

APPENDICES

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Appendix A. Probability-of-Occurrence Analysis.

Table A1. Probability-of-Occurrence Analysis of Special Status Plant Species.						
Species	Status	Habitat Requirements	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence	
Probability of Occurrence of Federally Listed Species.						
<i>Astragalus humilis</i> Mancos milkvetch	Endangered	Exfoliating Point Lookout Sandstone; rock ledges in pinyon-juniper woodlands. Elev. 5,500-5,850 ft. ¹	No	No	None	
<i>Astragalus tortipes</i> Sleeping Ute milkvetch	Candidate	Mixed desert scrub communities, on lower slopes of ridges and knolls, in gravels derived from volcanic intrusion in Mancos Shale. Elev. 5,400-5,700 ft. ¹ .	No	No	None	
<i>Pediocactus knowltonii</i> Knowlton's cactus	Endangered	Alluvial deposits that form rolling gravelly hills covered with pinyon-juniper and sagebrush. Elev. 6,400 ft. ¹	No	No	None	
<i>Sclerocactus mesae-verdae</i> Mesa Verde cactus	Threatened	Sparsely vegetated shale or adobe clay badlands derived from Mancos and Fruitland formations. Elev. 4,000-5,000 ft. ¹	No	No	None	
Probability of Occurrence of BLM Sensitive Species						
<i>Astragalus cronquistii</i> Cronquist milkvetch	G2/S2	Sandy and gravelly ridges on red sandstone. Also on Moncos Shale and on substrates derived from Morrison Formation in the eastern part of its range. Elev. 4,800-5,800 ft. ¹	No	No	None	
<i>Astragalus naturitensis</i> Naturita milkvetch	G3/S2S3	Sandstone mesas, ledges, crevices, and slopes in pinyon-juniper woodlands. Elev. 5,000-7,000. ¹	No	No	None	
<i>Erigeron kachinensis</i> Kachina daisy	G2/S1	Saline soils in alcoves and seeps in canyon walls. Elev. 4,800-5,600 ft. ¹	No	No	None	

Table A1 (cont'd). Probability-of-Occurrence Analysis of Special Status Plant Species.					
Species	Status	Habitat Requirements	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
<i>Eriogonum clavellatum</i> Comb Wash buckwheat	G3/S1	Local on shales in the Four Corners Area. ²	No	No	None
<i>Ipomopsis polyantha</i> var. <i>polyantha</i> Pagosa trumpet gilia	G1/S1 Forest Service Sensitive	Fine-textured soils derived from the Mancos shale, or in ponderosa pine, pinyon-juniper, or scrub oak communities. Elev. 6,800-7,200 ft. ¹	No	No	None
<i>Lesquerella pruinosa</i> Pagosa bladderpod	G2/S2 Forest Service Sensitive	Fine-textured soils derived from Mancos Formation shale. Barren areas surrounded by montane grasslands, open ponderosa pine stands with scrub oak, Douglas fir, or Engelmann spruce communities. Elev. 6,800-8,300 ft. ¹	No	No	None
Probability of Occurrence of Species of Concern					
<i>Adiantum capillus-veneris</i> Southern maiden hair	Forest Service Sensitive	Dripping cliffs and seeps, especially on sandstone or calcareous rocks or in highly mineralized soil. Elev. 4,800-7,800 ft. ¹	No	No	None
<i>Astragalus proximus</i> Aztec milkvetch	Forest Service Sensitive	Mesas, bluffs, and low hills in sandy, often alkaline, clay soils derived from Lewis or Mancos Shale. Grows among junipers or sagebrush. Elev. 5,400-7,300 ft. ¹	No	No	None
<i>Botrychium echo</i> Reflected moonwort	Forest Service Sensitive	Gravelly soils, rocky hillsides, grassy slopes, and meadows. Elev. 9,500 - 11,000 ft. ¹	Yes	No	Medium

Table A1 (cont'd). Probability-of-Occurrence Analysis of Special Status Plant Species.					
Species	Status	Habitat Requirements	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
<i>Botrychium pallidum</i> Pale moonwort	Forest Service Sensitive	Open, exposed hillsides, burned or cleared areas, old mining sites. Elev. 9,800 - 10,600 ft. ¹	Yes	No	Medium
<i>Epipactis gigantea</i> Giant helleborine	Forest Service Sensitive	Seeps on sandstone cliffs and hillsides; springs, sometimes hot springs. Elev. 4,800-8,000 ¹	No	No	None
<i>Eriophorum altaicum</i> var. <i>neogaeum</i> Altai cottongrass	Forest Service Sensitive	Fens. Elev. 9,500 - 14,000 ft. ¹	Yes	No	Medium
<i>Machaeranthera coloradoensis</i> Colorado tansy aster	Forest Service Sensitive	Gravelly Areas in mountain parks, slopes, and rock outcrops up to dry tundra Elev. 8,500 - 12,500 ft. ¹	Yes	No	Medium
<i>Salix arizonica</i> Arizona willow	Forest Service Sensitive	Sedge meadow and wetland drainage ways in subalpine coniferous forests. Elev. 10,000-11,200 ft. ³	Yes*	No	Low
<p>1 Spackman et al. 1997. 2 Weber and Wittmann 1996 3 New Mexico Rare Plant Technical Council. 1999. * Species is not known from the San Juan NF, but it occurs on the adjacent Rio Grande NF east of Wolf Creek Pass.</p>					

Table A2. Probability of Occurrence of Special Status Fish & Wildlife Species in the Project Area.					
Species	Status¹	Habitat Requirements²	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
Federally Listed Threatened, Endangered, and Candidate Species.					
<i>Mammals</i>					
Black-footed ferret <i>Mustela nigripes</i>	FE, SE	Open grasslands in association with prairie dog colonies.	No	No	None
Canada Lynx <i>Lynx canadensis</i>	FT, SE	Mature spruce/fir forests in association with snowshoe hare habitat.	Yes	Yes	High
<i>Birds</i>					
Bald Eagle <i>Haliaeetus leucocephalus</i>	FT, ST	Large bodies of water (e.g. rivers, lakes, reservoirs) for feeding, mature trees for roosts. Winter below 8,000 feet.	Potential roost trees.	No. Below Animas River but not in project area.	Low
Mexican spotted owl <i>Strix occidentalis lucida</i>	FT, ST	Steep canyons with exposed cliffs surrounded by dense, mature ponderosa pine/mixed conifer forest.	No	No	None
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE, SE	Foothill and montane riparian thickets (mostly willows) below 10,000 feet.	Marginal -small patches along creek	No	Low
Whooping crane <i>Grus americana</i>	FE, SE	Mudflats around reservoirs and in agricultural areas.	No	No	None
<i>Amphibians</i>					
Boreal Toad <i>Bufo boreas boreas</i>	FC ³ , SE, R2	Lakes, marshes, ponds, and bogs, with shallow water for breeding; moist upland forests, meadows, or riparian areas outside of breeding season.	Yes	No	Low
<i>Fish</i>					
Bonytail <i>Gila elegans</i>	FE, SE	Large, fast-flowing waterways of the lower Colorado River.	No	No	None

