entrance station is over 30 years old and proposed improvements would bring this facility into compliance with current safety standards. Cost based on state park staff estimates and includes extending utilities and constructing sanitary facilities. If Roxborough Park neighborhood provides a donation towards this improvement, cost would be considerably lower.
- (3) The Sundance Ranch, Head Cabin and Treece Cabin will provide interpretive opportunities for park visitors once stabilized. Stabilization includes improving building and site condition for safe attendance by visitors and installing interpretive signage at each structure. State Parks staff provided cost estimate.
- (4) A new water treatment facility is needed to comply with state regulations. Cost is for a new water chlorination treatment facility and associated site work. Cost estimate provided by State Parks staff.
- (5) Includes the cost of five picnic tables to be placed near the visitor center and at other popular locations throughout the park. Cost estimate provided by BBC and based on informal web research on average municipal park supply retail prices for standard picnic tables.
- (6) Cost to provide a full amenity EE/EFS for maximum 80-person events includes a 40-space paved parking lot, a 2,000-square foot covered event facility, an associated wedding ceremony site, utility extension and site work. The proposed full amenity EE/EFS would include water, electric, restrooms and gas grills for cookouts. State Parks is currently considering two sites for the event facility shelter. The visitor center site will not require a separate wedding ceremony site. Additional development cost of the wedding ceremony site is included in the south site development cost only. State Parks staff provided cost information. Facility construction cost based on cost of construction of Chief Ouray event facility shelter at Cherry Creek State Park.
- (7) The modest amenity EE/EFS is similar to the full amenity EE/EFS, but smaller. The modest amenity EE/EFS would be sized to accommodate groups of 60 or less. Electric, gas grills and vault toilets would be available at the modest amenity EE/EFS. No running water would be provided at the modest amenity EE/EFS. Construction and site work cost estimates based on information provided by State Parks staff. The modest amenity EE/EFS is estimated to be 1,500 square feet.

- (8) The cost of 3.2 miles of proposed trail interpretive hiking trails in the Southdowns area of the park is based on State Parks trail construction cost estimates. Cost includes trail construction, a 30-space parking lot, a vault toilet, four interpretive signs and a trailhead.
- (9) Most park maintenance equipment is currently stored in garage space at Chatfield State Park. This 3-bay maintenance garage and shop will allow for equipment storage and repair space. Cost includes construction of maintenance and storage facility, utility extension, a quarter-mile gravel road spur extension and associated site work. Cost estimates provided by State Parks staff.
- (10) Currently there is no restroom facility at Persse Place. Cost includes purchase of composting or vault toilet and associated site work. Cost estimate provided by State Parks staff.
- (11) This 0.1-mile sensory trail located near the visitor center is designed to offer experiences for persons with disabilities. Trail construction cost estimates provided by State Parks staff. Cost includes trail construction and interpretive signage.
- (12) Enhancement opportunity 11 and 12 include noxious weed removal, reseeding of native vegetation and prescribed burning to restore native prairie habitat on the eastern portion of the park. Per acre costs provided by State Parks staff.

**Incremental Operating Costs.** Incremental park operating costs include staffing, utilities, annual maintenance and other ongoing operations and maintenance expenditures. These costs represent only the incremental new operating costs associated with additional park facilities. The following notes accompany Exhibit J-4, Roxborough State Park Preliminary Financial Analysis on page J-6.

- (13) Full time staffing costs are based on estimates from State Parks staff. State Parks estimates the  $\frac{1}{4}$  to  $\frac{1}{2}$  new full time position will be necessary to support maintenance and operation needs associated with the new maintenance compound ( $\frac{1}{4}$  FTE) and the EE/EFS ( $\frac{1}{4}$  FTE, full amenity EE/EFS only).
- (14) Seasonal staffing costs are based on estimates from Roxborough State Park staff. Wage and hours estimates reflect the actual cost and amount of seasonal hours required to operate proposed new park facilities. Includes the cost of one new seasonal ranger to provide services to additional park visitors related to projected visitation increases associated with the South Downs trails and the EE/EFS.
- (15) Utilities costs for the new maintenance facility, improved entry station, event facility shelter, group activity area and Persse Place toilet are based on current Roxborough State Park expenditures and Roxborough Park manager estimates.
- (16) Annual maintenance includes supplies, materials and purchased services related to annual operations and facility maintenance. Cost estimates are calculated at 1.5 percent of initial capital investment (not including construction contingency or mobilization). There are no incremental operating costs associated with restoration and rehabilitation projects such as EO11 (Prairie Restoration) and EO12 (Prescribed burning).

**Incremental Annual Revenue.** Incremental annual revenue includes the new revenue generated from additional park visitation associated with park improvements. These revenue figures represent only the incremental new revenue associated with additional park facilities. The following notes accompany Exhibit J-4, Roxborough State Park Financial Analysis on page J-6 and J-7.

- (17) Event revenue is estimated by projecting comparable benchmark performance. The event revenue calculation for the modest amenity EE/EFS is based on average performance at Golden Gate and Castlewood Canyon State Parks in fiscal year 2008 and 2009. Prior Exhibit J-3 shows the basis for event-related revenue calculations. Events create park revenue through direct fees and permits and through gate revenue. It is assumed the modest amenity EE/EE/EFS at Roxborough State Park can match the average event revenue performance of Castlewood Canyon and Golden Gate. For modeling purposes, the full amenity EE/EE/EFS (which would include an additional 10 parking spaces and running water) is estimated to generate 25 percent more events and State Parks is expecting to charge 25 percent more per event than the comparable parks.
- (18) Additional visitation is expected with the park improvements presented in the park management plan. Visitation associated with event facilities are added to adjusted baseline visitation by using the estimated number of events and an assumed event group size of 60 people at the modest amenity EE/EE/EFS and 73 people at the full amenity EE/EE/EFS (based on historical average group size at Golden Gate and Castlewood Canyon). Event-related visitation is described above in note 18.
- (19) The State Parks system calculates pass revenue per visitor on a monthly and annual basis in its park manager reports. Park pass revenues are calculated by applying a six-year average pass revenue per visitor figure for Roxborough State Park during years 2004-2009 (\$1.49).<sup>2</sup>

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<sup>2</sup> Roxborough State Park Park Manager Reports, 2005-2009.



**Investment Analysis.** The investment analysis includes several measures of financial performance, described below.

(20) The following are elements of the investment analysis:

- Net cash flow is equal to annual operating revenue less operating expenditure.
- Initial investment is equal to the initial capital investment in the park.
- The break-even annual revenue is the annual revenue required over the thirty-year analysis period to break-even on the initial investment, at the given discount rate.
- Payback is the number of years it would take to pay back the initial investment at the project net cash flow. This number is not displayed if there is negative net cash flow.
- Return on investment (ROI) is the annual profit (or loss) on the initial investment, expressed as a percentage.
- Net present value (NPV) is the total present value of a time series of cash flows. It is a standard method for using the time value of money to appraise long-term projects. There are two calculations of NPV shown: one that considers the initial capital outlay in year 1 and one that does not.



**APPENDIX H**  
**ROXBOROUGH STATE PARK TRAILS PLAN**

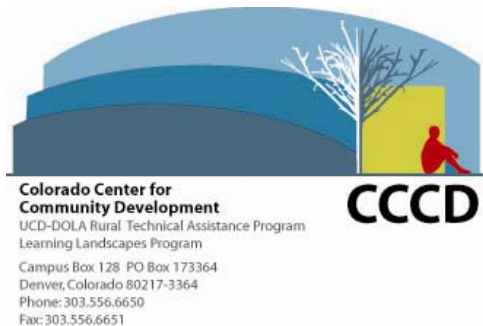
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# APPENDIX H

## ROXBOROUGH PARK TRAILS MANAGEMENT PLAN

PREPARED BY:



**Project Intern:** Bethany Clark  
**Project Manager:** Judith Bergquist  
**Date:** March 15, 2010



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## GOALS OF THE ROXBOROUGH STATE PARK TRAILS PLAN




Roxborough State Park’s 14.25 miles of trails offer some of the highest quality hiking, environmental education, and scenic and wildlife viewing opportunities along the Front Range. Maintaining and improving these existing trails are core tenets of this plan. Other important elements of this plan are recommendations for potential new interpretive hiking trails in the Southdowns area of the park (which currently is not accessible from the main park road), a new “sensory trail” near the visitor center, and expanded interpretive signage.




## CONCEPTUAL ROXBOROUGH PARK TRAIL SYSTEM




### Existing Roxborough Park Trails

About 9.6 miles of Roxborough’s 14.25 miles of trails are managed by Colorado State Parks. The remaining 4.6 miles of trails that extend through Roxborough are managed by either the U.S. Forest Service or Douglas County. Hiking is the only permitted use on the 9.6 miles of trails administered by park staff. Roxborough’s abundant scenic beauty, wildlife viewing opportunities, and quiet solitude make this park a popular destination for visitors seeking a high-quality, close-to-home hiking experience. An 80-yard surfaced walkway connects the upper parking lot to the visitor center patio. Trails administered by Roxborough are all accessible from the visitor center, the Willow Creek Trail and the South Rim Trails can also be accessed from the Willow Creek and South parking lots. Two scenic overlooks provide remarkable views of the park landscape. The Fountain Valley Overlook, which is a short walk from the visitor center, is a popular destination. The Lyons Overlook, accessible from the Fountain Valley Trail at 6,240 feet above sea level, has a wood deck with benches so visitors can relax as they enjoy the great view to the west. These trails are highlighted in Table 1 below and on Figure 1.

**Table 1. Roxborough Trails**

Trail Name	Description	Allowed Uses	Approx. Miles
<b>Trails Administered by Colorado State Parks (hiking only)</b>			
<b>Fountain Valley Trail</b>	<b>Fountain Valley Trail</b> offers a gentle to moderate stroll through the Fountain Formation and past the historic Persse Stone House. The trail also winds through several different habitats for plants and animals, including mule deer, fox and a variety of birds. Although the trail is unpaved, most wheelchairs can ride the Fountain Valley Trail with little or no difficulty during good weather conditions. Hiking time is approximately one and one-half to two hours.		1.9
<b>Lyons Overlook</b>	<b>Lyons Overlook Trail</b> provides access to a viewing platform at the top of the Lyons Formation which offers views to the Fountain Valley.		0.2
<b>South Rim Trail</b>	<b>South Rim Trail</b> provides a moderately challenging climb to the south		1.9

	end of the park through the montane shrubland and along the Lyons Formation. Golden Eagles have been spotted from this trail.		
<b>Carpenter Peak Trail</b>	<b>Carpenter Peak Trail</b> offers a 1,000-foot elevation gain as you hike to the granite-topped foothill on the west side of the park. Carpenter Peak’s summit lies at 7,160 feet. This is the highest point in the park and provides spectacular views in all directions. The 0.7-mile Elk Valley Trail link near the beginning of the Carpenter Peak trail connects to the Douglas County Trail System via Douglas County Road 5.		3.1
<b>Elk Valley Trail</b>	<b>Elk Valley Trail</b> connects the Carpenter Peak trail Douglas County Road 5 and traverses a U.S. Forest Service inholding.		0.7
<b>Willow Creek Trail</b>	<b>Willow Creek Trail</b> is a nice trail for families due to the short length and the diversity of plants and landscapes through which it travels. The Willow Creek Trail, which is known for its abundance of wildflowers during spring and summer months. The wealth of scrub oak attracts a variety of birds and makes this trail ideal for bird watching.		1.2

