### APPENDIX E GRAND CANYON NATIONAL PARK SPECIAL STATUS SPECIES

ATTENDIA E GRAND			Status		
Common Name	Scientific Name Wildlife	Federal	State	Status Navajo**	Other
Invertebrates	Whalle				
Grand Canyon cave pseudoscorpion	Archeolarca cavicola	_	_	_	SC
Kanab ambersnail	Oxyloma haydeni kanabensis	Е	-	_	EN2
Niobrara ambersnail	Oxyloma haydeni, closely related to Oxyloma haydeni kanabensis	-	WSC	-	SC
Fish					I.
Flannelmouth sucker	Catostomus latipinnis	-	-	-	SC
Humpback chub	Gila cypha	Е	WSC	G2	
Razorback sucker	Xyrauchen texanus	Е	WSC	G2	
Amphibians					
Lowland leopard frog	Rana yavapaiensis	-	WSC	-	-
Northern leopard frog	Rana pipiens	-	WSC	G2	
Relict leopard frog	Rana onca	С	WSC	-	-
Reptiles					
Desert tortoise (Mojave population)	Gopherus agassizii	Т	ws C	-	-
Desert tortoise (Sonoran population)	Gopherus agassizii	_	WSC	_	SC
Birds	1 F	1			
American peregrine falcon	Falco peregrinus anatum	_	WSC	_	SC
Bald eagle	Haliaeetus leucocephalus	T	WSC	-	
California brown pelican	Pelecanus occidentalis californicus	Е	-	-	
California condor	Gymnogyps californianus	E,XN	WSC	-	
Mexican spotted owl	Strix occidentalis lucida	T	WSC	G3	
Northern goshawk	Accipiter gentilis	-	ws C	-	-
Southwestern willow flycatcher	Empidonax traillii extimus	Е	WSC	G2	
Western yellow-billed cuckoo	Coccyzus americanus occidentalis	С	WSC	G3	
Yuma clapper rail	Rallus longirostris yumanensis	Е	WSC	-	
Mammals	1 0 2	•		•	•
Allen's lappet-browed bat	Idionycteris phyllotis	-	-	-	SC
Desert bighorn sheep	Ovis canadensis mexicana	-	-	G3	
Greater western mastiff bat	Eumops perotis californicus	-	-	-	SC
Long-legged myotis bat	Myotis volans	-	-	-	SC
Mexican long-tongued bat	Choeronycteris mexicana	-	WSC	-	SC
Pale Townsend's big-eared bat	Corynorhinus townsendii	-	-	-	SC
Pocketed free-tailed bat	Nyctinomops femorosacca	-	-	-	SC
Southwest river otter	Lontra canadensis sonora	-	WSC	G1	SC
Southwestern myotis bat	Myotis auriculus	-	-	-	SC
Spotted bat	Euderma maculatum	-	WSC	-	SC
Western red bat	Lasiurus blossevillii	-	WSC	-	
	Plants				
Arizona rubberweed	Hymenoxys subintegra	-	-	-	SC,EN2
Brittlebush	Encelia resinifera ssp. tenuifolia	-	-	-	SC,EN1
Bunchflower evening primrose	Camissonia confertiflora	-	-	-	SC,EN1
California bearpoppy	Arctomecon californica	-	SR	-	SC,EN2
Deer goldenbush	Ericameria arizonica	-	-	-	SC,EN1
Deer goldenbush	Ericameria cervina	-	-	-	SC,EN2
Flagstaff rockcress	Arabis gracilipes (genus name is changing to Boechera, not in ITIS yet)	-	-	-	SC,EN2
Grand Canyon agave	Agave phillipsiana	-	SR	-	SC,EN2
Grand Canyon beavertail cactus	Opuntia basilaris var. longiareolata	-	SR	-	EN2
Grand Canyon cave-dwelling primrose	Primula specuicola	-	SR	-	SC,EN2
Grand Canyon glowweed	Hesperodoria scopulina var. scopulina	-	-	-	EN2
Grand Canyon rose	Rosa stellata ssp. abyssa	-	-	-	SC,EN2
Kaibab agave	Agave utahensis ssp. kaibabensis	-	SR	-	EN2
Kaibab paintbrush	Castilleja kaibabensis	-	-	-	SC,EN2

			Status			
Common Name	Scientific Name	Federal	State	Navajo**	Other	
Kaibab Plateau beardtongue	Penstemon pseudoputus	-	-	-	SC,EN2	
Kaibab suncup	Camissonia specuicola ssp. specuicola	-	-	-	SC,EN2	
Kaibab suncup (Grand Canyon evening-primrose)	Camissonia specuicola ssp. hesperia	-	-	-	SC,EN2	
Kaibab whitlowgrass	Draba asprella var. kaibabensis	-	-	-	SC,EN2	
Kearney's mustard	Thelypodiopsis purpusii	-	-	-	SC	
Macdougal Indian parsley	Aletes macdougalii ssp. macdougalii	-	-	-	EN2	
McDougall's yellowtops	Flaveria mcdougallii	-	SR	-	SC,EN1	
Mt. Dellenbaugh sandwort	Arenaria aberrans	-	-	-	EN2	
Narrow scorpionweed	Phacelia filiformis	-	-	-	SC,EN2	
Newberry's yucca	Hesperoyucca newberryi	-	SR	-	EN2	
Pillar false gumweed	Vanclevea stylosa	-	-	-	EN2	
Roaring Springs prickle poppy	Argemone arizonica	-	-	-	SC,EN1	
Rough whitlowgrass	Draba asprella var. stelligera	-	-	-	SC,EN2	
Sentry milk-vetch	Astragalus cremnophylax var. cremnophylax	Е	1	-	EN1	
North Rim milk-vetch	Astragalus septentriorema	-	-	-	SC,EN1	
Spiked ipomopsis	Ipomopsis spicata ssp. tridactyla	-	-	-	SC,EN1	
Straightbranched catchfly	Silene rectiramea	-	-	-	SC,EN1	
Tusayan flameflower	Phemeranthus validulus	-	-	-	SC,EN2	
	(syn. Talinum validulum)					
Willow glowweed	Hesperodoria salicina	-	-	-	SC,EN2	
Marble Canyon spurge	Euphorbia aaron-rossii	-	-	-	SC,EN2	

#### Sources

66 Federal Register 54808

50 CFR 17.11-17.12

Fish and Wildlife Service. Endangered Species Program. Available at: www.fws.gov/endangered

Arizona Game and Fish Department. Heritage Data Management System. Available at:

www.azgfd.gov/w\_c/edits/species\_concern.shtml

Brian, Nancy J. 2000. A Field Guide to the Special Status Plants of Grand Canyon National Park. Science Center, Grand Canyon National Park. Grand Canyon, Arizona.

Species names conform to the Integrated Taxonomic Information System (ITIS). Available at: www.itis.gov

#### **Federal Status**

- Ε Endangered, in danger of extinction
- T Threatened, severely depleted
- C Candidate for listing as threatened or endangered
- XN Experimental, non-essential population; in Grand Canyon condors are managed as federally endangered

#### **State Status**

- Wildlife of Special Concern in Arizona WSC
- Endangered, state listing  $\mathbf{E}$
- SR Listed as salvage restricted by the Arizona Department of Agriculture; the plant is subject to damage by theft or vandalism; a state permit and salvage fees required for removal

#### Navajo Endangered Species List

- Group 1 (G1) No longer occurs on Navajo Nation lands. Arizona Game and Fish Department, 1996
- Group 2 (G2) Prospect of survival or recruitment is in jeopardy
- Group 3 (G3) Prospect of survival or recruitment is likely to be in jeopardy in the foreseeable future
- \*Navajo status determination is not used by any other affiliated Grand Canyon tribes

### Other

- Η Known to occur on Hualapai Reservation; not currently documented within GRCA boundary
- SC Species of Concern. Some information showing vulnerability or threat, but not enough to support listing under the Endangered Species Act. Some of these species are former USFWS Category 1, 2, and 3 species (Note: the Southwest Region of the USFWS no longer maintains a list of Category 1, 2, or 3 species)
- EN1 Endemic to GRCA. These species are only known to occur in GRCA, populations and trends should be monitored
- EN2 Endemic to the GRCA region, including known populations outside of park boundaries, but very limited in overall distribution
- Habitat not likely to be found in GRCA, but occurs outside park in northern Arizona

Appendix E E-2 Special Status Species

# APPENDIX F SPATIAL ANALYSIS RESULTS OF NOISE LEVELS BY WILDLIFE HABITAT AND SPECIAL STATUS SPECIES USE AREAS

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The following tables present contours analysis for Percent Time Audible and Average Sound Levels in the park and SFRA. Spatial analysis using noise contour data (described in Chapter 4, Soundscape) was conducted to determine amount of Wildlife habitat and Special Status Species habitat use areas, represented in acres, that fell within a range of sound energy metrics ( $L_{Aeq12}$  and Time Above decibel levels). Data presented for the Percent Time Audible (TAUD) represents habitat found in the SFRA boundary, as this noise metric was only measured in the boundary. Where zeros appear in tables, they signify that a particular habitat type was not found in that particular region of the park or SFRA.

Appendix F F-1 Spatial Analysis Results

1 2	Table 1. Summary of Mexican spotted-owl habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the base year and ten- year forecast under Alternative A
3 4	Table 2. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the base year and ten-year forecast under Alternative A
5 6 7	Table 3. Summary of Mexican spotted-owl habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E. Results of the spatial analysis of Mexican spotted owl critical habitat within the Special Flight Rules Area and noise contour results
8	Table 4. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E
10 11 12	Table 5. Summary of Mexican spotted-owl habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F. Results of the spatial analysis of Mexican spotted owl critical habitat within the Special Flight Rules Area and noise contour results.
13 14	Table 6. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F
15 16	Table 7. Summary of Mexican spotted-owl habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative
17 18	Table 8. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative
19 20	Table 9. Summary of California condor use areas exposed to various average sound levels (L <sub>Aeq12</sub> ) in the base year and ten- year forecast under Alternative A
21 22	Table 10. Summary of California condor use areas exposed to various percent time audible in the base year and ten-year forecast under the Alternative A.
23 24	Table 11. Summary of California condor use areas exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E.
25 26	Table 12. Summary of California condor use areas exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E
27 28	Table 13. Summary of California condor use areas exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F
29 30	Table 14. Summary of California condor use areas exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F
31 32	Table 15. Summary of California condor use areas exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative
33 34	Table 16. Summary of California condor use areas exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative
35 36	Table 17. Summary of wildlife habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the base year and ten-year forecast under Alternative A.
37 38	Table 18. Summary of wildlife habitat exposed to various percent time audible in the base year and ten-year forecast under Alternative A
39 40	Table 19. Summary of wildlife habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E
41 42	Table 20. Summary of wildlife habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E
43 44	Table 21. Summary of wildlife habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F
45 46	Table 22. Summary of wildlife habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F
47 48	Table 23. Summary of wildlife habitat exposed to various average sound levels (L <sub>Aeq12</sub> ) in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative.
+0 49 50	Table 24. Summary of wildlife habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative

Appendix F F-2 Spatial Analysis Results

## Table 1. Summary of Mexican spotted-owl habitat exposed to various average sound levels (L<sub>Aeq12</sub>) in the base year and ten-year forecast under Alternative A.

Alternative A – $L_{Aeq12}$				
Marble Canyon				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	96%	4%	0%	0%
Ten-Year Forecast	15%	77%	8%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	44%	23%	18%	15%
Ten-Year Forecast	3%	37%	38%	22%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	91%	9%	0%	0%

Table 2. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the base year and tenyear forecast under Alternative A.

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Alternative A – TAUD				
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	68%	15%	14%	4%
Ten-Year Forecast	68%	15%	14%	4%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	14%	3%	8%	76%
Ten-Year Forecast	14%	3%	8%	76%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	89 %	4%	4%	2%
Ten-Year Forecast	89%	4%	4%	2%

Appendix F F-3 Spatial Analysis Results

Table 3. Summary of Mexican spotted-owl habitat exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E. Results of the spatial analysis of Mexican spotted owl critical habitat within the Special Flight Rules Area and noise contour results.

Alt E - Peak - L <sub>Aeq12</sub>				
Marble Canyon				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	82%	6%	6%	6%
Ten-Year Forecast	85%	5%	9%	1%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%

Alternative E – Off-Pea Marble Canyon	ak Season – L <sub>Aeq12</sub>			
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	86%	5%	6%	3%
Ten-Year Forecast	89%	4%	6%	1%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%

4

Table 4. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E.

1 2

Alternative E – Peak S	eason – TAUD			
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	99%	1%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	60%	4%	7%	29%
Ten-Year Forecast	73%	4%	8%	16%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	99%	1%	0%	0%
Ten-Year Forecast	99%	0%	1%	0%

Alternative E – Off-Pe	ak Season – TAU	D		
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	65%	4%	9%	21%
Ten-Year Forecast	80%	3%	7%	9%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	97%	1%	1%	1%
Ten-Year Forecast	99%	0%	1%	0%

Appendix F F-5 Spatial Analysis Results

Table 5. Summary of Mexican spotted-owl habitat exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F. Results of the spatial analysis of Mexican spotted owl critical habitat within the Special Flight Rules Area and noise contour results.

Alternative F – Peak Marble Canyon	$-L_{ m Aeq12}$			
·	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Base Year	96%	4%	0%	0%
Ten-Year Forecast	96%	4%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	44%	23%	18%	15%
Ten-Year Forecast	59%	17%	15%	9%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%

Alternative F – Off-P	eak Season – L <sub>Aeq1</sub>	2		
Marble Canyon	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Base Year	100%	> 13 <= 23 dBA 0%	> 23 <= 33 dBA 0%	> 33 ubA 0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	55%	21%	18%	6%
Ten-Year Forecast	66%	16%	16%	2%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	98%	2%	0%	0%
Ten-Year Forecast	99%	1%	0%	0%

Appendix F F-6 Spatial Analysis Results

Table 6. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F.

1 2

Alternative F – Peak Se	eason – TAUD			
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	67%	15%	14%	4%
Ten-Year Forecast	85%	14%	1%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	14%	2%	8%	76%
Ten-Year Forecast	37%	7%	15%	41%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	95%	1%	1%	3%
Ten-Year Forecast	97%	1%	1%	0%

Alternative F – Off-Pea	ık Season – TAUl	0		
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	99%	1%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	20%	8%	26%	45%
Ten-Year Forecast	52%	13%	21%	13%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	86%	2%	4%	8%
Ten-Year Forecast	95%	2%	2%	1%

Appendix F F-7 Spatial Analysis Results

Table 7. Summary of Mexican spotted-owl habitat exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative.

NPS Preferred Alterr	native – Peak Seaso	$\mathrm{on}-\mathrm{L}_{\mathrm{Aeq12}}$		
Marble Canyon				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	99%	1%	0%	0%
Ten-Year Forecast	99%	1%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	44%	24%	19%	14%
Ten-Year Forecast	54%	20%	18%	8%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%

NPS Preferred Alternative – Off-Peak Season – L <sub>Aeq12</sub>					
Marble Canyon	0	5	10	15	
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA	
Base Year	100%	0%	0%	0%	
Ten-Year Forecast	100%	0%	0%	0%	
East End	0	5	10	15	
	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA	
Base Year	54%	22%	17%	7%	
Ten-Year Forecast	60%	19%	17%	5%	
Central					
	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA	
Base Year	100%	0%	0%	0%	
Ten-Year Forecast	100%	0%	0%	0%	

3

Table 8. Summary of Mexican spotted-owl habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative.

1 2

NPS Preferred Alternat	ive – Peak Season -	- TAUD		
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	95%	3%	2%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	12%	3%	8%	78%
Ten-Year Forecast	34%	7%	14%	46%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	87%	5%	4%	5%
Ten-Year Forecast	92%	4%	4%	0%

NPS Preferred Alternat	ive – Off-Peak Sea	son – TAUD		
Marble Canyon				_
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	98%	1%	1%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	20%	7%	25%	47%
Ten-Year Forecast	44%	10%	24%	22%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	95%	3%	2%	0%
Ten-Year Forecast	94%	4%	2%	0%

Appendix F F-9 Spatial Analysis Results

### Table 9. Summary of California condor use areas exposed to various average sound levels (L<sub>Aeq12</sub>) in the base year and ten-year forecast under Alternative A.

Alternative A – L <sub>Aeq12</sub>				
Marble Canyon				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	> 25 <= 35  dBA	> 35  dBA
Base Year	83%	16%	0%	0%
Ten-Year Forecast	57%	42%	1%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	42%	26%	17%	14%
Ten-Year Forecast	8%	35%	36%	20%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	85%	15%	1%	0%

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4

Table 10. Summary of California condor use areas exposed to various percent time audible in the base year and tenyear forecast under Alternative A.

Alternative A – TAUD				
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	86%	5%	6%	3%
Ten-Year Forecast	85%	5%	6%	3%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	13%	2%	8%	77%
Ten-Year Forecast	12%	2%	7%	78%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	93%	1%	2%	4%
Ten-Year Forecast	93%	1%	2%	4%

Appendix F F-10 Spatial Analysis Results

Table 11. Summary of California condor use areas exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E.

Alternative E – Peak	Season – L <sub>Aeq12</sub>			
Marble Canyon	15 ID 4	15 05 10 4	25 25 ID 4	25 ID 4
	$\leq 15 \text{ dBA}$	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	76%	14%	5%	5%
Ten-Year Forecast	78%	13%	8%	1%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%

Alternative E – Off-Pe	eak Season – L <sub>Aeq12</sub>			
Marble Canyon				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	77%	10%	8%	6%
Ten-Year Forecast	80%	9%	8%	3%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	96%	2%	1%	0%
Ten-Year Forecast	97%	2%	1%	0%

Table 12. Summary of California condor use areas exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E.

1 2

Alternative E – Peak Se	ason – TAUD			
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	99%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	55%	4%	10%	31%
Ten-Year Forecast	68%	5%	10%	18%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	99%	1%	1%	0%
Ten-Year Forecast	98%	1%	1%	0%

Alternative E – Off-Peak Season – TAUD				
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	60%	4%	9%	26%
Ten-Year Forecast	74%	4%	10%	12%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	95%	1%	2%	2%
Ten-Year Forecast	98%	1%	1%	0%

Appendix F F-12 Spatial Analysis Results

Table 13. Summary of California condor use areas exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F.