Table A2 (cont'd). Probability of Occurrence of Special Status Fish & Wildlife Species in the Project Area.					
Species	Status¹	Habitat Requirements²	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
Colorado Pikeminnow <i>Ptychocheilus lucius</i>	FE, ST	Swift flowing portions of the lower San Juan and Colorado Rivers with quite, warm backwaters.	No	No	None
Humpback chub <i>Gila cypha</i>	FE, ST	Deep, fast-moving, turbid waters of the lower Colorado River.	No	No	None
Razorback Sucker <i>Xyrauchen texanus</i>	FE, SE	Deep, clear to turbid waters of the lower San Juan and Colorado Rivers over mud, sand, or gravel.	No	No	None
<i>Invertebrates</i>					
Uncompahgre fritillary butterfly <i>Boloria acrocnema</i>	FE	Alpine habitats with large patches of Snow willow, on northeast-facing slopes, at elevations above 12,000 feet.	Snow willow present but patch size small.	No	Low
BLM Sensitive Species					
<i>Mammals</i>					
Allen's big-eared bat <i>Idionycteris phyllotis</i>	BLM, R2	Mixed forests, pinyon-juniper woodlands, lowland riparian, and shrublands. Elevations up to 9,800 feet. Roosts in caves and mines.	No; species not known to use spruce-fir habitat.	No	None
Big free-tailed bat <i>Nyctinomops macrostis</i>	BLM	Lowland riparian, desert shrub, and montane forest. Elevations up to 9,200 feet. Roosts in crevices of cliffs.	No, elevation too high.	No. No breeding records in CO.	None
Fringed myotis <i>Myotis thysanodes</i>	BLM	Ponderosa pine woodlands, and shrublands. Elevations up to 7,500 feet. Roosts in caves, mines and buildings.	No	No	None
Spotted bat <i>Euderma maculatum</i>	BLM, R2	Ponderosa pine, pinyon-juniper woodlands, and shrub desert. Elevations up to 10,600 feet. Roosts in crevices of rocky cliffs.	No	No, only known from northwest CO.	None

Table A2 (cont'd). Probability of Occurrence of Special Status Fish & Wildlife Species in the Project Area.					
Species	Status¹	Habitat Requirements²	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	BLM, R2	Semidesert shrublands, pinyon-juniper woodlands, and open montane forests. Elevations up to 9,500 feet. Roosts in caves and abandoned mines.	Yes, but elevation may be too high.	Not in San Juan Resource Area, but occurs in San Juan and Uncompahgre National Forests.	Low - Medium
<i>Birds</i>					
Black tern <i>Chlidonias niger</i>	BLM, R2	Marshes, sloughs, and wet meadows associated with reservoirs and lakes.	No	No	None
Ferruginous hawk <i>Buteo regalis</i>	BLM, SC, R2	Grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitat.	No	No	None
Gunnison sage grouse <i>Centrocercus minimus</i>	BLM, SC	Sagebrush shrublands.	No	No	None
Northern goshawk <i>Accipiter gentilis</i>	BLM, R2	Coniferous, mixed coniferous, and riparian (aspen stringers) forests.	Yes, foraging	On the San Juan Resource Area	Moderate - High
White-faced ibis <i>Plegadis chihi</i>	BLM, R2	Wet meadows, marsh edges, and reservoir shorelines.	No	No	None
<i>Reptiles</i>					
Desert spiny lizard <i>Sceloporus magister</i>	BLM, SC	Shrub covered dirt banks and sparsely vegetated rocky areas near streams and arroyos.	No	No	None
Texas horned lizard <i>Phrynosoma comutum</i>	BLM, SC, R2	Plains grassland.	No	No	None
<i>Fish</i>					
Bluehead sucker <i>Catostomus discobolus</i>	BLM, SC	Occupies large rivers and mountain streams. Habitats range from cold, clear mountain streams to warm, turbid streams.	No	No. Found in lower reaches of the Animas River at elevations below the project area.	None

Table A2 (cont'd). Probability of Occurrence of Special Status Fish & Wildlife Species in the Project Area.					
Species	Status¹	Habitat Requirements²	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
Flannelmouth sucker <i>Catostomus latipinnis</i>	BLM, SC	Inhabits moderate to large rivers, seldom in small creeks. Typical of pools and deeper runs.	No	No. Found in lower reaches of the Animas River.	None
Roundtail chub <i>Gila robusta</i>	BLM, SC	Inhabits cool to warm water mid-elevation streams and rivers.	No	No. Found in lower reaches of the Animas River.	None
Colorado River cutthroat trout <i>Oncorhynchus clarki pleuriticus</i>	BLM, SC, R2	Requires cool, clear water streams with pools and well-vegetated streambanks. Occurs also in lakes.	Potential habitat is present in the Upper Animas R.	No. Never found in Cement Creek Basin. Occurs in upper Colorado River.	None
Colorado State Threatened and Endangered Species					
<i>Mammals</i>					
Gray wolf <i>Canis lupus</i> ⁴	SE, FE	Any place with an adequate supply of ungulate prey and free from human persecution. Large home ranges.	No; home ranges would overlap developed areas.	No; no confirmed reports in CO since 1935.	None
Grizzly bear <i>Ursus arctos</i> ⁴	SE, FT	Habitat generalist; from prairie grasslands to alpine tundra.	Potential habitat present.	No; no confirmed reports in CO since 1979.	None
Kit Fox <i>Vulpes macrotis</i>	SE	Semidesert shrubland and margins of pinyon-juniper woodlands.	No	No	None
Preble's meadow jumping mouse <i>Zapus hudsonius preblei</i> ⁴	ST, FT	Tall grass habitats near water.	No	No	None
River otter <i>Lontra canadensis</i>	SE	Riparian habitats; requires permanent water with an abundant food source.	No	Occurs in Animas drainage but not in project area.	None
Wolverine <i>Gulo gulo</i>	SE, R2	From low-elevation, forested drainage bottoms to high-elevation, sparsely timbered cirque basins.	Yes	Unconfirmed report in San Juan Resource Area.	Moderate - High