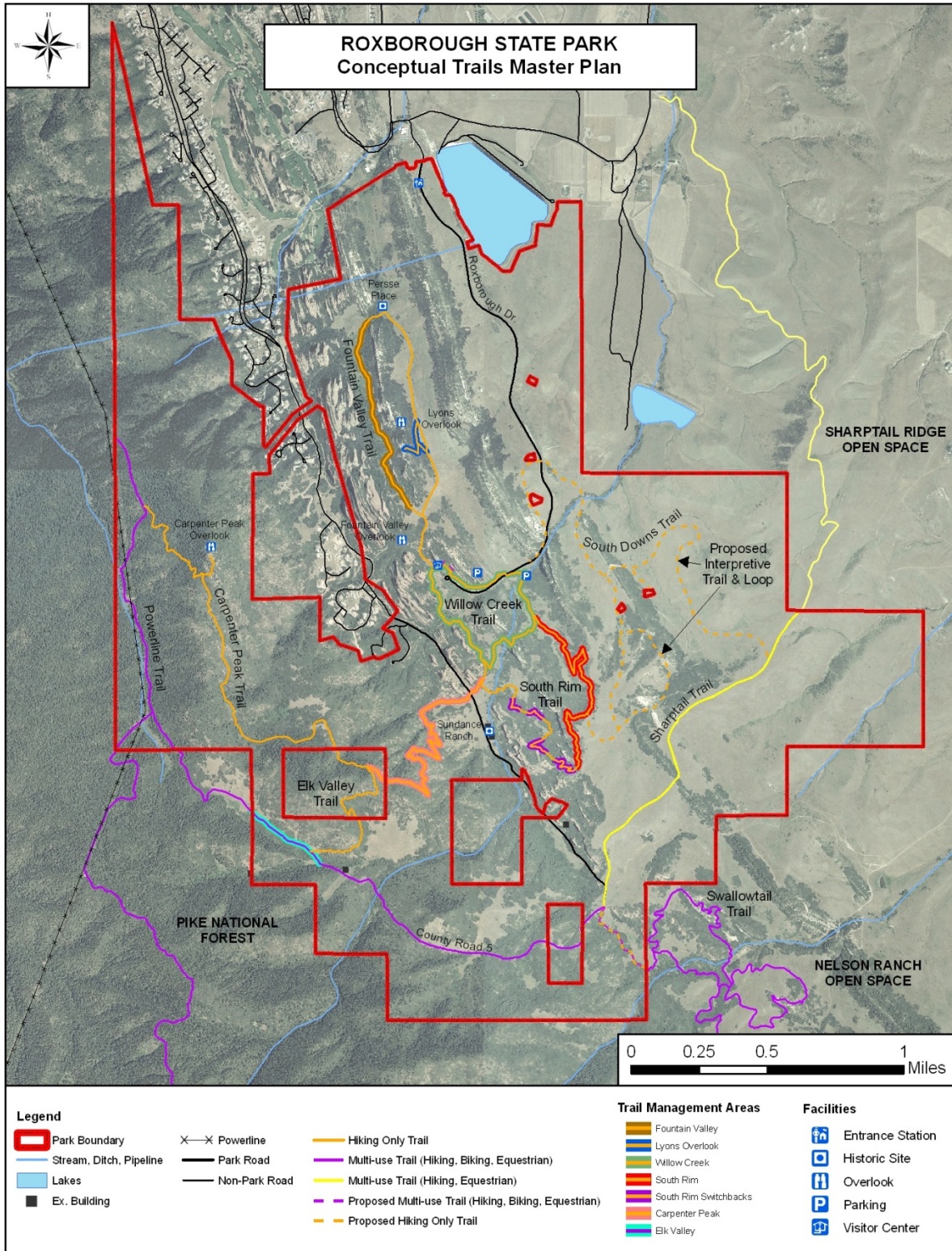
<b>Trails Administered by Other Local Governments and Federal Agencies</b>			
<b>Sharptail Trail – Douglas County</b>	The 4-mile <b>Sharptail Trail</b> crosses rolling grasslands, home to a variety of wildlife including elk herds. The 2.5 miles of trail that extend through Douglas County Open Space has seasonal closures in the fall (Labor Day through November) to allow for hunting as regulated by Colorado Division of Wildlife.		1.5
<b>Swallowtail Trail – Douglas County</b>	A small segment of the <b>Swallowtail Trail</b> extends across Roxborough State Park – connecting Nelson Ranch Open Space with County Road 5. Swallowtail Trail features views of the fountain formation and a unique geological perspective of the hogback. This trail eventually connects with the Ringtail Trail (which is in Nelson Ranch Open Space).		0.3
<b>Powerline Trail – U.S. Forest Service</b>	A small segment of the <b>Powerline Trail</b> crosses Roxborough State Park. This trail provides connections to Indian Creek Campground to the south as well as the Waterton Canyon and the Colorado Trail to the north/northwest.		1.5
	<b>Total Miles</b>		<b>14.25</b>

## County Road 5

County Road 5 is a gated, gravel road that bisects the park and provides access to private inholdings situated within the park. The road also serves as an emergency evacuation route for residents from Roxborough Park Foundation in the event of fire.

County Road 5 doubles as a multi-use trail that is primarily accessed residents of Roxborough Park neighborhood. Visitors access the trail where the road meets the neighborhood, and can

Figure 1. Conceptual Trails Master Plan



follow it all the way until it connects with the Powerline Trail and extends into Pike National Forest. Since this road is managed by the county, park rules do not apply and mountain bikers, hikers, and dog walkers are all commonly seen using this road.

## Proposed Roxborough Park Trails

Although there are numerous trails within Roxborough Park offering a variety of experiences, the area of the park known as “Southdowns” is currently inaccessible to Roxborough visitors entering the park via the main park road. In an effort to improve and expand the user experience, a new Southdowns Trailhead and is proposed off of the main park road. This trailhead would provide about 3.2 miles of hiking only interpretive trail that would extend through the Southdowns area, with segments linking to both the Sharptail Trail as well as the South Rim Trail. Interpretive displays would be provided at strategic locations along this trail including scenic overlooks, near the old quarry site, and possibly near the Columbine crosses (which are situated within a private inholding that features a memorial of crosses set up for the victims of the Columbine High School incident of April 20, 1999). Other likely interpretive themes include wildlife, geology, and cultural significance of the area.

There is also a hiking trail proposed along the northwest shoulder of the main park road which would link the Southdowns trailhead and an area north of the Willow Creek Trailhead. The area just north of Willow Creek Trailhead is currently being considered as a possible location for an Environmental Education/Event Facility Shelter. This shoulder trail would provide safe access to this facility from the Southdowns parking lot.

A short Sensory Trail is also proposed adjacent to the visitor center. This trail would be an accessible trail that would allow for a multitude of experiences that engage several of the senses.

## Existing Trail Corridors: Management Priorities

### Ongoing Trail Management Recommendations Common to All Trails

Existing trail corridors within Roxborough Park need to continuously be maintained in order to prevent erosion, instability, drainage issues, and damage to the surroundings. It is suggested that these trails be improved to a stable condition prior to implementing any new proposed trails.

Ongoing trail management recommendations that are common to all trails are as follows:

#### **Construction**

- Trails should be built up with gravel in areas below grade to improve drainage.
- Water bars should be located on down slopes to divert water off of the trail before it gains sufficient velocity to begin erosion.

#### **Maintenance**

- Trails which are driven occasionally for maintenance and patrol should be bladed periodically to prevent vehicle ruts from forming.

- Vegetation growth on trails should be carefully monitored. Growth should be mowed should it become a public safety factor.
- Water bars should be continually maintained so that they continue to function properly. The need for additional water bars may become apparent after initial trail development.
- Portions of the trails that are most heavily used should be surfaced with appropriate material.
- Bridges and benches should be repaired and stained as needed.

**Rehabilitation**

- Switchbacks, armor, and steps should be repaired as needed.

**Re-establishing Vistas**

- Benches and Overlooks should be restored to original installation condition.
- Over grown vegetation should be removed to restore original vistas.

**Fuel Mitigation**

- Efforts to reduce Gable Oak along trail corridors should continue. The line-of-sight along trails should be maintained and improved for visitor safety.

Suggested Improvements for Existing Trails

Table 1 identifies specific maintenance needs that should be performed along designated portions of existing trail corridors within Roxborough Park, to improve trail stability and visitor experience. Table X provides guidance as to what tasks need to be performed for the specific segments.

**Table 2: Trail Management Matrix**

	Carpenter Peak Trail	Fountain Valley Trail	Lyons Overlook Trail	South Rim Trail	South Rim Switch-backs	Elk Valley Trail	Willow Creek Trail
Tread Stabilization	X		X			X	X
Realign Trail				X			
Water Bar Installation		X					
Culvert Replacement		X					
Switch Back Rehabilitation					X		
Installation of Steps	X		X				
Construction of Check Dams	X						
Total Estimated Cost	\$6,442.20	\$8,466.00	\$1,275.00	\$3,187.50	\$1,543.50	\$3,812.50	\$7,003.50

Itemized Cost Estimate for Trail Improvements (materials only)<sup>1</sup>

An itemized breakdown of estimated trail improvement materials costs is provided below (in 2010 dollars). Labor costs are excluded from this summary. According to the Roxborough State

<sup>1</sup> Cost Estimate Provided By: Silver Crown Landsacape Materials. (2010, January). Cost Estimate. Littleton, Colorado.

Park Manager, labor for trail maintenance would be provided by volunteer groups, Colorado Youth Corps Association, and existing park staff.

Delivery fee to Visitor Center \$6.00/ton  
 Delivery fee to County Road 5 \$11.00/ton  
 Grey Crusher Fines \$19.50/ton  
 Red Crusher Fines \$34.00/ton  
 Granite Riprap \$32.00/ton  
 Rhyalite \$31.00/ton

**Carpenter Peak Trail:**

190 tons are needed 40 tons of red and 150 of grey.  
 1.6 tons of rhyalite are needed.  
 Red Crusher Fines 40 (\$34.00 + \$11.00) = \$1800.00  
 Grey Crusher Fines 150 (\$19.50 + \$11.00) = \$4575.00  
 Rhyalite 1.6 (\$31.00 + 11.00) = \$67.20  
*Total = \$6442.20*

**Fountain Valley Trail:**

332 tons of Crusher Fines are needed  
 Grey Crusher Fines 332 (\$19.50 + \$6.00) = \$8466.00  
*Total = \$8466.00*

**Lyons Overlook Trail:**

50 tons of crusher fines are needed  
 Grey Crusher Fines 50 (\$19.50 + \$6.00) = \$1275.00  
*Total = \$1275.00*

**South Rim Switchbacks:**

21 tons of Crusher Fines and 21 ton of Granite Riprap are needed  
 Grey Crusher Fines 21 (\$19.50 + \$11.00) = \$640.50  
 Granite Riprap 21 (\$32.00 + \$11.00) = \$903.00  
*Total = \$1543.50*

**Elk Valley Trail:**

125 tons Crusher Fines needed  
 Grey Crusher Fines 125 (\$19.50 + \$11.00) = \$3812.50  
*Total = \$3812.50*

**Willow Creek Trail:**

232 tons Crusher Fines need – 75 ton red Crusher Fines and 157 ton grey Crusher Fines  
 Red Crusher Fines 75 (\$34.00 + \$6.00) = \$3000.00  
 Grey Crusher Fines 157 (\$19.50 + \$6.00) = \$4003.50  
*Total = \$7003.5*

**South Rim Trail:**

125 tons Crusher Fines needed  
 Grey Crusher Fines 125 (\$19.50 + \$6.00) = \$3187.50  
*Total = \$3187.50*

**Total Material and Delivery Cost = \$31,730.20**

## EVALUATION OF THE PROPOSED SOUTHDOWNS INTERPRETIVE HIKING TRAIL

### Trail Purpose and Potential Users

#### Interpretive Hiking Trail

The 625-acre Southdowns area features a rolling, open grassland ecosystem with scattered rock outcroppings that traditionally have not been accessible to park visitors. About 3.2 miles of proposed hiking trails would extend southward across Willow Creek, where a small stream crossing would be provided (likely a ford with some improvements or a small bridge). These trails would provide excellent opportunities to educate visitors about the mixed grass prairie ecosystem and the unique geologic history of the Front Range. Hikers could connect to the Sharptail Trail or the South Rim Trail for additional hiking and interpretive opportunities from this new trail if desired. A small bridge linking the trail over Willow Creek may be necessary, along with carefully placed interpretive signage along the trail.

An interpretive display overlooking the prairie dog town would be a feature of the trailhead as well. A small bridge would also be needed to extend over Willow Creek to allow access to this trail.

#### Shoulder Trail

A trail along the northwest shoulder of Roxborough Park's main road will connect the Southdowns trails to the point where Willow Creek Trail crosses the road. This trail will be important in providing adequate circulation throughout the park and linking all of the trail networks in a more efficient way. This trail will also provide safe access for visitors to an area just north of the Willow Creek Trail crossing that is proposed to be the location of an Environmental Education/Event Facility Shelter. If the Environmental Education/Event Facility Shelter is implemented, this trail could allow visitors to use either the main parking lot, or the Southdowns parking lots as an overflow parking area and they could then walk to the shelter.

### Issues and Considerations

#### Sensitive Habitat

The Southdowns area is a rich habitat for sensitive or endangered species such as the Prairie Dog and the Preble's Meadow Jumping Mouse. The Prairie dog is an important keystone species and plays an important role in maintaining the health of a grasslands community. Nine different species of wildlife depend on the Prairie Dog and their habitat for survival, and their presence improves soil conditions.<sup>2</sup>

The Preble's Meadow Jumping Mouse habitat is primarily restricted to riparian corridors with complex communities of well developed shrub, tree, grass, and forb species. While riparian corridors dominated by willows is their primary habitat, it is also found that the Preble's

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<sup>2</sup> *About Prairie Dogs*. (2007). Retrieved January 28, 2010, from Prairie Dog Coalition: <http://www.prairiedogcoalition.org>

Meadow Jumping Mouse venture out into adjacent grasslands at night to forage.<sup>3</sup> (*Abundance, Survival, and Hibernation of Preble's Meadow Jumping Mice* by Carron A. Meaney, Anne K. Ruggles, Bruce C. Lubow and Norman W. Clippinger). Any trail development that is proposed to bisect these habitats needs to be constructed in a responsible manner to minimize disturbance or destruction of these habitats.

