



# APPENDIX B.

## ECOLOGICAL INTEGRITY AND SOCIOECONOMIC RESILIENCY RATINGS BY SUBBASIN AND COUNTY.

This Appendix presents the subbasin ecological integrity ratings for each of the component systems (forest, rangeland, aquatic, rangeland hydrology, and forest hydrology) as well as the composite integrity rating. Each of the 164 subbasins was rated for aquatic and composite ecological integrity. Ecological integrity ratings were developed for forest (range) systems if the subbasin had at least 20 percent of its area in forested (range) vegetation types. Subbasins were grouped into clusters based on similarities in ecological conditions and characteristics. Clusters were developed for forested systems and rangeland systems.

Figure B-1 shows the distribution of the subbasins within the Basin and figure B-2 shows the distribution of the counties within the Basin.

Table B-1 contains the integrity ratings for each subbasin, and they are also identified by name and number. See Sedell and others (in preparation) for details on how these ratings were determined. Briefly, integrity ratings reflect the relative level of ecological functions and processes that are present and operating within a subbasin, relative to the Basin. Thus, relative to the Basin as a whole, a subbasin with high ecological integrity would have more ecological functions and processes effective than a subbasin with a low rating. Proxies were used to estimate such elements of integrity as: consistency of tree stocking level with long-term disturbance processes; amount and distribution of exotic species; absence or presence of wildfire and its effect on composition and pattern of forest types; changes in fire severity and frequency from historical (pre-1800s) to the present; expansion of woodlands into herblands and shrublands; disruption of hydrologic regimes; and, the full expression of potential life histories. Composite integrity ratings reflect the ecological integrity of the subbasin based on its component integrity.

Table B-2 contains the assignment of counties (fig. B-2) by typology and resiliency ratings for each county. See Haynes and Horne (in press) for details of how these ratings were developed. Briefly, the economic resiliency ratings were developed where high, medium, and low resiliency meant that a county was in the top, middle, or bottom third of the counties nationally, based on employment diversity. Social resiliency was defined using population density and how a county ranked relative to the average for the Basin and the United States. Lifestyle diversity was defined by the top, middle, and bottom thirds of the counties in the Basin. Socioeconomic resiliency was defined as the linear summation of the ratings (where the ratings were converted to point scores) for economic and social resiliency, and lifestyle diversity. High, medium, and low ratings were assigned based on ranges of point scores.

Table B-3 contains the long-term trends in risks to ecological integrity for each subbasin by management option. See Quigley and others (1996) for details of how these ratings were developed. Briefly, long-term trends in ecological integrity were developed for each management option based on a set of indices reflecting forest and rangeland vegetation, riparian management, and management of road densities. Values assigned reflect either decreasing (-1), stable (0), or increasing (+1) trends for each index. Composite trends represent the summation of the three indices for each subbasin. Thus, composite trends ranged in value from -3 to +3. Trends in risks to ecological integrity were estimated using a rule set that related population density to forest, non-forest, and agricultural wildland vegetation groups. Generally, higher risk was associated with forested vegetation groups and areas of high population density.

- Haynes, Richard W.; Horne, Amy L.** 1996. Chapter 6: Economic Assessment of the Interior Columbia Basin. In: Quigley, T.M.; Arbelbide, S.J., tech. eds. An Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins. Gen. Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. [irregular pagination]. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).
- Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds.** 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen. Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. [irregular pagination]. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).
- Sedell, Jim; Lee, Danny; Hessburg, Paul [and others]** [in prep.]. Ecological integrity in the Interior Columbia Basin. On file with: U.S. Department of Agriculture, Forest Service, U.S. Department of Interior, Bureau of Land Management, Interior Columbia Basin Ecosystem Management, 112 E. Poplar, Walla Walla, WA 99362.

Table B-1—Integrity ratings for each subbasin within the Interior Columbia Basin Project area.

-----Subbasin-----		---Cluster #---		-----Integrity Ratings -----					
ID #	Name	Forest	Range	Forest	Range	Aquatic	Hydrology (Forest)	Hydrology (Range)	Composite Ecological
1	Alvord Lake		5		M	M		L	M
2	American Falls		6		L	L			L
3	Banks Lake		4		L	L		M	L
4	Beaver-Camas	6	6	M	L	L	L	H	L
5	Beaver-South Fork		1		L	L		H	L
6	Big Lost	6	5	H	M	L	H	L	L
7	Big Wood	6	6	H	M	M	M	H	L
8	Birch		5		M	L		M	M
9	Bitterroot	3	3	M		M	M		M
10	Blackfoot	3	3	M		M	L		M
11	Blackfoot		6		L	M			L
12	Boise-Mores	5	3	L		L	M		L
13	Brownlee Reservoir	6	5	M	M	L	L	L	L
14	Bruneau		5		M	M		M	M
15	Bully		6		L	L		H	L
16	Burnt	5	6	L	L	L	L	H	L
17	Butte	5	3	L		L	H		L
18	C. J. Strike Reservoir		6		L	L		M	L
19	Camas		6		M	L	L	H	L
20	Chief Joseph	6	4	M	L	L	L	M	L
21	Clearwater	3	3	L		M	L		M
22	Coeur d'Alene Lake	4		L		L	M		L
23	Colville	6	3	L		L	L		L
24	Crooked-Rattlesnake		6		M	L		L	M
25	Donner Und Blitzen		5		L	M		L	M
26	East Little Owyhee		5		H	L		L	M
27	Fisher	4		L		L	M		L
28	Flathead Lake	4	3	L		L	M		L
29	Flint-Rock	2	3	M		H	M		H
30	Franklin D.Roosevelt Lake	6	3	L		L	L		L
31	Goose		5		L	L		L	M
32	Goose Lake	5	1	L	L	M	L		L
33	Greys-Hobock	1	5	H	H	H	H		H
34	Gros Ventre	1	3	H		H	H		H
35	Guano		6		M	M		H	M
36	Hangman	6	3	L		L	L		L
37	Harney-Malheur Lakes		6		L	L		H	L
38	Hells Canyon	2	2	M	M	H	H	L	M
39	Idaho Falls		6		L	L			L
40	Imnaha	2	5	M	L	H	H	L	H
41	Jordan		6		L	L		L	M
42	Kettle	4	3	L		L	L		L
43	Klickitat	3	3	L		H	M		M
44	Lake Abert	5	6	M	L	L	H		L
45	Lake Chelan	1	2	H		M	H		H
46	Lake Walcott		6		L	L		H	L
47	Lemhi	2	5	H	M	M	M	L	H

-----Subbasin-----		---Cluster #---		-----Integrity Ratings -----					
ID #	Name	Forest	Range	Forest	Range	Aquatic	Hydrology (Forest)	Hydrology (Range)	Composite Ecological
48	Little Deschutes	5	3	L		L	M		L
49	Little Lost		5		H	M		L	M
50	Little Salmon	3	3	L		M	M		M
51	Little Spokane	6	3	L		L	L		L
52	Little Wood		6		L	L		H	L
53	Lochsa	2		L		M	H		H
54	Lost	5	1	L	L	L	L	M	L
55	Lower Boise		6		L	L		H	L
56	Lower Clark Fork	4		L		L	H		L
57	Lower Crab		4		L	L		H	L
58	Lower Crooked	6	1	L	L	L	M	M	L
59	Lower Deschutes	5	1	L	L	M	M	L	L
60	Lower Flathead	6	3	L		L	L		L
61	Lower Grande Ronde	5	6	L	L	H	L	M	M
62	Lower Henrys	6	6	H	L	L	L		L
63	Lower John Day		1		L	M		M	L
64	Lower Kootenai	4		L		L	M		L
65	Lower Malheur		6		L	L		H	L
66	Lower Middle Fork Salmon	1	2	H		H	H		H
67	Lower North Fork Clearwater	4	3	L		M	M		L
68	Lower Owyhee		6		M	L		M	M
69	Lower Salmon	3	3	L		M	L		M
70	Lower Selway	2	2	M		M	H		H
71	Lower Snake		4		L	L		M	L
72	Lower Snake-Asotin	3	4	L	L	L	L	L	M
73	Lower Snake-Tucannon		4		L	L		M	L
74	Lower Spokane	6	3	L		L	L		L
75	Lower Yakima		4		L	L		M	L
76	Medicine Lodge	6	6	H	M	L	L	H	L
77	Methow	2	2	M		M	M		H
78	Middle Clark Fork	4		L		M	M		L
79	Middle Columbia-Hood	3	3	L		M	L		M
80	Middle Columbia-Lake Wallula		4		L	L		M	L
81	Middle Fork Clearwater	3	3	L		M	L		M
82	Middle Fork Flathead	1		H		M	H		H
83	Middle Fork John Day	5	6	L	L	M	M	M	L
84	Middle Fork Payette	6	3	L		L	M		L
85	Middle Owyhee		5		M	M		L	M
86	Middle Salmon-Chamberlain	2	2	H		H	H		H
87	Middle Salmon-Panther	2	5	H	M	M	H	L	H
88	Middle Snake-Payette		6		L	L		H	L
89	Middle Snake-Succor		5		L	L		M	M
90	Moses Coulee		4		L	L		M	L
91	Moyie	4		L		L	H		L
92	Naches	2	2	M		H	H		H
93	North And Middle Fork Boise	2	3	H		M	M		H
94	North Fork Flathead	1		H		M	H		H
95	North Fork John Day	5	3	L		M	M		L
96	North Fork Payette	6	3	L		L	L		L
97	Okanogan	6	4	L	L	L	L	L	L