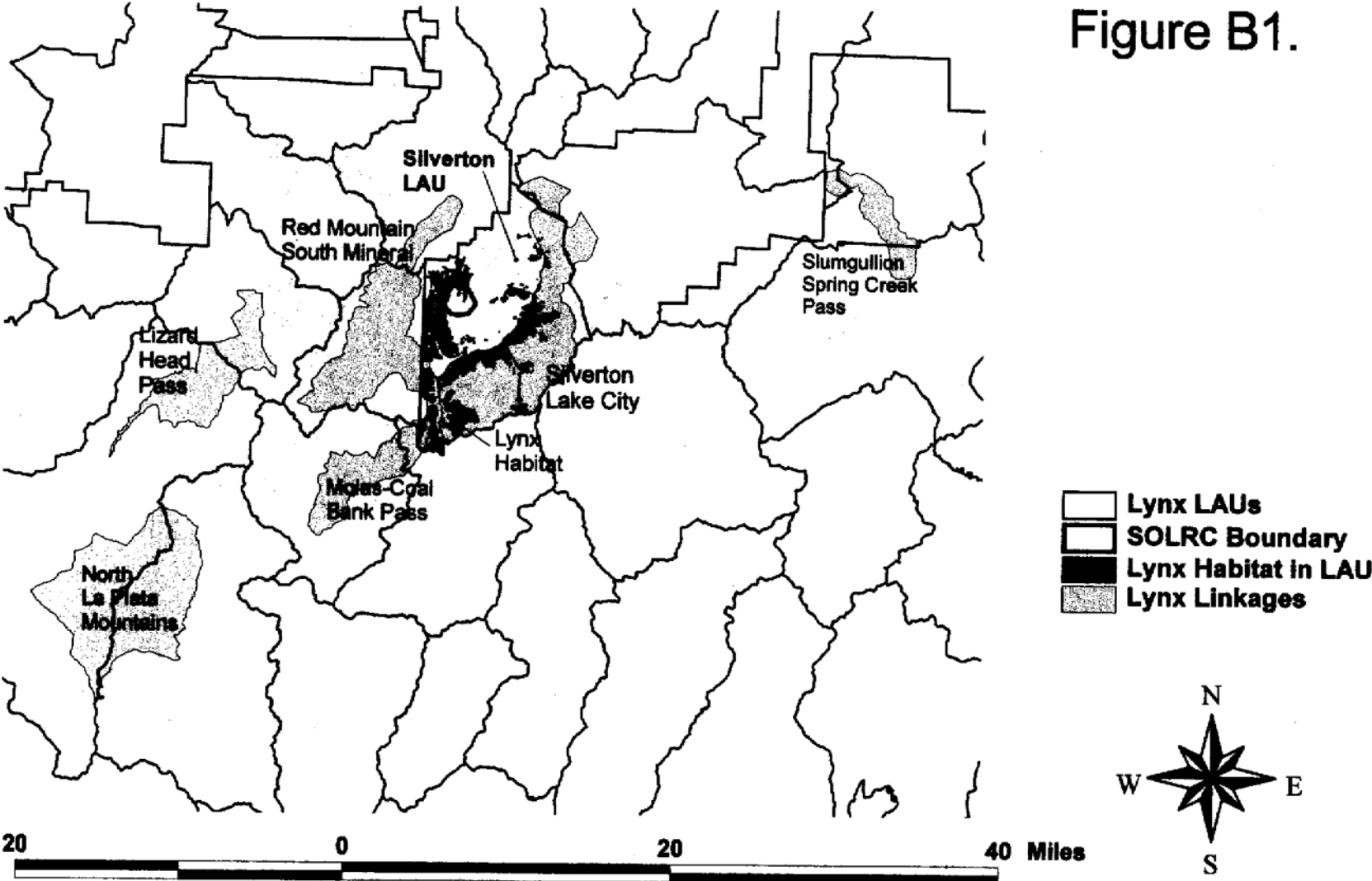
Table A2 (cont'd). Probability of Occurrence of Special Status Fish & Wildlife Species in the Project Area.					
Species	Status¹	Habitat Requirements²	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
<i>Birds</i>					
Burrowing owl <i>Athene cunicularia</i>	ST	Grasslands; usually in or near prairie dog towns.	No	No	None
Least tern <i>Sterna antillarum</i> ⁴	SE, FE	Nest on bare sandy shorelines of islands in reservoirs.	No	No	None
Lesser prairie-chicken <i>Tympanuchus pallidicinctus</i>	ST	Sandsage and sandsage-bluestem grasslands.	No	No	None
Piping plover <i>Charadrius melodus circumcinctus</i> ⁴	ST, FT	Mudflats and shorelines of reservoirs and lakes.	No	No	None
Plains sharp-tailed grouse <i>Tympanuchus phasianellus jamesii</i>	SE	Shrublands and grasslands	No	No	None
<i>Fish</i>					
Arkansas darter <i>Etheostoma cragini</i>	ST	Spring-fed creeks with cool, clear water and herbaceous vegetation.	No	No. Not found in the San Juan or Colorado Basins.	None
Brassy minnow <i>Hybognathus hankinsoni</i>	ST	Small, clear, sluggish weedy creeks or small rivers with organic sediment.	No	No. Not found in the San Juan or Colorado Basins.	None
Common shiner <i>Luxilus cornutus</i>	ST	Creeks and small to medium rivers. Clear cool water, moderate current, and gravel substrate.	No	No. Not found in the San Juan or Colorado Basins.	None
Greenback cutthroat trout <i>Oncorhynchus clarki stomias</i>	FT, ST	Cold, clear, gravely headwater streams and mountain lakes. Arkansas and South Platte Rivers.	No	No. Not found in the San Juan or Colorado Basins.	None

Table A2 (cont'd). Probability of Occurrence of Special Status Fish & Wildlife Species in the Project Area.					
Species	Status¹	Habitat Requirements²	Suitable Habitat Present?	Documented Occurrence?	Probability of Occurrence
Lake chub <i>Couesius plumbeus</i>	SE	Gravel-bottom pools and runs of streams and along rocky lake margins.	No	No. Not found in the San Juan or Colorado Basins.	None
Northern redbelly dace <i>Phoxinus eos</i>	SE	Boggy lakes, ponds, beaver ponds, and pools of headwaters.	No	No. Not found in the San Juan or Colorado Basins.	None
Plains minnow <i>Hybognathus placitus</i>	SE	Slow water and side pools of silty streams. Sand beds in large streams and rivers.	No	No. Not found in the San Juan or Colorado Basins.	None
Rio Grande sucker <i>Catostomus plebeius</i>	SE	Pools, runs, and riffles in small to large streams.	No	No. Not found in the San Juan or Colorado Basins.	None
Southern redbelly dace <i>Phoxinus erythrogaster</i>	SE	Headwaters and upland creeks, generally with clear water.	No	No. Not found in the San Juan or Colorado Basins.	None
Suckermouth minnow <i>Phenacobius mirabilis</i>	SE	Runs and riffles of creeks and small to medium rivers with substrate ranging from sand to boulders.	No	No. Not found in the San Juan or Colorado Basins.	None
<p>¹ FE = federally endangered, FT = federally threatened, FC = federal candidate for listing; BLM = BLM sensitive; SE = state endangered, ST = state threatened, SC = state special concern (not a statutory category); R2 = Forest Service Region 2 sensitive.</p> <p>² Hammerson 1982; Andrews and Righter 1992; Fitzgerald et al. 1994; NatureServe Explorer 2001; CDOW 2002a.</p> <p>³ The southern Rocky Mountain population (Colorado, Wyoming, and New Mexico) of boreal toads is a candidate for listing under the ESA.</p> <p>⁴ These species also have federal status. They are addressed in the state listed species section because they do not occur on the San Juan National Forest/BLM RA.</p>					

Appendix B. Lynx Analysis Unit and Linkages figures.