### Wetland Crossing

If improvements to the existing stream crossing over Willow Creek are necessary, State Parks will need to consult with the U.S. Army Corps of Engineers (CORPS) to determine if and what type of 404 permit is needed. Filling of jurisdictional wetlands and waters of the U.S. is regulated by the Corps and requires a permit under Section 404 of the Clean Water Act.

### Soils<sup>4</sup>

Soil characteristics and conditions are just one of many factors that should be taken into consideration when planning for trails at Roxborough State Park. The following summary focuses strictly on the soil classifications, characteristics, and potential issues concerning the construction and management of potential trails in the Southdowns area of Roxborough State Park. Figure 2 depicts the soil classifications and the proposed trail alignments. Table 2 lists the soil classifications and lengths of the proposed trails.

**Table 3: Length and Soil Types of Proposed Interpretative & Multi-Use Trails**

<b>PROPOSED TRAIL &amp; SOIL TYPE</b>	<b>SUM OF LENGTH (METERS)</b>	<b>SUM OF LENGTH (FEET)</b>
NeE-Newlin gravelly sandy loam, 8 to 30 percent slopes	846.53	2,777.47
ReE-Rednun-Redridge complex, 8 to 40 percent slopes	578.89	1,899.32
Sn-Satanta loam	140.41	460.70
Sv-Stony steep land	1,233.72	4,047.85
TaF-Tarryall gravelly loam, 10 to 50 percent slopes	433.61	1,422.69
En-Englewood clay loam	174.26	571.75
RaE Razor clay, 3 to 25 percent slopes	1,371.22	4,498.97
RtG-Rock land-Lonetree complex, 10 to 100 percent slopes	66.12	216.92
SrE-Satanta loam, calcareous variant, 9 to 25 percent slopes	274.61	900.99
	<b>5,119.37</b>	<b>16,796.66</b>

<sup>3</sup> Carron A. Meaney, e. (Dec., 2003). Abundance, Survival, and Hibernation of Preble's Meadow Jumping Mice (*Zapus hudsonius preblei*) in Boulder County, Colorado. *The Southwestern Naturalist*, 48 (4), 610-623.

<sup>4</sup> This Section taken directly from: Andrea Nelson, Assistant Planner. (2009, December 29). Roxborough State Park's Potential Multi-Use and Interpretive Trails and In Situ Soil Classifications. *Memorandum to Roxborough Planning Team*. Colorado State Parks.



### ***Soil Classifications and Descriptions***

The National Cooperative Soil Survey, a program of the National Resource Conservation Service, completed the most current set of soil survey maps in Colorado. The potential trails in the Southdowns area of the park traverse nine different soil types, classified alphabetically below:

#### **En- Englewood clay loam<sup>5</sup>**

The Englewood series consists of deep, well to moderately well drained, slowly permeable soils that formed in alluvial parent materials weathered from adjacent sedimentary bedrock. They are on alluvial fans and valley side slopes. Slopes range from 0 to 10 percent. Mean annual precipitation is about 17 inches, and mean annual temperature is about 48 degrees F.

#### **NeE- Newlin gravelly sandy loam, 8 to 30 percent slopes<sup>6</sup>**

Newlin soils are characterized as fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Aridic Argiustolls. These soils are on gently to moderately sloping alluvial fans or high terrace levels. Slope gradients range from 0 to 30 or more percent. The soils formed in alluvial parent materials derived from mixed sources and underlain by beds of relatively clean sand and gravel. At the type location the average annual precipitation is 17 inches, with peak periods of precipitation in the spring and summer. The mean annual soil temperature is 50 degrees F., and the mean summer soil temperature is 64 degrees F.

Newlin soils are well drained with medium to slow runoff and moderately rapid permeability. These soils are used for dry and irrigated cropland, and as native pastureland. Native vegetation is mainly big and little bluestem, prairie sandreed grass, needle-and-thread, and blue grama.

#### **RaE- Razor clay, 3 to 25 percent slopes<sup>7</sup>**

The Razor series consists of moderately deep, well drained, slowly permeable soils that formed in alluvium and residuum derived from calcareous shales. Razor soils are on plains, hills and breaks to major drainages. Slopes are 0 to 25 percent. Mean annual precipitation is about 13 inches and the mean annual temperature is about 52 degrees F.

#### **ReE- Rednun-Redridge complex, 8 to 40 percent slopes<sup>8,9</sup>**

These soils are a mix of Rednun and Redridge soils and share characteristics from both soil classes.

The Rednun series consists of deep, well to moderately well drained, slowly permeable soils formed in thick, medium to moderately fine textured, reddish brown to yellowish red

<sup>5</sup> "Englewood Series". National Resource Conservation Service, March 1982. Accessed by A. Nelson on 7 Dec. 2009. <<http://www2.ftw.nrcs.usda.gov/osd/dat/E/ENGLEWOOD.html>>

<sup>6</sup> "Newlin Series". National Resource Conservation Service, March 2003. Accessed by A. Nelson on 7 Dec. 2009. <<http://www2.ftw.nrcs.usda.gov/osd/dat/N/NEWLIN.html>>

<sup>7</sup> "Razor Series". National Resource Conservation Service, June 2006. Accessed by A. Nelson on 7 Dec. 2009. <<http://www2.ftw.nrcs.usda.gov/osd/dat/R/RAZOR.html>>

<sup>8</sup> "Rednun Series". National Resource Conservation Service, August 2006. Accessed by A. Nelson on 7 Dec. 2009. <<http://www2.ftw.nrcs.usda.gov/osd/dat/R/REDNUN.html>>

<sup>9</sup> "Redridge Series". National Resource Conservation Service, March 2003. Accessed by A. Nelson on 7 Dec. 2009. <<http://www2.ftw.nrcs.usda.gov/osd/dat/R/REDRIDGE.html>>

calcareous alluvial fan sediments derived from redbed shales and limestones. Rednun soils are on alluvial fans and valley filling side slopes. Slopes are 0 to 15 percent. Principal native vegetation is blue grama, oak brush, and cactus.

Redridge soils typically have reddish gray, very friable, gravelly, granular A horizons, reddish brown, gravelly sandy clay loam B2t horizons having moderate prismatic and subangular blocky structure, over sandy-skeletal substratum at depth of about 26 inches. Redridge soils are on fans, terraces, valley side slopes, and stream bottoms.

**RtG- Rock land-Lonetree complex, 10 to 100 percent slopes**<sup>10</sup>

These soils are a mix of Rock land and Lonetree soils and share characteristics from both soil classes.

Lonetree soils are on gently to moderately steeply sloping alluvial fans, valley side slopes, and small stream bottoms. Slope gradients range from 0 to 30 or more percent. The soil formed in parent materials derived from reddish-brown arkose beds of the Lyons and Fountain formations. At the type location the average annual precipitation is 17 inches, with peak periods of precipitation in the spring and early summer. Lonetree soils are typically well to somewhat excessively drained with a slow runoff and rapid permeability. Lonetree soils typically have dark reddish gray and reddish brown, very friable, loamy coarse sand, granular A horizons, and weak red, coarse sand, neutral C horizons.

**Sn- Satanta loam**<sup>11</sup>

The Satanta series consists of very deep well drained soils that formed in eolian deposits. These soils are on plains or high stream terraces in the Central High Tablelands (MLRA 72). Slopes range from 0 to 15 percent. Mean annual temperature is 13 degrees C. (56 degrees F.) and mean annual precipitation is 48 centimeters (19 inches).

**SR-E- Satanta loam, calcareous variant, 9 to 25 percent slopes**<sup>12</sup>

Also in the Satanta series, the Satanta loam calcareous variant has more calcium carbonate in the soil composition than typical Satanta loams. These soils are also located in a steeper gradient, but otherwise share the same characteristics as typical Satanta loam. soils (see Sn above).

**Sv- Stony steep land**<sup>13</sup>

TaF- Tarryall gravelly loam, 10 to 50 percent slopes.

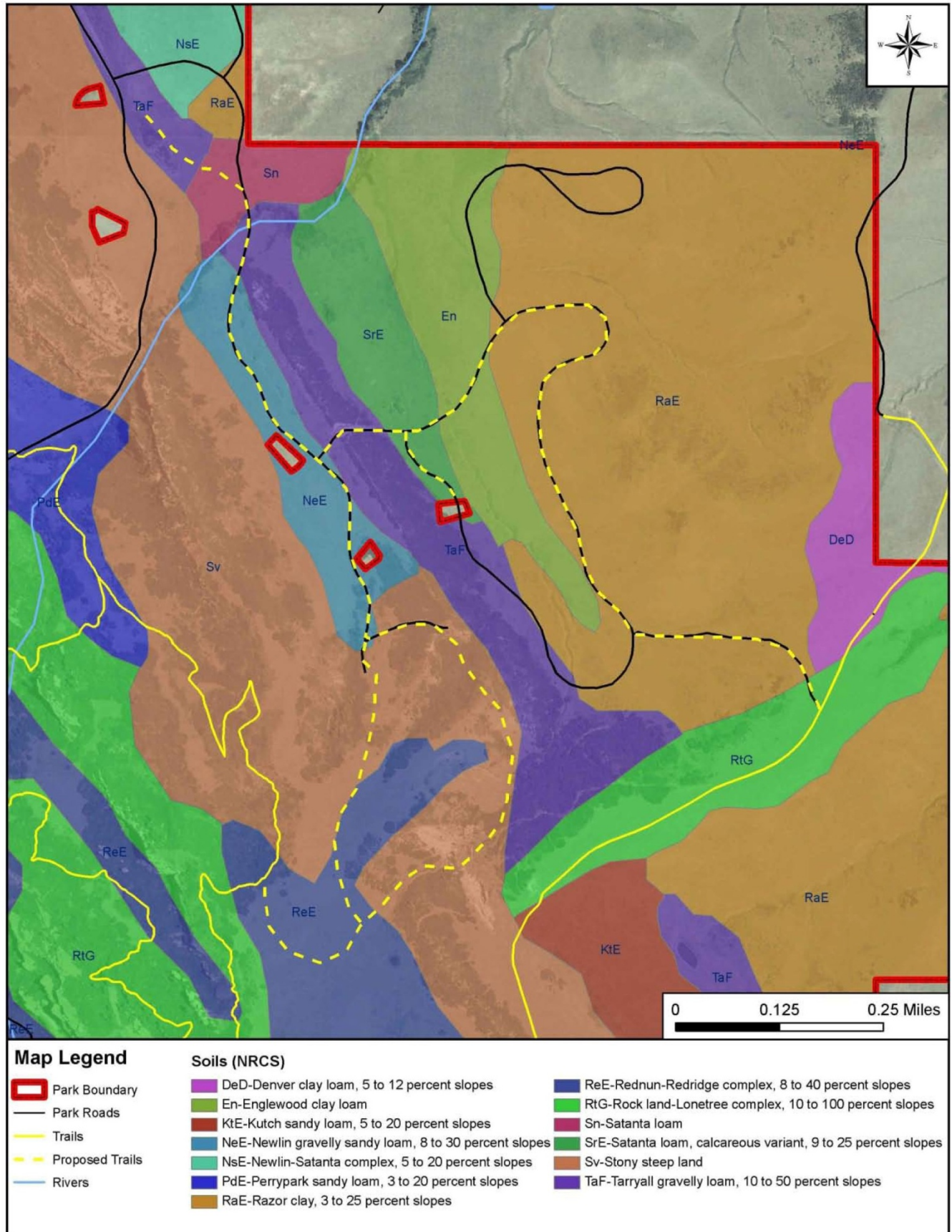
<sup>10</sup> "Lonetree Series". National Resource Conservation Service, February 1999. Accessed by A. Nelson on 7 Dec. 2009. <<http://www2.ftw.nrcs.usda.gov/osd/dat/L/LONETREE.html>>

<sup>11</sup> "Satanta Series". National Resource Conservation Service, January 2006. Accessed by A. Nelson on 7 Dec. 2009. <<http://ortho.ftw.nrcs.usda.gov/osd/dat/S/SATANTA.html>>

<sup>12</sup> *ibid.*

<sup>13</sup> "Tarryall Series". National Resource Conservation Service, March 2003. Accessed by A. Nelson on 7 Dec. 2009. <<http://www2.ftw.nrcs.usda.gov/osd/dat/T/TARRYALL.html>>

Figure 2: Roxborough State Park Soils Map with Proposed Trail Overlay



Tarryall soils are on moderate to steeply sloping hills and ridges where limestone bedrock lies moderately close to the surface. The soil formed in parent materials weathered residually from the limestone or locally transported downslope. At the type location the average annual precipitation is approximately 17 inches, with peak periods of precipitation in the spring and summer. Tarryall soils are typically well drained with medium to rapid runoff and moderate permeability. Adapted native vegetation is mainly Indian ricegrass, sideoats grama, needle-and-thread grass, Junegrass, blue grama, little bluestem, and mountain-mahogany.