1 2

Alternative F – Peak S	$eason - L_{Aeq12}$			
Marble Canyon				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	83%	16%	0%	0%
Ten-Year Forecast	82%	18%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	40%	28%	18%	14%
Ten-Year Forecast	54%	22%	14%	9%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%

Alternative F – Off-Peak Season – L <sub>Aeq12</sub>					
Marble Canyon					
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA	
Base Year	100%	0%	0%	0%	
Ten-Year Forecast	100%	0%	0%	0%	
East End					
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA	
Base Year	49%	26%	17%	8%	
Ten-Year Forecast	61%	21%	14%	4%	
Central					
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA	
Base Year	98%	2%	0%	0%	
Ten-Year Forecast	99%	1%	0%	0%	

Appendix F F-13 Spatial Analysis Results

Table 14. Summary of California condor use areas exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F.

Alternative F – Peak Sea	ason – TAUD			
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	86%	5%	6%	3%
Ten-Year Forecast	93%	6%	1%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	13%	2%	8%	77%
Ten-Year Forecast	37%	7%	16%	39%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	93%	1%	2%	4%
Ten-Year Forecast	99%	1%	0%	0%

Alternative F - Off-Peak Season - TAUD					
Marble Canyon					
	<= 5	> 5 <= 10	> 10 <= 25	> 25	
Base Year	99%	1%	0%	0%	
Ten-Year Forecast	100%	0%	0%	0%	
East End					
	<= 5	> 5 <= 10	> 10 <= 25	> 25	
Base Year	19%	8%	25%	48%	
Ten-Year Forecast	51%	13%	20%	17%	
Central					
	<= 5	> 5 <= 10	> 10 <= 25	> 25	
Base Year	80%	3%	6%	12%	
Ten-Year Forecast	95%	1%	2%	2%	

Appendix F F-14 Spatial Analysis Results

Table 15. Summary of California condor use areas exposed to various average sound levels (L<sub>Aeq12</sub>) in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative.

NPS Preferred Altern	ative – Peak Seasoi	$n-L_{Aeq12}$		
Marble Canyon				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	96%	4%	0%	0%
Ten-Year Forecast	95%	5%	0%	0%
East End				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	39%	27%	18%	15%
Ten-Year Forecast	51%	22%	17%	11%
Central				
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35  dBA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%

$NPS\ Preferred\ Alternative - Off-Peak\ Season - L_{Aeq12}$					
Marble Canyon					
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	> 25 <= 35  dBA	> 35 dBA	
Base Year	100%	0%	0%	0%	
Ten-Year Forecast	100%	0%	0%	0%	
East End					
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	$> 25 \le 35 \text{ dBA}$	> 35 dBA	
Base Year	52%	24%	17%	8%	
Ten-Year Forecast	59%	20%	15%	5%	
Central					
	<= 15  dBA	$> 15 \le 25 \text{ dBA}$	> 25 <= 35  dBA	> 35 dBA	
Base Year	100%	0%	0%	0%	
Ten-Year Forecast	100%	0%	0%	0%	

Table 16. Summary of California condor use areas exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative.

1 2

NPS Preferred Alterna	tive – Peak Seaso	n – TAUD		
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	96%	1%	2%	1%
Ten-Year Forecast	99%	1%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	11%	3%	8%	78%
Ten-Year Forecast	35%	7%	13%	45%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	88%	2%	3%	7%
Ten-Year Forecast	98%	1%	1%	0%

NPS Preferred Alterna	tive – Off-Peak Se	eason – TAUD		
Marble Canyon				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	97%	1%	1%	1%
Ten-Year Forecast	100%	0%	0%	0%
East End				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	20%	7%	23%	50%
Ten-Year Forecast	45%	10%	23%	22%
Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Base Year	97%	2%	2%	0%
Ten-Year Forecast	99%	0%	0%	0%

Appendix F F-16 Spatial Analysis Results

Table 17. Summary of wildlife habitat exposed to various average sound levels ( $L_{Aeq12}$ ) in the base year and ten-year forecast under Alternative A.

Marble Canyon				
	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35  dBA	> 35 dBA
Cold Desert Scrub				
Base Year	83%	16%	1%	0%
Ten-Year Forecast	25%	70%	5%	0%
Old Conifer Forest (no habitat)				
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub				
Base Year	79%	21%	0%	0%
Ten-Year Forecast	66%	32%	1%	0%
Pinyon Juniper				
Base Year	98%	2%	0%	0%
Ten-Year Forecast	0%	94%	6%	0%
Ponderosa Pine (no habitat)				
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparian Habitat)				
Base Year	77%	22%	1%	0%
Ten-Year Forecast	23%	74%	3%	0%
Warm Desert Scrub (no habitat)		, ,,,		
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
East End				
	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub				
Cold Desert Scrub Base Year	38%	21%	21%	20%
Cold Desert Scrub  Base Year  Ten-Year Forecast				
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest	38% 0%	21% 38%	21% 34%	20% 28%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year	38% 0% 44%	21% 38% 12%	21% 34% 20%	20% 28% 24%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast	38% 0%	21% 38%	21% 34%	20% 28%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub	38% 0% 44% 20%	21% 38% 12% 26%	21% 34% 20% 27%	20% 28% 24% 27%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year	38% 0% 44% 20%	21% 38% 12% 26%	21% 34% 20% 27%	20% 28% 24% 27%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Ten-Year Forecast	38% 0% 44% 20%	21% 38% 12% 26%	21% 34% 20% 27%	20% 28% 24% 27%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year	38% 0% 44% 20% 46% 61%	21% 38% 12% 26% 34% 32%	21% 34% 20% 27% 13% 7%	20% 28% 24% 27% 7% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Ten-Year Forecast	38% 0% 44% 20%	21% 38% 12% 26%	21% 34% 20% 27%	20% 28% 24% 27%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast	38% 0% 44% 20% 46% 61%	21% 38% 12% 26% 34% 32%	21% 34% 20% 27% 13% 7%	20% 28% 24% 27% 7% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year	38% 0% 44% 20% 46% 61%	21% 38% 12% 26% 34% 32%	21% 34% 20% 27% 13% 7%	20% 28% 24% 27% 7% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Pinyon Juniper Ten-Year Forecast	38% 0% 44% 20% 46% 61%	21% 38% 12% 26% 34% 32%	21% 34% 20% 27% 13% 7%	20% 28% 24% 27% 7% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine	38% 0% 44% 20% 46% 61% 44% 0%	21% 38% 12% 26% 34% 32% 23% 40%	21% 34% 20% 27% 13% 7% 16% 35%	20% 28% 24% 27% 7% 0% 16% 24%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine  Base Year Ten-Year Forecast	38% 0% 44% 20% 46% 61% 44% 0%	21% 38% 12% 26% 34% 32% 23% 40%	21% 34% 20% 27% 13% 7% 16% 35%	20% 28% 24% 27% 7% 0% 16% 24%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine  Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)	38% 0% 44% 20% 46% 61% 44% 0% 26% 4%	21% 38% 12% 26% 34% 32% 23% 40% 47% 32%	21% 34% 20% 27% 13% 7% 16% 35% 19% 50%	20% 28% 24% 27% 7% 0% 16% 24%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine  Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	38% 0% 44% 20% 46% 61% 44% 0% 26% 4%	21% 38% 12% 26% 34% 32% 23% 40% 47% 32%	21% 34% 20% 27% 13% 7% 16% 35% 19% 50%	20% 28% 24% 27% 7% 0% 16% 24%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	38% 0% 44% 20% 46% 61% 44% 0% 26% 4%	21% 38% 12% 26% 34% 32% 23% 40% 47% 32%	21% 34% 20% 27% 13% 7% 16% 35% 19% 50%	20% 28% 24% 27% 7% 0% 16% 24%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine  Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	38% 0% 44% 20% 46% 61% 44% 0% 26% 4%	21% 38% 12% 26% 34% 32% 23% 40% 47% 32%	21% 34% 20% 27% 13% 7% 16% 35% 19% 50%	20% 28% 24% 27% 7% 0% 16% 24%

Central				
	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	94%	6%	0%	0%
Old Conifer Forest				
Base	98%	0%	2%	0%
Ten-Year Forecast	98%	2%	0%	0%
Old Desert Shrub				
Base Year	57%	18%	16%	8%
Ten-Year Forecast	63%	35%	1%	0%
Pinyon Juniper				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	86%	14%	0%	0%
Ponderosa Pine				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	93%	7%	0%	0%
Rivers/Rapids (Riparian Habitat)				
Base Year	99%	1%	0%	0%
Ten-Year Forecast	81%	18%	1%	0%
Warm Desert Scrub				
Base Year	98%	1%	0%	0%
Ten-Year Forecast	68%	30%	2%	0%
West				
	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub				
Cold Desert Scrub  Base Year	27%	25%	35%	14%
Cold Desert Scrub  Base Year  Ten-Year Forecast				
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest	27% 8%	25% 30%	35% 40%	14% 22%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year	27% 8% 32%	25% 30% 45%	35% 40% 21%	14% 22% 3%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast	27% 8%	25% 30%	35% 40%	14% 22%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub	27% 8% 32% 42%	25% 30% 45% 48%	35% 40% 21% 8%	14% 22% 3% 2%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year	27% 8% 32% 42% 57%	25% 30% 45% 48%	35% 40% 21% 8%	14% 22% 3% 2% 6%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Ten-Year Forecast	27% 8% 32% 42%	25% 30% 45% 48%	35% 40% 21% 8%	14% 22% 3% 2%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper	27% 8% 32% 42% 57% 49%	25% 30% 45% 48% 18% 26%	35% 40% 21% 8% 19%	14% 22% 3% 2% 6% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year	27% 8% 32% 42% 57% 49%	25% 30% 45% 48% 18% 26%	35% 40% 21% 8% 19% 19%	14% 22% 3% 2% 6% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast	27% 8% 32% 42% 57% 49%	25% 30% 45% 48% 18% 26%	35% 40% 21% 8% 19%	14% 22% 3% 2% 6% 5%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine (no habitat)	27% 8% 32% 42% 57% 49% 53% 32%	25% 30% 45% 48% 18% 26% 30% 40%	35% 40% 21% 8% 19% 19% 14% 23%	14% 22% 3% 2% 6% 5% 3% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year	27% 8% 32% 42% 57% 49% 53% 32%	25% 30% 45% 48% 18% 26% 30% 40%	35% 40% 21% 8% 19% 19% 14% 23%	14% 22% 3% 2% 6% 5% 3% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Ponderosa Pine (ro habitat) Base Year Ten-Year Forecast	27% 8% 32% 42% 57% 49% 53% 32%	25% 30% 45% 48% 18% 26% 30% 40%	35% 40% 21% 8% 19% 19% 14% 23%	14% 22% 3% 2% 6% 5% 3% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)	27% 8% 32% 42% 57% 49% 53% 32%	25% 30% 45% 48% 18% 26% 30% 40%	35% 40% 21% 8% 19% 19% 14% 23% 0%	14% 22% 3% 2% 6% 5% 3% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	27% 8% 32% 42% 57% 49% 53% 32% 0% 0%	25% 30% 45% 48% 18% 26% 30% 40% 0% 0%	35% 40% 21% 8% 19% 19% 14% 23% 0% 0%	14% 22% 3% 2% 6% 5% 3% 5% 0% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	27% 8% 32% 42% 57% 49% 53% 32%	25% 30% 45% 48% 18% 26% 30% 40%	35% 40% 21% 8% 19% 19% 14% 23% 0%	14% 22% 3% 2% 6% 5% 3% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast  Warm Desert Scrub	27% 8% 32% 42% 57% 49% 53% 32% 0% 0% 56% 47%	25% 30% 45% 48% 18% 26% 30% 40% 0% 0% 12% 17%	35% 40% 21% 8% 19% 19% 14% 23% 0% 0% 0%	14% 22% 3% 2% 6% 5% 3% 5% 0% 0% 20% 22%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	27% 8% 32% 42% 57% 49% 53% 32% 0% 0%	25% 30% 45% 48% 18% 26% 30% 40% 0% 0%	35% 40% 21% 8% 19% 19% 14% 23% 0% 0%	14% 22% 3% 2% 6% 5% 3% 5% 0% 0%

Table 18. Summary of wildlife habitat exposed to various percent time audible in the base year and ten-year forecast under Alternative A.

Marble Canyon	_		40	
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub	700/	70/	00/	60/
Base Year	78%	7%	9%	6% 70/
Ten-Year Forecast	76%	7%	10%	7%
Old Conifer Forest (no habitat)	00/	00/	00/	00/
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub	970/	20/	70/	20/
Base Year	87%	3%	7%	2%
Ten-Year Forecast	86%	3%	8%	3%
Pinyon Juniper	1.60/	690/	1.50/	00/
Base Year	16%	68%	15%	0%
Ten-Year Forecast	6%	66%	28%	0%
Ponderosa Pine (no habitat) Base Year	00/	00/	0%	00/
	0%	0%		0%
Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparian Habitat)  Base Year	0.40/	20/	20/	10/
	94%	2%	3%	1%
Ten-Year Forecast	93%	2%	3%	1%
Warm Desert Scrub (no habitat) Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
East End	_	<b>7</b> 10	10 25	25
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub				
Cold Desert Scrub  Base Year	13%	2%	6%	78%
Cold Desert Scrub  Base Year  Ten-Year Forecast				
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest	13% 12%	2% 2%	6% 6%	78% 79%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year	13% 12%	2% 2% 0%	6% 6% 1%	78% 79% 98%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast	13% 12%	2% 2%	6% 6%	78% 79%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub	13% 12%	2% 2% 0%	6% 6% 1% 1%	78% 79% 98% 99%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year	13% 12% 1% 1% 1%	2% 2% 0% 0%	6% 6% 1% 1%	78% 79% 98% 99%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast	13% 12% 1% 1%	2% 2% 0% 0%	6% 6% 1% 1%	78% 79% 98% 99%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper	13% 12% 1% 1% 0% 0%	2% 2% 0% 0% 0%	6% 6% 1% 1% 5% 3%	78% 79% 98% 99% 95% 96%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast	13% 12% 1% 1% 1%	2% 2% 0% 0%	6% 6% 1% 1%	78% 79% 98% 99%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast	13% 12% 1% 1% 0% 0%	2% 2% 0% 0% 0%	6% 6% 1% 1% 5% 3%	78% 79% 98% 99% 95% 96%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine	13% 12% 1% 1% 0% 0% 9% 9%	2% 2% 0% 0% 0% 0% 2% 2%	6% 6% 1% 1% 5% 3% 6% 5%	78% 79% 98% 99% 95% 96% 83% 84%
Base Year Ten-Year Forecast  Dld Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast	13% 12% 1% 1% 0% 0% 9% 9%	2% 2% 0% 0% 0% 0% 2% 2%	6% 6% 1% 1% 5% 3% 6% 5%	78% 79% 98% 99% 95% 96% 83% 84%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Base Year	13% 12% 1% 1% 0% 0% 9% 9%	2% 2% 0% 0% 0% 0% 2% 2%	6% 6% 1% 1% 5% 3% 6% 5%	78% 79% 98% 99% 95% 96% 83% 84%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)	13% 12% 1% 1% 0% 0% 9% 9%	2% 2% 0% 0% 0% 0% 2% 2%	6% 6% 1% 1% 5% 3% 6% 5%	78% 79% 98% 99% 95% 96% 83% 84% 80% 82%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	13% 12% 1% 1% 0% 0% 9% 9% 8% 8%	2% 2% 0% 0% 0% 0% 2% 2% 2%	6% 6% 1% 1% 5% 3% 6% 5% 9% 8%	78% 79% 98% 99% 95% 96% 83% 84% 80% 82%
Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine  Base Year  Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)  Base Year  Ten-Year Forecast	13% 12% 1% 1% 0% 0% 9% 9% 8%	2% 2% 0% 0% 0% 0% 2% 2% 2%	6% 6% 1% 1% 5% 3% 6% 5%	78% 79% 98% 99% 95% 96% 83% 84% 80% 82%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast  Warm Desert Scrub	13% 12% 1% 1% 0% 0% 9% 9% 8% 8%	2% 2% 0% 0% 0% 0% 2% 2% 2% 4% 4%	6% 6% 1% 1% 5% 3% 6% 5% 9% 8%	78% 79% 98% 99% 95% 96% 83% 84% 80% 82%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	13% 12% 1% 1% 0% 0% 9% 9% 8% 8%	2% 2% 0% 0% 0% 0% 2% 2% 2%	6% 6% 1% 1% 5% 3% 6% 5% 9% 8%	78% 79% 98% 99% 95% 96% 83% 84% 80% 82%

Central				
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub				
Base Year	86%	7%	5%	1%
Ten-Year Forecast	85%	7%	7%	1%
Old Conifer Forest				
Base	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Old Desert Scrub				
Base Year	88%	3%	7%	2%
Ten-Year Forecast	88%	3%	8%	2%
Pinyon Juniper				
Base Year	77%	8%	9%	6%
Ten-Year Forecast	75%	8%	10%	7%
Ponderosa Pine				
Base Year	89%	2%	4%	5%
Ten-Year Forecast	88%	3%	4%	5%
Rivers/Rapids (Riparian Habitat)	2270		.,,	2,0
Base Year	96%	2%	1%	1%
Ten-Year Forecast	96%	2%	2%	1%
Warm Desert Scrub	7070	270	270	170
Base Year	49%	11%	18%	22%
Ten-Year Forecast	47%	10%	19%	24%
West				
West	<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub				
Cold Desert Scrub  Base Year	18%	4%	10%	68%
Cold Desert Scrub  Base Year  Ten-Year Forecast	18% 17%	4% 4%		
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av	18% 17% ailable for areas	4% 4% outside the SFRA)	10% 9%	68% 71%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year	18% 17%	4% 4%	10% 9% 0%	68% 71% 0%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast	18% 17% ailable for areas	4% 4% outside the SFRA)	10% 9%	68% 71%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub	18% 17% ailable for areas 0% 0%	4% 4% outside the SFRA) 0% 0%	10% 9% 0% 0%	68% 71% 0% 0%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year	18% 17% ailable for areas 0% 0%	4% 4% outside the SFRA) 0% 0%	10% 9% 0% 0% 29%	68% 71% 0% 0% 51%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast	18% 17% ailable for areas 0% 0%	4% 4% outside the SFRA) 0% 0%	10% 9% 0% 0%	68% 71% 0% 0%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper	18% 17% ailable for areas 0% 0% 13% 12%	4% 4% outside the SFRA) 0% 0% 7% 5%	10% 9% 0% 0% 29% 25%	68% 71% 0% 0% 51% 58%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year	18% 17% ailable for areas 0% 0% 13% 12%	4% 4% outside the SFRA) 0% 0%	10% 9% 0% 0% 29% 25%	68% 71% 0% 0% 51% 58%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast	18% 17% ailable for areas 0% 0% 13% 12%	4% 4% outside the SFRA) 0% 0% 7% 5%	10% 9% 0% 0% 29% 25%	68% 71% 0% 0% 51% 58%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year	18% 17% ailable for areas 0% 0% 13% 12% 36% 34%	4% 4% outside the SFRA) 0% 0% 7% 5%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine (no habitat)  Base Year	18% 17% ailable for areas 0% 0% 13% 12% 36% 34%	4% 4% outside the SFRA) 0% 0% 7% 5%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine (no habitat)	18% 17% ailable for areas 0% 0% 13% 12% 36% 34%	4% 4% outside the SFRA) 0% 0% 7% 5%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine (no habitat)  Base Year	18% 17% ailable for areas 0% 0% 13% 12% 36% 34%	4% 4% outside the SFRA) 0% 0% 7% 5%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine (no habitat)  Base Year  Ten-Year Forecast	18% 17% ailable for areas 0% 0% 13% 12% 36% 34%	4% 4% outside the SFRA) 0% 0% 7% 5%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine (no habitat)  Base Year  Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)	18% 17% ailable for areas 0% 0% 13% 12% 36% 34% 0%	4% 4% outside the SFRA) 0% 0% 7% 5% 7% 7%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41% 0%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest (TAUD data not av  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year  Ten-Year Forecast  Pinyon Juniper  Base Year  Ten-Year Forecast  Ponderosa Pine (no habitat)  Base Year  Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)  Base Year	18% 17% ailable for areas 0% 0% 13% 12% 36% 34% 0% 0%	4% 4% outside the SFRA) 0% 0% 7% 5% 7% 0% 0%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41% 0% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest (TAUD data not av Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	18% 17% ailable for areas 0% 0% 13% 12% 36% 34% 0% 0%	4% 4% outside the SFRA) 0% 0% 7% 5% 7% 0% 0%	10% 9% 0% 0% 29% 25% 21% 18%	68% 71% 0% 0% 51% 58% 36% 41% 0% 0%

Table 19. Summary of wildlife habitat exposed to various average sound levels (L<sub>Aeq12</sub>) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E.