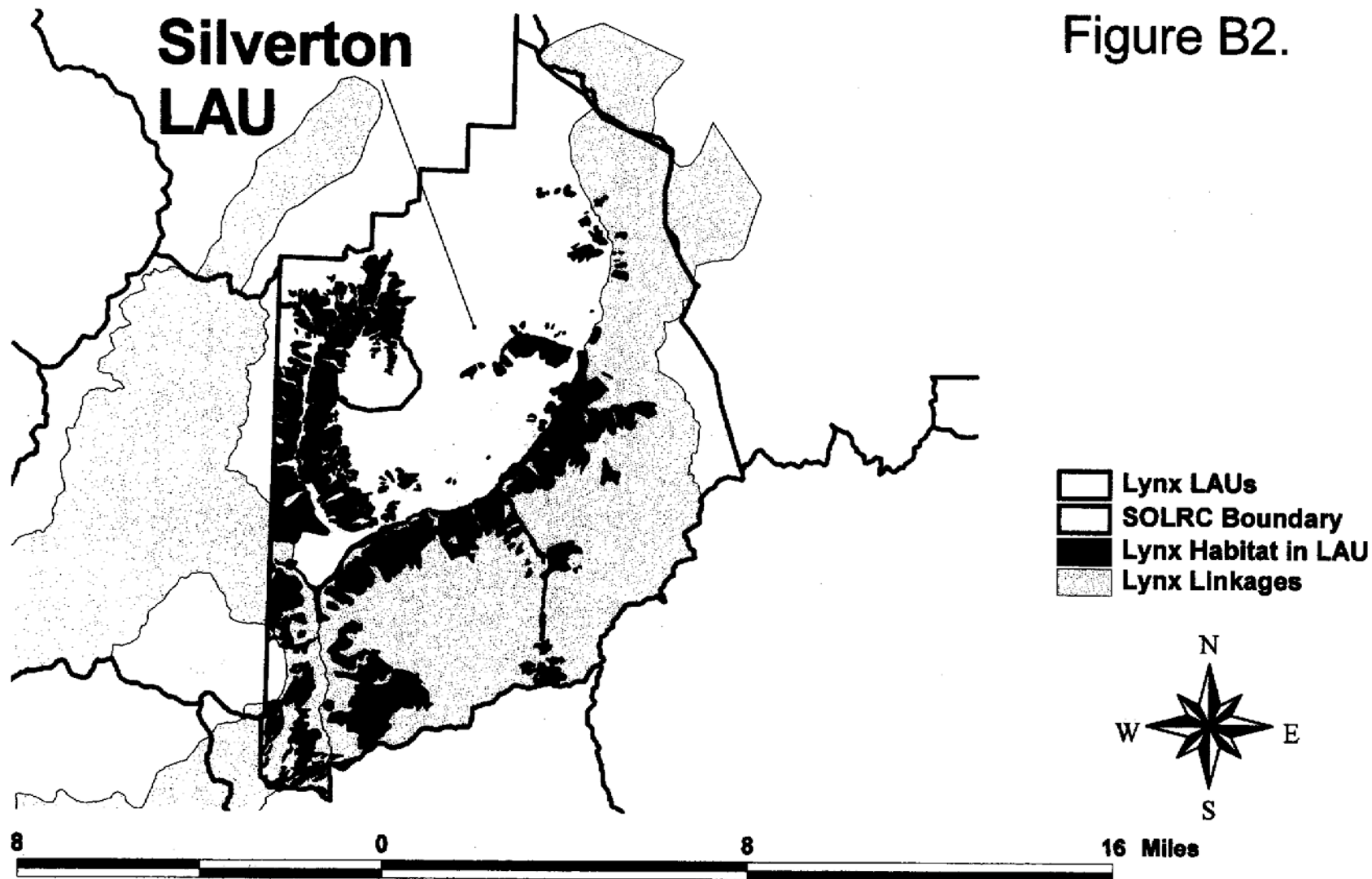
Lynx LAUs and Linkages in the Silverton Area

Figure B1.



Silverton Lynx Analysis Unit

Figure B2.



Appendix C. BLM Boundary Management Plan Figure and Supporting Text.

[Note: This appendix includes the boundary management plan currently in place. If Mitigation Measure 21 is required by the ROD, this plan will be updated to reflect the current situation. For instance, discussion of SH 110A would be revised to reflect the turnover of the road to San Juan County. The operational aspects of the plan would remain the same.]

BOUNDARY MAP OF SOLRC RESTRICTED ACCESS AREA

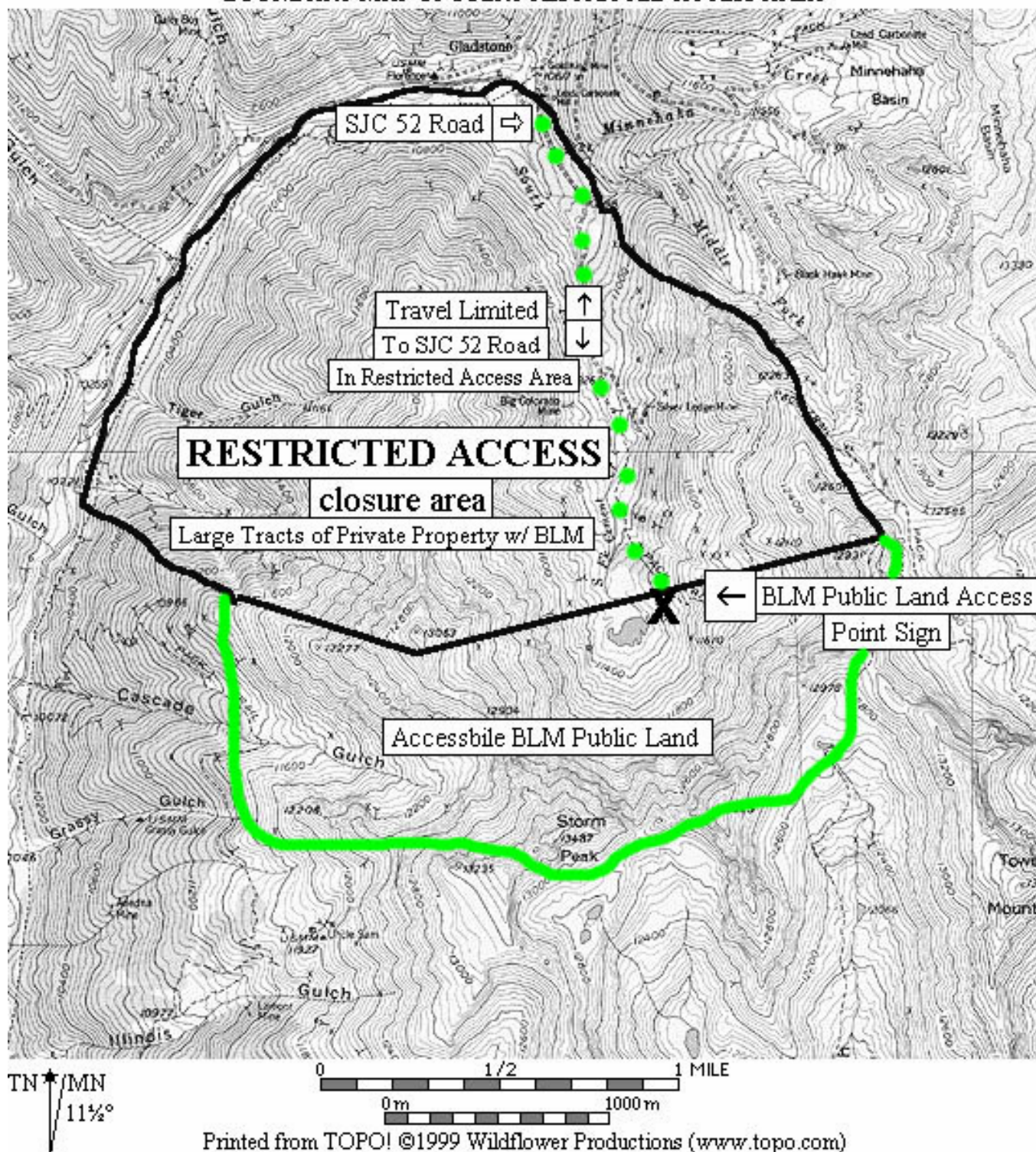


Figure C1. BLM Boundary Management Plan.