### ***Summary of Potential Issues with Proposed Trails in Southdowns***

The 3.2 miles of proposed interpretive hiking trail in the Southdowns area would be located on soils that are fairly well drained, but generally have slow to moderate runoff and permeability. This could present a problem in certain areas having certain soils, such as Razor clay (RaE) at the eastern border of the park, where precipitation combined with heavy trail usage could result in excessive trail erosion, rutting, or ponding. These problems may be compounded by the fact that the majority of the proposed trail (about 4,500 feet), cuts through Razor clay soils.

Erosion and wear is also an issue with particular soils on slopes with gradients of 10 percent or more. Tarryall gravelly loam is a common soil type found near the proposed interpretative trail spurs. The limestone bedrock lies moderately close to the surface where the interpretative trail intersects steeply sloping hills and ridges. Although not as widespread as Tarryall soils, Satanta loam, calcareous variant on the 9 to 25 percent slopes near the trailhead is more susceptible to erosion than other soil types present along the trail corridor. Stony steep lands are the dominant soil type along the proposed interpretative trail.

Finally, the nine soil types in the Southdowns area are the foundation for grassland species including Indian ricegrass, little bluestem, Junegrass, needle-and-thread grass, and the unique tall grass prairie. Any significant disturbance to the soils that support these grassland species would hinder further growth of a unique habitat in Roxborough State Park. With the impending Sterling Ranch development to the east of the park, preservation of these soils and the species they support are a unique asset worth protecting.

Most of the potential trail impacts are minimized due to the fact that hiking is the only proposed trail use at this time. Still erosion, rutting, pooling etc. could be issues in certain locations and during certain times of the year. These types of impacts can be mitigated through a variety of management strategies such as channeling surface runoff to areas away from the trail, carefully locating culverts, erecting structures such as terraces or buffers to stabilize soils and if necessary, closing sections of the trail during times of intense precipitation. Finally, prior to trail construction, it is recommended that special effort be made to “ground truth” a suitable trail alignment that will minimize any negative impacts to natural resources and ensure long-term trail sustainability.

### **Southdowns Trailhead and Parking**

As shown in Figure 3, the Southdowns parking lot options are presented to allow for visitors to access the proposed hiking only interpretive trails. The north parking lot option would have 22

spaces and be a direct pull-off lot where cars would pull directly into the lot off of the main park road and into the parking spaces. Prairie dog habitat on the east side limits the developable area for a parking lot. A second option is a pull-through parking lot on the west side of the park entrance road that would accommodate 32 vehicles. This lot would need to be a one-way lot for visitors to pull into from the southbound lane of the main park road and would require a pedestrian crosswalk across Roxborough Road to connect to the trailhead.

The trailhead should have signage that gives an overview of the multi-use trail and the interpretive trail, and could include additional signage about the park and trail rules and lengths of these trails. This trailhead is located directly adjacent to prairie dog habitat and could include interpretive signage about this key species. Additional amenities such as a shade pergola and benches would enhance the appeal of this trailhead.

### Southdowns Interpretive Signage

The Southdowns area has several opportunities to educate visitors about the surrounding environment through interpretive signage. Figure 4 shows possible locations for interpretive signage in the South Downs area.

The first interpretive signage would be located at the Trailhead, overlooking the Prairie Dog habitat. Signage at this location could outline the importance of the Prairie Dog species to the health of the grasslands ecosystem.

The second interpretive signage would be located along the riparian corridor of the creek. This signage could highlight the vegetation types commonly found in riparian corridors and the Preble's Meadow Jumping Mouse habitat that is commonly associated with these ecosystems.

The third interpretive signage would be located at the in-holding containing the memorial of crosses to the April 20, 1999 Columbine High School tragedy. This signage could relate the history of the incidence in addition to explaining the in-holdings throughout the park.

The fourth interpretive signage would be located within or adjacent to the scrub oak vegetation areas. This signage could explain the vegetation type as well as some of the topographic features found in the South Downs area. An inactive gravel pit is purportedly located in this area as well and could provide additional opportunities for interpretation.

The final interpretive signage would be located at the high point of a hill in the South Downs area, before the interpretive trail links back up with South Rim Trail. This interpretive signage would allow for an overlook of the Southdowns area and could provide an overview of the area's ecosystems and geologic features.

Figure 3: South Downs Trailhead and Parking Options

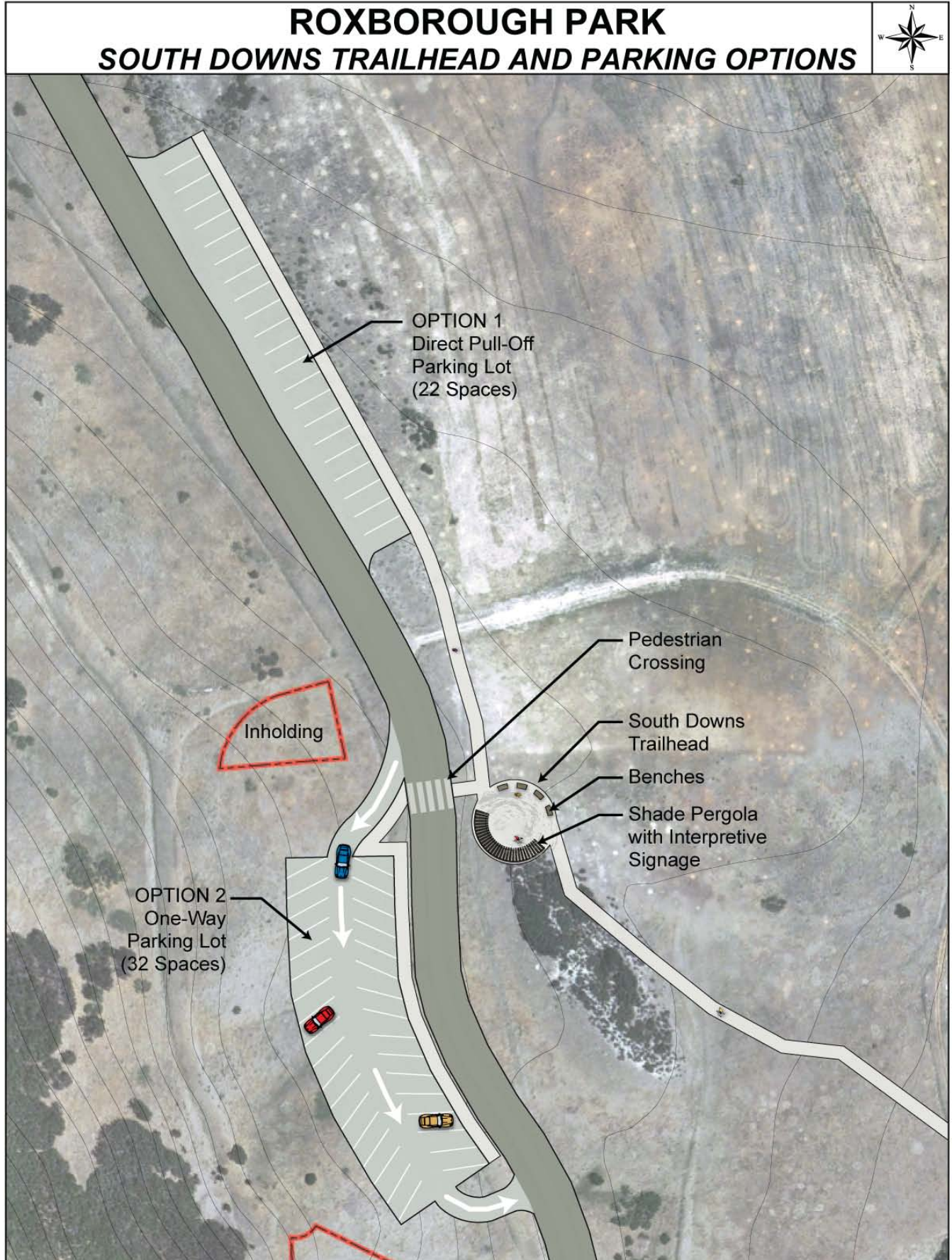
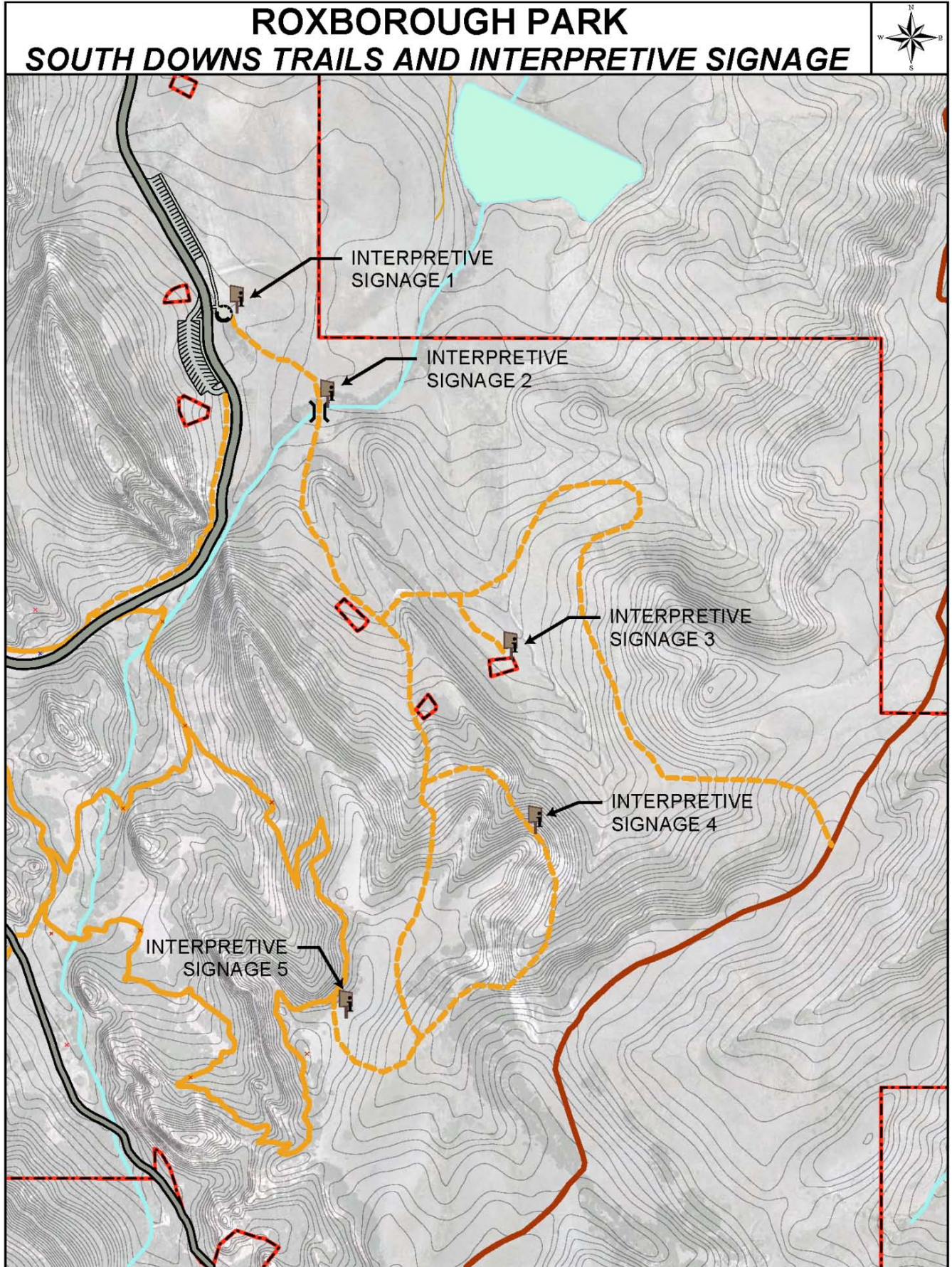


Figure 4: South Downs Interpretation



## Preliminary Estimate of Proposed Trail Costs

### Trail costs

\$6.00/Linear foot x 3.2 miles (16,896 feet) = \$101,376

### Interpretive displays

Four (4) @ \$2,500 = \$10,000

### Trailhead

Trailhead: One (1) @ \$25,000

CXT/Vault Toile: One (1) @ \$40,000

### Gravel Parking Lot

\$45 S.Y. @ 942/S.Y. = \$42,390

## PROPOSED SENSORY TRAIL

### Trail Purpose and Potential Users

A short, 0.1--mile Sensory Trail is proposed to loop off of existing trail that links the upper parking lot with the Visitor Center. The purpose of this trail is to provide a trail experience to stimulate the senses and to provide an accessible trail for sensory-deprived and mobility-impaired users. The trail will help visitors learn about Roxborough Park through an interactive experience while at the same time enhancing their sense of smell, touch, hearing, and possibly balance. *[Note: there may be other suitable areas near the Visitor Center for this trail, but the Roxborough Planning Team concluded that this location was the best option.]*

### User Experience and Trail Interpretive Signage

Though not all users will be visually-impaired, measures should be taken along the trail to provide a safe and educational experience for these users. One opportunity to engage the visually-impaired is to have a guiding rope that runs through drilled holes in posts or metal rings on existing trees along the trail edge. This guiding rope would help the visually-impaired find



Figure 6: Guide Rope with Knots



Figure 5: Braille Handrail



their sense of direction and provide information to them about the trail. Knots could be used to signal to the users that they are approaching points of interest, such as the interpretive signage. Another way to direct users is through handrails that have Braille information imprinted on the sides. Visually-impaired users would then be able to guide themselves along the handrails and be provided with information about important stopping points.