Alternative E – Peak S	$Season-L_{Aeq12}$				
Marble Canyon					
		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest (no	,				
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub					
	Base Year	96%	4%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Pinyon Juniper					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no ha					
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Ripari	an Habitat)				
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (1	no habitat)				
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
East End					
		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub					
	Base Year	65%	9%	11%	15%
	Ten-Year Forecast	70%	8%	19%	3%
Old Conifer Forest					
	Base Year	40%	9%	18%	33%
	Ten-Year Forecast	41%	14%	18%	26%
Old Desert Scrub					
	Base Year	64%	31%	4%	1%
	Ten-Year Forecast	65%	31%	3%	1%
Pinyon Juniper					
	Base Year	79%	13%	5%	3%
	Ten-Year Forecast	83%	11%	4%	2%
Ponderosa Pine					
	Base Year	82%	17%	1%	0%
	Ten-Year Forecast	91%	8%	0%	0%
Rivers/Rapids (Ripari	an Habitat)				
<del>.</del>	Base Year	64%	7%	16%	13%
	Ten-Year Forecast	69%	7%	23%	1%
Warm Desert Scrub					
	Base Year	86%	0%	3%	11%
	m 17 m	0.504	0.07	4.007	4.07

1 2

86%

0%

1%

12%

Ten-Year Forecast

Central		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub		<b>\= 13 UDA</b>	> 13 <= 23 ubA	> 25 <= 55 UDA	> 33 UDA
Cold Descrit Scrub	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest	Ten Tear Forecast	10070	070	070	070
Old Collifer Forest	Base Year	97%	0%	3%	0%
	Ten-Year Forecast	97%	0%	3%	0%
Old Desert Scrub	Ten-Tear Porceast	9170	070	3 /0	070
Olu Desell Schub	Base Year	77%	18%	5%	1%
	Ten-Year Forecast	75%	19%	5%	1%
Di Ti	Tell-Tear Forecast	13%	19%	3%	1%
Pinyon Juniper	Dans Van	100%	00/	00/	00/
	Base Year		0%	0%	0%
D 1 D'	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine	D 37	1000/	001	0.07	004
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Rivers/Rapids (Ripari	•				
	Base Year	98%	2%	0%	0%
	Ten-Year Forecast	98%	2%	0%	0%
Warm Desert Scrub					
	Base Year	96%	3%	0%	0%
	Ten-Year Forecast	96%	4%	0%	0%
West					
		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub					
Cold Desert Scrub	Base Year	36%	32%	20%	12%
	Base Year Ten-Year Forecast	36% 46%	32% 34%	20% 16%	12% 4%
Cold Desert Scrub  Old Conifer Forest					
	Ten-Year Forecast	46%	34%	16%	4%
	Ten-Year Forecast  Base Year	46% 56%	6%	16% 25%	13%
Old Conifer Forest	Ten-Year Forecast  Base Year	46% 56%	6%	16% 25%	13%
Old Conifer Forest	Ten-Year Forecast  Base Year  Ten-Year Forecast	46% 56% 50%	34% 6% 12%	16% 25% 26%	4% 13% 12%
Old Conifer Forest Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	46% 56% 50%	34% 6% 12%	25% 26% 23%	4% 13% 12%
Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	46% 56% 50%	34% 6% 12%	25% 26% 23%	4% 13% 12%
Old Conifer Forest Old Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	46% 56% 50% 53% 52%	34% 6% 12% 19% 22%	25% 26% 23% 22%	4% 13% 12% 6% 4%
Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	46% 56% 50% 53% 52%	34% 6% 12% 19% 22%	25% 26% 23% 22%	4% 13% 12% 6% 4%
Old Conifer Forest Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	46% 56% 50% 53% 52% 83% 83%	34% 6% 12% 19% 22% 14% 15%	25% 26% 23% 22% 3% 22%	4% 13% 12% 6% 4% 0% 0%
Old Conifer Forest Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year	46% 56% 50% 53% 52% 83% 83% 0%	34% 6% 12% 19% 22% 14% 15%	16% 25% 26% 23% 22% 3% 22%	4% 13% 12% 6% 4% 0% 0%
Old Conifer Forest Old Desert Scrub Pinyon Juniper Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  abitat) Base Year Ten-Year Forecast	46% 56% 50% 53% 52% 83% 83%	34% 6% 12% 19% 22% 14% 15%	25% 26% 23% 22% 3% 22%	4% 13% 12% 6% 4% 0% 0%
Old Conifer Forest Old Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast  an Habitat)	46% 56% 50% 53% 52% 83% 83% 0% 0%	34% 6% 12% 19% 22% 14% 15% 0% 0%	16% 25% 26% 23% 22% 3% 22% 0% 0%	4% 13% 12% 6% 4% 0% 0%
Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast an Habitat) Base Year	46% 56% 50% 53% 52% 83% 83% 0% 0%	34% 6% 12% 19% 22% 14% 15% 0% 0%	16% 25% 26% 23% 22% 3% 22% 0% 0%	4% 13% 12% 6% 4% 0% 0% 17%
Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast  an Habitat)	46% 56% 50% 53% 52% 83% 83% 0% 0%	34% 6% 12% 19% 22% 14% 15% 0% 0%	16% 25% 26% 23% 22% 3% 22% 0% 0%	4% 13% 12% 6% 4% 0% 0% 0%
Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  an Habitat) Base Year Ten-Year Forecast	46% 56% 50% 53% 52% 83% 83% 0% 0% 61% 61%	34% 6% 12% 19% 22% 14% 15% 0% 0% 8% 10%	16% 25% 26% 23% 22% 3% 22% 0% 0% 13% 14%	4% 13% 12% 6% 4% 0% 0% 17% 14%
Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast an Habitat) Base Year	46% 56% 50% 53% 52% 83% 83% 0% 0%	34% 6% 12% 19% 22% 14% 15% 0% 0%	16% 25% 26% 23% 22% 3% 22% 0% 0%	4% 13% 12% 6% 4% 0% 0% 17%

	eak Season – L <sub>Aeq12</sub>				
Marble Canyon	I	:			
		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub	D 44	1000/	0.07	004	001
	Base Year	100%	0%	0%	0%
011 G 40 T	Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest (n	,	0.5.		0.1	0
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub			_		
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Pinyon Juniper					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no ha					
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Ripari	ian Habitat)				
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (1	no habitat)				
· ·	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
East End		. 15 JDA	. 15 . 25 IDA	. 25 . 25 JDA	. 25 JD A
	•	<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
	Paga Voor				
	Base Year	88%	5%	5%	2%
Cold Desert Scrub	Base Year Ten-Year Forecast				
Cold Desert Scrub	Ten-Year Forecast	88% 90%	5% 4%	5% 6%	2% 0%
Cold Desert Scrub	Ten-Year Forecast  Base Year	88% 90% 97%	5% 4% 0%	5% 6% 3%	2% 0% 1%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast	88% 90%	5% 4%	5% 6%	2% 0%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96%	5% 4% 0% 1%	5% 6% 3% 3%	2% 0% 1% 0%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	88% 90% 97% 96%	5% 4% 0% 1%	5% 6% 3% 3% 6%	2% 0% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96%	5% 4% 0% 1%	5% 6% 3% 3%	2% 0% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63%	5% 4% 0% 1% 32% 32%	5% 6% 3% 3% 6% 4%	2% 0% 1% 0% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63%	5% 4% 0% 1% 32% 32%	5% 6% 3% 3% 6% 4%	2% 0% 1% 0% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63%	5% 4% 0% 1% 32% 32%	5% 6% 3% 3% 6% 4%	2% 0% 1% 0% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79%	5% 4% 0% 1% 32% 32% 9%	5% 6% 3% 3% 6% 4% 8% 8%	2% 0% 1% 0% 0% 0% 6% 4%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79%	5% 4% 0% 1% 32% 32% 9% 9%	5% 6% 3% 3% 6% 4% 8% 8%	2% 0% 1% 0% 0% 0% 6% 4%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine	Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79%	5% 4% 0% 1% 32% 32% 9%	5% 6% 3% 3% 6% 4% 8% 8%	2% 0% 1% 0% 0% 0% 6% 4%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine	Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79%	5% 4% 0% 1% 32% 32% 9% 9% 9%	5% 6% 3% 3% 6% 4% 8% 8%	2% 0% 1% 0% 0% 0% 6% 4% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79% 90% 92%	5% 4% 0% 1% 32% 32% 9% 9% 9%	5% 6% 3% 3% 6% 4% 8% 8% 1% 1%	2% 0% 1% 0% 0% 0% 6% 4% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine  Rivers/Rapids (Ripari	Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79%	5% 4% 0% 1% 32% 32% 9% 9% 9%	5% 6% 3% 3% 6% 4% 8% 8%	2% 0% 1% 0% 0% 0% 6% 4% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine  Rivers/Rapids (Ripari	Base Year Ten-Year Forecast  ian Habitat) Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79% 90% 92%	5% 4% 0% 1% 32% 32% 9% 9% 9% 10% 8%	5% 6% 3% 3% 3% 6% 4% 8% 8% 1% 1% 11% 9%	2% 0% 1% 0% 0% 0% 6% 4% 0% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	88% 90% 97% 96% 62% 63% 76% 79% 90% 92%	5% 4% 0% 1% 32% 32% 9% 9% 9%	5% 6% 3% 3% 6% 4% 8% 8% 1% 1%	2% 0% 1% 0% 0% 0% 6% 4% 0%

Central		. 15 JD A	. 15 . 45 JD A	. 15 . 25 ID A	. 25 JD A
Cold Desert Scrub		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
Cold Desert Scrub	Dana Vana	1000/	00/	00/	00/
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest	D 17	070/	00/	20/	00/
	Base Year	97%	0%	3%	0%
	Ten-Year Forecast	97%	0%	3%	0%
Old Desert Scrub					
	Base Year	68%	23%	8%	1%
	Ten-Year Forecast	68%	24%	7%	1%
Pinyon Juniper					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Rivers/Rapids (Riparia					
	Base Year	89%	4%	6%	0%
	Ten-Year Forecast	89%	6%	5%	0%
Warm Desert Scrub	Ten Tear Torceast	0770	070	370	0,0
Warm Describerab	Base Year	96%	4%	0%	0%
	Ten-Year Forecast	95%	4%	0%	0%
	Ten Ten Torceust	7570	170	070	070
West		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
West Cold Desert Scrub		<= 15 dBA	> 15 <= 25 dBA	> 25 <= 35 dBA	> 35 dBA
	Base Year	<= <b>15 dBA</b> 33%	> 15 <= 25 dBA	> 25 <= 35 dBA	> <b>35 dB</b> A
		33%	31%	22%	14%
Cold Desert Scrub	Base Year Ten-Year Forecast				
	Ten-Year Forecast	33% 42%	31% 37%	22% 17%	14% 5%
Cold Desert Scrub	Ten-Year Forecast  Base Year	33% 42% 52%	31% 37% 7%	22% 17% 23%	14% 5%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast	33% 42%	31% 37%	22% 17%	14% 5%
Cold Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast	33% 42% 52% 45%	31% 37% 7% 15%	22% 17% 23% 25%	14% 5% 18% 15%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	33% 42% 52% 45%	31% 37% 7% 15%	22% 17% 23% 25% 20%	14% 5% 18% 15%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast	33% 42% 52% 45%	31% 37% 7% 15%	22% 17% 23% 25%	14% 5% 18% 15%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	33% 42% 52% 45% 51% 54%	31% 37% 7% 15% 19% 19%	22% 17% 23% 25% 20% 22%	14% 5% 18% 15% 9% 5%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	33% 42% 52% 45% 51% 54%	31% 37% 7% 15% 19% 19%	22% 17% 23% 25% 20% 22%	14% 5% 18% 15% 9% 5%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	33% 42% 52% 45% 51% 54%	31% 37% 7% 15% 19% 19%	22% 17% 23% 25% 20% 22%	14% 5% 18% 15% 9% 5%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	33% 42% 52% 45% 51% 54% 80% 81%	31% 37% 7% 15% 19% 19%	22% 17% 23% 25% 20% 22% 3% 2%	14% 5% 18% 15% 9% 5% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year	33% 42% 52% 45% 51% 54% 80% 81%	31% 37% 7% 15% 19% 19% 16% 17%	22% 17% 23% 25% 20% 22% 3% 2%	14% 5% 18% 15% 9% 5% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast	33% 42% 52% 45% 51% 54% 80% 81%	31% 37% 7% 15% 19% 19%	22% 17% 23% 25% 20% 22% 3% 2%	14% 5% 18% 15% 9% 5% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast an Habitat)	33% 42% 52% 45% 51% 54% 80% 81% 0%	31% 37% 7% 15% 19% 19% 16% 17%	22% 17% 23% 25% 20% 22% 3% 2% 0% 0%	14% 5% 18% 15% 9% 5% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast an Habitat) Base Year	33% 42% 52% 45% 51% 54% 80% 81% 0% 0%	31% 37% 7% 15% 19% 19% 16% 17% 0%	22% 17% 23% 25% 20% 22% 3% 2% 0% 0%	14% 5% 18% 15% 9% 5% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast an Habitat)	33% 42% 52% 45% 51% 54% 80% 81% 0%	31% 37% 7% 15% 19% 19% 16% 17%	22% 17% 23% 25% 20% 22% 3% 2% 0% 0%	14% 5% 18% 15% 9% 5% 1% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast an Habitat) Base Year Ten-Year Forecast Ten-Year Forecast	33% 42% 52% 45% 51% 54% 80% 81% 0% 0% 62% 61%	31% 37% 7% 15% 19% 19% 16% 17% 0% 0%	22% 17% 23% 25% 20% 22% 3% 2% 0% 0%	14% 5% 18% 15% 9% 5% 1% 0% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast an Habitat) Base Year	33% 42% 52% 45% 51% 54% 80% 81% 0% 0%	31% 37% 7% 15% 19% 19% 16% 17% 0%	22% 17% 23% 25% 20% 22% 3% 2% 0% 0%	14% 5% 18% 15% 9% 5% 1% 0%

Table 20. Summary of wildlife habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative E.