***ACCESS TO PORTION OF BLM LANDS UNDER AVALANCHE STUDY PERMIT
TEMPORARILY RESTRICTED***

November 9, 2002....Effective Saturday November 9, 2002 in order to protect the public from the snow and avalanche study occurring at the Silverton Outdoor Learning and Recreation Center (SOLRC), access to certain areas of BLM public land and private land (controlled by SOLRC) will be restricted for the winter season. The area shown on the map will be closed to all public access in the Cement Creek and Colorado Basin areas northwest of Silverton through June 15, 2003.

The seasonal closure area is required to protect the public from dangers associated with the snow and avalanche study including but not limited to avalanches and explosives.

However, a new BLM public land access point has been created within a portion of the study area. This access point is located approximately 1.7 miles down San Juan County road 52, south towards Storm Peak. The access point provides access to the areas south of the BLM access point sign towards Storm Peak only. The areas north of the BLM access sign towards Gladstone as shown on the map are closed to public access. The new access point does **not** allow access into the restricted access portion of the study area as shown on the map. Travel along San Juan County road 52 is restricted to the roadway at all times (as highlighted with green dots) until reaching the BLM public land access point. The BLM public land access point and SJC 52 road are the only route for ingress and egress within the restricted access portion of the study area as shown on the map. Entry into the accessible BLM public land areas on the northern flank of Storm Peak (as shown on the map outlined in green) is limited to San Juan County 52 Road. Frequent temporary closures of San Juan County 52 Road should be expected.

The following entities are exempt from the access restrictions (however, their entry into the closure area must be coordinated with SOLRC to ensure that conditions are safe):

- San Juan County Sheriff's officers;
- San Juan County Search and Rescue operations;
- Private property owners in the act of accessing their property in the area;
- CDOT;
- Other entities authorized under special-use permit to the BLM, including Core Mountain Enterprises, dba as SOLRC, and Helitrax.

The temporary closure is implemented under Title 43 of the Code of Federal Regulations 8364.1. Violators are subject to fines up to \$100,000 and/or imprisonment of to 12 months.

In addition, SOLRC has been authorized by the Colorado Department of Transportation to close Highway #110-A (Cement Creek Road) when avalanche control work will affect that drainage. SOLRC is also authorized by San Juan County to close County Road 52.

For more information look for informational postings at the SOLRC base area, and at SJC 52 road, or contact SOLRC 387-5706.

Appendix D. Avalanche Paths adjacent to SH 110A: Figure and Table.

Figure D1 depicts known avalanche paths adjacent to SH 110A. Those on the east side of the highway originate from the SOLRC project area.

Table D1 summarizes data on the avalanche paths along SH 110A that originate from or are adjacent to the SOLRC project area. Data in the table includes the following: proximity of the path to the project area, the average frequency that the avalanche path will hit the road, the length of road potentially affected by a slide, the average avalanche hazard index, the date that specific avalanche paths ran to the road, and the measurement of debris that covered the road.

Data Source: CDOT Region Five Avalanche Atlas

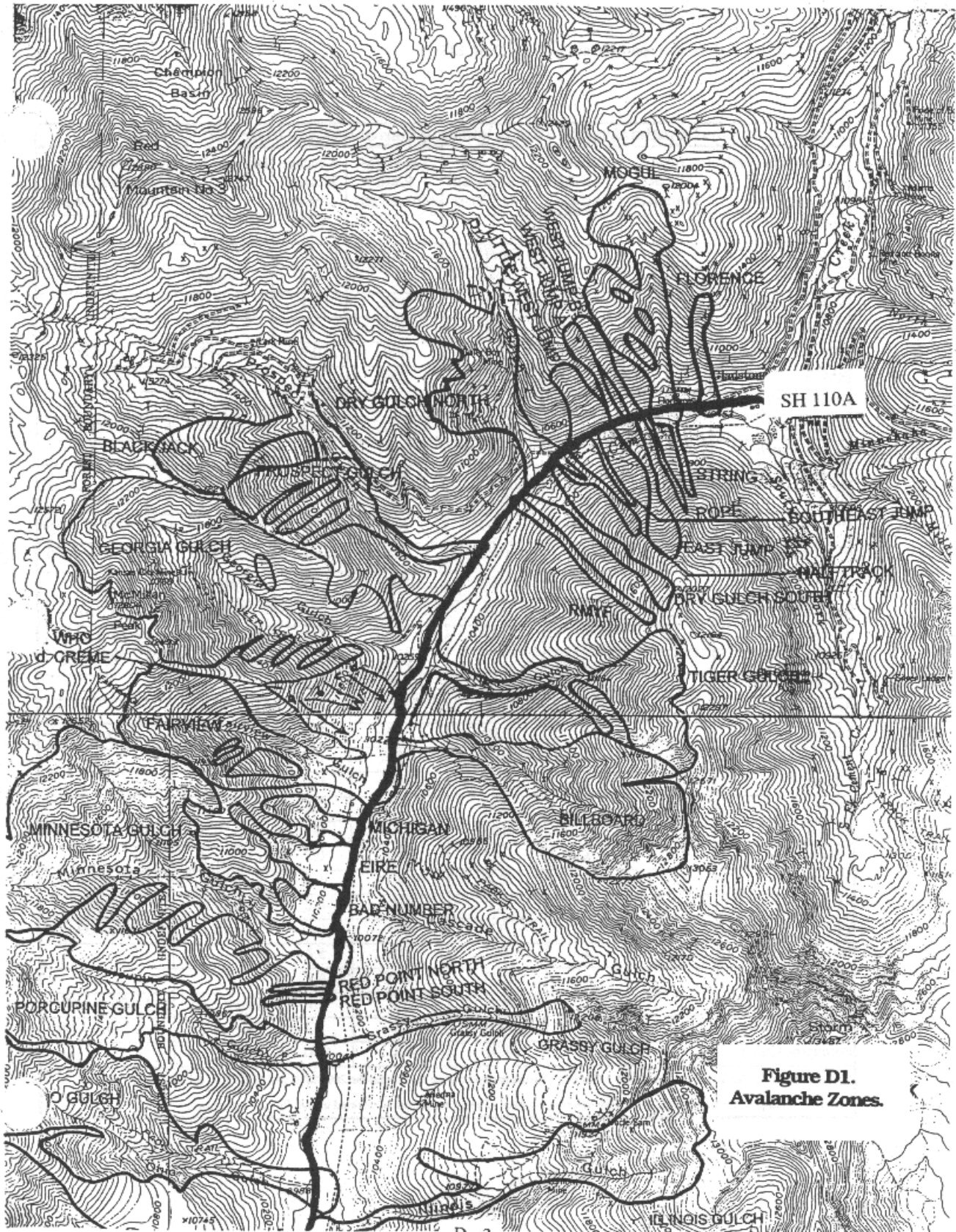


Figure D1.
Avalanche Zones.

Table D1. Avalanche paths along SH 110A originating from or adjacent to the SOLRC boundary.