Interpretive signage could then be used at multiple locations to convey information about important features of Roxborough Park and to engage the senses of the user. The signs themselves could have Braille as well as carved reliefs of wildlife, plants, or geologic features of the park. This would encourage users to use their sense of touch to explore for information. Other signage could use recorded sounds to engage the user's sense of hearing.



Figure 7: Interpretive Signage with Braille and Carved Relief



Figure 8: Carved Relief Panel

As shown in Figure 10, the Sensory Trail could have four areas for interpretive signage. These areas of interpretation could offer a variety of sensory experiences.

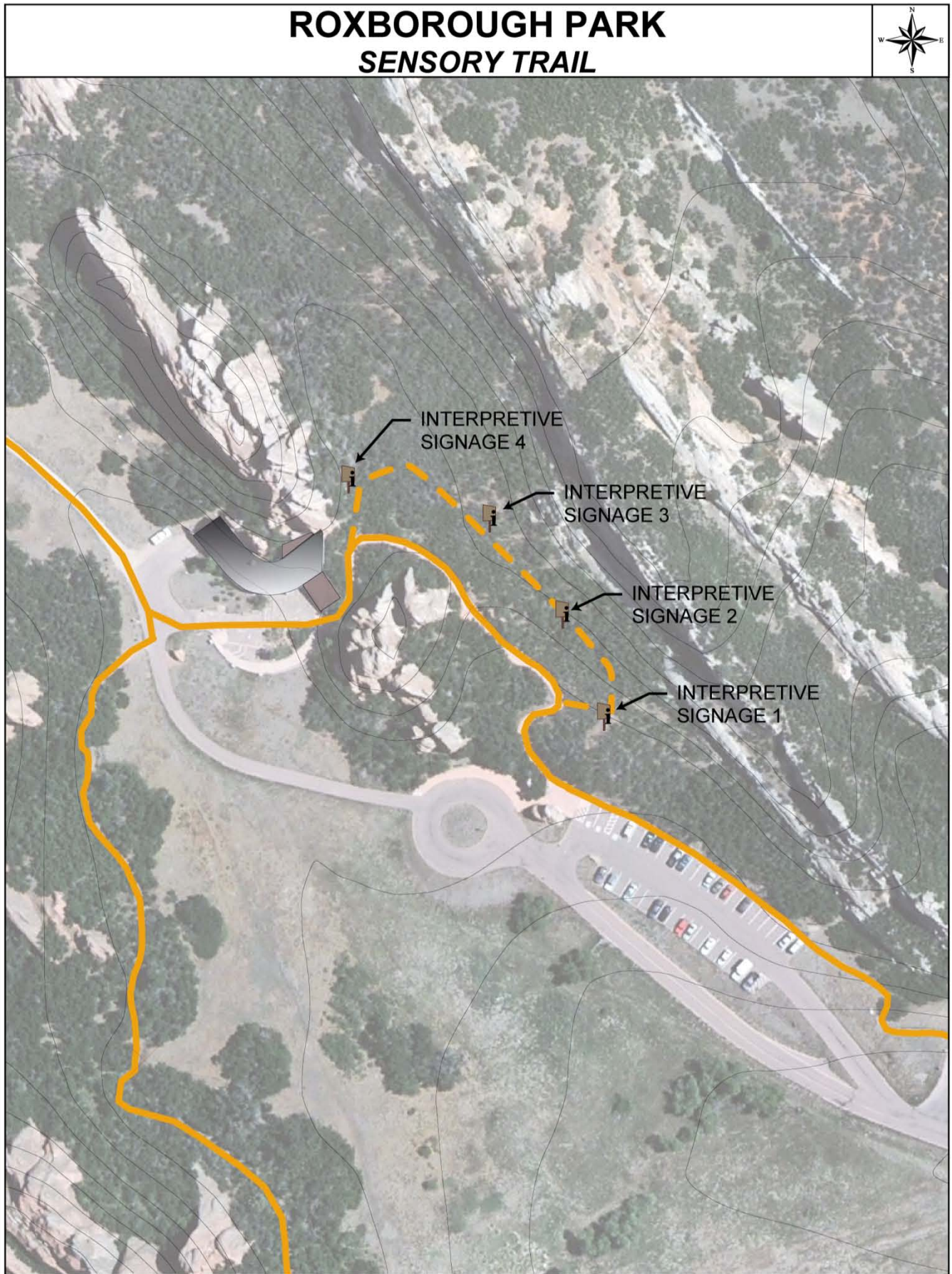
The first interpretive location could engage the sense of hearing if properly located near known bird habitat. The interpretive signage could note the species of birds that inhabit the park and outline key information for these species. Though ideally this interpretive location would be situated to provide the most opportunity for users to hear bird calls, it would also be beneficial to have a recording of bird sounds that users could play to allow the signage to become more interactive.

The second interpretive location could engage the sense of smell through the use of fragrant native plantings. This interpretive signage would convey information about plant



Figure 9: Native Plantings Engage Sense of Smell

Figure 10: Sensory Trail Alignment



The third interpretive location could denote other wildlife that inhabits Roxborough Park such as mule deer, rabbits, snakes, mountain lions, or the golden eagle. Carved reliefs in the interpretive signage would allow the users to have a more interactive experience.

The fourth interpretive location could highlight the unique geologic features of Roxborough Park. Signage would be located adjacent to the formation behind the visitor center and the signage could include fragments of the formation to allow visually-impaired visitors to appreciate the unique geology through the sense of touch.

Other opportunities to create a unique experience along the sensory trail would be to have a small, secondary trail alongside the main trail. This trail could have a variety of trail materials such as hard-packed dirt, gravel, rough earth, as well as a change in terrain. This would allow users to both feel and hear changes in material and could challenge balance for some users. This trail, however, would need to be well separated with barriers from the main trail so as not to become a hazard for visually-impaired trail users.



Figure 11: Material and Terrain Variation

## DESIGN STANDARDS FOR SITE FURNISHINGS

### Signage Standards

Signage is important for proper communication of information to visitors and can greatly impact visitor experience. Therefore, it is essential for interpretive and wayfinding signs to be clear and used in appropriate ways. A hierarchy of wayfinding and interpretive signage reflecting the natural or rustic character of the park should be developed. Sign types should include:

- *Primary and Secondary Feature Identification Signs* to identify large park areas with multiple features or facilities or areas with smaller, single park features or facilities.
- *Building Identification Signs* to identify the building use, such as restrooms or offices, when not otherwise apparent.
- *Vehicular and Pedestrian Directional Signs* to direct both vehicles and pedestrians in and around the park. Pedestrian signs should also be used to guide trail circulation and direct visitors to features and facilities within the park
- *Regulatory Signs* to convey multi-purpose regulatory messages such as information about park rules, hours, or fees. These should be posted at the park entrances, visitors center, and trailheads.
- *Trailmarker Signs* to provide orientation and denote restricted use trails. These should be scaled and located appropriately to match the trail users.

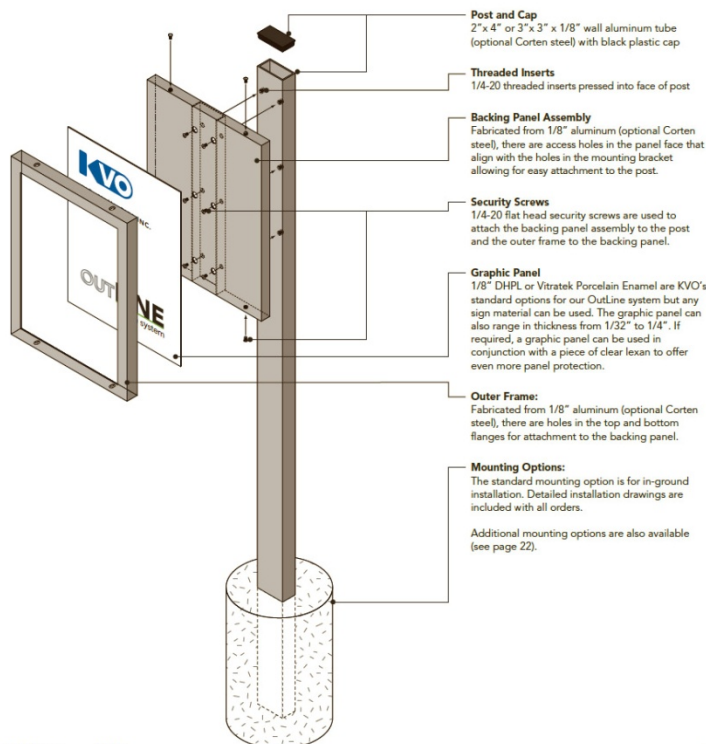
- *Interpretive Signs* to highlight features within the park, such as a unique landform, habitat, or cultural landmark, and provide key information about these features.



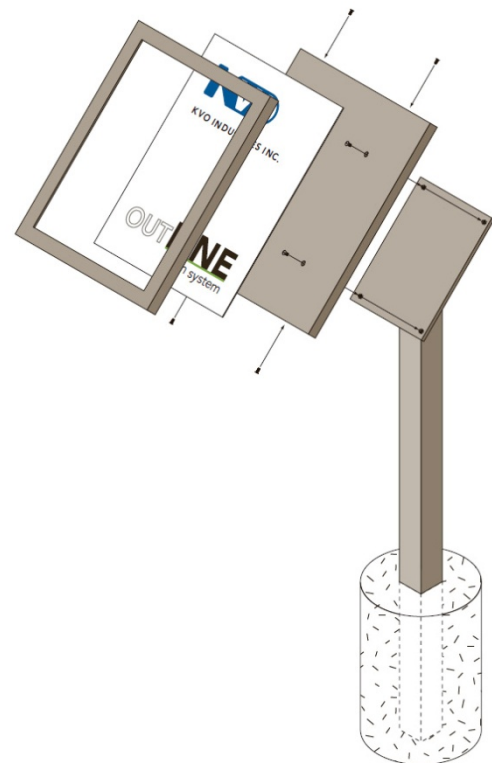
**Figure 14: High Pressure Laminate Sign in an External Use**

under intense pressure and heat to fuse the layers into a solid product.<sup>14</sup> The signage can then be mounted on a base in either a lectern style base at various angles, or a 90° vertical base, as seen in Figures 13 and 14.<sup>15</sup>

Due to the fact that park signage is permanently exposed to the elements, durable materials should be used for all signage. One material that is used successfully in many State Parks and that is scratch and graffiti resistant is High Pressure Laminate. High Pressure Laminate (HPL) combines digitally imaged paper saturated with melamine resins, a UV resistant overlamine, and layers of phenolic, resin-saturated kraft stock and presses it all



**Figure 12: Vertical Sign Base Mount**



**Figure 13: Lectern Style Sign Base Mount**

<sup>14</sup> KVO Industries. (2008). *High Pressure Laminate General Specs*. Retrieved February 10, 2010, from KVO Industries: <http://www.kvoindustries.com/pdf%20documents%202008/KVO-HPL%20General%20Specs.pdf>

<sup>15</sup> KVO Industries. (2008). *KVO Exhibit Base Product Guide*. Retrieved February 10, 2010, from KVO Industries: <http://www.kvoindustries.com/pdf%20documents%202008/KVO%20Outline%20Exhibit%20Bases.pdf>