-----Subbasin-----		---Cluster #---		-----Integrity Ratings -----					
ID #	Name	Forest	Range	Forest	Range	Aquatic	Hydrology (Forest)	Hydrology (Range)	Composite Ecological
98	Pahsimeroi	2	5	H	H	M	H	L	H
99	Palisades	2	5	H	H	M	H		H
100	Palouse		4		L	L		M	L
101	Payette	6	6	L	L	L	L	H	L
102	Pend Oreille	4		L		L	L		L
103	Pend Oreille Lake	4	3	L		M	H		L
104	Portneuf		6		L	M			L
105	Powder	5	3	L		L	L		L
106	Priest	4		L		L	M		L
107	Raft		6		L	L		M	L
108	Rock		4		L	L		H	L-NoOwn
109	Salmon Falls		5		M	L		L	M
110	Salt	6	3	H		M	M		L
111	Sanpoil	4	3	L		L	L		L
112	Silver		6		L	L		H	L
113	Silvies	5	6	L	L	L	M	H	L
114	Similkameen	1	2	H		L	M		H
115	Snake Headwaters	1	2	H		H	H		H
116	South Fork Boise	2	5	M	L	M	M	L	H
117	South Fork Clearwater	3	3	L		M	M		M
118	South Fork Coeur d'Alene	4		L		L	L		L
119	South Fork Flathead	1	2	H		H	H		H
120	South Fork Owyhee		5		H	L		L	M
121	South Fork Payette	2	3	H		M	H		H
122	South Fork Salmon	2	3	H		M	H		H
123	Sprague	5	3	L		M	H		L
124	St. Joe	4		L		M	H		L
125	Stillwater	4		L		L	M		L
126	Summer Lake	5	6	M	L	L	H		L
127	Swan	3		L		M	H		M
128	Teton	6	6	M	L	M	L		L
129	Thousand-Virgin		5		M	M		H	M
130	Trout		1		L	M		H	L
131	Umatilla	5	4	L	L	M	L	M	L
132	Upper Clark Fork	5	3	L		L	L		L
133	Upper Coeur d'Alene	4		L		M	H		L
134	Upper Columbia-Entiat	4	5	M	L	L	M	L	M
135	Upper Columbia-Priest Rapids			4		L	L		M L
136	Upper Crab		4		L	L		M	L
137	Upper Crooked	5	1	L	L	L	L	H	L
138	Upper Deschutes	4	3	L		L	H		M
139	Upper Grande Ronde	5	3	L		M	L		L
140	Upper Henrys	4	6	H	M	M	M		M
141	Upper John Day	5	1	L	L	M	M	M	L
142	Upper Klamath	5	3	L		L	H		L
143	Upper Klamath Lake	3	3	M		L	M		L
144	Upper Kootenai	4		L		M	M		L
145	Upper Malheur	5	6	M	L	L	M	M	L

-----Subbasin-----		---Cluster #---		-----Integrity Ratings -----					
ID #	Name	Forest	Range	Forest	Range	Aquatic	Hydrology (Forest)	Hydrology (Range)	Composite Ecological
146	Upper Middle Fork Salmon	1		H		H	H		H
147	Upper North Fork Clearwater	4		M		M	M		L
148	Upper Owyhee		5		H	M		M	M
149	Upper Quinn		5		M	L		L	M
150	Upper Salmon	1	5	H	M	M	H	L	H
151	Upper Selway	2	2	H		H	H		H
152	Upper Snake-Rock		6		L	L		H	L
153	Upper Spokane	6	3	L		L	L		L
154	Upper Yakima	3	5	L	L	M	M	L	M
155	Walla Walla		4		L	M	L	M	L
156	Wallowa	2	2	L		H	L		H
157	Warner Lakes		6		M	L		H	M
158	Weiser	6	6	L	L	L	L	H	L
159	Wenatchee	2	2	M		H	H		H
160	Williamson	5	3	L		M	M		L
161	Willow	5	6	L	L	M	M		L
162	Willow		6		L	L		H	L
163	Willow		4		L	L		M	L
164	Yaak	4		L		M	H		L

H = high integrity rating

M = medium integrity rating

L = low integrity rating

NoOwn = no BLM/FS ownership in subbasin

1,2,3,4,5,6 indicate forest or rangeland cluster numbers

Sources: Quigley, T.M.; Arbelbide, S.J., tech. eds. 1996. An Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins. Gen. Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. [irregular pagination]. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen. Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. [irregular pagination]. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem).

Table B-2—Social and economic resiliency ratings for each county within the Interior Columbia Basin Project area.

County	State	Typology	Economic Resiliency	Social Resiliency	Lifestyle Diversity	Socioeconomic Resiliency
Ada	ID	Metropolitan	H	H	H	H
Adams	WA	Other	L	L	M	L
Adams	ID	Other	L	L	L	L
Asotin	WA	Other	M	M	H	H
Baker	OR	Other	M	M	H	M
Bannock	ID	Other	M	M	H	H
Benewah	ID	Recreation	L	L	M	L
Benton	WA	Metropolitan	M	M	H	H
Bingham	ID	Other	L	L	H	M
Blaine	ID	Recreation	M	M	M	L
Boise	ID	Other	L	L	M	L
Bonner	ID	Recreation	H	H	H	H
Bonneville	ID	Other	M	M	H	H
Boundary	ID	Other	M	M	L	L
Box Elder	UT	Other	L	L	L	L
Butte	ID	Other	L	L	L	L
Camas	ID	Recreation	L	L	L	L
Canyon	ID	Metropolitan	H	H	H	H
Caribou	ID	Other	L	L	L	L
Cassia	ID	Other	M	M	M	M
Chelan	WA	Recreation	H	H	H	H
Clark	ID	Other	L	L	L	L
Clearwater	ID	Other	L	L	M	L
Columbia	WA	Other	L	L	L	L
Crook	OR	Other	L	L	H	L
Custer	ID	Recreation	L	L	L	L
Deer Lodge	MT	Other	L	L	M	M
Deschutes	OR	Recreation	H	H	H	H
Douglas	WA	Other	L	L	H	M
Elko	NV	Recreation	L	L	L	L
Elmore	ID	Other	L	L	M	L
Ferry	WA	Other	L	L	M	L
Flathead	MT	Recreation	H	H	H	H
Franklin	WA	Metropolitan	M	M	H	H
Fremont	WY	Recreation	M	M	L	L
Fremont	ID	Other	L	L	M	L
Garfield	WA	Other	L	L	L	L
Gem	ID	Other	M	M	M	M
Gilliam	OR	Other	L	L	L	L
Gooding	ID	Other	M	M	L	M

County	State	Typology	Economic Resiliency	Social Resiliency	Lifestyle Diversity	Socioeconomic Resiliency
Granite	MT	Other	L	L	L	L
Grant	OR	Other	L	L	M	L
Grant	WA	Other	M	M	M	M
Harney	OR	Other	L	L	M	L
Hood River	OR	Recreation	H	H	M	H
Humboldt	NV	Recreation	L	L	L	L
Idaho	ID	Other	M	M	M	L
Jefferson	ID	Other	L	L	M	M
Jefferson	OR	Other	M	M	M	M
Jerome	ID	Other	M	M	M	M
Kittitas	WA	Other	L	L	H	M
Klamath	OR	Other	H	M	H	H
Klickitat	WA	Other	L	L	H	M
Kootenai	ID	Recreation	H	H	H	H
Lake	OR	Other	L	L	M	L
Lake	MT	Other	M	M	M	M
Latah	ID	Other	L	L	M	M
Lemhi	ID	Recreation	M	M	L	L
Lewis	ID	Other	L	L	L	L
Lewis and Clark	MT	Recreation	M	M	H	H
Lincoln	ID	Other	L	L	L	L
Lincoln	MT	Other	M	M	M	L
Lincoln	WY	Other	M	M	L	L
Lincoln	WA	Other	L	L	L	L
Madison	ID	Other	L	M	L	M
Malheur	OR	Other	L	L	M	L
Mineral	MT	Other	L	L	L	L
Minidoka	ID	Other	L	L	M	M
Missoula	MT	Other	H	H	H	H
Morrow	OR	Other	L	L	L	L
Nez Perce	ID	Other	H	H	H	H
Okanogan	WA	Recreation	L	L	M	L
Oneida	ID	Other	L	L	L	L
Owyhee	ID	Other	L	L	L	L
Payette	ID	Other	M	M	M	H
Pend Oreille	WA	Other	M	M	L	L
Powell	MT	Other	L	L	M	L
Power	ID	Other	L	L	L	L
Ravalli	MT	Other	L	L	M	M
Sanders	MT	Other	M	M	L	L
Sherman	OR	Other	L	L	L	L
Shoshone	ID	Other	L	L	L	L
Silver Bow	MT	Other	L	M	H	H



County	State	Typology	Economic Resiliency	Social Resiliency	Lifestyle Diversity	Socioeconomic Resiliency
Skamania	WA	Other	L	L	M	L
Spokane	WA	Metropolitan	H	H	H	H
Stevens	WA	Other	H	H	M	H
Sublette	WY	Recreation	M	M	L	L
Teton	ID	Recreation	L	L	L	L
Teton	WY	Recreation	L	L	L	L
Twin Falls	ID	Other	H	H	H	H
Umatilla	OR	Other	H	H	H	H
Union	OR	Other	M	M	H	H
Valley	ID	Recreation	M	M	L	L
Walla Walla	WA	Other	H	H	H	H
Wallowa	OR	Other	M	M	L	L
Wasco	OR	Recreation	M	M	H	M
Washington	ID	Other	M	M	L	L
Wheeler	OR	Other	L	L	L	L
Whitman	WA	Other	L	L	M	M
Yakima	WA	Metropolitan	H	H	H	H

H = high resiliency rating

M = medium resiliency rating

L = low resiliency rating

Sources: Quigley, T.M.; Arbelbide, S.J., tech. eds. 1996. An Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins. Gen. Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. [irregular pagination]. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

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Table B-3—Long-term trends in ecological integrity and risks projected for each subbasin within the Interior Columbia Basin Project area.