Alternative E – Peak Seas	son – TAUD				
Marble Canyon		_			
		<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub	D V	000/	10/	10/	00/
	Base Year	98%	1%	1%	0%
Old Conifor Forest (no he	Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest (no ha	Base Year	0%	00/	00/	0%
	Ten-Year Forecast	0% 0%	0% 0%	0% 0%	0%
Old Desert Scrub	Ten-Tear Forecast	0%	0%	0%	0%
Old Desert Scrub	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Pinyon Juniper	Ten-Teal Polecast	10070	0 /0	0 /0	070
r myon aumper	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no habit		10070	O /0	0 /0	0 /0
i onderosa i me (no nabit	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparian		070	0 /0	U / U	0 70
itivois, itupius (itipui itii	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (no l		10070	0,0	0,0	0,0
(10 1	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
East		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub		\_ <del>\</del>	/ U <= 10	7 10 1 25	7 20
	Base Year	45%	3%	8%	44%
	Ten-Year Forecast	58%	3%	6%	32%
Old Conifer Forest	Ton Tour Torocust	3670	370	0,0	3270
	Base Year	1%	0%	4%	95%
	Ten-Year Forecast	11%	6%	35%	49%
Old Desert Scrub					
	Base Year	23%	2%	3%	72%
	Ten-Year Forecast			1%	71%
	Tell-Teal Tolecast	28%	0%	1 70	
Pinyon Juniper	Ten-Teal Polecast	28%	0%	1 70	7170
Pinyon Juniper	Base Year	40%	5%	14%	
Pinyon Juniper					41%
•	Base Year	40%	5%	14%	41%
•	Base Year	40%	5%	14%	41% 22%
•	Base Year Ten-Year Forecast	40% 55%	5% 6%	14% 16%	41% 22%
Ponderosa Pine	Base Year Ten-Year Forecast Base Year Ten-Year Forecast	40% 55% 72%	5% 6% 3%	14% 16% 7%	41% 22% 17%
Ponderosa Pine	Base Year Ten-Year Forecast Base Year Ten-Year Forecast	40% 55% 72%	5% 6% 3%	14% 16% 7%	41% 22% 17% 1%
Ponderosa Pine	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat)	40% 55% 72% 88%	5% 6% 3% 6%	14% 16% 7% 5%	41% 22% 17% 1% 31%
Ponderosa Pine	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat) Base Year	40% 55% 72% 88%	5% 6% 3% 6%	14% 16% 7% 5%	41% 22% 17% 1% 31%
Ponderosa Pine Rivers/Rapids (Riparian	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat) Base Year	40% 55% 72% 88%	5% 6% 3% 6%	14% 16% 7% 5%	41% 22% 17%

Central					
	<del></del>	<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	98%	1%	1%	0%
	Ten-Year Forecast	99%	0%	0%	0%
<b>Old Conifer Forest</b>					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Old Desert Scrub					
	Base Year	97%	0%	1%	2%
	Ten-Year Forecast	97%	0%	1%	2%
Pinyon Juniper					
	Base Year	93%	3%	3%	1%
	Ten-Year Forecast	94%	2%	3%	1%
Ponderosa Pine	Ton Ton Torocust	2.70	270	370	1/0
I JIMOI OSM I IIIC	Base Year	99%	1%	0%	0%
	Ten-Year Forecast	98%	1%	1%	0%
Rivers/Rapids (Riparian		70 /0	1 /0	1 /0	0 /0
Mivers/Napius (Niparian	Base Year	98%	1%	1%	0%
	Ten-Year Forecast	98%	0%	1%	0%
Warm Desert Scrub	Ten-Tear Forecast	98%	0%	1 %	0%
warm Desert Scrub	Base Year	67%	3%	10%	20%
	T V F	700/	20/	00/	210/
	Ten-Year Forecast	70%	2%	8%	21%
West	Ten-Year Forecast	70%	2%	8%	21%
West	Ten-Year Forecast	70% <= <b>5</b>	2% > 5 <= 10	8% > 10 <= 25	21% > <b>25</b>
West Cold Desert Scrub	Ten-Year Forecast				
	Ten-Year Forecast  Base Year				
		<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub	Base Year Ten-Year Forecast	<= <b>5</b> 29% 35%	> 5 <= 10  3% 7%	> 10 <= 25 6%	> <b>25</b> 62%
Cold Desert Scrub	Base Year	<= <b>5</b> 29% 35%	> 5 <= 10  3% 7%	> 10 <= 25 6%	> <b>25</b> 62%
Cold Desert Scrub	Base Year Ten-Year Forecast ID data not available for a Base Year	<= 5  29% 35% reas outside 0%	> 5 <= 10  3% 7% the SFRA) 0%	> 10 <= 25  6% 20%	> <b>25</b> 62% 39%
Cold Desert Scrub  Old Conifer Forest (TAU	Base Year Ten-Year Forecast <b>D data not available for a</b>	<= 5 29% 35% reas outside	> 5 <= 10 3% 7% the SFRA)	> <b>10</b> <= <b>25</b> 6% 20%	> <b>25</b> 62% 39%
Cold Desert Scrub	Base Year Ten-Year Forecast ID data not available for a Base Year	<= 5  29% 35% reas outside 0% 0%	> 5 <= 10  3% 7% the SFRA) 0% 0%	> 10 <= 25  6% 20%	> <b>25</b> 62% 39% 0% 0%
Cold Desert Scrub  Old Conifer Forest (TAU	Base Year Ten-Year Forecast  TD data not available for a Base Year Ten-Year Forecast  Base Year	<= 5  29% 35% reas outside 0% 0%	> 5 <= 10  3% 7% the SFRA) 0% 0%	> 10 <= 25  6% 20%  0% 0% 28%	> 25 62% 39% 0% 0% 59%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub	Base Year Ten-Year Forecast ID data not available for a Base Year Ten-Year Forecast	<= 5  29% 35% reas outside 0% 0%	> 5 <= 10  3% 7% the SFRA) 0% 0%	> 10 <= 25  6% 20%  0% 0%	> <b>25</b> 62% 39% 0% 0%
Cold Desert Scrub  Old Conifer Forest (TAU	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	<= 5  29% 35% reas outside 0% 0% 10% 15%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2%	> 10 <= 25  6% 20%  0% 0% 28% 19%	> 25 62% 39% 0% 0% 59% 64%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Base Year	<= 5  29% 35% reas outside 0% 0% 10% 15%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2%	> 10 <= 25  6% 20%  0% 0% 28% 19%	> <b>25</b> 62% 39% 0% 0% 59% 64%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	<= 5  29% 35% reas outside 0% 0% 10% 15%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2%	> 10 <= 25  6% 20%  0% 0% 28% 19%	> 25 62% 39% 0% 0% 59% 64%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	<= 5  29% 35% reas outside 0% 0%  10% 15%  70% 82%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2% 6% 5%	> 10 <= 25  6% 20%  0% 0% 28% 19%  7% 9%	> 25 62% 39% 0% 0% 59% 64% 17% 4%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast	<= 5  29% 35% reas outside 0% 0%  10% 15%  70% 82%	> 5 <= 10  3% 7% the SFRA) 0% 0%  3% 2%  6% 5%	> 10 <= 25  6% 20%  0% 0% 28% 19%  7% 9%	> 25 62% 39% 0% 0% 59% 64% 17% 4%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no habit	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  at)  Base Year Ten-Year Forecast	<= 5  29% 35% reas outside 0% 0%  10% 15%  70% 82%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2% 6% 5%	> 10 <= 25  6% 20%  0% 0% 28% 19%  7% 9%	> 25 62% 39% 0% 0% 59% 64% 17% 4%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  tat)  Base Year Ten-Year Forecast  Habitat)	<= 5  29% 35% reas outside 0% 0%  10% 15%  70% 82%  0% 0%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2% 6% 5% 0%	> 10 <= 25  6% 20%  0% 0%  28% 19%  7% 9%  0% 0%	> 25 62% 39% 0% 0% 59% 64% 17% 4% 0% 0%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no habit	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  at) Base Year Ten-Year Forecast  Habitat) Base Year	<= 5  29% 35% reas outside 0% 0% 10% 15%  70% 82%  0% 0%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2%  6% 5%  0% 0% 3%	> 10 <= 25  6% 20%  0% 0% 28% 19%  7% 9%  0% 0%	> 25 62% 39% 0% 0% 59% 64% 17% 4% 0% 0% 27%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no habit  Rivers/Rapids (Riparian	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  tat)  Base Year Ten-Year Forecast  Habitat)	<= 5  29% 35% reas outside 0% 0%  10% 15%  70% 82%  0% 0%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2% 6% 5% 0%	> 10 <= 25  6% 20%  0% 0%  28% 19%  7% 9%  0% 0%	> 25 62% 39% 0% 0% 59% 64% 17% 4% 0%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no habit	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  at) Base Year Ten-Year Forecast  Habitat) Base Year Ten-Year Forecast	<= 5  29% 35% reas outside 0% 0% 10% 15%  70% 82% 0% 0% 64% 66%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2%  6% 5% 0% 0% 3% 2%	> 10 <= 25  6% 20%  0% 0%  28% 19%  7% 9%  0% 0%  7% 11%	> 25 62% 39% 0% 0% 59% 64% 17% 4% 0% 27% 21%
Cold Desert Scrub  Old Conifer Forest (TAU  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no habit  Rivers/Rapids (Riparian	Base Year Ten-Year Forecast  D data not available for a Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  at) Base Year Ten-Year Forecast  Habitat) Base Year	<= 5  29% 35% reas outside 0% 0% 10% 15%  70% 82%  0% 0%	> 5 <= 10  3% 7% the SFRA) 0% 0% 3% 2%  6% 5%  0% 0% 3%	> 10 <= 25  6% 20%  0% 0% 28% 19%  7% 9%  0% 0%	> 25 62% 39% 0% 0% 59% 64% 17% 4% 0% 0% 27%

	•				
Marble Canyon		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub		<u></u>	<i>&gt; 5</i> <= 10	7 10 <- 25	- 20
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest (no h					
· ·	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Pinyon Juniper					
<u>-</u>	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no habit					
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparian	Habitat)				
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (no	habitat)				
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
East		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	69%	3%	7%	20%
	Ten-Year Forecast	82%	3%	5%	10%
Old Conifer Forest					
Old Conifer Forest	Base Year	72%	2%	8%	18%
Old Conifer Forest	Base Year Ten-Year Forecast	72% 70%	2% 9%	8% 11%	
Old Conifer Forest Old Desert Scrub					
	Ten-Year Forecast  Base Year				10%
	Ten-Year Forecast	70%	9%	11%	10%
	Ten-Year Forecast  Base Year	70% 34% 34%	9%	0% 0%	10% 66% 66%
Old Desert Scrub	Ten-Year Forecast  Base Year	70%	9%	0%	10% 66% 66%
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year  Ten-Year Forecast	70% 34% 34%	9% 0% 0%	0% 0%	10% 66% 66% 37%
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	70% 34% 34% 52% 62%	9% 0% 0% 4% 3%	11% 0% 0% 7% 14%	10% 66% 66% 37% 20%
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	70% 34% 34% 52%	9% 0% 0% 4%	11% 0% 0% 7%	10% 66% 66% 37% 20%
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	70% 34% 34% 52% 62%	9% 0% 0% 4% 3%	11% 0% 0% 7% 14%	10% 66% 66% 37% 20%
Old Desert Scrub Pinyon Juniper Ponderosa Pine	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	70% 34% 34% 52% 62%	9% 0% 0% 4% 3%	11% 0% 0% 7% 14%	10% 66% 66% 37% 20%
Old Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	70% 34% 34% 52% 62%	9% 0% 0% 4% 3%	11% 0% 0% 7% 14%	10% 66% 66% 37% 20% 15% 1%
Old Desert Scrub Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat)	70% 34% 34% 52% 62% 67% 85%	9% 0% 0% 4% 3% 6% 6%	11%  0% 0%  7% 14%  12% 8%	10% 66% 66% 37% 20% 15% 1%
Old Desert Scrub Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat) Base Year	70% 34% 34% 52% 62% 67% 85%	9% 0% 0% 4% 3% 6% 6%	11%  0% 0%  7% 14%  12% 8%	14%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine  Rivers/Rapids (Riparian	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat) Base Year	70% 34% 34% 52% 62% 67% 85%	9% 0% 0% 4% 3% 6% 6%	11%  0% 0%  7% 14%  12% 8%	10% 66% 66% 37% 20% 15% 1%

Central					
		_	<b>7</b> 10	10 25	25
		<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub	D 17	0.604	10/	20/	1.07
	Base Year	96%	1%	2%	1%
	Ten-Year Forecast	99%	0%	0%	0%
Old Conifer Forest					
	Base Year	89%	11%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Old Desert Scrub					
	Base Year	97%	0%	0%	3%
	Ten-Year Forecast	97%	0%	0%	2%
Pinyon Juniper					
r y	Base Year	88%	2%	5%	5%
	Ten-Year Forecast	94%	2%	3%	1%
Ponderosa Pine	Ton Tour Torocust	21/0	2/0	570	1 /0
1 onuclosa 1 mc	Base Year	93%	3%	3%	1%
	Ten-Year Forecast	98%	1%	1%	0%
Divord/Donida (Dinamian II		70%	1 70	1 %0	U%0
Rivers/Rapids (Riparian H		070/	10/	20/	1.0/
	Base Year	97%	1%	2%	1%
	Ten-Year Forecast	98%	0%	1%	1%
Warm Desert Scrub				_	
	Base Year	61%	4%	9%	25%
	Ten-Year Forecast	69%	2%	6%	23%
West					
		<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
Cold Desert Scrub	Base Year	25%	4%	6%	65%
Cold Desert Scrub	Base Year Ten-Year Forecast	25% 33%	4% 6%	6% 17%	65% 44%
Old Conifer Forest (TAUD	Ten-Year Forecast	33%	6%		
	Ten-Year Forecast	33%	6%		
	Ten-Year Forecast  O data not available for a	33% reas outside	6% the SFRA) 0%	0%	44% 0%
Old Conifer Forest (TAUD	Ten-Year Forecast  data not available for a  Base Year	33% reas outside 0%	6% the SFRA)	17%	44%
	Ten-Year Forecast  O data not available for a  Base Year  Ten-Year Forecast	33% reas outside 0% 0%	6% the SFRA) 0% 0%	0% 0%	0% 0%
Old Conifer Forest (TAUD	Ten-Year Forecast  O data not available for a  Base Year  Ten-Year Forecast  Base Year	33% reas outside 0% 0%	6% the SFRA) 0% 0%	17% 0% 0% 15%	44% 0% 0% 75%
Old Conifer Forest (TAUD	Ten-Year Forecast  O data not available for a  Base Year  Ten-Year Forecast	33% reas outside 0% 0%	6% the SFRA) 0% 0%	0% 0%	0% 0%
Old Conifer Forest (TAUD	Ten-Year Forecast  O data not available for a  Base Year  Ten-Year Forecast  Base Year  Ten-Year Forecast	33% reas outside 0% 0% 8% 14%	6% the SFRA) 0% 0% 2% 2%	17% 0% 0% 15% 12%	44% 0% 0% 75% 72%
Old Conifer Forest (TAUD	Ten-Year Forecast  O data not available for a  Base Year  Ten-Year Forecast  Base Year  Ten-Year Forecast  Base Year	33% reas outside 0% 0% 8% 14%	6% the SFRA) 0% 0% 2% 2%	17% 0% 0% 15% 12%	44% 0% 0% 75% 72% 21%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  O data not available for a  Base Year  Ten-Year Forecast  Base Year  Ten-Year Forecast  Base Year  Ten-Year Forecast	33% reas outside 0% 0% 8% 14%	6% the SFRA) 0% 0% 2% 2%	17% 0% 0% 15% 12%	44% 0% 0% 75% 72%
Old Conifer Forest (TAUD	Ten-Year Forecast  O data not available for a  Base Year  Ten-Year Forecast  Base Year  Ten-Year Forecast  Base Year  Ten-Year Forecast  Base Year  Ten-Year Forecast	33% reas outside 0% 0% 8% 14% 63% 80%	6% the SFRA) 0% 0% 2% 2% 6% 4%	17%  0% 0%  15% 12%  10% 9%	44% 0% 0% 75% 72% 21% 6%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Description  Description	33% reas outside 0% 0% 8% 14% 63% 80%	6% the SFRA) 0% 0% 2% 2% 6% 4%	17%  0% 0% 15% 12%  10% 9%	44% 0% 0% 75% 72% 21% 6%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper Ponderosa Pine (no habitat	Ten-Year Forecast  Description  Description	33% reas outside 0% 0% 8% 14% 63% 80%	6% the SFRA) 0% 0% 2% 2% 6% 4%	17%  0% 0%  15% 12%  10% 9%	44% 0% 0% 75% 72% 21% 6%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Description  Description	33% reas outside 0% 0% 8% 14% 63% 80% 0% 0%	6% the SFRA) 0% 0% 2% 2% 4% 6% 4%	17%  0% 0% 15% 12%  10% 9%  0% 0%	44% 0% 0% 75% 72% 21% 6% 0%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper Ponderosa Pine (no habitat	Ten-Year Forecast  Description  Description	33% reas outside 0% 0% 8% 14% 63% 80% 0% 62%	6% the SFRA) 0% 0% 2% 2% 6% 4% 0% 0%	17%  0% 0% 15% 12%  10% 9%  0% 7%	44% 0% 0% 75% 72% 21% 6% 0% 0%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper Ponderosa Pine (no habitat	Ten-Year Forecast  Description  Description	33% reas outside 0% 0% 8% 14% 63% 80% 0% 0%	6% the SFRA) 0% 0% 2% 2% 4% 6% 4%	17%  0% 0% 15% 12%  10% 9%  0% 0%	44% 0% 0% 75% 72% 21% 6% 0%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper Ponderosa Pine (no habitat	Ten-Year Forecast  Description  Description	33% reas outside 0% 0% 8% 14% 63% 80% 0% 62%	6% the SFRA) 0% 0% 2% 2% 6% 4% 0% 0%	17%  0% 0% 15% 12%  10% 9%  0% 7%	44% 0% 0% 75% 72% 21% 6% 0% 0%
Old Conifer Forest (TAUD Old Desert Scrub Pinyon Juniper Ponderosa Pine (no habitat	Ten-Year Forecast  Description  Description	33% reas outside 0% 0% 8% 14% 63% 80% 0% 62%	6% the SFRA) 0% 0% 2% 2% 6% 4% 0% 0%	17%  0% 0% 15% 12%  10% 9%  0% 7%	44% 0% 0% 75% 72% 21% 6% 0% 0%

Table 21. Summary of wildlife habitat exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F.