## Preliminary Estimate of Sensory Trail Costs

### Trail costs

\$6.00/Linear foot x 0.1 miles (528 feet) = \$3,168.00

### Interpretive displays

\$5,000 total

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**APPENDIX I**  
**ANNUAL WORK PLAN**

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# Roxborough State Park

## Annual Work Program

# 2009



Prepared by  
Margaret Taylor  
Park Manager  
Roxborough State Park  
January 2009

# Roxborough State Park Annual Work Program 2009

During 2009, Roxborough Staff will focus on the following park goals and objectives:

## ADMINISTRATION

**Goal: To perform the basic park administrative functions in a timely and accurate manner**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Prepare the 2009 budget request	as requested	PM IV
Prepare spending plans for budgets	as requested	PM IV/staff
Prepare the annual work program	January	PM IV
Prepare monthly Park Manager/EOM reports	monthly	PM IV/staff
Review budget status	monthly	PM IV
Supervise work program	on-going	PM IV

**Goal: To provide effective budget management**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Reconcile the Budget Status Reports	monthly	PM IV
Manage (potential) budget cuts appropriately	on-going	PM IV/staff
Review the SWP program	monthly	PM IV/staff
Follow div. procedures for purchasing/accounting (incl. procard)	on-going	PM IV/staff
Process payments on a timely basis	on-going	PM IV/staff

**Goal: Continue working relationship with the Friends of Roxborough State Park. Maintain a close working relationship with the group to work toward common goals; provide input and update group on relevant park issues.**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Coordinate with Friends for the Annual Meeting	November	PM IV
Coordinate with Friends on their special event fundraisers, Merchandise sales and board meetings	on-going	PM IV
Coordinate with Friends on their newsletter publication	quarterly	PM IV
Coordinate with Friends land acquisition projects	on-going	PM IV
Provide oversight in Friends budget matters	on-going	PM IV

## HUMAN RESOURCES

**Goal: To provide effective leadership and supervision to maximize FTE employee productivity, teamwork and morale**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Schedule PPP planning, interim and final review sessions	as directed	PM IV/staff
Provide direction and supervision to accomplish work program	on-going	PM IV
Prepare FTE staff to serve as leaders for the division through active acquisition of new knowledge and skills	on-going	PM IV/staff
Conduct staff meetings	on-going	PM IV/staff
Ensure each employee has needed equipment to perform her duties	on-going	PM IV

**Goal: To provide effective leadership and supervision to maximize SWP employee productivity, teamwork and morale**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Recruit SWP applications	as needed	PM II/staff
Select, train and supervise seasonal rangers and gate-workers (including Seasonal Ranger training)	as needed	PMII
Select and train naturalists and VC supervisors	as needed	GPII
Develop monthly work schedules	monthly	PM IV/staff
Supervise Summer Youth Crews	summer	PMII

**Goal: To provide effective leadership and supervision to maintain a successful Volunteer Naturalist program.**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Complete volunteer park pass applications (48 hours)	December	GPII
Offer monthly training programs	monthly	GPII
To provide newsletters and emails to keep volunteers informed	monthly	GPII
To offer various forms of recognition for their efforts	on-going	GPII
To provide an Annual Graduation/Recognition Event	July 11	GPII
To provide appropriate scheduling and supervision	on-going	GPII /staff
Represent Roxborough on the statewide volunteer committee	on-going	GPII
Conduct a Roving Ranger training class	summer	GPII/PMII
Conduct a CPR/1 <sup>st</sup> Aid class	summer	GPII
Pursue Certificate in Volunteer Administration	2009	GPII
Conduct new volunteer training	Spring	GPII

**Goal: To provide effective leadership and supervision to maintain a successful Volunteer Stewardship program.**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Identify and train Weed Warrior Leaders and Trail Crew leaders	spring	PMII
Schedule weekly/monthly Weed Warrior workdays	April – Sept.	PMII
Schedule stewardship projects for Earth Day, National Trails Day etc.	April – Sept.	PMII
Coordinate National Public Lands Day w/ REI(budget dependent)	Sept. 27	PMII
Schedule Weed Awareness Day project and booth	July 11	GPII/PMII
Schedule weekly/monthly Trail/Fence Maintenance workdays	April-Oct	PMII

Recruit groups wanting to participate in stewardship activities	on-going	PMII /GPII
Work with Eagle Scout Candidates	on-going	PMII
Provide appropriate supervision, tools and materials	on-going	Staff
Provide appropriate recognition	on-going	Staff

**Goal: To provide effective leadership and supervision to maintain a successful Court Volunteer program.**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Provide staff with direction on how to handle COV procedures	on-going	PMII
Provide appropriate supervision	on-going	PMII/GPII
Handle final paperwork and reporting	on-going	PMII

## FISCAL MANAGEMENT

**Goal: To provide responsible and accurate revenue collection and reporting.**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Collect revenues and complete shift reports accurately	daily	PMII/staff
Take deposits to the bank according to revenue procedures	daily/weekly	PMII
Prepare accurate CUR revenue reports in PARKS	monthly	PMII
Complete end of the year closeout	January	PMII
Obtain and distribute new passes	December	PMII
Train staff to handle and report revenue accurately	on-going	PMII
Re-evaluate revenue procedures (new safes if funded)	2009	PMII/PM IV

**Goal: To provide timely handling of RMNA products and proceeds**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Make weekly deposits	weekly	VC staff
Reconcile monthly financial reports	monthly	GPII
Complete the annual spring order and other stock requests	March	GPII
Complete annual fall inventory and closeout	November	GPII

## ACQUISITION

**Goal: To provide field level in-put into the park acquisition program**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Follow up on “kiln property” and “Preshaw” interests	on-going	PM IV
Encourage Friends to pursue remaining Southdowns parcels	on-going	PM IV
Follow up on potential purchases as they become available	on-going	PMIV

## PUBLIC SAFETY

**Goal: To foster and maintain positive relationships with other public safety agencies.**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Work with Douglas County Sheriff on emergency issues	on-going	PM IV/ PMII
Work with West Metro Fire on emergency issues	on-going	PM IV/ PMII
Work with DWM and DOW on wildlife issues	on-going	PM IV/PMII

**Goal: To provide adequate patrol to insure visitor safety and resource protection**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Schedule FTE and SWP rangers during park hours	on-going	PM IV/PMII
Staff conducts regular patrols of parking lots and trails	on-going	Staff
Monitor park capacity, control parking	as needed	Staff
Conduct a Roving Ranger training class	spring	GPII/PMII
Maintain radios and first aid kits for emergency readiness	on-going	PMII

**Goal: To maintain proficiency in emergency service and law enforcement skills**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Attend regional law enforcement refresher	Feb.	PM IV/ PMII
Qualify quarterly with duty weapon	quarterly	PM IV/ PMII
Obtain Red Card certification	annually	PM IV/ PMII
FTE staff maintain current 1 <sup>st</sup> aid/CPR certification	on-going	Staff
Update other law enforcement skills (DUI, radar etc.)	on-going	PM IV/ PMII

## VISITOR SERVICES

**Goal: To provide for increased use and enjoyment of Roxborough State Park**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Advertise public programs, concerts and moonlight hikes	quarterly	GPII
Utilize the South Denver Metro Chamber of Commerce	on-going	PM IV
Begin work on Management Plan update	2009	PM IV
Celebrate 50 <sup>th</sup> Anniversary of Colorado State Parks	2009	Staff

**Goal: To improve the quantity and quality of interpretive services and exhibits**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Create DVD to replace introductory slide show	spring	GPII /PM IV
Provide a variety of public interpretive programs	on-going	GPII
Provide and coordinate the RoxRide program	on-going	GPII
Coordinate the Douglas County Christmas Bird Count	December	GPII

Create and distribute the Rambles program guide/website	quarterly	GPII
Coordinate 6 Moonlight Hikes	summer	GPII /Friends
Maintain # of WIN-WIN programs	spring & fall	GPII
Coordinate and lead school/scout/outreach programs	ongoing	GPII
Provide a monthly schedule of Persse House openings	on-going	GPII
Update changing exhibits	quarterly	GPII
Create and offer Jr. Ranger Program	2009	GPII

**Goal: To act as a catalyst for advancement of the interpretive field**

<u>Objective</u>	<u>Timeframe</u>	<u>Personnel</u>
Take a leadership role in FTE interp training	2009	GPII
Lead a training session-GOCO Volunteer Training	April	GPII
Provide programs and input to other State Parks	on-going	GPII
Take a leadership role in WIN-WIN, CAEE, NAI and other interpretive groups	on-going	GPII

**RESOURCE PROTECTION**

**Goal: To manage and protect park natural and cultural resources**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Continue current inventory programs	on-going	Staff
Monthly bird counts		
Herbarium collections		
Weather observations		
Work with stewardship staff on the updated Stewardship Plan	2009	PM IV
Carry out recommendations for weed control as outlined in the weed plan (Spring/Fall spray)	on-going	PM IV
Carry out re-vegetation work in disturbed areas	as needed	PMII/IV
Monitor changes from weed control and reveg projects	on-going	PMII/IV
Work with Vickey Trammell on VC monitoring project	2009	PM IV
Continue recycling program	on-going	PMII
Coordinate historic assessments on historic buildings	on-going	PM IV
Coordinate Fuel Mitigation projects-DC5 project	2009	PM IV
Monitor completed Fuel Mitigation projects for weeds etc.	on-going	PM IV/staff
Host Pulling for Colorado Event	July	Staff

**MAINTENANCE**

**Goal: To provide maintenance for park buildings including the George O'Malley Visitor's Center, entrance station, Persse Place and Chatfield storage garage**

<u>Task</u>	<u>Timetable</u>	<u>Personnel</u>
Update the controlled maintenance plan (MRMI)	January	PM IV



Review buildings for OSHA compliance	2009	PMII/Vol.
Review Visitor Center for fire inspections/ADT inspection	summer	PMII
O'Malley VC		
Assist in Building upgrades	2009	PM IV/staff
Monitor water system and well	monthly	PMII
Replace parts-UV system	as needed	PMII
Maintain sewer/septic system	as needed	PMII
Monitor VC roof conditions(included in building upgrade)	2009	Contract
Replace wood-pellet fireplace(included in building upgrade)	2009	Contract
Check/clean gutters	fall	PMII
Maintain plumbing and fixtures	on-going	PMII
Maintain burglar alarm	on-going	PMII
Paint Interior (included in building upgrade)	2009	Contract
Replace carpet (included in building upgrade)	2009	Contract
Maintain garden and landscaping	on-going	GPII
Update Electric Outlets (included in building upgrade)	2009	Contract
Maintain courtyard	on-going	PMII
Upgrade lighting (included in building upgrade)	2009	Contract
Maintain cleaning and paper supplies	on-going	PMII
Continue rodent control	on-going	Staff
Remove ceiling/wall rodent infestation(building upgrade)	2009	Contract
Upgrade heating/AC (included in building upgrade)	2009	Contract
Stain VC	2009	Contract
Move office into storage for const. project	2009	Staff
Create new office for Angel (building upgrade)	2009	Contract
Entrance Station		
Restain	2009	PMII /staff
Provide supplies and materials	on-going	PMII
Maintain interior	on-going	PMII /staff
Persse Place		
Continue Rodent Control	on-going	Staff
Monthly cleaning	on-going	Staff
Construct buck rail fence at Cooper Cabins	summer	PMII
Chatfield Garage		
Maintain exterior	as needed	PMII /staff
Remove garage if Chatfield construction begins	unknown	Staff
Sundance Ranch		
Maintain interior/exterior	on-going	PMII/staff
Continue rodent control	on-going	Staff
Continue to evaluate building improvements	on-going	PM IV

**Goal: To maintain park vehicles to insure operation**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Schedule routine maintenance in a timely manner	on-going	PM IV
Stock vehicles with maintenance, safety and other equipment	as needed	PMII
Maintain vehicle radios, light bars, siren/PA, binoculars	as needed	PMII
Maintain vehicle first aid kits	as needed	PMII
Insure vehicles interior and exteriors are clean	on-going	PMII /staff

**Goal: To maintain park trails**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Work with volunteers and youth crews to maintain existing trails	spring-fall	PMII
Maintain memorial plaques	on-going	PMII
Maintain trail bridges (repair Carpenter Peak bridge)	summer	PMII /staff
Plan future trail improvements	winter	PMIV/ PMII
Update Carpenter Peak/Elk Valley loop signs	summer	PMII
Stain and repair trail benches (Carpenter Peak)	summer	PMII
Update CR5 signs	summer	PMII

**Goal: To maintain park equipment**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Provide annual and weekly maintenance for the Rox Ride	on-going	PMII /staff
Maintain ATV/plow	on-going	PMII /staff
Maintain weed eaters	spring	PMII /staff
Maintain snowblower	fall	PMII /staff
Maintain chainsaws	spring	PMII /staff

**Goal: To maintain an adequate signing system**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Order new signs (funding dependent)	on-going	PMII
Install new/replacement signs	on-going	PMII

**Goal: To prepare the park for winter readiness**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Winterize irrigation system	September	PMII /staff
Winterize building vents	September	PMII /staff
Winterize Rox-Ride	September	PMII/staff
Winterize weedeaters, snowblower, Gravely chainsaw	September	PMII /staff
Install snow fence	September	PMII /staff
Check vehicle tires, anti-freeze and snow equipment	September	PMII /staff

Snow plow road and walkways as needed	winter	Staff
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**Goal: To maintain park grounds**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Install/ repair fence as needed (Youth Corps project)	on-going	PMII
Contact landowners - domestic animals	on-going	PMIV
Maintain electronic gate and EEE gate	on-going	PMII
Continue to remove old fence	on-going	PMII /staff
Repair damaged curbs (if funded)	2009	PM IV/Cntrct.