ID #	Subbasin Name	Index												Trends in Risks to Ecological Integrity										
		Option 1				Option 2				Option 3				Option 1	Option 2	Option 3								
		Veg	Rip	Road	Comp	Veg	Rip	Road	Comp	Veg	Rip	Road	Comp	Comp	Rip	Road	Comp							
1	Alvord Lake	-1	-1	0	-2	1	1	0	2	0	1	0	1	0	1	0	1	0	-1	-1	0	-1		
2	American Falls	-1	-1	0	-2	0	1	0	1	0	1	0	0	1	1	0	0	1	0	0	0	0	+1	
3	Banks Lake	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	0	0	1	0	0	0	0	+1	
4	Beaver-Camas	-1	-1	-1	-3	0	1	0	1	0	1	0	0	1	1	0	0	0	1	0	0	0	+1	
5	Beaver-South Fork	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	-1	
6	Big Lost	-1	-1	-1	-3	0	1	0	1	0	1	0	0	1	1	0	0	0	1	0	0	0	0	
7	Big Wood	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	+1	
8	Birch	-1	-1	0	-2	1	1	0	2	0	1	0	1	0	1	0	1	0	0	-1	-1	0	-1	
9	Bitterroot	-1	-1	-1	-3	1	1	1	1	-1	1	1	1	1	1	1	3	1	1	0	0	0	0	
10	Blackfoot	-1	-1	-1	-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	+1	
11	Blackfoot	-1	-1	0	-2	-1	1	0	0	-1	1	0	1	0	0	0	0	0	0	0	0	0	0	+1
12	Boise-Mores	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	+1
13	Brownlee Reservoir	-1	-1	-1	-3	0	1	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	+1	
14	Bruneau	-1	-1	0	-2	1	1	0	2	0	1	0	1	0	1	0	1	0	0	-1	-1	0	-1	
15	Bully	-1	-1	0	-2	0	1	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	0	
16	Burnt	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	+1	
17	Butte	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	+1	
18	C. J. Strike Reservoir	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	
19	Camas	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	+1	
20	Chief Joseph	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	+1	
21	Clearwater	-1	-1	-1	-3	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	+1	
22	Coeur d'Alene Lake	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	+1	
23	Colville	-1	-1	-1	-3	0	1	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	+1	
24	Crooked-Rattlesnake	-1	-1	0	-2	1	1	0	2	1	1	1	1	1	1	2	2	1	0	0	0	0	-1	
25	Donner Und Blitzen	-1	-1	0	-2	1	1	0	2	0	1	0	1	0	1	0	1	0	1	0	0	0	-1	
26	East Little Owyhee	-1	-1	0	-2	1	1	0	2	0	1	0	1	0	1	0	1	0	1	0	0	0	-1	
27	Fisher	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	0	
28	Flathead Lake	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	
29	Flint-Rock	-1	-1	-1	-3	1	1	1	1	1	1	1	1	1	1	2	2	1	0	0	0	0	+1	
30	Franklin D. Roosevelt Lake	-1	-1	-1	-3	0	1	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	+1	
31	Goose	-1	-1	0	-2	1	1	0	2	1	1	1	1	1	1	2	2	1	0	0	0	0	-1	
32	Goose Lake	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	0	
33	Greys-Hobcock	-1	-1	-1	-3	1	1	1	1	1	1	1	1	1	1	2	2	1	0	0	0	0	-1	
34	Gros Ventre	0	-1	0	-1	1	1	0	2	0	1	0	1	0	1	0	1	1	1	0	1	1	-1	
35	Guano	-1	-1	0	-2	1	1	0	2	1	1	1	1	1	1	2	2	1	0	0	0	0	-1	
36	Hangman	-1	-1	0	-2	1	1	0	2	1	1	1	1	1	1	2	2	1	0	0	0	0	-1	
37	Harney-Malheur Lakes	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	+1	
38	Hells Canyon	-1	-1	0	-2	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	-1	
39	Idaho Falls	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	+1	

Subbasin	Index												Trends in Risks to Ecological Integrity								
	Option 1						Option 2						Option 3								
	Veg	Rip	Road	Comp	Veg	Integrity	Veg	Rip	Road	Comp	Veg	Integrity	Veg	Rip	Road	Comp	Veg	Integrity	Option 1	Option 2	Option 3
40	Imnaha	-1	-1	-1	-3	1	1	1	3	-1	1	1	1	1	1	1	1	0	+1	-1	0
41	Jordan	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	1	1	0	+1	+1	+1
42	Kettle	-1	-1	-1	-3	0	0	1	0	0	1	0	1	0	1	1	1	0	+1	0	0
43	Klickitat	-1	-1	-1	-3	1	1	1	1	0	1	1	1	1	2	1	2	1	+1	+1	+1
44	Lake Abert	-1	-1	-1	-3	0	1	0	0	0	1	0	1	0	1	1	1	0	0	-1	-1
45	Lake Chelan	0	1	0	1	1	1	0	2	-1	1	0	0	0	0	0	0	0	0	0	+1
46	Lake Walcott	-1	-1	-1	-3	1	1	0	1	-1	1	0	1	0	0	0	0	0	0	-1	-1
47	Lemhi	-1	-1	-1	-3	1	1	0	2	0	1	0	1	0	1	1	1	0	+1	-1	0
48	Little Deschutes	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	0	1	1	1	0	+1	+1	+1
49	Little Lost	-1	-1	0	-2	1	1	0	2	-1	1	0	0	0	0	0	0	0	0	-1	-1
50	Little Salmon	-1	-1	-1	-3	1	1	1	1	1	1	1	1	1	3	1	3	0	+1	0	-1
51	Little Spokane	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	0	0	0	0	0	+1	+1	+1
52	Little Wood	-1	-1	0	-2	0	1	0	1	-1	1	0	0	0	0	0	0	0	0	-1	-1
53	Lochsa	-1	-1	-1	-3	1	1	1	3	-1	1	1	1	1	1	1	1	0	+1	0	0
54	Lost	-1	-1	-1	-3	0	1	-1	0	0	1	0	1	0	1	1	1	0	+1	+1	0
55	Lower Boise	-1	-1	0	-2	0	1	0	1	-1	1	0	0	0	0	0	0	0	+1	+1	+1
56	Lower Clark Fork	-1	-1	-1	-3	0	1	-1	0	0	1	0	1	0	1	1	1	0	+1	0	0
57	Lower Crab	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	1	1	0	+1	0	0
58	Lower Crooked	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	0	0	0	0	0	+1	+1	+1
59	Lower Deschutes	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	0	0	0	0	0	+1	0	0
60	Lower Flathead	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	0	0	0	0	0	+1	+1	+1
61	Lower Grande Ronde	-1	-1	-1	-3	1	1	-1	1	1	1	1	1	1	3	1	3	0	+1	0	-1
62	Lower Henrys	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	0	0	0	0	0	+1	0	0
63	Lower John Day	-1	-1	0	-2	-1	1	0	0	-1	1	0	0	0	0	0	0	0	+1	+1	+1
64	Lower Kootenai	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	0	0	0	0	0	+1	0	0
65	Lower Malheur	-1	-1	-1	-3	0	1	0	1	0	1	0	1	0	1	1	1	0	+1	+1	+1
66	Lower Middle Fork Salmon	0	0	0	0	1	0	0	1	-1	0	0	0	0	-1	0	0	0	0	0	+1
67	Lower North Fork Clearwater	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	0	0	0	0	0	+1	0	0
68	Lower Owyhee	-1	-1	0	-2	1	1	0	2	1	1	0	2	1	2	2	2	0	+1	0	0
69	Lower Salmon	-1	-1	-1	-3	1	1	-1	1	1	1	1	1	1	3	3	3	0	+1	0	0
70	Lower Selway	-1	0	-1	-2	1	0	1	2	-1	0	1	0	0	0	0	0	0	+1	-1	0
71	Lower Snake	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	1	1	1	0	+1	+1	+1
72	Lower Snake-Asotin	-1	-1	-1	-3	1	1	-1	1	1	1	1	1	1	3	3	3	0	+1	0	0
73	Lower Snake-Tucannon	-1	-1	-1	-3	-1	1	0	0	-1	1	0	0	0	0	0	0	0	+1	+1	+1
74	Lower Spokane	-1	-1	0	-2	0	1	0	1	-1	1	0	0	0	0	0	0	0	+1	+1	+1
75	Lower Yakima	-1	-1	0	-2	0	1	0	1	-1	1	0	0	0	0	0	0	0	+1	+1	+1
76	Medicine Lodge	-1	-1	-1	-3	0	1	0	1	-1	1	0	1	0	0	0	0	0	0	-1	-1
77	Methow	-1	-1	-1	-3	1	1	1	3	-1	1	1	1	1	1	1	1	0	+1	-1	0
78	Middle Clark Fork	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	0	0	0	0	0	+1	+1	+1
79	Middle Columbia-Hood	-1	-1	-1	-3	1	1	-1	1	-1	1	1	1	1	1	1	1	0	+1	+1	+1
80	Middle Columbia-Lake Wallula-1	-1	-1	0	-2	-1	1	-1	0	-1	1	1	1	1	0	0	0	0	+1	0	+1