Marble Canyon		<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub		1 10 0211	, 10 , 20 42.11	720 ( 00 02)1	, 00 0212
	Base Year	83%	16%	1%	0%
	Ten-Year Forecast	82%	17%	0%	0%
Old Conifer Forest					
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub					
	Base Year	79%	21%	0%	0%
	Ten-Year Forecast	81%	19%	0%	0%
Pinyon Juniper					
	Base Year	97%	3%	0%	0%
	Ten-Year Forecast	97%	3%	0%	0%
Ponderosa Pine (no	habitat)				
•	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Rip	arian Habitat)				
•	Base Year	77%	22%	1%	0%
	Ten-Year Forecast	75%	24%	1%	0%
Warm Desert Scru	b (no habitat)				
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
East End					
		<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub		<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub	Base Year	<= <b>15 dBA</b> 38%	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub	Base Year Ten-Year Forecast				
	Ten-Year Forecast	38%	0%	0%	0%
	Ten-Year Forecast	38%	0%	0%	0%
Old Conifer Forest	Ten-Year Forecast	38% 49%	0% 0%	0% 0%	0% 0%
Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48%	0% 0% 12% 19%	0% 0% 20%	0% 0% 24%
Old Conifer Forest	Ten-Year Forecast  Base Year	38% 49% 44%	0% 0% 12%	0% 0% 20%	0% 0% 24%
Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48%	0% 0% 12% 19%	0% 0% 20% 16%	0% 0% 24% 16%
Cold Desert Scrub Old Conifer Forest Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	38% 49% 44% 48%	0% 0% 12% 19%	0% 0% 20% 16%	0% 0% 24% 16%
Old Conifer Forest Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	38% 49% 44% 48%	0% 0% 12% 19%	0% 0% 20% 16%	0% 0% 24% 16%
Old Conifer Forest Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59%	0% 0% 12% 19% 38% 23%	0% 0% 20% 16% 13% 10%	0% 0% 24% 16% 6% 8%
Old Conifer Forest Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59% 42% 57%	0% 0% 12% 19% 38% 23% 24% 17%	0% 0% 20% 16% 13% 10%	0% 0% 24% 16% 6% 8% 17% 13%
Old Conifer Forest Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59% 42% 57%	0% 0% 12% 19% 38% 23% 24% 17%	0% 0% 20% 16% 13% 10%	0% 0% 24% 16% 6% 8% 17% 13%
Old Conifer Forest Old Desert Scrub Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59% 42% 57%	0% 0% 12% 19% 38% 23% 24% 17%	0% 0% 20% 16% 13% 10%	0% 0% 24% 16% 6% 8% 17% 13%
Old Conifer Forest Old Desert Scrub Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59% 42% 57%	0% 0% 12% 19% 38% 23% 24% 17%	0% 0% 20% 16% 13% 10%	0% 0% 24% 16% 6% 8% 17% 13%
Old Conifer Forest Old Desert Scrub Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59% 42% 57%	0% 0% 12% 19% 38% 23% 24% 17%	0% 0% 20% 16% 13% 10%	0% 0% 24% 16% 6% 8% 17% 13%
Old Conifer Forest Old Desert Scrub Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  arian Habitat)	38% 49% 44% 48% 43% 59% 42% 57% 26% 54%	0% 0% 12% 19% 38% 23% 24% 17% 47% 31%	0% 0% 20% 16% 13% 10% 16% 13%	0% 0% 24% 16% 6% 8% 17% 13%
Old Conifer Forest Old Desert Scrub Pinyon Juniper Ponderosa Pine Rivers/Rapids (Rip	Base Year Ten-Year Forecast  arian Habitat) Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59% 42% 57% 26% 54%	0% 0% 12% 19% 38% 23% 24% 17% 47% 31%	0% 0% 20% 16% 13% 10% 16% 13% 19% 9%	0% 0% 24% 16% 6% 8% 17% 13%
Old Conifer Forest Old Desert Scrub	Base Year Ten-Year Forecast  arian Habitat) Base Year Ten-Year Forecast	38% 49% 44% 48% 43% 59% 42% 57% 26% 54%	0% 0% 12% 19% 38% 23% 24% 17% 47% 31%	0% 0% 20% 16% 13% 10% 16% 13% 19% 9%	0% 0% 24% 16% 6% 8% 17% 13%

Central					
_		<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub					
I	Base Year	100%	0%	0%	0%
7	Γen-Year Forecast	100%	0%	0%	0%
<b>Old Conifer Forest</b>					
F	Base Year	98%	0%	2%	0%
٦	Γen-Year Forecast	98%	0%	2%	0%
Old Desert Scrub					
	Base Year	65%	15%	12%	7%
	Ten-Year Forecast	61%	17%	15%	8%
Pinyon Juniper	ren rearrorecast	0170	1770	1370	070
	Base Year	100%	0%	0%	0%
	Γen-Year Forecast	99%	1%	0%	0%
Ponderosa Pine	Daga Vana	1000/	00/	00/	00/
	Base Year	100%	0%	0%	0%
	Γen-Year Forecast	100%	0%	0%	0%
Rivers/Rapids (Riparia					
	Base Year	98%	1%	0%	0%
	Γen-Year Forecast	97%	2%	1%	0%
Warm Desert Scrub					
I	Base Year	90%	9%	0%	0%
7	Γen-Year Forecast	79%	19%	2%	0%
West		<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub					
Cold Desert Scrub	Base Year	16%	19%	43%	23%
Cold Desert Scrub	Base Year Fen-Year Forecast				
Cold Desert Scrub  H Old Conifer Forest	Ten-Year Forecast	16%	19%	43%	23%
Cold Desert Scrub  H Old Conifer Forest		16%	19%	43%	23%
Cold Desert Scrub  H Old Conifer Forest	Ten-Year Forecast	16% 15%	19% 23%	43% 40%	23% 22%
Cold Desert Scrub  H Old Conifer Forest	Fen-Year Forecast Base Year	16% 15% 53%	19% 23% 4%	43% 40% 32%	23% 22% 12%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Fen-Year Forecast Base Year	16% 15% 53%	19% 23% 4%	43% 40% 32%	23% 22% 12%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Fen-Year Forecast  Base Year  Fen-Year Forecast	16% 15% 53% 54%	19% 23% 4% 6%	43% 40% 32% 41%	23% 22% 12% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year	16% 15% 53% 54%	19% 23% 4% 6%	43% 40% 32% 41%	23% 22% 12% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Fen-Year Forecast  Base Year  Fen-Year Forecast  Base Year  Fen-Year Forecast	16% 15% 53% 54% 53% 51%	19% 23% 4% 6% 22% 23%	43% 40% 32% 41% 18% 16%	23% 22% 12% 0% 7% 9%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Pase Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year	16% 15% 53% 54% 53% 51%	19% 23% 4% 6% 22% 23%	43% 40% 32% 41% 18% 16%	23% 22% 12% 0% 7% 9%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Pase Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast	16% 15% 53% 54% 53% 51%	19% 23% 4% 6% 22% 23%	43% 40% 32% 41% 18% 16%	23% 22% 12% 0% 7% 9%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast	16% 15% 53% 54% 53% 51% 33% 33%	19% 23% 4% 6% 22% 23% 34% 34%	43% 40% 32% 41% 18% 16% 28% 27%	23% 22% 12% 0% 7% 9% 4% 6%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Fen-Year Forecast  Base Year Fen-Year Forecast	16% 15% 53% 54% 53% 51% 33% 33%	19% 23% 4% 6% 22% 23% 34% 34%	43% 40% 32% 41% 18% 16% 28% 27%	23% 22% 12% 0% 7% 9% 4% 6%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Fen-Year Forecast Base Year Fen-Year Forecast Base Year Fen-Year Forecast Base Year Fen-Year Forecast bitat) Base Year Fen-Year Forecast	16% 15% 53% 54% 53% 51% 33% 33%	19% 23% 4% 6% 22% 23% 34% 34%	43% 40% 32% 41% 18% 16% 28% 27%	23% 22% 12% 0% 7% 9% 4% 6%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  bitat)  Base Year Fen-Year Forecast  an Habitat)	16% 15% 53% 54% 53% 51% 33% 33%	19% 23% 4% 6% 22% 23% 34% 34% 0% 0%	43% 40% 32% 41% 18% 16% 28% 27%	23% 22% 12% 0% 7% 9% 4% 6% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Fen-Year Forecast Abitat) Base Year Fen-Year Forecast Base Year Fen-Year Forecast Base Year	16% 15% 53% 54% 53% 51% 33% 33% 0% 0%	19% 23% 4% 6% 22% 23% 34% 34% 0% 0%	43% 40% 32% 41% 18% 16% 28% 27% 0% 0%	23% 22% 12% 0% 7% 9% 4% 6% 0% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha  Rivers/Rapids (Ripari	Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  bitat)  Base Year Fen-Year Forecast  an Habitat)	16% 15% 53% 54% 53% 51% 33% 33%	19% 23% 4% 6% 22% 23% 34% 34% 0% 0%	43% 40% 32% 41% 18% 16% 28% 27%	23% 22% 12% 0% 7% 9% 4% 6% 0%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha  Rivers/Rapids (Riparia	Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  Base Year Fen-Year Forecast  bitat)  Base Year Fen-Year Forecast  an Habitat)  Base Year Fen-Year Forecast  an Habitat	16% 15% 53% 54% 53% 51% 33% 33% 0% 0% 52% 52%	19% 23% 4% 6% 22% 23% 34% 34% 0% 0% 0%	43% 40% 32% 41% 18% 16% 28% 27% 0% 0% 0%	23% 22% 12% 0% 7% 9% 4% 6% 0% 0% 16%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha  Rivers/Rapids (Ripari	Base Year Fen-Year Forecast Abitat) Base Year Fen-Year Forecast Base Year Fen-Year Forecast Base Year	16% 15% 53% 54% 53% 51% 33% 33% 0% 0%	19% 23% 4% 6% 22% 23% 34% 34% 0% 0%	43% 40% 32% 41% 18% 16% 28% 27% 0% 0%	23% 22% 12% 0% 7% 9% 4% 6% 0% 0%

#### Alternative F – Off-Peak Season – L<sub>Aeg12</sub> Marble Canyon <= 15 dBA >15 <= 25 dBA >25 <= 35 dBA > 35 dBA **Cold Desert Scrub** Base Year 100% 0% 0% 0% 0% Ten-Year Forecast 100% 0% 0% **Old Conifer Forest (no habitat)** 0% 0% 0% 0% Base Year Ten-Year Forecast 0% 0% 0% 0% **Old Desert Scrub** Base Year 100% 0% 0% 0% Ten-Year Forecast 0% 100% 0% 0% **Pinyon Juniper** 0% Base Year 100% 0% 0% Ten-Year Forecast 100% 0% 0% 0% Ponderosa Pine (no habitat) Base Year 0% 0% 0% 0% Ten-Year Forecast 0% 0% 0% 0% Rivers/Rapids (Riparian Habitat) 0% 0% Base Year 100% 0% Ten-Year Forecast 100% 0% 0% 0% Warm Desert Scrub (no habitat) 0% 0% Base Year 0% 0% Ten-Year Forecast 0% 0% 0% 0% East End <= 15 dBA>15 <= 25 dBA >25 <= 35 dBA > 35 dBA **Cold Desert Scrub** Base Year 46% 22% 26% 6% Ten-Year Forecast 56% 19% 23% 2% **Old Conifer Forest** Base Year 50% 16% 19% 16% Ten-Year Forecast 54% 18% 16% 12% **Old Desert Scrub** Base Year 63% 20% 10% 6% Ten-Year Forecast 65% 17% 10% 8% **Pinyon Juniper** Base Year 46% 27% 16% 11% Ten-Year Forecast 60% 20% 15% 6% Ponderosa Pine Base Year 29% 8% 2% 60% Ten-Year Forecast 1% 78% 16% 4% Rivers/Rapids (Riparian Habitat) Base Year 38% 27% 31% 4% Ten-Year Forecast 0% 53% 23% 24% Warm Desert Scrub Base Year 58% 8% 28% 7% Ten-Year Forecast 9% 28%0% 62%

Central		<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub		<= 15 ubA	>15 <= 25 UDA	>25 <= 35 UDA	> 35 UDA
Colu Desert Scrub	Base Year	99%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
<b>Old Conifer Forest</b>	Ten-Tear Porceast	10070	0 /0	070	0 /0
Old Collifer Forest	Base Year	98%	0%	2%	0%
	Ten-Year Forecast	98%	0%	2%	0%
Old Desert Scrub	Tell-Teal Polecast	9070	070	270	070
Old Desert Scrub	Base Year	67%	15%	10%	8%
	Ten-Year Forecast				
Dinaran Iraninan	Tell-Tear Forecast	63%	17%	14%	6%
Pinyon Juniper	Daga Vasa	0.60/	20/	00/	00/
	Base Year	96%	3%	0%	0%
D 1 D'	Ten-Year Forecast	97%	2%	0%	0%
Ponderosa Pine	D V	020/	00/	007	00/
	Base Year	92%	8%	0%	0%
	Ten-Year Forecast	97%	3%	0%	0%
Rivers/Rapids (Ripar					_
	Base Year	97%	3%	0%	0%
	Ten-Year Forecast	97%	2%	1%	0%
Warm Desert Scrub					
	Base Year	92%	8%	0%	0%
	Ten-Year Forecast	83%	17%	0%	0%
West					
		<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dB/
Cold Desert Scrub					
	Base Year	16%	17%	42%	26%
	Ten-Year Forecast	15%	24%	40%	20%
<b>Old Conifer Forest</b>					
Old Conifer Forest	Base Year	53%	4%	26%	18%
	Base Year Ten-Year Forecast	53% 54%	4% 6%	26% 40%	18% 0%
Old Conifer Forest Old Desert Scrub					
	Ten-Year Forecast	54%	6%	40%	0%
	Ten-Year Forecast Base Year	53%	6% 22%	18%	0% 6%
Old Desert Scrub	Ten-Year Forecast Base Year	53%	6% 22%	18%	0% 6%
Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast	54% 53% 52%	6% 22% 24%	40% 18% 15%	0% 6% 8%
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	54% 53% 52%	6% 22% 24% 32%	40% 18% 15% 29%	0% 6% 8%
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  abitat)	54% 53% 52%	6% 22% 24% 32% 34%	40% 18% 15% 29% 26%	0% 6% 8% 6% 5%
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  nabitat)  Base Year	54% 53% 52% 33% 34%	6% 22% 24% 32% 34%	40% 18% 15% 29% 26%	0% 6% 8% 6% 5%
Old Desert Scrub Pinyon Juniper Ponderosa Pine (no h	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  abitat) Base Year Ten-Year Forecast	54% 53% 52% 33% 34%	6% 22% 24% 32% 34%	40% 18% 15% 29% 26%	0% 6% 8% 6% 5%
Old Desert Scrub Pinyon Juniper Ponderosa Pine (no h	Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast Ten-Year Forecast Ten-Year Forecast	54% 53% 52% 33% 34% 0% 0%	6% 22% 24% 32% 34% 0% 0%	40% 18% 15% 29% 26% 0%	0% 6% 8% 6% 5% 0%
Old Desert Scrub Pinyon Juniper Ponderosa Pine (no h	Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast	54% 53% 52% 33% 34% 0% 0%	6% 22% 24% 32% 34% 0% 0%	40%  18% 15%  29% 26%  0% 0%	0% 6% 8% 6% 5% 0% 0%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no handerosa)  Rivers/Rapids (Ripan	Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast Ten-Year Forecast Ten-Year Forecast	54% 53% 52% 33% 34% 0% 0%	6% 22% 24% 32% 34% 0% 0%	40% 18% 15% 29% 26% 0%	0% 6% 8% 6% 5% 0%
Old Desert Scrub Pinyon Juniper Ponderosa Pine (no h	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  nabitat) Base Year Ten-Year Forecast  rian Habitat) Base Year Ten-Year Forecast	54% 53% 52% 33% 34% 0% 0% 52% 52%	6% 22% 24% 32% 34% 0% 0% 10% 10%	40%  18% 15%  29% 26%  0% 0%  21% 21%	0% 6% 8% 6% 5% 0% 0% 16%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no handerosa)  Rivers/Rapids (Ripan	Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast	54% 53% 52% 33% 34% 0% 0%	6% 22% 24% 32% 34% 0% 0%	40%  18% 15%  29% 26%  0% 0%	0% 6% 8% 6% 5% 0% 0%

Table 22. Summary of wildlife habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under Alternative F.

Marble Canyon		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	78%	7%	9%	6%
	Ten-Year Forecast	87%	10%	3%	0%
<b>Old Conifer Forest</b>					
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub				1,77	
	Base Year	87%	4%	7%	2%
	Ten-Year Forecast	91%	9%	0%	0%
Pinyon Juniper	Ten Ten Torceast	<i>7170</i>	770	070	070
1 my on oumper	Base Year	16%	69%	15%	0%
	Ten-Year Forecast	83%	17%	0%	0%
Ponderosa Pine (no		05/0	1 / /0	0 70	0 /0
1 onuciosa i ilic (III	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Rip		U /0	U70	U 70	070
Kivers/Kapius (Kip	Base Year	94%	2%	3%	1%
	Ten-Year Forecast	98%	1%	1%	0%
Warm Desert Scrul		90%	1 70	1 70	0%
warm Desert Scrui	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
	- Tell-Teal Folecast	U%0	0%	0%	0%
East End		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	13%	2%	6%	79%
	Ten-Year Forecast	35%	3%	9%	53%
<b>Old Conifer Forest</b>					
	Base Year	1%	0%	1%	98%
			1770		
				60%	
Old Desert Scrub	Ten-Year Forecast	14%	5%	60%	21%
Old Desert Scrub	Ten-Year Forecast	14%	5%		21%
Old Desert Scrub	Ten-Year Forecast  Base Year	0%	5%	5%	21% 95%
	Ten-Year Forecast	14%	5%		
Old Desert Scrub Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast	14% 0% 1%	5% 0% 5%	5% 25%	21% 95% 69%
	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	14% 0% 1%	5% 0% 5% 2%	5% 25% 6%	21% 95% 69% 83%
Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast	14% 0% 1%	5% 0% 5%	5% 25%	21% 95% 69% 83%
Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	14% 0% 1% 9% 33%	5% 0% 5% 2% 6%	5% 25% 6% 16%	21% 95% 69% 83% 45%
Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	14% 0% 1% 9% 33%	5% 0% 5% 2% 6%	5% 25% 6% 16%	21% 95% 69% 83% 45%
Pinyon Juniper Ponderosa Pine	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	14% 0% 1% 9% 33%	5% 0% 5% 2% 6%	5% 25% 6% 16%	21% 95% 69% 83% 45%
Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  arian Habitat)	14% 0% 1% 9% 33% 8% 40%	5% 0% 5% 2% 6% 24% 14%	5% 25% 6% 16% 9% 23%	21% 95% 69% 83% 45% 81% 23%
Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  arian Habitat) Base Year	14% 0% 1% 9% 33% 8% 40%	5% 0% 5% 2% 6% 24% 14%	5% 25% 6% 16% 9% 23%	21% 95% 69% 83% 45% 81% 23%
Pinyon Juniper  Ponderosa Pine  Rivers/Rapids (Rip	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  arian Habitat) Base Year Ten-Year Forecast	14% 0% 1% 9% 33% 8% 40%	5% 0% 5% 2% 6% 24% 14%	5% 25% 6% 16% 9% 23%	21% 95% 69% 83% 45% 81% 23%
Pinyon Juniper Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  arian Habitat) Base Year Ten-Year Forecast	14%  0% 1%  9% 33%  8% 40%  24% 47%	5%  0% 5%  2% 6%  244 14%  44% 5%	5% 25% 6% 16% 9% 23% 14% 18%	21% 95% 69% 83% 45% 81% 23% 58% 30%
Pinyon Juniper Ponderosa Pine Rivers/Rapids (Rip	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  arian Habitat) Base Year Ten-Year Forecast	14% 0% 1% 9% 33% 8% 40%	5% 0% 5% 2% 6% 24% 14%	5% 25% 6% 16% 9% 23%	21% 95% 69% 83% 45% 81% 23%