**Goal: To maintain park roads**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Contact contractor for road grading	on-going	PM IV
Repair culverts/create drainage/add roadbase	2009	Contract
Maintain drains and culverts	on-going	PMII /staff
Re-stripe road and parking lots (if funded)	2009	PM IV

**Goal: Maintenance of Interpretive Exhibits and Equipment**

<u>Task</u>	<u>Timetable</u>	<u>Personnel</u>
Maintain slide presentation equipment	spring	GPII
Maintain Dilts Memorial sign/tiles	quarterly	GPII
Clean/dust permanent exhibits	weekly	GPII/staff
Replace changing exhibit panels	quarterly	GPII
Rotate changing exhibits	quarterly	GPII
Maintain sightings board	weekly	GPII
Maintain program board	weekly	GPII
Inventory specimens	annual	GPII
Inventory and service interp tour equipment	on-going	GPII
Inventory and service binoculars and scopes	on-going	GPII
Inventory and service telescope and microscope	on-going	GPII
Inventory and service digital camera	on-going	GPII

**Goal: Maintenance of office equipment**

<u>Task</u>	<u>Timeframe</u>	<u>Personnel</u>
Send copier reports and obtain maintenance service	monthly	GPII /staff
Maintain fax supplies and service	on-going	GPII /staff
Maintain office supplies	on-going	GPII /staff
Computer upkeep	on-going	GPII /staff



**APPENDIX J**  
**PHOTO MONITORING**

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## PHOTO MONITORING

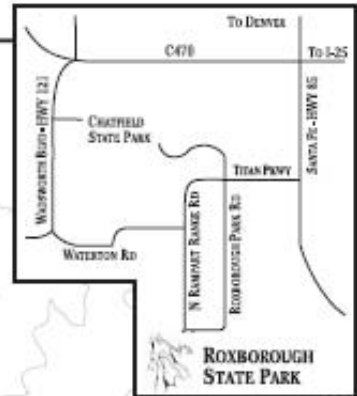
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This Appendix section includes a sampling of 23 photo monitoring points that may be useful to Roxborough State Park in monitoring outdoor recreation and trail use over time. By documenting the overall conditions in specific areas of the park at a given point in time, Roxborough Staff will have a baseline from which to compare future conditions, and potentially adapt management, if needed.<sup>1</sup> The map shown on reverse shows approximate locations from which photo monitoring points were taken. Additional photo monitoring points may be added to this appendix over time. These points should be added to the attached map (or a variation thereof).

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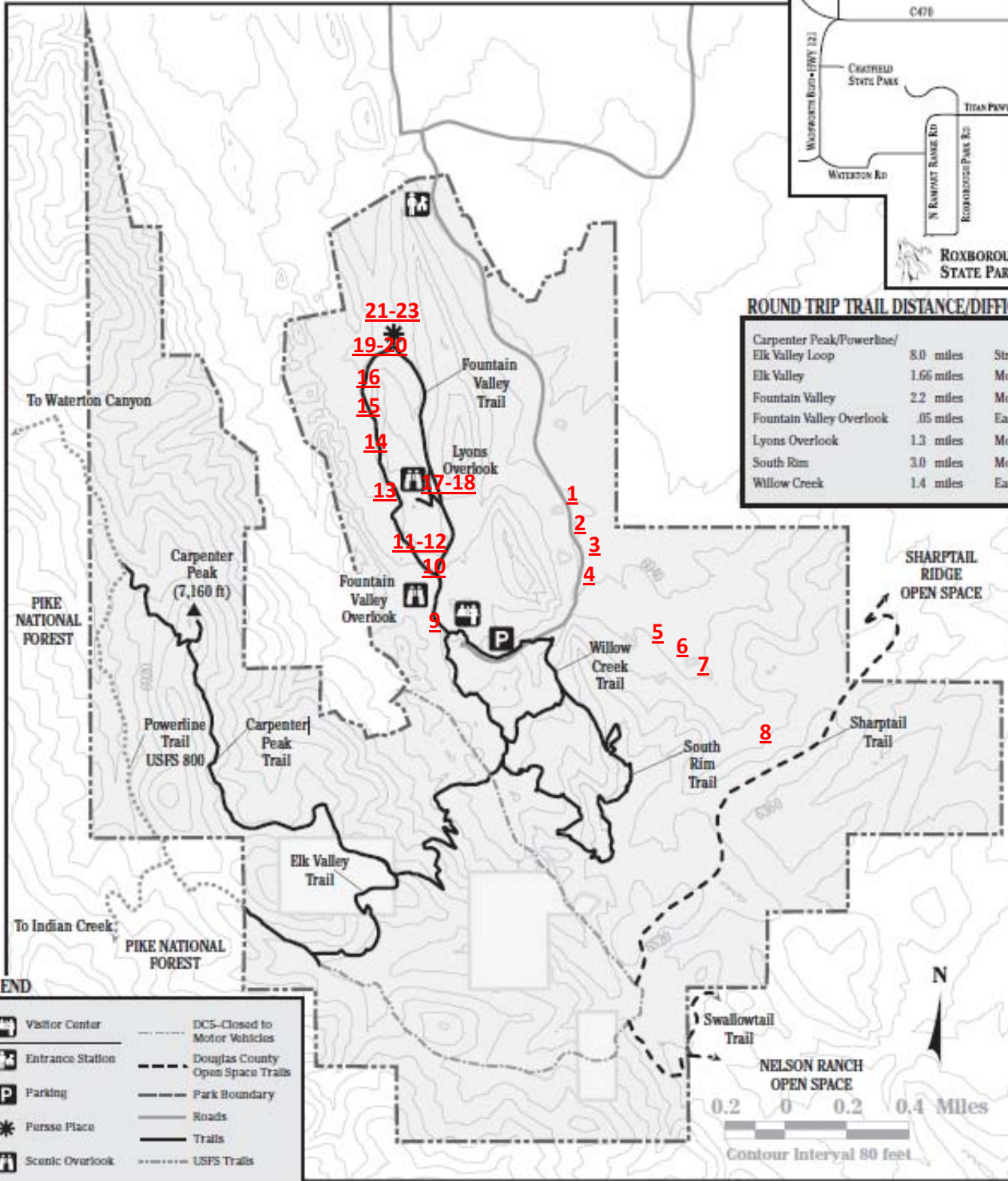
<sup>1</sup> Some of the points were taken within areas where no current trail exists (such as the Southdowns area).

# ROXBOROUGH STATE PARK



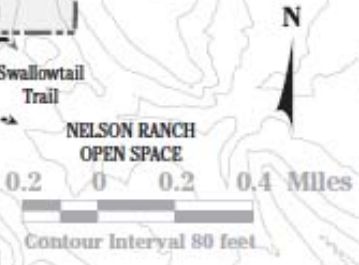
## ROUND TRIP TRAIL DISTANCE/DIFFICULTY

Carpenter Peak/Powerline/	8.0 miles	Strenuous
Elk Valley Loop	1.66 miles	Moderate
Elk Valley	2.2 miles	Moderate
Fountain Valley	.05 miles	Easy
Fountain Valley Overlook	1.3 miles	Moderate
Lyons Overlook	3.0 miles	Moderate
South Rim	1.4 miles	Easy
Willow Creek		



## LEGEND

	Visitor Center		DCS-Closed to Motor Vehicles
	Entrance Station		Douglas County Open Space Trails
	Parking		Park Boundary
	Purse Place		Roads
	Scenic Overlook		Trails
			USFS Trails





1. Photo: 8069.jpg and Photo: 8076.jpg
2. Photo: 8086.jpg and Photo: 8089.jpg
3. Photo: 8092.jpg and Photo: 8090.jpg
4. Photo: 8114.jpg
5. Photo: 8123.jpg
6. Photo: 8130.jpg and Photo: 8138.jpg
7. Photo: 8140.jpg and Photo: 8148.jpg
8. Photo: 8190.jpg and Photo: 8190.jpg
9. Photo: 8273.jpg
10. Photo: 8282.jpg
11. Photo: 8288.jpg
12. Photo: 8290.jpg and Photo: 8289.jpg
13. Photo: 8297.jpg and Photo: 8298.jpg
14. Photo: 1020803.jpg and Photo: 8266.jpg
15. Photo: 8302.jpg and Photo: 8304.jpg
16. Photo: 8323.jpg and Photo: 8329.jpg
17. Photo: 1020769.jpg and Photo: 1020772.jpg
18. Photo: 1020796.jpg and Photo: 1020785.jpg
19. Photo: 1020657.jpg and Photo: 1020658.jpg
20. Photo: 1020685.jpg and Photo: 1020686.jpg
21. Photo: 1020720.jpg and Photo: 1020721.jpg
22. Photo: 1020733.jpg and Photo: 1020734.jpg and Photo: 1020735.jpg
23. Photo: 1020751.jpg and Photo: 1020748.jpg

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 9:00am  
**Weather:** Warm, sunny, 90°F.  
**Trail Location:** 1. Roxborough: Southdowns, service road entrance off of Roxborough Drive.  
**Trail Condition:** good  
**Issue:** weeds  
**Evaluator:** Leigh Johnson  
**Photo:** 8069.jpg



**Photo:** 8076.jpg



**Additional comments:**

Old service road, entrance is gated and signed "Authorized Vehicles Only" and "No Parking". Gravel pull-out area on side of road, with tire tracks clearly visible. Shortly into the road, there are signs of weeds along each side of road tracks.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 9:20am  
**Weather:** Warm, sunny.  
**Trail Location:** 2. Roxborough: Southdowns, service road about 200 ft in from Roxborough Rd.  
**Trail Condition:** good  
**Issue:** Potential erosion area  
**Evaluator:** Leigh Johnson

**Photo:** 8086.jpg



**Photo:** 8089.jpg



**Additional comments:**

On west side of service road tracks, a "wall" of exposed earth is clearly visible, creating a small ledge.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 9:30am  
**Weather:** Warm, sunny.  
**Trail Location:** 3. Roxborough: Southdowns, service road about 300 ft in from Roxborough Rd.  
**Trail Condition:** good  
**Issue:** weeds  
**Evaluator:** Leigh Johnson

**Photo:** 8092.jpg



**Photo:** 8090.jpg



**Additional comments:**

Thistle weeds w/ purple flowers, scattered locations. Service road tracks clearly visible here.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 10:40am  
**Weather:** Warm, sunny.  
**Trail Location:** 4. Roxborough: Southdowns, on service road. Near water crossing, looking North.  
**Trail Condition:** Good  
**Issue:** Water crossing  
**Evaluator:** Leigh Johnson

**Photo:** 8114.jpg



**Additional comments:**

Stream follows trees. Can hear the water flow, but it cannot be easily seen due to veg. Old service road tracks are more heavily grown in with veg. but are still visible.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 9:30am  
**Weather:** Warm, sunny.  
**Trail Location:** 5. Roxborough: Southdowns, service road about .5 mile in from Roxborough Rd. entrance  
**Trail Condition:** good  
**Issue:** open prairie area  
**Evaluator:** Leigh Johnson

**Photo:** 8123.jpg



**Additional comments:**

Where service road bends east, large open expanse of prairie. Sign in area that reads "No Access Beyond This Point" is just out of the photo to right (west).

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 9:45am  
**Weather:** Warm, sunny.  
**Trail Location:** 6. Roxborough: Southdowns, on service road about 1+ mile from road entrance, looking east.  
**Trail Condition:** good  
**Issue:** Potential for social trails  
**Evaluator:** Leigh Johnson  
**Photo:** 8130.jpg (looking South-East)



**Photo:** 8138.jpg (looking back to the South-West)



**Additional comments:**

Animal footprints seen in dirt area between mounds. Road is cut in between 2 mounds; a trail is seen on southern mound on its east side. Wildlife may use the trail, but could also be a concern for a social trail.