Subbasin	Index										Trends in Risks to Ecological Integrity					
	Option 1					Option 2					Option 3					
	Veg	Rip	Road	Comp	Veg	Rip	Road	Comp	Veg	Rip	Road	Comp	Option 1	Option 2	Option 3	
81 Middle Fork Clearwater	-1	-1	-1	-3	1	1	-1	1	1	1	1	3	+1	0	-1	
82 Middle Fork Flathead	0	-1	0	-1	1	1	0	2	-1	1	0	0	+1	-1	0	
83 Middle Fork John Day	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	+1	0	0	
84 Middle Fork Payette	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	+1	+1	+1	
85 Middle Owyhee	-1	-1	0	-2	1	1	0	2	-1	1	0	0	0	-1	-1	
86 Middle Salmon-Chamberlain	0	0	-1	-3	1	0	1	2	-1	0	1	0	+1	-1	0	
87 Middle Salmon-Panther	-1	-1	-1	-3	1	1	0	2	0	1	0	1	+1	-1	0	
88 Middle Snake-Payette	-1	-1	0	-2	0	1	0	1	0	1	0	1	+1	+1	+1	
89 Middle Snake-Succor	-1	-1	0	-2	1	1	0	2	-1	1	0	0	+1	+1	+1	
90 Moses Coulee	-1	-1	0	-2	0	1	0	1	0	1	0	0	+1	0	+1	
91 Moyie	-1	-1	-1	-3	0	1	-1	0	0	1	0	1	+1	0	0	
92 Naches	-1	-1	-1	-3	1	1	1	3	-1	1	1	1	+1	+1	+1	
93 North And Middle Fork Boise	-1	-1	-1	-3	1	1	1	3	0	1	1	2	+1	+1	+1	
94 North Fork Flathead	0	-1	0	-1	1	1	0	2	0	1	0	1	+1	-1	0	
95 North Fork John Day	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	+1	0	0	
96 North Fork Payette	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	+1	0	+1	
97 Okanogan	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	+1	+1	+1	
98 Pahsimeroi	-1	-1	-1	-3	1	1	0	2	0	1	0	1	0	-1	-1	
99 Palisades	-1	-1	-1	-3	1	1	0	2	1	1	0	2	+1	0	0	
100 Palouse	-1	-1	0	-2	-1	1	0	0	-1	1	0	0	+1	+1	+1	
101 Payette	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	+1	+1	+1	
102 Pend Oreille	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	+1	+1	+1	
103 Pend Oreille Lake	-1	-1	-1	-3	0	1	-1	0	0	1	0	1	+1	+1	+1	
104 Portneuf	-1	-1	0	-2	0	1	0	1	-1	1	0	0	+1	0	+1	
105 Powder	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	+1	+1	+1	
106 Priest	-1	-1	-1	-3	0	1	-1	0	0	1	0	1	+1	+1	+1	
107 Raft	-1	-1	0	-2	0	1	0	1	0	1	0	1	+1	-1	-1	
108 Rock	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	
109 Salmon Falls	-1	-1	0	-2	1	1	0	2	0	1	0	1	0	0	0	
110 Salt	-1	-1	-1	-3	0	1	0	1	-1	1	0	0	+1	0	0	
111 Sanpoil	-1	-1	-1	-3	0	1	-1	0	0	1	0	1	+1	0	0	
112 Silver	-1	-1	0	-2	0	1	0	1	0	1	0	1	0	-1	-1	
113 Silvies	-1	-1	-1	-3	0	1	-1	0	0	1	0	1	+1	0	0	
114 Similkameen	0	1	0	1	1	1	0	2	0	1	0	1	0	0	0	
115 Snake Headwaters	0	-1	0	-1	1	1	0	2	1	1	0	2	+1	-1	-1	
116 South Fork Boise	-1	-1	-1	-3	1	1	1	3	0	1	1	2	+1	0	0	
117 South Fork Clearwater	-1	-1	-1	-3	1	1	-1	1	1	1	1	3	+1	0	0	
118 South Fork Coeur d'Alene	-1	-1	-1	-3	0	1	-1	0	-1	1	0	0	+1	+1	+1	
119 South Fork Flathead	0	0	0	0	1	0	0	1	-1	0	0	-1	0	0	+1	
120 South Fork Owyhee	-1	-1	0	-2	1	1	0	2	-1	1	0	0	0	-1	-1	
121 South Fork Payette	-1	-1	-1	-3	1	1	1	3	0	1	1	2	+1	0	0	

ID #	Subbasin Name	Index												Trends in Risks to Ecological Integrity					
		Option 1				Option 2				Option 3				Option 1		Option 2		Option 3	
		Veg	Rip	Road	Comp	Veg	Rip	Road	Comp	Veg	Rip	Road	Comp	Rip	Road	Comp	Option 1	Option 2	Option 3
122	South Fork Salmon	-1	-1	-1	-3	1	1	0	2	0	0	1	0	0	1	+1	-1	0	
123	Sprague	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	0	1	+1	0	0	
124	St. Joe	-1	-1	-1	-3	0	1	-1	0	-1	0	0	0	0	0	+1	+1	+1	
125	Stillwater	-1	-1	-1	-3	0	1	-1	0	-1	0	0	0	0	0	+1	0	0	
126	Summer Lake	-1	-1	-1	-3	0	1	-1	0	0	0	1	0	0	1	0	-1	-1	
127	Swan	-1	-1	-1	-3	1	1	-1	1	-1	1	1	1	1	1	+1	0	0	
128	Teton	-1	-1	-1	-3	0	1	0	1	-1	0	0	0	0	0	+1	0	+1	
129	Thousand-Virgin	-1	0	0	-1	1	0	0	1	0	0	1	0	-1	0	0	-1	0	
130	Trout	-1	-1	0	-2	-1	1	0	0	0	0	1	0	0	1	+1	0	0	
131	Umatilla	-1	-1	-1	-3	0	1	-1	0	-1	0	0	0	0	0	+1	+1	+1	
132	Upper Clark Fork	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	0	1	+1	+1	+1	
133	Upper Coeur d'Alene	-1	-1	-1	-3	0	1	-1	0	0	0	1	0	1	+1	+1	+1		
134	Upper Columbia-Entiat	-1	-1	-1	-3	0	1	-1	0	-1	0	0	0	0	0	+1	+1	+1	
135	Upper Columbia-	-1	-1	-1	-3	1	1	-1	1	-1	1	1	1	1	1	+1	0	0	
136	Priest Rapids	-1	-1	0	-2	0	1	0	1	0	0	1	0	0	0	+1	+1	+1	
137	Upper Crab	-1	-1	0	-2	0	1	0	1	0	0	1	0	0	1	+1	0	0	
138	Upper Crooked	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	1	0	+1	0	0	
139	Upper Deschutes	-1	-1	-1	-3	1	1	-1	1	-1	1	1	1	1	1	+1	0	0	
140	Upper Grande Ronde	-1	-1	-1	-3	0	1	-1	0	0	0	1	0	1	0	+1	0	0	
141	Upper Henrys	-1	-1	-1	-3	1	1	-1	1	-1	1	1	1	3	+1	0	-1	-1	
142	Upper John Day	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	1	+1	0	0	0	
143	Upper Klamath	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	1	+1	+1	+1	+1	
144	Upper Klamath Lake	-1	-1	-1	-3	0	1	-1	0	-1	0	0	0	0	+1	+1	+1	+1	
145	Upper Kootenai	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	1	+1	0	0	0	
146	Upper Malheur	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	1	0	0	-1	-1	
147	Upper Middle Fork Salmon	0	0	0	0	1	0	0	1	0	0	-1	0	0	0	0	0	+1	
148	Upper North Fork Clearwater	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	0	+1	+1	+1	+1	
149	Upper Owyhee	-1	-1	0	-2	1	1	0	2	0	0	1	0	1	0	0	-1	-1	
150	Upper Quinn	-1	-1	0	-2	1	1	0	2	0	0	1	0	1	0	-1	-1	-1	
151	Upper Salmon	-1	-1	0	-2	1	1	0	2	-1	0	1	0	0	+1	-1	-1	0	
152	Upper Selway	0	0	-1	-1	1	0	0	1	0	0	-1	0	-1	+1	0	+1	+1	
153	Upper Snake-Rock	-1	-1	0	-2	0	1	0	1	0	1	0	0	1	+1	0	0	0	
154	Upper Spokane	-1	-1	-1	-3	1	1	-1	1	-1	1	1	0	0	+1	+1	+1	+1	
155	Upper Yakima	-1	-1	-1	-3	1	1	-1	1	-1	1	1	1	1	+1	+1	+1	+1	
156	Walla Walla	-1	-1	0	-2	-1	1	0	0	0	0	0	0	0	+1	+1	+1	+1	
157	Wallowa	0	-1	-1	-2	1	1	0	2	1	0	1	0	2	+1	0	0	0	
158	Warner Lakes	-1	-1	0	-2	1	1	0	2	-1	0	1	0	0	0	0	-1	-1	
159	Weiser	-1	-1	-1	-3	0	1	0	1	0	0	1	0	0	+1	+1	+1	+1	
160	Wenatchee	-1	-1	-1	-3	1	1	1	3	1	1	1	1	1	+1	0	0	0	
161	Williamson	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	1	+1	0	0	0	
162	Willow	-1	-1	-1	-3	0	1	-1	0	-1	0	1	0	0	+1	+1	+1	+1	

Subbasin ID # Name	Index												Trends in Risks to Ecological Integrity					
	Option 1			Option 2			Option 3			Option 1		Option 2		Option 3				
	Veg	Rip	Road Comp	Veg	Rip	Road Comp	Veg	Rip	Road Comp	Rip	Road Comp	Option 1	Option 2	Option 1	Option 2	Option 3		
163 Willow	-1	-1	0	-2	-1	0	0	0	-1	1	0	0	0	+1	+1	+1		
162 Willow	-1	-1	0	-2	0	0	1	0	0	1	0	0	1	+1	0	0		
164 Yaak	-1	-1	-1	-3	0	1	-1	0	0	1	0	0	1	+1	0	0		

Veg = Forest/Range Vegetation  
 Rip = Riparian Management  
 Road = Road Density  
 Comp = Composite Ecological Integrity  
 Values assigned reflect either decreasing (-1), stable (0), or increasing (+1) trends for each index.  
 Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen. Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. [irregular pagination]. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem).