Central				
Central	<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub	<u> </u>	7 5 <= 10	> 10 <= 25	7 20
Base Year	97%	1%	1%	1%
Ten-Year Forecast	94%	2%	4%	0%
Old Conifer Forest	7.70		.,,	0,0
Base Year	84%	16%	0%	0%
Ten-Year Forecast	84%	0%	16%	0%
Old Desert Scrub	0170	070	1070	070
Base Year	97%	0%	2%	1%
Ten-Year Forecast	97%	0%	1%	2%
Pinyon Juniper	7170	070	1 /0	270
Base Year	86%	5%	5%	5%
Ten-Year Forecast	86%		8%	
Ponderosa Pine	OU%	4%	070	1%
Base Year	89%	2%	4%	5%
Ten-Year Forecast	97%	2%	1%	0%
Rivers/Rapids (Riparian Habitat)	070/	10/	10/	1.0/
Base Year	97%	1%	1%	1%
Ten-Year Forecast	97%	1%	2%	0%
Warm Desert Scrub	<b>540</b>	4.404	2224	
Base Year	61%	11%	22%	6%
Ten-Year Forecast	49%	6%	26%	19%
West	_			
	<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub	201	201	501	0.407
Base Year	8%	2%	6%	84%
Ten-Year Forecast	9%	1%	6%	84%
Old Conifer Forest (TAUD data not availal			_	
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub				
Base Year	34%	10%	36%	20%
Ten-Year Forecast	26%	7%	25%	42%
Pinyon Juniper				
Base Year	20%	3%	16%	61%
Ten-Year Forecast	23%	4%	15%	58%
Ponderosa Pine (no habitat)				
1 onuci osa i inc (no navitat)				
Base Year	0%	0%	0%	0%
` ,	0% 0%	0% 0%	0% 0%	0% 0%
Base Year				
Base Year Ten-Year Forecast	0%		0%	
Base Year Ten-Year Forecast Rivers/Rapids (Riparian Habitat) Base Year	57%	0% 5%	0%	0% 27%
Base Year Ten-Year Forecast Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	0%	0%	0%	0%
Base Year Ten-Year Forecast Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast Warm Desert Scrub	0% 57% 54%	0% 5% 5%	0% 11% 14%	0% 27% 27%
Base Year Ten-Year Forecast Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	57%	0% 5%	0%	0% 27%

Marble Canyon	Alternative F – Off-	Peak Season – TAUD				
Section   Sect		reak ocason - Inco				
Base Year	Marble Canyon	_	~ <b>- 5</b>	< <b>5</b> <- 10	> 10 <- 25	> 25
Base Year   97%   2%   1%   0%   0%   0%   0%   0%   0%   0	Cold Desert Scrub		<- 3	> 3 <= 10	> 10 <= 25	<i>&gt; 23</i>
Ten-Year Forecast	Cold Describerds	Base Year	97%	2%	1%	0%
Old Conifer Forest (no habitat)           Base Year         0%						
Base Year	Old Conifer Forest (		10070	0,0		0,0
Ten-Year Forecast	014 0011111 1 01 050 (		0%	0%	0%	0%
Base Year   100%   0%   0%   0%   0%   0%   0%						
Base Year   100%   0%   0%   0%   0%   0%   0%	Old Desert Scrub	Ten Ten Torocast	070	070	070	070
Ten-Year Forecast   100%   0%   0%   0%   0%   0%   0%	Old Desert Serus	Base Year	100%	0%	0%	0%
Pinyon Juniper						
Base Year   100%   0%   0%   0%   0%   0%   0%	Pinyon Juniner	Ten Ten Torceust	10070	070	070	070
Ten-Year Forecast   100%   0%   0%   0%   0%   0%   Ponderosa Pine (no habitat)	i myon sumper	Rase Vear	100%	Λ%	0%	0%
Ponderosa Pine (no habitat)   Base Year   0%   0%   0%   0%   0%   0%   0%   0						
Base Year   0%   0%   0%   0%   0%   0%   0%   0	Ponderosa Pina (no		100/0	0 /0	0 70	0 70
Ten-Year Forecast	i onuciosa i me (no .	,	0%	Λ%	0%	Ω%
Base Year   100%   0%   0%   0%   0%   0%   0%						
Base Year   100%   0%   0%   0%   0%   0%   0%	Divers/Penids (Pine		070	070	070	0 70
Ten-Year Forecast   100%   0%   0%   0%   0%   0%   Warm Desert Scrub (no habitat)	Mivers/Rapius (Ripa		100%	Λ0/-	Λ0/-	Λ0/-
Base Year   0%   0%   0%   0%   0%   0%   0%   0						
Base Year   0%   0%   0%   0%   0%   0%   0%   0	Worm Dogort Sorub		100%	U 70	070	070
East End	waim Desert Scrub	,	00/	00/	Ω0/-	Λ0/
Section						
<= 5         >5 <= 10         >10 <= 25         >25           Cold Desert Scrub           Base Year Ten-Year Forecast         41%         8%         31%         20%           Old Conifer Forest           Base Year 2% 4%         70%         25%           Ten-Year Forecast         37%         49%         9%         6%           Old Desert Scrub           Base Year 26% 1% 5%         5%         68%           Ten-Year Forecast         28%         4%         2%         66%           Pinyon Juniper           Base Year 10% 4%         4%         22%         64%           Ten-Year Forecast         37%         15%         24%         24%           Ponderosa Pine           Base Year 23% 17% 38%         23%         24%         24%         24%           Pin-Year Forecast         81%         13%         5%         0%           Rivers/Rapids (Riparian Habitat)         8         9%         26%         32%           Base Year 54% 12%         21%         13%         21%         13%           Warm Desert Scrub           Base Year 36% 36% 36%         3%		I	070	070	070	070
Base Year   19%   5%   19%   57%   Ten-Year Forecast   41%   8%   31%   20%	East End		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Ten-Year Forecast	Cold Desert Scrub					
Base Year   2%   4%   70%   25%   70%   25%   70%   25%   70%   25%   70%   25%   70%   25%   70%   25%   70%   25%   70%   25%   70%   6%   70%   6%   70%   6%   70%		Base Year	19%	5%	19%	57%
Base Year       2%       4%       70%       25%         Ten-Year Forecast       37%       49%       9%       6%         Old Desert Scrub         Base Year       26%       1%       5%       68%         Ten-Year Forecast       28%       4%       2%       66%         Pinyon Juniper         Base Year       10%       4%       22%       64%         Ten-Year Forecast       37%       15%       24%       24%         Ponderosa Pine         Base Year       23%       17%       38%       23%         Ten-Year Forecast       81%       13%       5%       0%         Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub		Ten-Year Forecast	41%	8%	31%	20%
Ten-Year Forecast   37%   49%   9%   6%	<b>Old Conifer Forest</b>					
Old Desert Scrub         Base Year       26%       1%       5%       68%         Ten-Year Forecast       28%       4%       2%       66%         Pinyon Juniper         Base Year       10%       4%       22%       64%         Ten-Year Forecast       37%       15%       24%       24%         Ponderosa Pine         Base Year       23%       17%       38%       23%         Ten-Year Forecast       81%       13%       5%       0%         Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%		Base Year	2%	4%	70%	25%
Base Year       26%       1%       5%       68%         Ten-Year Forecast       28%       4%       2%       66%         Pinyon Juniper         Base Year       10%       4%       22%       64%         Ten-Year Forecast       37%       15%       24%       24%         Ponderosa Pine         Base Year       23%       17%       38%       23%         Ten-Year Forecast       81%       13%       5%       0%         Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%		Ten-Year Forecast	37%	49%	9%	6%
Base Year       26%       1%       5%       68%         Ten-Year Forecast       28%       4%       2%       66%         Pinyon Juniper         Base Year       10%       4%       22%       64%         Ten-Year Forecast       37%       15%       24%       24%         Ponderosa Pine         Base Year       23%       17%       38%       23%         Ten-Year Forecast       81%       13%       5%       0%         Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%	Old Desert Scrub					
Ten-Year Forecast   28%   4%   2%   66%		Base Year	26%	1%	5%	68%
Base Year   10%   4%   22%   64%   7en-Year Forecast   37%   15%   24%   24%		Ten-Year Forecast	28%	4%	2%	66%
Base Year       10%       4%       22%       64%         Ten-Year Forecast       37%       15%       24%       24%         Ponderosa Pine         Base Year       23%       17%       38%       23%         Ten-Year Forecast       81%       13%       5%       0%         Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%	Pinyon Juniper					
Ten-Year Forecast   37%   15%   24%   24%     Ponderosa Pine		Base Year	10%	4%	22%	64%
Ponderosa Pine         Base Year       23%       17%       38%       23%         Ten-Year Forecast       81%       13%       5%       0%         Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%						24%
Base Year       23%       17%       38%       23%         Ten-Year Forecast       81%       13%       5%       0%         Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%	Ponderosa Pine					
Ten-Year Forecast     81%     13%     5%     0%       Rivers/Rapids (Riparian Habitat)       Base Year     32%     9%     26%     32%       Ten-Year Forecast     54%     12%     21%     13%       Warm Desert Scrub       Base Year     36%     3%     9%     52%		Base Year	23%	17%	38%	23%
Rivers/Rapids (Riparian Habitat)         Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%						
Base Year       32%       9%       26%       32%         Ten-Year Forecast       54%       12%       21%       13%         Warm Desert Scrub         Base Year       36%       3%       9%       52%	Rivers/Rapids (Rina		- /-			2,0
Ten-Year Forecast 54% 12% 21% 13%  Warm Desert Scrub  Base Year 36% 3% 9% 52%		*	32%	9%	26%	32%
Warm Desert Scrub Base Year 36% 3% 9% 52%						
Base Year 36% 3% 9% 52%	Warm Desert Scrub		2.70	1270		1370
	, all Describer up		36%	3%	9%	52%
1011-10a1 10100ast 41/0 1/0 1/0 29%						

Central					
		<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	94%	1%	2%	2%
	Ten-Year Forecast	94%	3%	3%	1%
<b>Old Conifer Forest</b>					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	85%	0%	15%	0%
Old Desert Scrub					
	Base Year	98%	1%	2%	0%
	Ten-Year Forecast	97%	0%	2%	1%
Pinyon Juniper	Ten Tear Forceast	<i>717</i> 0	070	270	1 /0
	Base Year	80%	2%	4%	13%
	Ten-Year Forecast	83%	5%	9%	3%
	Tell-Tear Forecast	83%	3%	9%	3%
Ponderosa Pine	Dana Van	270/	00/	200/	250/
	Base Year	27%	9%	29%	35%
	Ten-Year Forecast	88%	5%	6%	1%
Rivers/Rapids (Ripar					
	Base Year	94%	2%	3%	2%
	Ten-Year Forecast	97%	1%	2%	0%
Warm Desert Scrub					
	Base Year	68%	12%	15%	6%
	Ten-Year Forecast	50%	8%	33%	9%
West		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	8%	2%	6%	84%
	Ten-Year Forecast	9%	2%	8%	82%
<b>Old Conifer Forest (T</b>				070	0270
,	Base Year	0%	0%	0%	0%
		0 /0	0 /0	0 / 0	0 /0
		Ω0/ <sub>2</sub>	Ο0/-	Ω0/4	Ω0/2
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub					
Old Desert Scrub	Base Year	36%	9%	35%	20%
Old Desert Scrub					
Old Desert Scrub Pinyon Juniper	Base Year Ten-Year Forecast	36% 28%	9% 9%	35% 34%	20% 30%
Old Desert Scrub Pinyon Juniper	Base Year Ten-Year Forecast Base Year	36% 28%	9% 9% 3%	35% 34% 16%	20% 30% 61%
Old Desert Scrub Pinyon Juniper	Base Year Ten-Year Forecast Base Year Ten-Year Forecast	36% 28%	9% 9%	35% 34%	20% 30%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast Base Year Ten-Year Forecast abitat)	36% 28% 19% 23%	9% 9% 3% 4%	35% 34% 16% 18%	20% 30% 61% 55%
Old Desert Scrub Pinyon Juniper Ponderosa Pine (no ha	Base Year Ten-Year Forecast Base Year Ten-Year Forecast abitat) Base Year	36% 28% 19% 23%	9% 9% 3% 4%	35% 34% 16% 18%	20% 30% 61% 55%
Old Desert Scrub Pinyon Juniper Ponderosa Pine (no ha	Base Year Ten-Year Forecast Base Year Ten-Year Forecast abitat)	36% 28% 19% 23%	9% 9% 3% 4%	35% 34% 16% 18%	20% 30% 61% 55%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast Base Year Ten-Year Forecast abitat) Base Year Ten-Year Forecast	36% 28% 19% 23%	9% 9% 3% 4%	35% 34% 16% 18%	20% 30% 61% 55%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no has Rivers/Rapids (Ripara)	Base Year Ten-Year Forecast Base Year Ten-Year Forecast abitat) Base Year Ten-Year Forecast	36% 28% 19% 23%	9% 9% 3% 4%	35% 34% 16% 18%	20% 30% 61% 55%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha	Base Year Ten-Year Forecast Base Year Ten-Year Forecast abitat) Base Year Ten-Year Forecast	36% 28% 19% 23% 0% 0%	9% 9% 3% 4% 0%	35% 34% 16% 18% 0% 0%	20% 30% 61% 55% 0%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no harmana Rivers/Rapids (Ripara)	Base Year Ten-Year Forecast Base Year Ten-Year Forecast abitat) Base Year Ten-Year Forecast ian Habitat) Base Year	36% 28% 19% 23% 0% 0%	9% 9% 3% 4% 0% 0%	35% 34% 16% 18% 0% 0%	20% 30% 61% 55% 0% 0% 27%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no harmonical Rivers/Rapids (Riparative)  Warm Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  abitat) Base Year Ten-Year Forecast ian Habitat) Base Year Ten-Year Forecast	36% 28% 19% 23% 0% 0% 57% 55%	9% 9% 3% 4% 0% 0% 5% 6%	35% 34% 16% 18% 0% 0% 10% 14%	20% 30% 61% 55% 0% 0% 27% 25%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no harmonic Rivers/Rapids (Riparature)  Warm Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  abitat) Base Year Ten-Year Forecast ian Habitat) Base Year Ten-Year Forecast Base Year	36% 28% 19% 23% 0% 0% 57% 55%	9% 9% 3% 4% 0% 0% 5% 6%	35% 34% 16% 18% 0% 0% 10% 14%	20% 30% 61% 55% 0% 0% 27% 25%
Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no ha  Rivers/Rapids (Ripara  Warm Desert Scrub	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  abitat) Base Year Ten-Year Forecast ian Habitat) Base Year Ten-Year Forecast	36% 28% 19% 23% 0% 0% 57% 55%	9% 9% 3% 4% 0% 0% 5% 6%	35% 34% 16% 18% 0% 0% 10% 14%	20% 30% 61% 55% 0% 0% 27% 25%

Table 23. Summary of wildlife habitat exposed to various average sound levels ( $L_{Aeq12}$ ) in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative.

Marble Canyon	. 15 IDA	. 15 . 25 ID A	. 05 . 05 ID 4	. 25 IDA
Call Daniel Carrel	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub	0.60/	40/	00/	00/
Base Year	96%	4%	0%	0%
Ten-Year Forecast	98%	2%	0%	0%
Old Conifer Forest (no habitat)	00/	00/	00/	00/
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub	020/	70/	00/	00/
Base Year	93%	7%	0%	0%
Ten-Year Forecast	93%	7%	0%	0%
Pinyon Juniper	1000/	00/	00/	00/
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no habitat)		6	0-:	0.5.
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparian Habitat)				
Base Year	99%	1%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (no habitat)				
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
D / D 1				
East End	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub				
Cold Desert Scrub  Base Year	43%	23%	20%	14%
Cold Desert Scrub  Base Year  Ten-Year Forecast				
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest	43% 50%	23% 21%	20% 20%	14%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year	43% 50% 47%	23% 21% 9%	20% 20% 20%	14% 9% 24%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast	43% 50%	23% 21%	20% 20%	14% 9%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub	43% 50% 47% 49%	23% 21% 9% 13%	20% 20% 20% 19%	14% 9% 24% 19%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year	43% 50% 47% 49%	23% 21% 9% 13%	20% 20% 20% 19%	14% 9% 24% 19%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast	43% 50% 47% 49%	23% 21% 9% 13%	20% 20% 20% 19%	14% 9% 24% 19%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper	43% 50% 47% 49% 59% 58%	23% 21% 9% 13% 23% 24%	20% 20% 20% 19% 11%	14% 9% 24% 19% 7% 7%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year	43% 50% 47% 49% 59% 58%	23% 21% 9% 13% 23% 24%	20% 20% 20% 19% 11% 11%	14% 9% 24% 19% 7% 7%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast	43% 50% 47% 49% 59% 58%	23% 21% 9% 13% 23% 24%	20% 20% 20% 19% 11%	14% 9% 24% 19% 7% 7%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine	43% 50% 47% 49% 59% 58% 42% 53%	23% 21% 9% 13% 23% 24% 24% 20%	20% 20% 20% 19% 11% 11% 18% 17%	14% 9% 24% 19% 7% 7% 16% 10%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Base Year	43% 50% 47% 49% 59% 58% 42% 53%	23% 21% 9% 13% 23% 24% 24% 20%	20% 20% 20% 19% 11% 11% 18% 17%	14% 9% 24% 19% 7% 7% 16% 10%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast	43% 50% 47% 49% 59% 58% 42% 53%	23% 21% 9% 13% 23% 24% 24% 20%	20% 20% 20% 19% 11% 11% 18% 17%	14% 9% 24% 19% 7% 7% 16% 10%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)	43% 50% 47% 49% 59% 58% 42% 53% 24% 51%	23% 21% 9% 13% 23% 24% 24% 20% 48% 31%	20% 20% 20% 19% 11% 11% 18% 17%	14% 9% 24% 19% 7% 76 16% 10%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	43% 50% 47% 49% 59% 58% 42% 53% 24% 51%	23% 21% 9% 13% 23% 24% 24% 20% 48% 31%	20% 20% 20% 19% 11% 11% 18% 17% 19% 11%	14% 9% 24% 19% 7% 76 16% 10% 10% 7%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	43% 50% 47% 49% 59% 58% 42% 53% 24% 51%	23% 21% 9% 13% 23% 24% 24% 20% 48% 31%	20% 20% 20% 19% 11% 11% 18% 17%	14% 9% 24% 19% 7% 76 16% 10%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast  Warm Desert Scrub	43% 50% 47% 49% 59% 58% 42% 53% 24% 51% 36% 43%	23% 21% 9% 13% 23% 24% 24% 20% 48% 31% 26% 24%	20% 20% 19% 11% 11% 18% 17% 19% 11%	14% 9% 24% 19% 7% 76 16% 10% 7% 11% 5%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest  Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast  Pinyon Juniper  Base Year Ten-Year Forecast  Ponderosa Pine Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	43% 50% 47% 49% 59% 58% 42% 53% 24% 51%	23% 21% 9% 13% 23% 24% 24% 20% 48% 31%	20% 20% 20% 19% 11% 11% 18% 17% 19% 11%	14% 9% 24% 19% 7% 76 16% 10% 10% 7%