**Date/Time:** July 22, 2010 approx 9:55am  
**Weather:** Warm, sunny.  
**Trail Location:** 7. Roxborough: Southdowns, service road about 1+ mile in from Roxborough Rd. entrance – near Columbine cross memorial area  
**Trail Condition:** good  
**Issue:** open prairie area, Columbine cross memorial area  
**Evaluator:** Leigh Johnson  
**Photo:** 8140.jpg



Photo: 8148.jpg



**Additional comments:**

Weeds along each side of road tracks at top of hill. Sign at bottom of hill reads "No Access at this Point". Columbine cross memorial is to right (south) of service road. Nice open expanse of prairie in all directions. Service road tracks become more difficult to see, as veg. has grown in on them.



## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 9:50am  
**Weather:** Warm, sunny.  
**Trail Location:** 8. Roxborough: Southdowns, service road about 1+ mile in from Roxborough Rd. entrance  
**Trail Condition:** Service road becomes more difficult to see  
**Issue:** Intact, open prairie area  
**Evaluator:** Leigh Johnson  
**Photo:** 8190.jpg



**Photo:** 8196.jpg



**Additional comments:**

Open prairie area with small wild flowers tucked in grass. Shown above is Indian Paintbrush.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 12:00pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 9. Roxborough: Fountain Valley Trail, before Interp. Sign Post #3  
**Trail Condition:** Good  
**Issue:** Interesting geologic formations  
**Evaluator:** Leigh Johnson

**Photo:** 8273.jpg



**Additional comments:**  
Interesting geologic formations.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 12:20pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 10. Roxborough: Fountain Valley Trail, where looped trail splits  
**Trail Condition:** Good  
**Issue:** Trail splits  
**Evaluator:** Leigh Johnson

**Photo:** 8282.jpg



**Additional comments:**

Looped trail splits into its two parts. Vegetation looks good on either side.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 12:30pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 11. Roxborough: Fountain Valley Trail, bench near "Restricted Area", after area where trail splits.  
**Trail Condition:** Lightly used  
**Issue:** Increasing trail width  
**Evaluator:** Leigh Johnson

**Photo:** 8288.jpg



**Additional comments:**

There are many benches scattered throughout trail. Potential for visitors to go beyond designated areas.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 12:45pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 12. Roxborough: Fountain Valley Trail, restricted area  
**Trail Condition:** Good  
**Issue:** Restricted Area  
**Evaluator:** Leigh Johnson

**Photo:** 8290.jpg



**Photo:** 8289.jpg



**Additional comments:**

Vegetation and signage in good appearance.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 12:55pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 13. Roxborough: Fountain Valley Trail,  
**Trail Condition:** Good  
**Issue:** Vegetation along trail  
**Evaluator:** Leigh Johnson

**Photo:** 8297.jpg



**Photo:** 8298.jpg



**Additional comments:**

Clearly visible along trail, but also seen in fields to either side of trail.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 1:15pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 14. Roxborough: Fountain Valley Trail, Interp. Sign Post #5 and #1  
**Trail Condition:** Good  
**Issue:** Interp. Signage  
**Evaluator:** Leigh Johnson  
**Photo:** 1020803.jpg



**Photo:** 8266.jpg

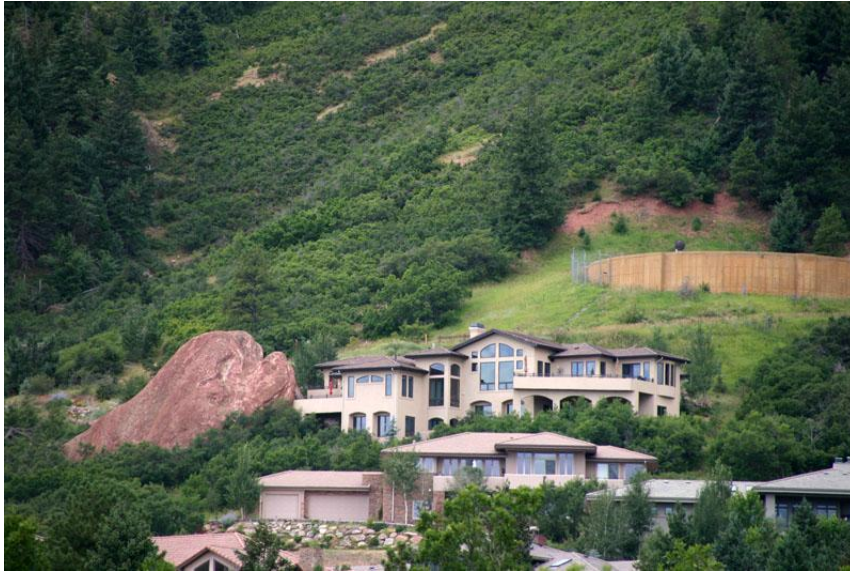


**Additional comments:**  
Self-guided interp. signage in good condition.

**Date/Time:** July 22, 2010 approx 1:30pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 15. Roxborough: Fountain Valley Trail  
**Trail Condition:** Good  
**Issue:** Residential development.  
**Evaluator:** Leigh Johnson  
**Photo:** 8302.jpg



**Photo:** 8304.jpg



**Additional comments:**

Residential development immediately around park. Additional residential homes can be seen from Perse Place.



## PHOTO MONITORING SHEET

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**Date/Time:** July 22, 2010 approx 1:30pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 16. Roxborough: Fountain Valley Trail, after residential homes and before Perrse House  
**Trail Condition:** Good  
**Issue:** Drainage on trail  
**Evaluator:** Leigh Johnson

**Photo:** 8323.jpg



**Photo:** 8329.jpg



**Additional comments:**

Most of trail is excellent to good; some parts show a drainage pattern and may have had fill-gravel or diversions installed to route water off trail.

## PHOTO MONITORING SHEET

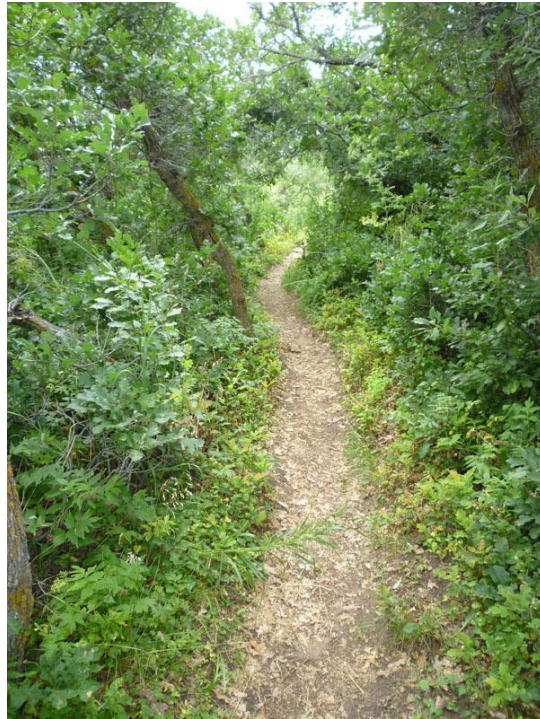
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**Date/Time:** July 22, 2010 approx 1:30pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 17. Roxborough: Fountain Valley Trail, Lions Overlook Trail  
**Trail Condition:** Good, narrow  
**Issue:** Access to and veg growth along entrance to trail  
**Evaluator:** Leigh Johnson

**Photo:** 1020769.jpg



**Photo:** 1020772.jpg



**Additional comments:**

Trail is good, a bit narrowed due to veg growth. Entrance to trail has a small area of compacted earth. Steps along trail are in good condition. Signage is good. Upper portions of trail are sandy. Animal footprints (ungulate) observed in dirt along upper portion.

**Date/Time:** July 22, 2010 approx 2:00pm  
**Weather:** Overcast, thunderstorm rolling in.  
**Trail Location:** 18. Roxborough: Lions Overlook  
**Trail Condition:** Good  
**Issue:** Overlook area  
**Evaluator:** Leigh Johnson  
**Photo:** 1020796.jpg



**Photo:** 1020785.jpg



**Additional comments:**

Bench seating in good condition. Sandy soil. Treed area just behind overlook is sandy, exposed roots, well-spaced trees, and some wooden barriers set up to limit access.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 1:30pm  
**Weather:** Overcast, thunderstorm.  
**Trail Location:** 19. Roxborough: Fountain Valley Trail, before area where rock wall "curves"  
**Trail Condition:** Good  
**Issue:** Drainage  
**Evaluator:** Leigh Johnson

**Photo:** 1020657.jpg



**Photo:** 1020658.jpg



**Additional comments:**

Most of trail is very good. Some areas show drainage patterns or built diversions. Drainage causing a "rut" into side area, off-trail, and drains into stream.

**PHOTO MONITORING SHEET**

**Date/Time:** July 22, 2010 approx 1:20pm  
**Weather:** Overcast, thunderstorm.  
**Trail Location:** 20. Roxborough: Fountain Valley Trail, Between Interp. Sign Post #15 and #11  
**Trail Condition:** Good  
**Issue:** Drainage  
**Evaluator:** Leigh Johnson

**Photo:** 1020685.jpg



**Photo:** 1020686.jpg



**Additional comments:**  
Section of trail lined with wood poles, drainage area to outside of trail. Additional drainage areas further along trail between Interp. Sign Posts 15 and 11.

## PHOTO MONITORING SHEET

---

**Date/Time:** July 22, 2010 approx 1:30pm  
**Weather:** Overcast, thunderstorm.  
**Trail Location:** 21. Roxborough: Fountain Valley Trail – Perse Place  
**Trail Condition:** Good  
**Issue:** Integrity of structure  
**Evaluator:** Leigh Johnson  
**Photo:** 1020720.jpg



**Photo:** 1020721.jpg



**Additional comments:**

Structure appears to be in good shape. Interior looked clean and displays were intact.

## PHOTO MONITORING SHEET

**Date/Time:** July 22, 2010 approx 1:30pm  
**Weather:** Overcast, thunderstorm.  
**Trail Location:** 22. Roxborough: Fountain Valley Trail– Persse Place  
**Trail Condition:** Good  
**Issue:** Trail widening  
**Evaluator:** Leigh Johnson

**Photo:** 1020733.jpg (back of house)



**Photo:** 1020735.jpg (front of house)



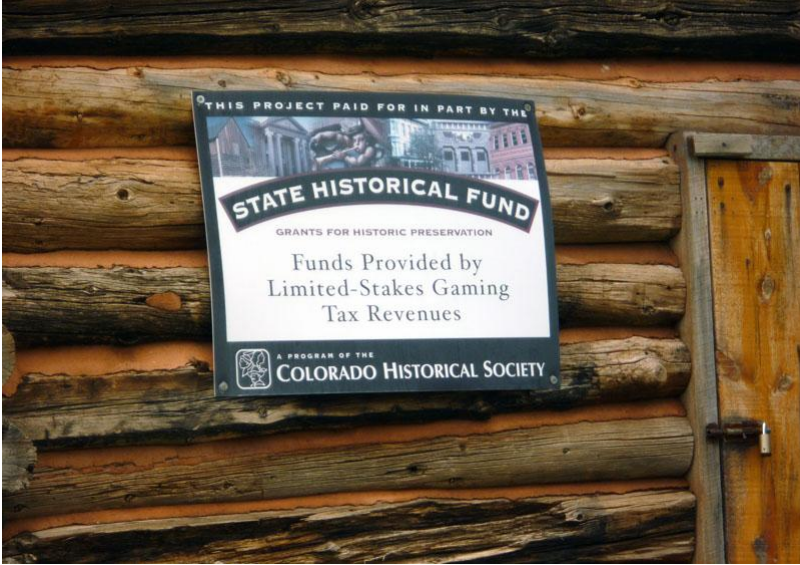
**Additional comments:**

Potential for trails to widen around house. Currently paths are approx. 24-40 inches wide. Interpretive display and bench nearby are in good condition.

**Date/Time:** July 22, 2010 approx 1:45pm  
**Weather:** Overcast, thunderstorm.  
**Trail Location:** 23. Roxborough: Fountain Valley Trail - barns  
**Trail Condition:** Good  
**Issue:** Integrity of structures  
**Evaluator:** Leigh Johnson  
**Photo:** 1020751.jpg



Photo: 1020748.jpg



**Additional comments:**

Structures appear stable; sign is intact. Path to structures is partially weedy. Fencing is intact and collapsed structure is signed and contained within fencing



**APPENDIX K**  
**OTHER USEFUL INFORMATION & SUPPORTING DOCS**

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DRAFT