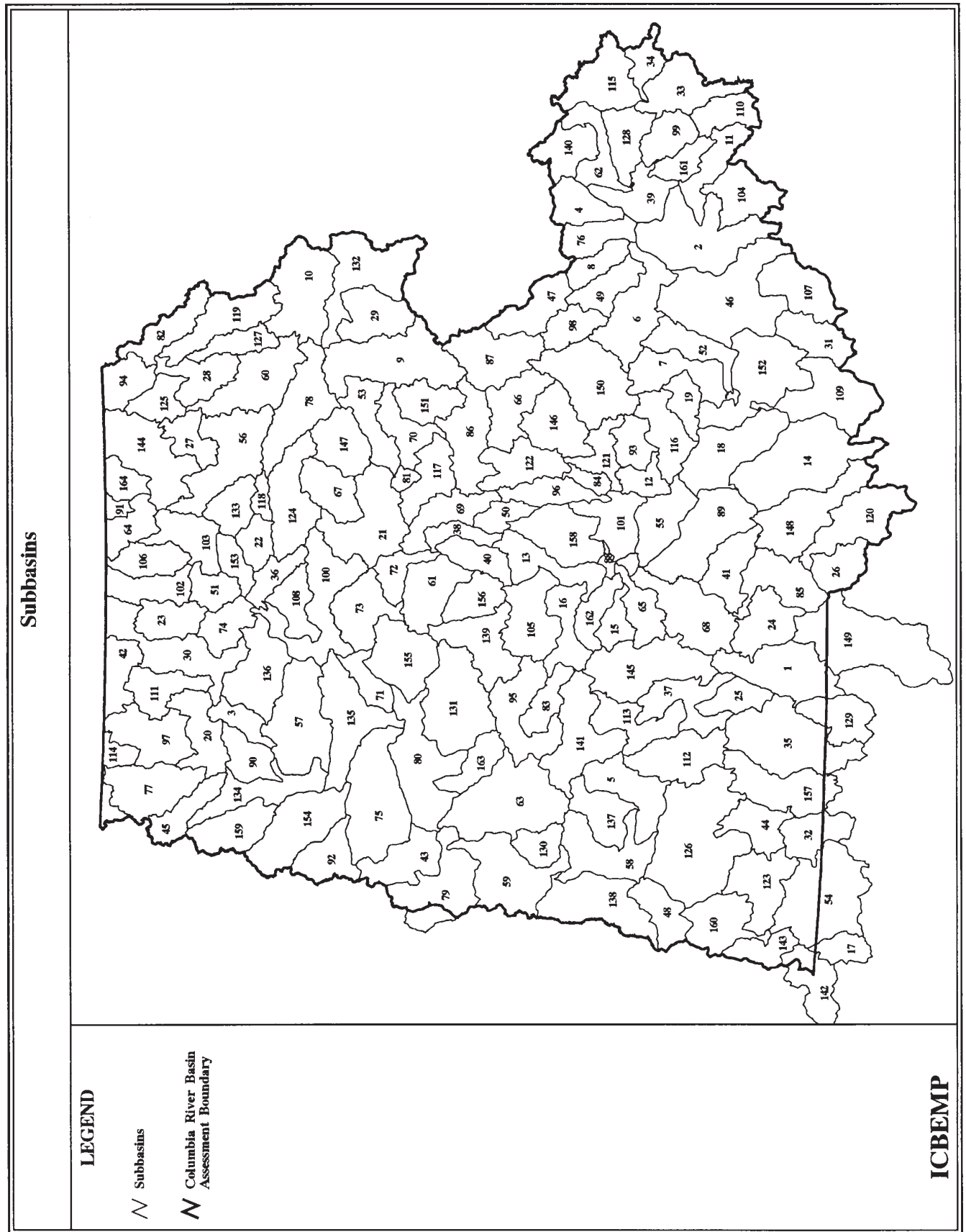


Figure B-2—Distribution of subbasins by identification number as referenced in tables B-1 and B-3.





# APPENDIX C.

## HABITAT OUTCOMES FOR SELECTED SPECIES WITHIN THE BASIN.

This appendix presents the definitions (fig. C-1) and outcomes of viability for individual species (table C-1) during historic, current, and projected future timeframes in the Interior Columbia Basin Ecosystem Management Project (ICBEMP) assessment area. Outcomes describe effects of habitat changes on federal lands only, and cumulative effects on populations from habitat changes on federal and non-federal lands and from other non-habitat influences.

Judgments on viability outcomes were solicited from expert panels provided with information on the species population and habitat relationships, and information on habitat conditions for the timeframes (see Lehmkuhl and others 1996 for details). The term “habitat” was defined as primary habitat capable of supporting a self-replacing population. Separate judgments were made for the historical and current periods and for each of the 3 future options in the two EIS planning areas [Eastern Oregon and Washington (EEIS), and the Upper Columbia River Basin (UCRB)].

For each timeframe and planning area, the experts were asked to first rate the species’ likely distribution based only on habitat conditions on the Federal lands and the natural history characteristics of the species. The federal habitat judgments concerned potential population distribution across Federal land (FS and BLM only) based on population changes associated with habitat, environmental stochasticity, or natural catastrophes.

Then, panelists were asked to rate the cumulative effects on species populations across all ownerships given habitat conditions across all ownerships, the natural history of the species, and all other influences (such as, water pollution, trapping, etc.) on the species. The cumulative effects judgments concerned likely population response to management of federal habitat, population change associated with habitat, environmental stochasticity and natural catastrophes, changes in non-federal habitat, and other non-habitat influences.

Expert judgments were registered by likelihood voting using a structured outcome scale (fig. C-1). The outcome scale describes five distinct possible outcomes for the species or its habitat along a gradient ranging from broadly- distributed, with high likelihood of persistence, to poorly-distributed, with high likelihood of extirpation. For each judgment, each expert spread 100 likelihood votes across these five outcomes.

We calculated for each species the mean likelihood score for each outcome from individual experts’ scores, then the weighted mean outcome (table C-2). The weighted mean was calculated by assigning a value to each of the outcome categories (Outcome 1 value=1, Outcome 2 value=2, etc.), multiplying the mean likelihood of that outcome by its assigned value, adding these products for all outcomes and then dividing by 100. The resulting weighted mean can be compared across time periods and across future options.

Table C-1—Mean viability outcomes for evaluation of ICBEMP management alternatives. Mean outcomes were calculated as the weighted mean of average likelihood scores in each outcome.

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	C	Period/Outcome <sup>3</sup>		
					1	2	3
<b>VASCULAR PLANTS</b>							
Habitat & Populations							
PLT	<i>Astragalus mulfordiae</i>	EEIS BLM/FS	3.2	3.4	3.8	3.5	3.6
		EEIS CumEff	3.2	3.4	3.8	3.5	3.6
		UCRB BLM/FS	3.2	3.3	3.8 <sup>5</sup>	3.5	3.6
		UCRB CumEff	3.2	3.4	4.0 <sup>5</sup>	3.6	3.8
PLT	<i>Astragalus oniciformis</i>	UCRB BLM/FS	3.1	3.4	3.8	3.5	3.4
		UCRB CumEff	3.1	3.4	3.6	3.5	3.6
PLT	<i>Astragalus paysonii</i>	UCRB BLM/FS	3.2	3.3	3.3	3.1	3.2
		UCRB CumEff	3.2	3.3	3.3	3.1	3.2
PLT	<i>Astragalus solitarius</i>	EEIS BLM/FS	3.2	3.3	3.3	3.2	3.3
		EEIS CumEff	3.2	3.3	3.3	3.2	3.3
PLT	<i>Astragalus yoder-williamsii</i>	UCRB BLM/FS	3.1	3.4	3.3	3.2	3.3
		UCRB CumEff	3.1	3.4	3.3	3.2	3.3
PLT	<i>Botrychium ascendens</i>	EEIS BLM/FS	3.5	3.5	3.2	3.3	3.2
		UCRB BLM/FS	3.5	3.5	4.6 <sup>5</sup>	4.6 <sup>5</sup>	4.7 <sup>5</sup>
		UCRB CumEff	3.5	3.5	4.6 <sup>5</sup>	4.6 <sup>5</sup>	4.6 <sup>5</sup>
PLT	<i>Botrychium crenulatum</i>	EEIS BLM/FS	3.5	3.5	4.1 <sup>5</sup>	3.8	3.5
		EEIS CumEff	3.5	3.5	4.1 <sup>5</sup>	3.8	3.5
		UCRB BLM/FS	3.6	3.6	4.4 <sup>5</sup>	4.2 <sup>5</sup>	3.8
		UCRB CumEff	3.6	3.6	4.6 <sup>5</sup>	4.6 <sup>5</sup>	4.6 <sup>5</sup>
PLT	<i>Botrychium paradoxum</i>	EEIS BLM/FS	3.5	3.5	3.6	3.6	3.6
		UCRB BLM/FS	3.5	3.5	3.6	3.6	3.6
PLT	<i>Calochortus longebarbatus</i> var. <i>longebarbatus</i>	EEIS BLM/FS	3.2	3.3	3.5	3.4	3.4
		EEIS CumEff	3.2	3.4	3.5	3.5	3.4
PLT	<i>Calochortus longebarbatus</i> var. <i>peckii</i>	EEIS BLM/FS	3.0	3.2	3.2	3.2	3.1
		EEIS CumEff	3.0	3.3	3.2	3.2	3.1
PLT	<i>Calochortus nitidus</i>	EEIS BLM/FS	3.4	3.7	3.7	3.5	3.8
		EEIS CumEff	3.4	3.8	3.8	3.6	3.8
		UCRB BLM/FS	3.9	3.9	3.8	3.8	3.8
		UCRB CumEff	3.3	4.5	4.7	4.7	4.9
PLT	<i>Castilleja chlorotica</i>	EEIS BLM/FS	3.1	3.2	3.1	3.1	3.3
		EEIS CumEff	3.1	3.2	3.1	3.1	3.4
PLT	<i>Collomia mazama</i>	EEIS BLM/FS	3.1	3.1	3.1	3.1	3.1
		EEIS CumEff	3.1	3.1	3.1	3.1	3.1
PLT	<i>Cypripedium fasciculatum</i>	EEIS BLM/FS	2.3	3.2	3.2	3.0	3.3
		EEIS CumEff	2.3	3.3	3.3	3.2	3.2
		UCRB BLM/FS	2.3	2.3	2.4	2.1	2.2
		UCRB CumEff	2.4	2.4	2.4	2.2	2.2
PLT	<i>Grindelia howellii</i>	UCRB BLM/FS	5.0	3.5	3.4	3.3	3.3
		UCRB CumEff	4.4	3.4	3.2	3.2	3.2
PLT	<i>Hackelia cronquistii</i>	EEIS BLM/FS	3.5	3.6	3.8	3.6	3.7
		EEIS CumEff	3.5	3.7	3.7	3.6	3.6
PLT	<i>Haplopappus liatriformis</i>	UCRB BLM/FS	2.2	4.8	4.9	4.9	4.9
		UCRB CumEff	2.2	4.9	4.9	4.9	4.9
PLT	<i>Howellia aquatilis</i>	EEIS BLM/FS	4.2	4.3	4.3	4.3	4.3
		EEIS CumEff	3.4	3.6	3.6	3.7	3.7
		UCRB BLM/FS	3.1	3.2	3.2	3.2	3.2
		UCRB CumEff	3.1	3.2	3.3	3.3	3.2
PLT	<i>Lomatium suksdorfii</i>	EEIS BLM/FS	4.5	4.5	4.5	4.5	4.5
		EEIS CumEff	3.4	3.5	3.6	3.6	3.6
PLT	<i>Mimulus pygmaeus</i>	EEIS BLM/FS	3.1	3.2	3.2	3.2	3.2
		EEIS CumEff	3.1	3.2	3.2	3.2	3.2