Avalanche Path	Inside SOLRC Boundary	Outside SOLRC Boundary	Average Activity on Road/Year	Length of Road affected (ft)	Average Hazard Index	Date on Road	Debris Flow Measurement (ft; depth by length)
String ¹	x		-	-	-	-	-
Rope	x		0.04	400	0		
East Jump	x		0.04	300	0.3	Feb-93	4 x 50
Southeast Jump	x		0.03	100	0.1		
Half Track	x		0.03	350	0		
Dry Gulch South	x		0.2	400	0.7	Jan-88	7 x 100
RMYF	x		0.2	200	0.2	Feb-93	3 x 40
Tiger Gulch	x		0.4	350	0.7		
Billboard	x		0.12	500	4.7	Feb-95	4 x 400
Grassy Gulch	x		0.3	200	0.1		
Florence		x	0.04	400	-		
Mogul		x	0.23	600	4.3	Feb-85,93	18 x 400
West Jump B ²		x	0.36	350	0.3	Feb-85,93	25 x 250, 15 x 800
West Jump A ²		x	0.25	250	0.1	Feb-85,93	12 x 70, 15 x 800
Little West Jump ²		x	0.05	800	-	Feb-85	15 x 800
Dry Gulch North		x	0.14	700	1	Feb-93	6 x 350
Dump North		x	0.05	300	0.4	Feb-93, Jan-97	4 x 40, 6 x 200
Dump South		x	0.1	500	0.4	Feb-93, Jan-97	6 x 50, 2 x 20
Prospect Gulch		x	0.01	200	0.1		
Black Jack		x	0.01	200	0.1		
Stump		x	0.03	300	0.4	Feb-93	3 x 60
Georgia Gulch		x	0.03	1,200	6.7		
Crème		x	0.03	400	0.2		
Who		x	0.03	600	0.1		
Stones		x	0.03	500	0.1		
Beatles		x	0.03	150	0.2		
Fairview		x	0.2	1,000	6.9	Jan-74	12 x 200
Michigan		x	0.1	250	0.8	Jan-71	6 x 100
Eire		x	0.2	450	0.8	Feb-93	12 x 400
Bad Number		x	0.1	250	5.4		
Minnesota Gulch		x	0.05	950	6.1		
Red Point North		x	0.15	100	1.2	Feb-93, 96	4 x 30, 5 x 60
Red Point South		x	0.1	250	1.2	Feb-93, 96	6 x 250, 5 x 60
Porcupine Gulch		x	0.02	400	0.01		

¹ No data exists for the String avalanche path. This chute has been skied during the current the 2001/2002 and 2002/2003 permits.

² Both West Jump A and B and Little West Jump released together. Debris measurement reported is total for all three chutes.

Appendix E. Colorado Ski Safety Act of 1979

Source: State of Colorado Department of Regulatory Agencies, Division of Registrations, Colorado Passenger Tramway Safety Board.

TITLE 33

WILDLIFE AND PARKS AND OUTDOOR RECREATION

Article 5

Recreational Areas and Ski Safety

PART 7

Ski Safety and Liability

33-44-101. Short title.

This article shall be known and may be cited as the "Ski Safety Act of 1979".

33-44-102. Legislative declaration.

The general assembly hereby finds and declares that it is in the interest of the state of Colorado to establish reasonable safety standards for the operation of ski areas and for the skiers using them. Realizing the dangers that inhere in the sport of skiing, regardless of any and all reasonable safety measures which can be employed, the purpose of this article is to supplement the passenger tramway safety provisions of part 7 of article 5 of title 25, C.R.S.; to further define the legal responsibilities of ski area operators and their agents and employees; to define the responsibilities of skiers using such ski areas; and to define the rights and liabilities existing between the skier and the ski area operator and between skiers.

33-44-103. Definitions.

As used in this article, unless the context otherwise requires:

- (1) "Base area lift" means any passenger tramway which skiers ordinarily use without first using some other passenger tramway.
- (2) "Competitor" means a skier actually engaged in competition or in practice therefor with the permission of the ski area operator on any slope or trail or portion thereof designated by the ski area operator for the purpose of competition.
- (3) "Conditions of ordinary visibility" means daylight and, where applicable, nighttime in nonprecipitating weather.
- (3.5) "Inherent dangers and risks of skiing" means those dangers or conditions which are an integral part of the sport of skiing, including changing weather conditions; snow conditions as they exist or may change, such as ice, hard pack, powder, packed powder, wind pack, corn, crust, slush, cut-up snow, and machine-made snow; surface or subsurface conditions such as bare spots, forest growth, rocks, stumps, streambeds, and trees, or other natural objects, and collisions with such natural objects; impact with lift towers, signs, posts, fences or enclosures, hydrants, water pipes, other man-made structures and their components; variations in steepness or terrain, whether natural or as a result of slope design, snowmaking or grooming operations, including but not limited to roads and catwalks or other terrain modifications; collisions with other skiers; and the failure of skiers to ski within their own abilities. The term "inherent dangers and risks of skiing" does not include the negligence of a ski area operator as set forth in section 33-44-104 (2). Nothing in this section shall be construed to limit the liability of the ski area operator for injury caused by the use or operation of ski lifts.
- (4) "Passenger" means any person who is lawfully using any passenger tramway.
- (5) "Passenger tramway" means a device as defined in section 25-5-702 (4), C.R.S.
- (6) "Ski area" means all ski slopes or trails and other places under the control of a ski area operator and administered as a single enterprise within this state.

(7) "Ski area operator" means an "area operator" as defined in section 25-5-702 (1), C.R.S., and any person, partnership, corporation, or other commercial entity having operational responsibility for any ski areas, including an agency of this state or a political subdivision thereof.

(8) "Skier" means any person using a ski area for the purpose of skiing; for the purpose of sliding downhill on snow or ice on skis, a toboggan, a sled, a tube, a ski-bob, a snowboard, or any other device; or for the purpose of using any of the facilities of the ski area, including but not limited to ski slopes and trails.

(9) "Ski slopes or trails" means those areas designated by the ski area operator to be used by skiers for any of the purposes enumerated in subsection (8) of this section. Such designation shall be set forth on trail maps, if provided, and designated by signs indicating to the skiing public the intent that such areas be used by skiers for the purpose of skiing. Nothing in this subsection (9) or in subsection (8) of this section, however, shall imply that ski slopes or trails may not be restricted for use by persons using skis only or for use by persons using any other device described in subsection (8) of this section.

33-44-104. Negligence - civil actions.

(1) A violation of any requirement of this article shall, to the extent such violation causes injury to any person or damage to property, constitute negligence on the part of the person violating such requirement.

(2) A violation by a ski area operator of any requirement of this article or any rule or regulation promulgated by the passenger tramway safety board pursuant to section 25-5-704 (1) (a), C.R.S., shall, to the extent such violation causes injury to any person or damage to property, constitute negligence on the part of such operator.

(3) All rules adopted or amended by the passenger tramway safety board on or after July 1, 1979, shall be subject to sections 24-4-103 (8) (c) and (8) (d) and 24-34-104 (9) (b) (II), C.R.S.

33-44-105. Duties of passengers.

(1) No passenger shall board a passenger tramway if he does not have sufficient physical dexterity, ability, and knowledge to negotiate or use such facility safely or until such passenger has asked for and received information sufficient to enable him to use the equipment safely. A passenger is required to follow any written or verbal instructions that are given to him regarding the use of the passenger tramway.