	- 15 JD A	≤1 <i>E →</i> _ 2 <i>E</i> JD A	> 25 ∠_ 25 JD A	< 25 an 4
C-11 D	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub	1000/	00/	00/	00/
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest	0.004	004	201	00/
Base Year	98%	0%	2%	0%
Ten-Year Forecast	97%	0%	3%	0%
Old Desert Scrub				
Base Year	58%	18%	16%	8%
Ten-Year Forecast	55%	21%	17%	8%
Pinyon Juniper				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Rivers/Rapids (Riparian Habitat)	100,0			3,0
Base Year	99%	1%	0%	0%
Ten-Year Forecast	99%	1%	0%	0%
Warm Desert Scrub	9970	1 /0	070	070
Base Year	99%	1%	0%	0%
Ten-Year Forecast	98%	1%	0%	0%
	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dB
Cold Desert Scrub	2604		410/	
Base Year	26%	24%	41%	9%
Base Year Ten-Year Forecast	26% 23%		41% 14%	
Base Year Ten-Year Forecast Old Conifer Forest	23%	24% 29%	14%	9% 15%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year	23% 32%	24% 29% 46%	20%	9% 15% 2%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast	23%	24% 29%	14%	9% 15%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year	23% 32%	24% 29% 46%	20%	9% 15% 2%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast	23% 32%	24% 29% 46%	20%	9% 15% 2%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub	23% 32% 32%	24% 29% 46% 45%	14% 20% 21%	9% 15% 2% 2%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year	23% 32% 32% 57%	24% 29% 46% 45%	14% 20% 21%	9% 15% 2% 2% 4%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast	23% 32% 32% 57%	24% 29% 46% 45%	14% 20% 21%	9% 15% 2% 2% 4%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper	23% 32% 32% 57% 57%	24% 29% 46% 45% 19% 21%	14% 20% 21% 19% 19%	9% 15% 2% 2% 4% 3%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast	23% 32% 32% 57% 57%	24% 29% 46% 45% 19% 21%	14% 20% 21% 19% 19%	9% 15% 2% 2% 4% 3%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year	23% 32% 32% 57% 57% 52% 47%	24% 29% 46% 45% 19% 21% 30% 36%	14% 20% 21% 19% 19% 14% 15%	9% 15% 2% 2% 4% 3% 4% 3%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year	23% 32% 32% 57% 57% 52% 47%	24% 29% 46% 45% 19% 21% 30% 36%	14% 20% 21% 19% 19% 15%	9% 15% 2% 2% 4% 3% 4% 3%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast	23% 32% 32% 57% 57% 52% 47%	24% 29% 46% 45% 19% 21% 30% 36%	14% 20% 21% 19% 19% 14% 15%	9% 15% 2% 2% 4% 3% 4% 3%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)	23% 32% 32% 57% 57% 47% 0% 0%	24% 29% 46% 45% 19% 21% 30% 36% 0%	14% 20% 21% 19% 19% 15% 0% 0%	9% 15% 2% 2% 4% 3% 4% 3% 0%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	23% 32% 32% 57% 57% 67% 60% 60% 57%	24% 29% 46% 45% 19% 21% 30% 36% 0% 0%	14% 20% 21% 19% 19% 15% 0% 0%	9% 15% 2% 2% 4% 3% 4% 3% 0% 0%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	23% 32% 32% 57% 57% 47% 0% 0%	24% 29% 46% 45% 19% 21% 30% 36% 0%	14% 20% 21% 19% 19% 15% 0% 0%	9% 15% 2% 2% 4% 3% 4% 3%
Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	23% 32% 32% 57% 57% 67% 60% 60% 57%	24% 29% 46% 45% 19% 21% 30% 36% 0% 0%	14% 20% 21% 19% 19% 15% 0% 0%	9% 15% 2% 2% 4% 3% 4% 3% 0% 0%

NPS Preferred Alternative – Off-Peak S	easull – L <sub>Aeq12</sub>			
Marble Canyon				
	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest (no habitat)				
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Pinyon Juniper				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no habitat)				
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparian Habitat)				
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (no habitat)				
Base Year	0%	0%	0%	0%
Ten-Year Forecast	0%	0%	0%	0%
East End				
	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub				
Base Year	50%	22%	19%	9%
Ten-Year Forecast	55%	19%	20%	7%
Old Conifer Forest				
Base Year	46%	11%	16%	26%
Ten-Year Forecast	44%	15%	17%	24%
Old Desert Scrub	1.,,	10 / 0	17,7	2.70
Base Year	66%	16%	10%	8%
Ten-Year Forecast	65%	18%	11%	6%
Pinyon Juniper	0370	1070	1170	070
Base Year	54%	21%	17%	8%
Ten-Year Forecast	60%	19%	15%	5%
Ten-Teal Polecast	0070	1970	1370	370
Pandarasa Pina				
	A A 0/.	270/	120/	70/
Base Year	44%	37% 22%	12%	7% 5%
Base Year Ten-Year Forecast	44% 64%	37% 22%	12% 8%	7% 5%
Base Year Ten-Year Forecast <b>Rivers/Rapids (Riparian Habitat)</b>	64%	22%	8%	5%
Base Year Ten-Year Forecast <b>Rivers/Rapids (Riparian Habitat)</b> Base Year	64% 45%	22%	23%	5% 6%
Base Year Ten-Year Forecast <b>Rivers/Rapids (Riparian Habitat)</b> Base Year Ten-Year Forecast	64%	22%	8%	5%
Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)  Base Year  Ten-Year Forecast  Warm Desert Scrub	64% 45% 49%	22% 26% 25%	8% 23% 24%	5% 6% 2%
Base Year Ten-Year Forecast <b>Rivers/Rapids (Riparian Habitat)</b> Base Year Ten-Year Forecast	64% 45%	22%	23%	5% 6%

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Spatial Analysis Results

Appendix F

Central	<= 15 dBA	>15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub	<b>\= 13 ubA</b>	>13 <= 23 UDA	≥23 <= 33 dBA	> 33 ubA
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest	10070	0,0	0,0	070
Base Year	97%	0%	3%	0%
Ten-Year Forecast	97%	0%	3%	0%
Old Desert Scrub	7170	0,0	370	070
Base Year	61%	16%	15%	9%
Ten-Year Forecast	58%	19%	16%	7%
Pinyon Juniper	2070	1770	1070	, , ,
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine	10070			3,3
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Rivers/Rapids (Riparian Habitat)	10070	J / U	O /0	070
Base Year	100%	0%	0%	0%
Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub	10070	070	070	070
Base Year	100%	0%	0%	0%
				0 / 0
Ten-Year Forecast West	100%	0%	0%	0%
West				0% > <b>35 dB</b> A
West Cold Desert Scrub	100% <= <b>15 dBA</b>	0% >15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
West  Cold Desert Scrub  Base Year	100% <= <b>15 dBA</b> 25%	0% >15 <= 25 dBA 22%	>25 <= 35 dBA	> <b>35 dB</b> A
West  Cold Desert Scrub  Base Year  Ten-Year Forecast	100% <= <b>15 dBA</b>	0% >15 <= 25 dBA	>25 <= 35 dBA	> 35 dBA
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest	100% <= <b>15 dBA</b> 25% 23%	0% >15 <= 25 dBA  22% 30%	>25 <= 35 dBA 38% 41%	> <b>35 dB</b> A
Cold Desert Scrub  Base Year Ten-Year Forecast Old Conifer Forest Base Year	100% <= 15 dBA  25% 23%  32%	0% >15 <= 25 dBA  22% 30%  43%	>25 <= 35 dBA  38% 41%	> 35 dBA
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast	100% <= <b>15 dBA</b> 25% 23%	0% >15 <= 25 dBA  22% 30%	>25 <= 35 dBA 38% 41%	> <b>35 dB</b> A
West  Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub	100% <= 15 dBA  25% 23%  32% 32%	0% >15 <= 25 dBA  22% 30%  43% 47%	>25 <= 35 dBA  38% 41%  22% 19%	> 35 dBA 15% 6% 3% 2%
Cold Desert Scrub  Base Year  Ten-Year Forecast  Old Conifer Forest  Base Year  Ten-Year Forecast  Old Desert Scrub  Base Year	100% <= 15 dBA  25% 23%  32% 32% 59%	0% >15 <= 25 dBA  22% 30%  43% 47%	>25 <= 35 dBA  38% 41%  22% 19%	> 35 dBA 15% 6% 3% 2%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub  Base Year Ten-Year Forecast	100% <= 15 dBA  25% 23%  32% 32%	0% >15 <= 25 dBA  22% 30%  43% 47%	>25 <= 35 dBA  38% 41%  22% 19%	> 35 dBA 15% 6% 3% 2%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper	100% <= 15 dBA  25% 23%  32% 32% 59% 59%	0% >15 <= 25 dBA  22% 30%  43% 47%  17% 20%	>25 <= 35 dBA  38% 41%  22% 19%  19% 18%	> 35 dBA 15% 6% 3% 2% 5% 3%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year	100% <= 15 dBA  25% 23%  32% 32% 59% 59% 59%	0% >15 <= 25 dBA  22% 30%  43% 47%  17% 20%	>25 <= 35 dBA  38% 41%  22% 19%  19%  14%	> 35 dBA 15% 6% 3% 2% 5% 3%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast	100% <= 15 dBA  25% 23%  32% 32% 59% 59%	0% >15 <= 25 dBA  22% 30%  43% 47%  17% 20%	>25 <= 35 dBA  38% 41%  22% 19%  19% 18%	> 35 dBA  15% 6%  3% 2%  5% 3%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat)	100% <= 15 dBA  25% 23%  32% 32% 59% 59% 52% 47%	0%  >15 <= 25 dBA  22% 30%  43% 47%  17% 20%  29% 36%	>25 <= 35 dBA  38% 41%  22% 19%  19%  14% 15%	> 35 dBA  15% 6%  3% 2%  5% 3% 6% 2%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year	100% <= 15 dBA  25% 23%  32% 32% 59% 59% 59% 47%	0%  >15 <= 25 dBA  22% 30%  43% 47%  17% 20%  29% 36%  0%	>25 <= 35 dBA  38% 41%  22% 19%  19% 18%  14% 15%	> 35 dBA  15% 6%  3% 2%  5% 3% 6% 2%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast	100% <= 15 dBA  25% 23%  32% 32% 59% 59% 52% 47%	0%  >15 <= 25 dBA  22% 30%  43% 47%  17% 20%  29% 36%	>25 <= 35 dBA  38% 41%  22% 19%  19%  14% 15%	> 35 dBA  15% 6%  3% 2%  5% 3% 6% 2%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat)	100%  <= 15 dBA  25% 23%  32% 32%  59% 59% 47%  0% 0%	0%  >15 <= 25 dBA  22% 30%  43% 47%  17% 20%  29% 36%  0% 0%	>25 <= 35 dBA  38% 41%  22% 19%  19% 18%  14% 15%  0% 0%	> 35 dBA  15% 6%  3% 2%  5% 3% 6% 2%  0% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	100% <= 15 dBA  25% 23%  32% 32% 59% 59% 52% 47%  0% 0% 58%	0%  >15 <= 25 dBA  22% 30%  43% 47%  17% 20%  29% 36%  0% 0%	>25 <= 35 dBA  38% 41%  22% 19%  19% 18%  0% 0% 11%	> 35 dBA 15% 6% 3% 2% 5% 3% 6% 2% 0% 0% 18%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year Ten-Year Forecast	100%  <= 15 dBA  25% 23%  32% 32%  59% 59% 47%  0% 0%	0%  >15 <= 25 dBA  22% 30%  43% 47%  17% 20%  29% 36%  0% 0%	>25 <= 35 dBA  38% 41%  22% 19%  19% 18%  14% 15%  0% 0%	> 35 dBA 15% 6% 3% 2% 5% 3% 6% 2% 0% 0%
Cold Desert Scrub  Base Year Ten-Year Forecast  Old Conifer Forest Base Year Ten-Year Forecast  Old Desert Scrub Base Year Ten-Year Forecast  Pinyon Juniper Base Year Ten-Year Forecast  Ponderosa Pine (no habitat) Base Year Ten-Year Forecast  Rivers/Rapids (Riparian Habitat) Base Year	100% <= 15 dBA  25% 23%  32% 32% 59% 59% 52% 47%  0% 0% 58%	0%  >15 <= 25 dBA  22% 30%  43% 47%  17% 20%  29% 36%  0% 0%	>25 <= 35 dBA  38% 41%  22% 19%  19% 18%  0% 0% 11%	> 35 dBA 15% 6% 3% 2% 5% 3% 6% 2% 0% 0% 18%

Table 24. Summary of wildlife habitat exposed to various percent time audible in the peak and off-peak seasons of the base year and ten-year forecast under the NPS Preferred Alternative.

Marble Canyon		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub			, , , _,	, 1, 1	
	Base Year	92%	2%	4%	2%
	Ten-Year Forecast	98%	2%	0%	0%
Old Conifer Forest (no					
0 1	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub					
	Base Year	99%	1%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Pinyon Juniper	1011 1 011 1 01 00 til	10070	0,0	0,0	0,0
my on oumper	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no hab		10070	<u> </u>	370	0,0
onderosa i me (no nas	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparia)		070	070	070	070
Kiveis/Kapius (Kiparia)	Base Year	98%	1%	1%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (no		10070	0 / 0	070	070
warm Desert Scrub (no	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
	Ten-Tear Porceast	070	070	070	070
East End		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	12%	2%	7%	79%
	Ten-Year Forecast	27%	6%	12%	55%
Old Conifer Forest	1011 1 011 1 01 00 til		0,0	12,0	22,0
old commer 1 orest	Base	2%	0%	1%	97%
	Ten-Year Forecast	14%	6%	16%	64%
Old Desert Scrub	Ten Ten Torceust	1470	070	1070	0-170
Old Describer ab					
	Race Vear	8%	12%	0%	72%
	Base Year	8% 27%	12%	9% 4%	72% 67%
Dinyon Juninor	Base Year Ten-Year Forecast	8% 27%	12% 2%	9% 4%	
Pinyon Juniper	Ten-Year Forecast	27%	2%	4%	67%
Pinyon Juniper	Ten-Year Forecast  Base Year	27% 9%	2%	4% 6%	67% 83%
•	Ten-Year Forecast	27%	2%	4%	67% 83%
•	Ten-Year Forecast  Base Year Ten-Year Forecast	27% 9% 28%	2% 2% 6%	4% 6% 12%	67% 83% 54%
•	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	27% 9% 28%	2% 2% 6% 2%	4% 6% 12%	67% 83% 54% 85%
Ponderosa Pine	Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	27% 9% 28%	2% 2% 6%	4% 6% 12%	67% 83% 54% 85%
Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Ten-Year Forecast	27% 9% 28% 6% 42%	2% 2% 6% 2% 10%	4% 6% 12% 8% 21%	67% 83% 54% 85% 27%
Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat) Base Year	27% 9% 28% 6% 42%	2% 6% 2% 10%	4% 6% 12% 8% 21%	67% 83% 54% 85% 27%
Ponderosa Pine Rivers/Rapids (Riparia	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Ten-Year Forecast	27% 9% 28% 6% 42%	2% 2% 6% 2% 10%	4% 6% 12% 8% 21%	67% 83% 54% 85% 27%
Pinyon Juniper Ponderosa Pine Rivers/Rapids (Riparia Warm Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat) Base Year Ten-Year Forecast	27% 9% 28% 6% 42% 23% 44%	2% 6% 2% 10% 5% 7%	4% 6% 12% 8% 21% 16%	67% 83% 54% 85% 27% 56% 34%
Ponderosa Pine Rivers/Rapids (Riparia	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Habitat) Base Year	27% 9% 28% 6% 42%	2% 6% 2% 10%	4% 6% 12% 8% 21%	67% 83%