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
PLT	<i>Mimulus washingtonensis</i> var. <i>washingtonensis</i>	EEIS BLM/FS	3.7	3.8	3.8	3.7	3.8
		EEIS CumEff	3.7	3.8	3.8	3.7	3.8
PLT	<i>Mirabilis macfarlanei</i>	EEIS BLM/FS	3.1	4.0	4.0	4.0	3.9
		EEIS CumEff	3.1	4.5	4.3	4.2	4.1
		UCRB BLM/FS	3.1	3.8	3.8	3.8	3.7
		UCRB CumEff	3.1	4.0	4.0	3.9	3.9
PLT	<i>Penstemon glaucinus</i>	EEIS BLM/FS	3.6	3.3	3.2	3.2	3.3
		EEIS CumEff	3.6	3.3	3.2	3.2	3.3
PLT	<i>Penstemon lemhiensis</i>	UCRB BLM/FS	3.3	3.7	3.7	3.1 <sup>5</sup>	3.6
		UCRB CumEff	3.3	3.8	3.8	3.2 <sup>5</sup>	3.6
PLT	<i>Polemonium pectinatum</i>	EEIS BLM/FS	4.4	4.5	4.5	4.5	4.5
		EEIS CumEff	2.2	4.9	5.0	5.0	5.0
PLT	<i>Silene spaldingii</i>	EEIS BLM/FS	4.5	4.5	4.5	4.3	4.5
		EEIS CumEff	2.2	4.8	4.9	4.9	4.9
PLT	<i>Stephanomeria malheurensis</i>	EEIS BLM/FS	5.0	5.0	5.0	5.0	5.0
PLT	Trifolium thompsonii	EEIS BLM/FS	3.5	3.5	3.6	3.5	3.6
		EEIS CumEff	3.5	3.5	3.6	3.5	3.5

### AMPHIBIANS and REPTILES

Habitat & Populations							
AMP	Coeur d'lene salamander	UCRB BLM/FS <sup>4</sup>	3.7	4.3	4.6	4.2	4.1
		UCRB CumEff	3.7	4.4	4.9	4.7	4.5
AMP	Spotted frog species B	EEIS BLM/FS	2.5	3.5	3.9	3.5	3.4
		EEIS CumEff	2.5	3.5	4.0	3.6	3.5
		UCRB BLM/FS	2.1	3.1	3.6	3.1	3.0
		UCRB CumEff	2.1	3.1	3.7 <sup>5</sup>	3.2	3.1
AMP	Northern leopard frog	EEIS BLM/FS <sup>4</sup>	3.2	4.5	4.7	4.4	4.3
		EEIS CumEff	3.2	4.5	5.0 <sup>5</sup>	4.9	4.9
		UCRB BLM/FS <sup>4</sup>	2.9	4.7	4.9	4.3	3.9 <sup>5</sup>
		UCRB CumEff	2.9	4.8	5.0	5.0	4.9
AMP	Spotted frog species A	EEIS BLM/FS <sup>4</sup>	2.5	3.6	4.1	3.4	3.1 <sup>5</sup>
		EEIS CumEff	2.5	3.6	4.1	3.7	3.6
AMP	Tailed frog	EEIS BLM/FS	2.8	3.2	4.1 <sup>5</sup>	3.2	3.0
		EEIS CumEff	2.8	3.2	4.6 <sup>5</sup>	3.8 <sup>5</sup>	3.6
		UCRB BLM/FS	2.8	3.2	4.0 <sup>5</sup>	3.2	3.0
		UCRB CumEff	2.8	3.2	4.2 <sup>5</sup>	3.6	3.5
AMP	Western toad	EEIS BLM/FS	1.8	2.4	3.4 <sup>5</sup>	2.2	2.0
		EEIS CumEff	1.8	3.3	4.4 <sup>5</sup>	3.4	3.3
		UCRB BLM/FS	2.1	2.6	3.5 <sup>5</sup>	2.6	2.5
		UCRB CumEff	2.1	3.4	4.2 <sup>5</sup>	3.6	3.5
AMP	Woodhouse's toad	EEIS BLM/FS <sup>4</sup>	2.5	3.9	4.5 <sup>5</sup>	3.7	3.4
		EEIS CumEff	2.5	3.9	4.7 <sup>5</sup>	4.5 <sup>5</sup>	4.5 <sup>5</sup>
		UCRB BLM/FS <sup>4</sup>	3.0	3.8	4.4 <sup>5</sup>	3.7	3.4
		UCRB CumEff	3.0	3.8	4.7 <sup>5</sup>	4.6 <sup>5</sup>	4.6 <sup>5</sup>
REP	Common garter snake	EEIS BLM/FS	1.5	2.5	3.5 <sup>5</sup>	2.5	2.5
		EEIS CumEff	1.5	3.5	4.5 <sup>5</sup>	3.5	3.5
		UCRB BLM/FS	1.5	2.6	3.2 <sup>5</sup>	2.6	2.6
		UCRB CumEff	1.5	3.1	3.7 <sup>5</sup>	3.2	3.1
REP	Desert horned lizard	EEIS BLM/FS	1.5	1.6	1.6	1.6	1.5
		EEIS CumEff	1.5	1.6	1.6	1.6	1.5
		UCRB BLM/FS	1.5	1.6	1.6	1.6	1.5
		UCRB CumEff	1.5	1.6	1.6	1.6	1.5
REP	Longnose leopard lizard	EEIS BLM/FS	3.5	3.8	4.0	3.8	3.8
		EEIS CumEff	3.5	3.9	4.1	3.9	3.8
		UCRB BLM/FS	3.5	3.8	4.0	3.8	3.8
		UCRB CumEff	3.5	3.9	4.1	3.9	3.8
REP	Mojave black-collared lizard	UCRB BLM/FS	2.5	2.8	3.0	2.8	2.8
		UCRB CumEff	3.8	3.8	4.2	3.9	3.8

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
REP	Night snake	EEIS BLM/FS	1.5	1.5	1.5	1.5	1.5
		EEIS CumEff	1.5	2.5	2.5	2.5	2.5
		UCRB BLM/FS	1.5	1.6	1.6	1.6	1.5
		UCRB CumEff	1.5	1.6	1.7	1.6	1.6
REP	Painted turtle	EEIS BLM/FS	2.4	2.7	3.2 <sup>5</sup>	2.6	2.4
		EEIS CumEff	2.4	3.3	3.9 <sup>5</sup>	3.2	3.2
		UCRB BLM/FS	2.5	2.7	3.1 <sup>5</sup>	2.6	2.5
		UCRB CumEff	2.5	3.4	3.9 <sup>5</sup>	3.4	3.2
REP	Rubber boa	EEIS BLM/FS	2.5	3.5	3.9	3.3	2.9 <sup>5</sup>
		EEIS CumEff	2.5	3.5	4.9 <sup>5</sup>	4.3 <sup>5</sup>	3.9
		UCRB BLM/FS	3.0	3.6	3.8	3.5	3.2
		UCRB CumEff	3.0	3.6	4.3 <sup>5</sup>	4.0	3.8
REP	Sagebrush lizard	EEIS BLM/FS	1.5	1.5	1.5	1.5	1.5
		EEIS CumEff	1.5	2.5	2.5	2.5	2.5
		UCRB BLM/FS	1.5	1.6	1.7	1.6	1.6
		UCRB CumEff	1.5	2.0	2.3	2.1	2.0
REP	Sharptail snake	EEIS BLM/FS <sup>4</sup>	3.5	4.5	4.7	4.4	3.9 <sup>5</sup>
		EEIS CumEff	3.5	4.5	5.0 <sup>5</sup>	4.9	4.5
REP	Short-horned lizard	EEIS BLM/FS	1.5	1.5	1.5	1.5	1.5
		EEIS CumEff	1.5	2.5	2.5	2.5	2.5
		UCRB BLM/FS	1.5	1.6	1.7	1.6	1.6
		UCRB CumEff	1.5	1.7	1.7	1.7	1.6
REP	Striped whipsnake	EEIS BLM/FS	1.5	1.5	1.5	1.5	1.5
		EEIS CumEff	1.5	2.5	2.5	2.5	2.5
		UCRB BLM/FS	3.5	3.8	3.9	3.8	3.7
		UCRB CumEff	3.5	3.8	3.9	3.8	3.8
REP	Western pond turtle	EEIS BLM/FS	1.9	2.6	3.0	2.2	2.2
		EEIS CumEff	1.9	4.6	4.9	4.6	4.6