(2) No passenger shall:

(a) Embark upon or disembark from a passenger tramway except at a designated area except in the event of a stoppage of the passenger tramway (and then only under the supervision of the operator) or unless reasonably necessary in the event of an emergency to prevent injury to the passenger or others;

(b) Throw or expel any object from any passenger tramway while riding on such device, except as permitted by the operator;

(c) Act, while riding on a passenger tramway, in any manner that may interfere with proper or safe operation of such passenger tramway;

(d) Engage in any type of conduct that may contribute to or cause injury to any person;

(e) Place in an uphill track of a J-bar, T-bar, platter pull, rope tow, or any other surface lift any object that could cause another skier to fall;

(f) Embark upon a passenger tramway marked as closed;

(g) Disobey any instructions posted in accordance with this article or any verbal instructions by the ski area operator regarding the proper or safe use of a passenger tramway unless such verbal instructions are contrary to this article or the rules promulgated under it, or contrary to posted instructions.

33-44-106. Duties of operators - signs.

(1) Each ski area operator shall maintain a sign system with concise, simple, and pertinent information for the protection and instruction of passengers. Signs shall be prominently placed on each passenger tramway readable in conditions of ordinary visibility and, where applicable, adequately lighted for nighttime passengers. Signs shall be posted as follows:

(a) At or near the loading point of each passenger tramway, regardless of the type, advising that any person not familiar with the operation of the device shall ask the operator of the device for assistance and instruction;

(b) At the interior of each two-car and multicar passenger tramway, showing:

- (I) The maximum capacity in pounds of the car and the maximum number of passengers allowed;
- (II) Instructions for procedures in emergencies.

(c) In a conspicuous place at each loading area of two-car and multicar passenger tramways, stating the maximum capacity in pounds of the car and the maximum number of passengers allowed;

(d) At all chair lifts, stating the following:

- (I) "Prepare to Unload", which shall be located not less than fifty feet ahead of the unloading area;
- (II) "Keep Ski Tips Up", which shall be located ahead of any point where the skis may come in contact with a platform or the snow surface;
- (III) "Unload Here", which shall be located at the point designated for unloading;
- (IV) "Safety Gate", which shall be located where applicable;
- (V) "Remove Pole Straps from Wrists", which shall be located prominently at each loading area;
- (VI) "Check for Loose Clothing and Equipment", which shall be located before the "Prepare to Unload" sign.

(e) At all J-bars, T-bars, platter pulls, rope tows, and any other surface lift, stating the following:

- (I) "Remove Pole Straps from Wrists", which shall be placed at or near the loading area;
- (II) "Stay in Tracks", "Unload Here", and "Safety Gate", which shall be located where applicable;
- (III) "Prepare to Unload", which shall be located not less than fifty feet ahead of each unloading area.

(f) Near the boarding area of all J-bars, T-bars, platter pulls, rope tows, and any other surface lift, advising passengers to check to be certain that clothing, scarves, and hair will not become entangled with the lift;

(g) At or near the boarding area of all lifts, regarding the requirements of section 33-44-109 (6).

(2) Other signs not specified by subsection (1) of this section may be posted at the discretion of the ski area operator.

(3) The ski area operator, before opening the passenger tramway to the public each day, shall inspect such passenger tramway for the presence and visibility of the signs required by subsection (1) of this section.

(4) The extent of the responsibility of the ski area operator under this section shall be to post and maintain such signs as are required by subsection (1) of this section in such condition that they may be viewed during conditions of ordinary visibility. Evidence that signs required by subsection (1) of this section were present, visible, and readable where required at the beginning of the passenger tramway operation on any given day raises a presumption that all passengers using said devices have seen and understood said signs.

33-44-107. Duties of ski area operators - signs and notices required for skiers' information.

(1) Each ski area operator shall maintain a sign and marking system as set forth in this section in addition to that required by section 33-44-106. All signs required by this section shall be maintained so as to be readable and recognizable under conditions of ordinary visibility.

(2) A sign shall be placed in such a position as to be recognizable as a sign to skiers proceeding to the uphill loading point of each base area lift depicting and explaining signs and symbols which the skier may encounter at the ski area as follows:

(a) The ski area's least difficult trails and slopes, designated by a green circle and the word "easiest";

(b) The ski area's most difficult trails and slopes, designated by a black diamond and the words "most difficult";

(c) The ski area's trails and slopes which have a degree of difficulty that falls between the green circle and the black diamond designation, designated by a blue square and the words "more difficult";

(d) Danger areas, designated by a red exclamation point inside a yellow triangle with a red band around the triangle and the word "Danger" printed beneath the emblem. Danger areas do not include areas presenting inherent dangers and risks of skiing.

(e) Closed trails or slopes, designated by an octagonal-shaped sign with a red border around a white interior containing a black figure in the shape of a skier with a black band running diagonally across the sign from the upper right-hand side to the lower left-hand side and with the word "Closed" printed beneath the emblem.

(3) If applicable, a sign shall be placed at or near the loading point of each passenger tramway, as follows:

"WARNING: This lift services (most difficult) or (most difficult and more difficult) or (more difficult) slopes only."

(4) If a particular trail or slope or portion of a trail or slope is closed to the public by a ski area operator, such operator shall place a sign notifying the public of that fact at each identified entrance of each portion of the trail or slope involved. Alternatively, such a trail or slope or portion thereof may be closed with ropes or fences.

(5) The ski area operator shall place a sign at or near the beginning of each trail or slope, which sign shall contain the appropriate symbol of the relative degree of difficulty of that particular trail or slope as set forth by subsection (2) of this section. This requirement shall not apply to a slope or trail designated "easiest" which to a skier is substantially visible in its entirety under conditions of ordinary visibility prior to his beginning to ski the same.

(6) The ski area operator shall mark its ski area boundaries in a fashion readily visible to skiers under conditions of ordinary visibility. Where the owner of land adjoining a ski area closes all or part of his land and so advises the ski area operator, such portions of the boundary shall be signed as required by paragraph (e) of subsection (2) of this section. This requirement shall not apply in heavily wooded areas or other nonskiable terrain.

(7) The ski area operator shall mark hydrants, water pipes, and all other man-made structures on slopes and trails which are not readily visible to skiers under conditions of ordinary visibility from a distance of at least one hundred feet and shall adequately and appropriately cover such obstructions with a shock-absorbent material that will lessen injuries. Any type of marker shall be sufficient, including but not limited to wooden poles, flags, or signs, if the marker is visible from a distance of one hundred feet and if the marker itself does not constitute a serious hazard to skiers. Variations in steepness or terrain, whether natural or as a result of slope design or snowmaking or grooming operations, including but not limited to roads and catwalks or other terrain modifications, are not man-made structures, as that term is used in this article.

(8) (a) Each ski area operator shall post and maintain signs which contain the warning notice specified in paragraph (c) of this subsection (8). Such signs shall be placed in a clearly visible location at the ski area where the lift tickets and ski school lessons are sold and in such a position to be recognizable as a sign to skiers proceeding to the uphill loading point of each base area lift. Each sign shall be no smaller than three feet by three feet. Each sign shall be white with black and red letters as specified in this paragraph (a). The words "WARNING" shall appear on the sign in

red letters. The warning notice specified in paragraph (c) of this subsection (8) shall appear on the sign in black letters, with each letter to be a minimum of one inch in height.

(b) Every ski lift ticket sold or made available for sale to skiers by any ski area operator shall contain in clearly readable print the warning notice specified in paragraph (c) of this subsection (8).