Central					
		<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	86%	8%	5%	2%
	Ten-Year Forecast	87%	6%	6%	1%
<b>Old Conifer Forest</b>					
	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Old Desert Scrub					
	Base Year	89%	4%	6%	2%
	Ten-Year Forecast	88%	3%	7%	2%
Pinyon Juniper					
z my om oumper	Base Year	73%	8%	9%	10%
	Ten-Year Forecast	82%	7%	9%	2%
Ponderosa Pine	Ten Ten Torceast	02/0	7 /0	<i>)</i> /0	270
1 onuciosa i ilic	Base Year	73%	5%	9%	13%
	Ten-Year Forecast	73% 99%	1%	9% 0%	0%
Divona/Donida /Dini-		<b>フフ</b> %	1 70	U%	U%
Rivers/Rapids (Riparia		0.60/	10/	10/	10/
	Base Year	96%	1%	1%	1%
	Ten-Year Forecast	97%	1%	1%	0%
Warm Desert Scrub					
	Base Year	50%	11%	18%	21%
	Ten-Year Forecast	53%	10%	16%	20%
West		_		40	
		<= 5	> 5 <= 10	> 10 <= 25	> 25
West  Cold Desert Scrub					
	Base Year	17%	3%	10%	69%
Cold Desert Scrub	Ten-Year Forecast	17% 19%	3% 4%		
Cold Desert Scrub	Ten-Year Forecast <b>AUD data not available for</b>	17% 19% areas outs	3% 4%	10% 9%	69% 68%
Cold Desert Scrub	Ten-Year Forecast	17% 19%	3% 4%	10%	69%
Cold Desert Scrub	Ten-Year Forecast <b>AUD data not available for</b>	17% 19% areas outs	3% 4% side the SFRA)	10% 9%	69% 68%
Cold Desert Scrub	Ten-Year Forecast AUD data not available for Base Year	17% 19% • areas outs 0%	3% 4% side the SFRA) 0%	10% 9% 0%	69% 68%
Cold Desert Scrub  Old Conifer Forest (TA	Ten-Year Forecast AUD data not available for Base Year	17% 19% • areas outs 0%	3% 4% side the SFRA) 0%	10% 9% 0%	69% 68%
Cold Desert Scrub  Old Conifer Forest (TA	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast	17% 19% c areas outs 0% 0%	3% 4% side the SFRA) 0% 0%	10% 9% 0% 0%	69% 68% 0% 0%
Cold Desert Scrub  Old Conifer Forest (TA	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast Base Year	17% 19% • areas outs 0% 0%	3% 4% side the SFRA) 0% 0%	10% 9% 0% 0% 34%	69% 68% 0% 0% 46%
Cold Desert Scrub  Old Conifer Forest (TA	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast Base Year	17% 19% • areas outs 0% 0% 13% 15%	3% 4% side the SFRA) 0% 0%	10% 9% 0% 0% 34% 25%	69% 68% 0% 0% 46% 54%
Cold Desert Scrub  Old Conifer Forest (TA	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year	17% 19% r areas outs 0% 0% 13% 15%	3% 4% side the SFRA) 0% 0% 7% 6%	10% 9% 0% 0% 34% 25%	69% 68% 0% 0% 46% 54%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast	17% 19% • areas outs 0% 0% 13% 15%	3% 4% side the SFRA) 0% 0%	10% 9% 0% 0% 34% 25%	69% 68% 0% 0% 46% 54%
Cold Desert Scrub  Old Conifer Forest (TA	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast Base Year Ten-Year Forecast	17% 19% <b>Fareas outs</b> 0% 0% 13% 15% 35% 38%	3% 4% 4% 5ide the SFRA) 0% 0% 7% 6%	10% 9% 0% 0% 34% 25% 22% 18%	69% 68% 0% 0% 46% 54% 37% 38%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat)  Base Year	17% 19% <b>Fareas outs</b> 0% 0% 13% 15% 35% 38%	3% 4% 4% 5ide the SFRA) 0% 0% 7% 6% 7% 5%	10% 9% 0% 0% 34% 25% 22% 18%	69% 68% 0% 0% 46% 54% 37% 38%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no hal	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat)  Base Year Ten-Year Forecast	17% 19% <b>Fareas outs</b> 0% 0% 13% 15% 35% 38%	3% 4% 4% 5ide the SFRA) 0% 0% 7% 6%	10% 9% 0% 0% 34% 25% 22% 18%	69% 68% 0% 0% 46% 54% 37% 38%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast  m Habitat)	17% 19% Careas outs 0% 0% 13% 15% 35% 38% 0% 0%	3% 4% side the SFRA) 0% 0% 7% 6% 7% 5%	10% 9% 0% 0% 34% 25% 22% 18%	69% 68% 0% 0% 46% 54% 37% 38%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no hal	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast  m Habitat) Base Year	17% 19% c areas outs 0% 0% 13% 15% 35% 38% 0% 0%	3% 4% 4% 5ide the SFRA) 0% 0% 7% 6% 7% 5%	10% 9% 0% 0% 34% 25% 22% 18% 0% 0%	69% 68% 0% 0% 46% 54% 37% 38% 0% 0%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no hal  Rivers/Rapids (Riparia	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast  m Habitat)	17% 19% Careas outs 0% 0% 13% 15% 35% 38% 0% 0%	3% 4% side the SFRA) 0% 0% 7% 6% 7% 5%	10% 9% 0% 0% 34% 25% 22% 18%	69% 68% 0% 0% 46% 54% 37% 38%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no hal	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast  n Habitat) Base Year Ten-Year Forecast  n Habitat Forecast	17% 19% 7 areas outs 0% 0% 13% 15% 35% 38% 0% 0% 59% 60%	3% 4% 4% 5ide the SFRA) 0% 0% 7% 6% 7% 5% 0% 0%	10% 9% 0% 0% 34% 25% 22% 18% 0% 0%	69% 68% 0% 0% 46% 54% 37% 38% 0% 0% 28% 26%
Cold Desert Scrub  Old Conifer Forest (TA  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine (no hal  Rivers/Rapids (Riparia	Ten-Year Forecast AUD data not available for Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  bitat) Base Year Ten-Year Forecast  m Habitat) Base Year	17% 19% c areas outs 0% 0% 13% 15% 35% 38% 0% 0%	3% 4% 4% 5ide the SFRA) 0% 0% 7% 6% 7% 5%	10% 9% 0% 0% 34% 25% 22% 18% 0% 0%	69% 68% 0% 0% 46% 54% 37% 38% 0% 0%

NPS Preferred Alternative	e – Off-Peak Season – '	ΓAUD			
Marble Canyon					
real of Carry of	_	<= 5	> 5 <= 10	> 10 <= 25	> 25
Cold Desert Scrub					
	Base Year	94%	1%	3%	1%
	Ten-Year Forecast	100%	0%	0%	0%
Old Conifer Forest (no ha	,	0.51	0.00	0.1	0.51
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Old Desert Scrub	Dogo Voor	1000/	00/	Ο0/	0%
	Base Year Ten-Year Forecast	100% 100%	0% 0%	0% 0%	0% 0%
Pinyon Juniper	Tell-Teal Folecast	100%	U%0	070	0%
1 myon sumper	Base Year	100%	0%	0%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Ponderosa Pine (no habita		10070		370	370
1 011401 054 1 1110 (110 114010	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
Rivers/Rapids (Riparian I	Habitat)				
• ` •	Base Year	99%	0%	1%	0%
	Ten-Year Forecast	100%	0%	0%	0%
Warm Desert Scrub (no h	abitat)				
	Base Year	0%	0%	0%	0%
	Ten-Year Forecast	0%	0%	0%	0%
East End					
		<= <b>5</b>	> 5 <= 10	> 10 <= 25	> 25
East End Cold Desert Scrub					
	Base Year	17%	5%	21%	57%
Cold Desert Scrub	Base Year Ten-Year Forecast				
	Ten-Year Forecast	17% 34%	5% 9%	21% 21%	57% 36%
Cold Desert Scrub	Ten-Year Forecast  Base Year	17% 34%	5% 9% 0%	21% 21% 1%	57% 36% 98%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast	17% 34%	5% 9%	21% 21%	57% 36%
Cold Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10%	5% 9% 0% 9%	21% 21% 1% 11%	57% 36% 98% 71%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	17% 34% 1% 10%	5% 9% 0% 9% 2%	21% 21% 1% 11%	57% 36% 98% 71%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10%	5% 9% 0% 9%	21% 21% 1% 11%	57% 36% 98% 71%
Cold Desert Scrub  Old Conifer Forest	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28%	5% 9% 0% 9% 2% 4%	21% 21% 1% 11% 5% 4%	57% 36% 98% 71% 70% 64%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	17% 34% 1% 10% 23% 28%	5% 9% 0% 9% 2% 4%	21% 21% 1% 11% 5% 4%	57% 36% 98% 71% 70% 64%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28%	5% 9% 0% 9% 2% 4%	21% 21% 1% 11% 5% 4%	57% 36% 98% 71% 70% 64%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28% 16% 39%	5% 9% 0% 9% 2% 4% 4%	21% 21% 1% 11% 5% 4% 18% 25%	57% 36% 98% 71% 70% 64% 61% 26%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year Ten-Year Forecast  Base Year	17% 34% 1% 10% 23% 28% 16% 39%	5% 9% 0% 9% 2% 4%	21% 21% 1% 11% 5% 4% 18% 25%	57% 36% 98% 71% 70% 64% 61% 26%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper	Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28% 16% 39%	5% 9% 0% 9% 2% 4% 4%	21% 21% 1% 11% 5% 4% 18% 25%	57% 36% 98% 71% 70% 64% 61% 26%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine	Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28% 16% 39%	5% 9% 0% 9% 2% 4% 4%	21% 21% 1% 11% 5% 4% 18% 25%	57% 36% 98% 71% 70% 64% 61% 26%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28% 16% 39% 14% 55%	5% 9% 0% 9% 2% 4% 4% 10%	21% 21% 1% 11% 5% 4% 18% 25% 31% 27%	57% 36% 98% 71% 70% 64% 61% 26% 47% 5%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine	Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28% 16% 39% 14% 55%	5% 9% 0% 9% 2% 4% 4% 10%	21% 21% 1% 11% 5% 4% 18% 25% 31% 27%	57% 36% 98% 71% 70% 64% 61% 26% 47% 5%
Cold Desert Scrub  Old Conifer Forest  Old Desert Scrub  Pinyon Juniper  Ponderosa Pine  Rivers/Rapids (Riparian I	Ten-Year Forecast  Base Year Ten-Year Forecast	17% 34% 1% 10% 23% 28% 16% 39% 14% 55%	5% 9% 0% 9% 2% 4% 4% 10%	21% 21% 1% 11% 5% 4% 18% 25% 31% 27%	57% 36% 98% 71% 70% 64% 61% 26% 47% 5%

Second Desert Scrub	Central					
Base Year   93%   5%   2%   0%   70%			<= 5	> 5 <= 10	> 10 <= 25	> 25
Ten-Year Forecast	Cold Desert Scrub					
Base Year   100%   0%   0%   0%   0%   0%   0%		Base Year	93%	5%	2%	0%
Base Year		Ten-Year Forecast	89%	6%	5%	0%
Ten-Year Forecast   100%   0%   0%   0%   0%   0%   0%	Old Conifer Forest					
Old Desert Scrub           Base Year         90%         5%         4%         1%           Pinyon Juniper           Base Year         87%         6%         6%         1%           Ponderosa Pine           Base Year         94%         4%         3%         0%           Ten-Year Forecast         100%         0%         0%         0%           Rivers/Rapids (Riparian Habitat)         8ase Year         98%         1%         1%         0%           Rivers/Rapids (Riparian Habitat)         7en-Year Forecast         98%         1%         1%         0%           Warm Desert Scrub         Base Year         57%         9%         15%         19%           West         <=5		Base Year	100%	0%	0%	0%
Base Year   90%   5%   4%   1%   1%   7en-Year Forecast   89%   3%   6%   1%   1%   7en-Year Forecast   89%   3%   6%   6%   1%   7en-Year Forecast   85%   8%   6%   6%   1%   7en-Year Forecast   85%   8%   6%   6%   1%   7en-Year Forecast   85%   8%   6%   6%   1%   7en-Year Forecast   100%   0%   0%   0%   0%   0%   0%		Ten-Year Forecast	100%	0%	0%	0%
Ten-Year Forecast   89%   3%   6%   1%	Old Desert Scrub					
Pinyon Juniper   Base Year   87%   6%   6%   1%   1%   1%   1%   1%   1		Base Year	90%	5%	4%	1%
Pinyon Juniper   Base Year   87%   6%   6%   1%   1%   16   16   16   1		Ten-Year Forecast	89%	3%	6%	1%
Base Year   87%   6%   6%   1%     Ten-Year Forecast   85%   8%   6%   6%   1%     Ponderosa Pine	Pinvon Juniper					
Ponderosa Pine   Sase Year	, , , , , , , , , , , , , , , , , , , ,	Base Year	87%	6%	6%	1%
Ponderosa Pine						
Base Year   94%   4%   3%   0%   7en-Year Forecast   100%   0%   0%   0%   0%   0%   0%	Ponderosa Pine	Ton Ton Torough	32 /0			1,0
Ten-Year Forecast   100%   0%   0%   0%   0%   0%   1%   1	- VALUE ON A HILL	Base Year	94%	4%	3%	0%
Base Year   98%   1%   1%   0%   0%   7en-Year Forecast   98%   1%   1%   0%   0%   0%   0%   0%   0						
Base Year   98%   1%   1%   0%   7en-Year Forecast   98%   1%   1%   0%   0%	Rivers/Ranids (Ringrian		10070	0 /0	0 /0	0 /0
Warm Desert Scrub         Base Year         57%         9%         15%         19%           West         56%         12%         14%         18%           West           <= 5 > 5 <= 10	Mivers/Kapius (Miparian		08%	10%	10%	Λ0/6
Base Year   57%   9%   15%   19%   18%						
Base Year   57%   9%   15%   19%   18%	Warm Dagart Camb	Tell-Teal Folecast	96%	1 70	1 70	0%
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Section   Sect						
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## APPENDIX G PROJECTS CONSIDERED IN CUMULATIVE ANALYSIS

Overall, cumulative impact analysis identifies to what extent each Alternative would contribute to the combined effect of Alternative and other past, present, or reasonably foreseeable future actions. To the extent appropriate, impact criteria, including NPS impact intensity thresholds used in assessing direct and indirect impacts were also used in assessing cumulative effects.

**Historic Railroad Depot Rehabilitation** A 2008 historic structures report (NPS 2008f) provided specific treatment recommendations for structure rehabilitation. Major interior and exterior building improvements are anticipated in 2013 and 2014, including repairs to nonfunctioning restrooms and accessibility upgrades. Due to drainage problems on the building's north side, the paved lane adjacent to the building may be removed to regrade and facilitate drainage away from the building.

**South Rim Visitor Transportation Plan**The plan's purpose is to provide a transportation system addressing the park's most pressing transportation issues through 2020. The plan accommodates current and anticipated South Rim visitation levels, facilitates enhanced visitor experiences, and protects park resources. The plan includes constructing new parking areas near the visitor center, expanding shuttle bus service from Tusayan, expanding shuttle bus transit in the Village and to Hermits Rest, and South Entrance Station improvements such as additional vehicle lanes and tour bus management (NPS 2008e).

**Bright Angel Trailhead Area Design Plan** Actions include developing a plaza near the primary trailhead, enhancing trail connections and wayfinding, constructing a new restroom near the proposed plaza and existing mule corral, and improving parking area vehicle circulation. Future phases could include hardening the parking surface and delineating parking spaces, additional revegetating and landscaping, and enhancing wayfinding and interpretive signs.

Concessions Environmental Assessment The contract to provide most hospitality services (including lodging, retail sales, food services, mule rides, and some tours) expires in 2011. While most primary services will continue as they currently exist, the new prospectus may call for some employee dormitories to be converted to visitor lodging, associated development of replacement employee housing, construction of new employee dining and lounge facilities, construction of new maintenance and/or warehouse facilities, and construction of a composting and greenhouse facility/facilities.

**Science and Resource Management Building** Grand Canyon is proposing to construct a new building for the park's science and resource management staff adjacent to the magistrate's office, across from ranger operations building, during the years 2010 to 2012.

**Supai Camp Improvements** This camp is a small housing area for Havasupai Tribe members, who used Grand Canyon for millennia before Euro-American settlement. Currently in poor condition without most basic utilities, Grand Canyon is proposing to upgrade existing facilities and construct additional new lodging units, during 2010-2011.

Greenway Trail Phase III (Greenway III) When complete, this approximately seven-mile segment of Greenway Trail will provide a pedestrian/bicycle/equestrian trail from the community of Tusayan to Grand Canyon Visitor Center. This trail will provide an alternate option for non-motorized access into the park (NPS 2008e). The trail will be designated as the Arizona Trail into the park for hikers, cyclists, and equestrians. Once incorporated into the park's overall trail system, it will be routinely patrolled by park rangers. Construction began on a small trail section near the Grand Canyon Visitor Center but has stalled due to a lack of funds. Construction will resume with South Rim Visitor Transportation Plan implementation. New ground disturbance is estimated at approximately four acres.

Greenway Trail Phase V (Greenway V)

The National Park Service proposes to construct an approximately one-mile paved trail from Pipe Creek Vista, an overlook along Desert View Drive, to South Kaibab Trailhead. Completion of this trail segment would connect the paved Rim Trail from Mather Point to South Kaibab Trailhead. The majority of the trail alignment would use existing disturbed corridors to minimize new ground disturbance. Pipe Creek Vista and South Kaibab Trailhead are both accessible by shuttle bus, and Pipe Creek Vista also provides some vehicular parking. Project scope includes reconfiguring overlook parking for enhanced safety and adequate room for the trail to cross the overlook area; creation of an accessible path from South Kaibab Trailhead parking area to the trailhead itself with improved site amenities; and identification of a connector trail between South Entrance Road and the project area for Arizona Trail users, bicyclists, and equestrians.

Appendix G G-1 Projects Considered

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**Hermit Road Rehabilitation** This seven-mile, narrow, historic roadway connecting Grand Canyon Village to Hermits Rest will be widened and rehabilitated to accommodate current levels of shuttle bus and tour bus traffic. This project also includes repair and upgrades to multiple overlook parking areas and construction of an approximately three-mile multimodal greenway trail between the Abyss (a popular overlook) and Hermits Rest.

**Relocation of Stock Camp to Mather Campground** A project is underway to relocate the South Rim stock camp for private stock users from the NPS housing and maintenance area near Juniper Hill to Mather Campground. The Juniper Hill private stock camp is difficult for visitors to locate, has no permanent restroom facility or water source, no delineated boundaries, and is not easily accessible to other visitor facilities. New paneling, stalls, water troughs, feed bins, and manure dumpster will be located in the campsites being developed at Mather Campground. The project is expected to be completed in 2011.

 Backcountry Management Plan The National Park Service is planning to initiate the process to revise the 1988 Backcountry Management Plan to comply with the 1995 General Management Plan and NPS Management Policies 2006. The plan's scope is under consideration, but is expected to include visitor use and backcountry access, natural and cultural resource stewardship, and proposed Wilderness. The plan will complement other recently completed plans such as the Colorado River Management Plan and Fire Management Plan. It is expected that corridor trails (Bright Angel, South Kaibab, and North Kaibab) will be included in the plan.

Fire Management Plan The National Park Service completed a Record of Decision for the final Environmental Impact Statement for the Fire Management Plan in 2010. The updated plan was completed to comply with NPS Management Polices, the 1995 General Management Plan, and NPS wildland fire policy directives. The plan defined new fire management units and includes suppression, wildland fire use, prescribed fire, and non-fire treatments, with additional options of manual hazard fuel techniques and mechanical thinning in the wildland-urban interface areas. This plan will ensure the park can better manage forest resources and enhance protection of unique natural and cultural resources.

Mule Operations and Stock Use Plan An EA released March 2010 establishes appropriate park stock use levels to address maintenance and operations to reduce conflicts between trail users while continuing to provide opportunities for stock use to as large a cross section of visitors as practicable. The EA proposes reducing the annual number of commercial mule rides into the canyon from both North and South Rim, and proposes increasing the number of mule rides available above the rim. Minor changes are also proposed for private stock users, including a limit of six head of stock and six persons at inner canyon campsites. Monitoring, increased education, continued trail maintenance, and use of an adaptive management strategy are also proposed. A decision document for this project is anticipated in 2010.

In addition to these plans, the following ongoing management activities within the park may contribute to the cumulative effects on resources

**Exotic Plant Management Activities** Exotic plant management is an ongoing activity throughout the park and includes integrated pest management to treat high-priority invasive, nonnative plant species. Treatments include cultural, manual, mechanical, and chemical controls.

**Routine Trails Maintenance** Maintenance of all park trails is ongoing.

**Borrow Pit Use** Trail materials, dirt, and rock required to maintain Grand Canyon trails are taken from borrow pits in the Inner Canyon and active drainages near trails.

Appendix G G-2 Projects Considered

National Park Service U.S. Department of the Interior



Grand Canyon National Park P.O. Box 129 Grand Canyon, Arizona 86023