### WATERBIRDS and SHOREBIRDS

		Habitat & Species Group					
WAT	1) Open water birds	EEIS BLM/FS	3.0	3.6	3.8	3.3	3.5
		EEIS CumEff	3.1	3.5	3.7	3.3	3.5
		UCRB BLM/FS	3.2	3.5	3.8	3.3	3.3
		UCRB CumEff	3.1	3.4	3.7	3.2	3.3
WAT	2) Common loon	EEIS BLM/FS	3.7	3.6	3.8	3.5	3.6
		EEIS CumEff	3.5	3.3	3.6	3.3	3.3
		UCRB BLM/FS	3.8	3.6	3.8	3.5	3.5
		UCRB CumEff	3.6	3.3	3.6	3.3	3.4
WAT	3) Wood duck, mergansers	EEIS BLM/FS	3.6	3.5	3.7	3.1	3.4
		EEIS CumEff	3.6	3.6	3.8	3.2	3.4
		UCRB BLM/FS	2.9	3.0	3.3	2.8	2.9
		UCRB CumEff	3.0	3.1	3.4	2.9	3.1
WAT	4) Goldeneyes	EEIS BLM/FS	3.6	3.8	4.2	3.6	3.8
		EEIS CumEff	3.6	3.8	4.1	3.6	3.8
		UCRB BLM/FS	3.5	3.7	4.1	3.5	3.6
		UCRB CumEff	3.5	3.8	4.1	3.6	3.7
WAT	5) Western snowy plover	EEIS BLM/FS	4.0	4.0	4.1	4.0	4.0
		EEIS CumEff	4.0	4.1	4.2	4.1	4.1
WAT	6) Harlequin duck	EEIS BLM/FS	3.4	4.5	4.8	3.5 <sup>5</sup>	4.1
		EEIS CumEff	3.3	4.6	4.9	3.6 <sup>5</sup>	4.2
		UCRB BLM/FS	3.2	4.5	4.8	3.5 <sup>5</sup>	4.1
		UCRB CumEff	3.2	4.6	4.8	3.6 <sup>5</sup>	4.1
WAT	7) Herons, egrets	EEIS BLM/FS	3.0	3.4	3.4	3.3	3.4
		EEIS CumEff	3.0	3.3	3.4	3.2	3.4
		UCRB BLM/FS	3.2	3.4	3.5	3.3	3.3
		UCRB CumEff	3.2	3.4	3.5	3.4	3.4
WAT	8) Dabbling ducks	EEIS BLM/FS	2.7	3.2	3.4	3.1	3.1
		EEIS CumEff	2.6	3.1	3.4	3.0	3.1

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
WAT	9) Spotted sandpiper	UCRB BLM/FS	2.8	3.3	3.5	3.1	3.3
		UCRB CumEff	2.8	3.3	3.5	3.2	3.3
		EEIS BLM/FS	2.5	2.5	2.6	2.5	2.5
		EEIS CumEff	2.5	2.5	2.6	2.5	2.4
WAT	10) Greater sandhill crane	UCRB BLM/FS	2.5	2.5	2.6	2.5	2.5
		UCRB CumEff	2.5	2.5	2.6	2.4	2.4
		EEIS BLM/FS	3.1	3.5	3.7	3.3	3.5
		EEIS CumEff	3.1	3.4	3.6	3.2	3.4
WAT	11) Rails, avocets	UCRB BLM/FS	3.1	3.2	3.5	3.1	3.4
		UCRB CumEff	3.0	3.3	3.5	3.2	3.4
		EEIS BLM/FS	3.3	3.5	3.7	3.3	3.5
		EEIS CumEff	3.2	3.4	3.7	3.2	3.5
WAT	12) Curlew , willet	UCRB BLM/FS	3.4	3.6	3.8	3.4	3.6
		UCRB CumEff	3.3	3.5	3.7	3.3	3.5
		EEIS BLM/FS	3.7	3.9	4.0	3.8	3.9
		EEIS CumEff	3.7	3.9	4.0	3.8	3.9
WAT	13) Upland sandpiper	UCRB BLM/FS	3.7	3.9	4.0	3.8	3.9
		UCRB CumEff	3.7	3.9	4.0	3.8	3.9
		EEIS BLM/FS <sup>4</sup>	2.3	5.0	5.0	4.8	4.9
		EEIS CumEff	2.3	5.0	5.0	4.9	5.0
WAT	14) Common snipe	UCRB BLM/FS <sup>4</sup>	2.3	5.0	5.0	4.8	4.9
		UCRB CumEff	2.3	5.0	5.0	4.9	5.0
		EEIS BLM/FS	2.9	3.1	3.3	2.9	3.1
		EEIS CumEff	2.9	3.1	3.3	3.0	3.1
WAT	15) Migrant sandpipers	UCRB BLM/FS	2.9	3.1	3.3	2.9	3.1
		UCRB CumEff	2.9	3.1	3.3	3.0	3.1
		EEIS BLM/FS	1.8	2.1	2.2	2.0	2.0
		EEIS CumEff	1.8	2.0	2.2	2.0	2.0
		UCRB BLM/FS	1.9	2.2	2.4	2.0	2.2
		UCRB CumEff	1.8	2.0	2.2	1.9	2.0

### RAPTORS and GAMEBIRDS

Habitat & Populations							
GMB	Band-tailed pigeon	EEIS BLM/FS	2.0	3.0	3.0	2.6	2.8
		EEIS CumEff	2.0	3.1	3.1	2.7	2.9
		UCRB BLM/FS	4.0	4.1	3.7	3.5 <sup>5</sup>	3.4 <sup>5</sup>
		UCRB CumEff	4.0	4.1	3.8	3.5 <sup>5</sup>	3.5 <sup>5</sup>
GMB	Blue grouse	EEIS BLM/FS	1.7	2.2	2.3	1.9	2.0
		EEIS CumEff	1.7	2.2	2.3	1.9	2.0
		UCRB BLM/FS	1.5	2.2	2.3	1.9	1.9
		UCRB CumEff	1.4	2.2	2.2	1.9	1.9
GMB	Columbian sharp-tailed grouse	EEIS BLM/FS	1.3	4.8	4.6	4.0 <sup>5</sup>	4.4
		EEIS CumEff	1.2	4.6	4.6	3.9 <sup>5</sup>	4.3
		UCRB BLM/FS	1.4	4.6	4.6	4.0 <sup>5</sup>	4.4
		UCRB CumEff	1.3	4.6	4.5	3.9 <sup>5</sup>	4.3
GMB	Mountain quail	EEIS BLM/FS	2.5	3.9	4.0	3.5	3.6
		EEIS CumEff	2.4	3.7	3.8	3.5	3.6
		UCRB BLM/FS	3.4	4.8	4.7	4.4	4.6
		UCRB CumEff	3.2	4.7	4.7	4.3	4.5
GMB	Sage grouse	EEIS BLM/FS	1.6	3.2	3.4	2.3 <sup>5</sup>	2.6 <sup>5</sup>
		EEIS CumEff	1.6	3.1	3.4	2.3 <sup>5</sup>	2.6 <sup>5</sup>
		UCRB BLM/FS	1.6	3.1	3.3	2.2 <sup>5</sup>	2.6
		UCRB CumEff	1.5	3.1	3.3	2.3 <sup>5</sup>	2.6
RAP	Bald eagle	EEIS BLM/FS	2.8	3.6	3.4	2.9 <sup>5</sup>	3.0 <sup>5</sup>
		EEIS CumEff	2.6	3.7	3.5	2.9 <sup>5</sup>	2.9 <sup>5</sup>
		UCRB BLM/FS	2.8	3.6	3.4	2.9 <sup>5</sup>	3.0 <sup>5</sup>
		UCRB CumEff	2.6	3.7	3.5	2.9 <sup>5</sup>	2.9 <sup>5</sup>
RAP	Barred owl	EEIS BLM/FS	3.3	2.2	2.5	3.2 <sup>5</sup>	2.3
		EEIS CumEff	4.8	2.4	2.5	2.9 <sup>5</sup>	2.6
		UCRB BLM/FS	3.0	2.9	2.4 <sup>5</sup>	2.5	2.2 <sup>5</sup>

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
RAP	Boreal owl	UCRB CumEff	4.9	3.2	2.3 <sup>5</sup>	2.4 <sup>5</sup>	2.3 <sup>5</sup>
		EEIS BLM/FS	4.1	4.2	4.3	4.0	3.7 <sup>5</sup>
		EEIS CumEff	4.2	4.2	4.3	4.2	3.9
		UCRB BLM/FS	2.9	3.7	3.6	3.2 <sup>5</sup>	3.0 <sup>5</sup>
RAP	Burrowing owl	UCRB CumEff	3.3	3.7	3.5	3.3	3.2 <sup>5</sup>
		EEIS BLM/FS	1.5	3.0	3.0	2.8	2.9
		EEIS CumEff	1.3	2.8	2.9	2.8	2.9
		UCRB BLM/FS	1.5	2.9	3.0	2.8	2.9
RAP	Cooper's hawk	UCRB CumEff	1.4	2.8	2.9	2.8	2.9
		EEIS BLM/FS	1.8	2.4	2.5	1.9	2.0
		EEIS CumEff	1.7	2.2	2.3	1.7	1.9
		UCRB BLM/FS	1.8	2.4	2.4	1.9	2.0
RAP	Ferruginous hawk	UCRB CumEff	1.7	2.3	2.3	1.8	1.9
		EEIS BLM/FS	2.3	3.0	3.0	2.5	2.6
		EEIS CumEff	2.2	2.8	2.7	2.5	2.5
		UCRB BLM/FS	2.3	3.0	3.0	2.5	2.6
RAP	Flammulated owl	UCRB CumEff	2.2	2.8	2.7	2.5	2.5
		EEIS BLM/FS	2.2	3.8	4.2	2.9 <sup>5</sup>	3.3
		EEIS CumEff	2.2	3.8	4.2	2.9 <sup>5</sup>	3.3
		UCRB BLM/FS	2.2	3.8	4.2	2.9 <sup>5</sup>	3.3
RAP	Great gray owl	UCRB CumEff	2.2	3.8	4.2	2.9 <sup>5</sup>	3.3
		EEIS BLM/FS	3.4	3.7	3.8	3.5	3.6
		EEIS CumEff	3.3	3.6	3.7	3.4	3.5
		UCRB BLM/FS	3.0	3.5	3.4	3.0 <sup>5</sup>	3.1
RAP	Long-eared owl	UCRB CumEff	2.9	3.5	3.3	3.0	3.1
		EEIS BLM/FS	3.1	3.6	3.7	3.2	3.5
		EEIS CumEff	3.0	3.3	3.5	3.1	3.4
		UCRB BLM/FS	3.1	3.6	3.7	3.3	3.6
RAP	Merlin	UCRB CumEff	3.0	3.4	3.6	3.2	3.5
		EEIS BLM/FS	2.9	3.1	3.3	3.0	3.1
		EEIS CumEff	2.8	3.0	3.1	3.0	3.1
		UCRB BLM/FS	2.9	3.1	3.1	2.9	3.0
RAP	Northern goshawk	UCRB CumEff	2.8	3.0	3.0	2.9	3.0
		EEIS BLM/FS	2.1	2.5	2.7	2.3	2.4
		EEIS CumEff	2.1	2.4	2.6	2.2	2.3
		UCRB BLM/FS	2.1	2.6	2.6	2.2	2.3
RAP	Northern pygmy-owl	UCRB CumEff	2.1	2.5	2.5	2.2	2.3
		EEIS BLM/FS	1.4	1.6	1.7	1.4	1.5
		EEIS CumEff	1.3	1.6	1.7	1.4	1.5
		UCRB BLM/FS	1.3	1.6	1.7	1.4	1.5
RAP	Northern saw-whet owl	UCRB CumEff	1.3	1.6	1.7	1.4	1.5
		EEIS BLM/FS	1.3	1.7	1.8	1.5	1.6
		EEIS CumEff	1.3	1.7	1.8	1.5	1.6
		UCRB BLM/FS	1.3	1.7	1.8	1.5	1.6
RAP	Swainson's hawk	UCRB CumEff	1.2	1.7	1.7	1.4	1.5
		EEIS BLM/FS	2.0	1.9	1.8	1.8	1.8
		EEIS CumEff	2.0	2.0	2.0	1.9	1.9
		UCRB BLM/FS	2.1	1.9	1.8	1.8	1.8
RAP	Western screech owl	UCRB CumEff	2.1	2.0	2.0	1.9	1.9
		EEIS BLM/FS	2.4	2.8	2.9	2.6	2.6
		EEIS CumEff	2.4	2.8	2.9	2.5	2.5
		UCRB BLM/FS	2.4	2.8	2.9	2.6	2.6
		UCRB CumEff	2.4	2.8	2.9	2.5	2.6