(c) The signs described in paragraph (a) of this subsection (8) and the lift tickets described in paragraph (b) of this subsection (8) shall contain the following warning notice:

WARNING

Under Colorado law, a skier assumes the risk of any injury to person or property resulting from any of the inherent dangers and risks of skiing and may not recover from any ski area operator for any injury resulting from any of the inherent dangers and risks of skiing, including: Changing weather conditions; existing and changing snow conditions; bare spots; rocks; stumps; trees; collisions with natural objects, man-made objects, or other skiers; variations in terrain; and the failure of skiers to ski within their own abilities.

33-44-108. Ski area operators - additional duties.

(1) Any motorized snow-grooming vehicle shall be equipped with a light visible at any time the vehicle is moving on or in the vicinity of a ski slope or trail.

(2) Whenever maintenance equipment is being employed to maintain or groom any ski slope or trail while such ski slope or trail is open to the public, the ski area operator shall place or cause to be placed a conspicuous notice to that effect at or near the top of that ski slope or trail.

(3) All snowmobiles operated on the ski slopes or trails of a ski area shall be equipped with at least the following: One lighted headlamp, one lighted red tail lamp, a brake system maintained in operable condition, and a fluorescent flag at least forty square inches mounted at least six feet above the bottom of the tracks.

(4) The ski area operator shall have no duty arising out of its status as a ski area operator to any skier skiing beyond the area boundaries marked as required by section 33-44-107 (6).

(5) The ski area operator, upon finding a person skiing in a careless and reckless manner, may revoke that person's skiing privileges. This subsection (5) shall not be construed to create an affirmative duty on the part of the ski area operator to protect skiers from their own or from another skier's carelessness or recklessness.

33-44-109. Duties of skiers - penalties.

(1) Each skier solely has the responsibility for knowing the range of his own ability to negotiate any ski slope or trail and to ski within the limits of such ability. Each skier expressly accepts and assumes the risk of and all legal responsibility for any injury to person or property resulting from any of the inherent dangers and risks of skiing; except that a skier is not precluded under this article from suing another skier for any injury to person or property resulting from such other skier's acts or omissions. Notwithstanding any provision of law or statute to the contrary, the risk of a skier/skier collision is neither an inherent risk nor a risk assumed by a skier in an action by one skier against another.

(2) Each skier has the duty to maintain control of his speed and course at all times when skiing and to maintain a proper lookout so as to be able to avoid other skiers and objects. However, the primary duty shall be on the person skiing downhill to avoid collision with any person or objects below him.

(3) No skier shall ski on a ski slope or trail that has been posted as "Closed" pursuant to section 33-44-107 (2) (e) and (4).

(4) Each skier shall stay clear of snow-grooming equipment, all vehicles, lift towers, signs, and any other equipment on the ski slopes and trails.

(5) Each skier has the duty to heed all posted information and other warnings and to refrain from acting in a manner which may cause or contribute to the injury of the skier or others. Each skier

shall be presumed to have seen and understood all information posted in accordance with this article near base area lifts, on the passenger tramways, and on such ski slopes or trails as he is skiing. Under conditions of decreased visibility, the duty is on the skier to locate and ascertain the meaning of all signs posted in accordance with sections 33-44-106 and 33-44-107.

(6) Each ski used by a skier while skiing shall be equipped with a strap or other device capable of stopping the ski should the ski become unattached from the skier. This requirement shall not apply to cross country skis.

(7) No skier shall cross the uphill track of a J-bar, T-bar, platter pull, or rope tow except at locations designated by the operator; nor shall a skier place any object in such an uphill track.

(8) Before beginning to ski from a stationary position or before entering a ski slope or trail from the side, the skier shall have the duty of avoiding moving skiers already on the ski slope or trail.

(9) No person shall move uphill on any passenger tramway or use any ski slope or trail while such person's ability to do so is impaired by the consumption of alcohol or by the use of any controlled substance, as defined in section 12-22-303 (7), C.R.S., or other drug or while such person is under the influence of alcohol or any controlled substance, as defined in section 12-22-303 (7), C.R.S., or other drug.

(10) No skier involved in a collision with another skier or person in which an injury results shall leave the vicinity of the collision before giving his name and current address to an employee of the ski area operator or a member of the voluntary ski patrol, except for the purpose of securing aid for a person injured in the collision; in which event the person so leaving the scene of the collision shall give his name and current address as required by this subsection (10) after securing such aid.

(11) No person shall knowingly enter upon public or private lands from an adjoining ski area when such land has been closed by its owner and so posted by the owner or by the ski area operator pursuant to section 33-44-107 (6).

(12) Any person who violates any of the provisions of subsection (3), (9), (10), or (11) of this section is guilty of a class 2 petty offense and, upon conviction thereof, shall be punished by a fine of not more than three hundred dollars.

33-44-110. Competition.

(1) The ski area operator shall, prior to the beginning of a competition, allow each competitor a reasonable visual inspection of the course or area where the competition is to be held.

(2) The competitor shall be held to assume the risk of all course conditions including, but not limited to, weather and snow conditions, course construction or layout, and obstacles which a visual inspection should have revealed. No liability shall attach to a ski area operator for injury or death of any competitor proximately caused by such assumed risk.

33-44-111. Statute of limitation.

All actions against any ski area operator or its employees brought to recover damages for injury to person or property caused by the maintenance, supervision, or operation of a passenger tramway or a ski area shall be brought within two years after the claim for relief arises and not thereafter.

33-44-112. Limitation on actions for injury resulting from inherent dangers and risks of skiing.

Notwithstanding any judicial decision or any other law or statute to the contrary, including but not limited to sections 13-21-111 and 13-21-111.7, C.R.S., no skier may make any claim against or recover from any ski area operator for injury resulting from any of the inherent dangers and risks of skiing.

33-44-113. Limitation of liability.

The total amount of damages which may be recovered from a ski area operator by a skier who uses a ski area for the purpose of skiing or for the purpose of sliding downhill on snow or ice on skis, a toboggan, a sled, a tube, a ski-bob, a snowboard, or any other device and who is injured, excluding those associated with an injury occurring to a passenger while riding on a passenger tramway, shall not exceed one million dollars, present value, including any derivative claim by any other claimant, which shall not exceed two hundred fifty thousand dollars, present value, and including any claim attributable to noneconomic loss or injury, as defined in sections 13-21-102.5 (2), C.R.S., whether past damages, future damages, or a combination of both, which shall not exceed two hundred fifty thousand dollars. If, upon good cause shown, the court determines that the present value of the amount of lost past earnings and the present value of lost future earnings, or the present value of past medical and other health care costs and the present value of the amount of future medical and other health care costs, or both, when added to the present value of other past damages and the present value of other future damages, would exceed such limitation and that the application of such limitation would be unfair, the court may award damages in excess of the limitation equal to the present value of additional future damages, but only for the loss of such excess future earnings, or such excess future medical and other health care costs, or both. For purposes of this section, "present value" has the same meaning as that set forth in section 13-64-202 (7), C.R.S., and "past damages" has the same meaning as that set forth in section 13-64-202 (6), C.R.S. The existence of the limitations and exceptions thereto provided in this section shall not be disclosed to a jury.

33-44-114. Inconsistent law or statute.

Insofar as any provision of law or statute is inconsistent with the provisions of this article, this article controls.