### CAVITY NESTERS

Habitat & Populations							
CAV	Black-backed woodpecker	EEIS BLM/FS	2.2	3.2	4.1 <sup>5</sup>	3.0	2.9
		EEIS CumEff	2.2	3.2	4.1 <sup>5</sup>	3.1	3.1
		UCRB BLM/FS	2.2	3.1	4.0 <sup>5</sup>	2.9	2.9
		UCRB CumEff	2.2	3.2	4.1 <sup>5</sup>	3.1	3.0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
CAV	Downy woodpecker	EEIS BLM/FS <sup>4</sup>	1.8	2.7	3.1	2.8	2.9
		EEIS CumEff <sup>4</sup>	1.8	2.8	3.0	2.8	2.8
		UCRB BLM/FS <sup>4</sup>	1.8	2.7	3.2 <sup>5</sup>	2.8	3.0
		UCRB CumEff <sup>4</sup>	1.8	2.7	3.2	2.8	3.0
CAV	Hairy woodpecker	EEIS BLM/FS	2.2	2.2	2.6	2.5	2.2
		EEIS CumEff	2.2	2.1	2.6	2.4	2.3
		UCRB BLM/FS	2.2	2.2	2.5	2.4	2.2
		UCRB CumEff	2.2	2.2	2.6	2.4	2.3
CAV	Lewis' woodpecker	EEIS BLM/FS	2.3	3.5	4.5 <sup>5</sup>	2.5 <sup>5</sup>	2.6 <sup>5</sup>
		EEIS CumEff	2.7	3.9	4.8 <sup>5</sup>	3.0 <sup>5</sup>	3.0 <sup>5</sup>
		UCRB BLM/FS	2.3	3.4	4.5 <sup>5</sup>	2.7 <sup>5</sup>	2.7 <sup>5</sup>
		UCRB CumEff	2.8	4.0	4.8 <sup>5</sup>	3.2 <sup>5</sup>	3.3 <sup>5</sup>
CAV	Pileated woodpecker	EEIS BLM/FS <sup>4</sup>	3.1	3.4	4.0 <sup>5</sup>	2.5 <sup>5</sup>	2.5 <sup>5</sup>
		EEIS CumEff <sup>4</sup>	3.1	3.4	4.0 <sup>5</sup>	2.5 <sup>5</sup>	2.5 <sup>5</sup>
		UCRB BLM/FS <sup>4</sup>	3.0	3.4	4.0 <sup>5</sup>	2.5 <sup>5</sup>	2.6 <sup>5</sup>
		UCRB CumEff <sup>4</sup>	3.0	3.4	4.0 <sup>5</sup>	2.5 <sup>5</sup>	2.6 <sup>5</sup>
CAV	Pygmy nuthatch	EEIS BLM/FS	2.2	2.9	3.6 <sup>5</sup>	2.6	2.9
		EEIS CumEff	2.2	2.9	3.6 <sup>5</sup>	2.6	2.9
		UCRB BLM/FS	2.2	3.0	3.6 <sup>5</sup>	2.6	2.9
		UCRB CumEff	2.2	3.0	3.6 <sup>5</sup>	2.6	2.9
CAV	Red-naped sapsucker	EEIS BLM/FS	2.0	3.3	3.8 <sup>5</sup>	2.7 <sup>5</sup>	3.1
		EEIS CumEff	2.0	3.3	3.9 <sup>5</sup>	2.8 <sup>5</sup>	3.1
		UCRB BLM/FS	2.0	3.3	3.8 <sup>5</sup>	2.7 <sup>5</sup>	3.1
		UCRB CumEff	2.0	3.3	3.9 <sup>5</sup>	2.8 <sup>5</sup>	3.1
CAV	Three-toed woodpecker	EEIS BLM/FS	2.6	2.9	4.0 <sup>5</sup>	3.1	2.9
		EEIS CumEff	2.6	3.0	4.0 <sup>5</sup>	3.1	2.9
		UCRB BLM/FS	2.6	2.9	4.0 <sup>5</sup>	3.1	2.9
		UCRB CumEff	2.6	3.0	4.0 <sup>5</sup>	3.1	2.9
CAV	Vaux's swift	EEIS BLM/FS <sup>4</sup>	4.0	3.7	4.5 <sup>5</sup>	3.7	2.9 <sup>5</sup>
		EEIS CumEff <sup>4</sup>	4.4	4.1	4.8	4.1	3.4
		UCRB BLM/FS <sup>4</sup>	3.9	3.8	4.5	3.7	2.9
		UCRB CumEff <sup>4</sup>	4.2	4.1	4.8	4.1	3.4
CAV	White-breasted nuthatch	EEIS BLM/FS	2.2	3.0	3.6 <sup>5</sup>	2.8	2.9
		EEIS CumEff	2.2	3.0	3.6 <sup>5</sup>	2.8	2.9
		UCRB BLM/FS	2.2	2.9	3.6 <sup>5</sup>	2.7	2.9
		UCRB CumEff	2.2	2.9	3.6 <sup>5</sup>	2.7	2.9
CAV	White-headed woodpecker	EEIS BLM/FS <sup>4</sup>	2.4	3.8	4.2	2.7 <sup>5</sup>	3.1 <sup>5</sup>
		EEIS CumEff <sup>4</sup>	2.4	3.8	4.3	2.8 <sup>5</sup>	3.1 <sup>5</sup>
		UCRB BLM/FS <sup>4</sup>	2.4	3.8	4.2	2.7 <sup>5</sup>	3.1 <sup>5</sup>
		UCRB CumEff <sup>4</sup>	2.4	3.8	4.3	2.8 <sup>5</sup>	3.1 <sup>5</sup>
CAV	Williamson's sapsucker	EEIS BLM/FS	2.2	3.1	4.0 <sup>5</sup>	2.9	2.9
		EEIS CumEff	2.2	3.1	4.0 <sup>5</sup>	2.9	2.9
		UCRB BLM/FS	2.2	3.2	3.9 <sup>5</sup>	3.0	2.9
		UCRB CumEff	2.2	3.2	3.9 <sup>5</sup>	3.1	2.9

### CUCKOOS, HUMMINGBIRDS, AND PASSERINES

Habitat & Species Groups							
FOR	Black-chinned hummingbird	EEIS BLM/FS	2.8	3.1	3.3	3.1	3.1
		EEIS CumEff	2.8	3.2	3.6	3.3	3.2
		UCRB BLM/FS	2.8	3.1	3.3	3.1	3.1
		UCRB CumEff	2.8	3.2	3.6	3.3	3.2
FOR	Broad-tailed hummingbird	UCRB BLM/FS	2.4	3.3	3.6	3.1	3.2
		UCRB CumEff	2.4	3.5	3.6	3.3	3.3
FOR	Chestnut-backed chickadee	EEIS BLM/FS	3.2	3.3	3.8	3.0	2.6
		EEIS CumEff	3.2	3.3	3.8	3.0	2.6
		UCRB BLM/FS	2.8	3.2	3.8	3.0	2.6
		UCRB CumEff	2.8	3.2	3.8	3.0	2.6
FOR	Hammond's flycatcher	EEIS BLM/FS	1.7	3.5	3.7	2.9 <sup>5</sup>	2.9 <sup>5</sup>
		EEIS CumEff	1.3	3.5	3.8	3.2	3.1
		UCRB BLM/FS	1.7	3.4	3.7	2.9	2.9
		UCRB CumEff	1.3	3.4	3.8	3.2	3.1

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
FOR	Lazuli bunting	EEIS BLM/FS	2.6	2.8	2.9	2.6	2.6
		EEIS CumEff	2.6	2.9	3.0	2.9	2.9
		UCRB BLM/FS	2.4	2.6	2.7	2.5	2.5
		UCRB CumEff	2.4	2.8	2.9	2.8	2.8
FOR	Olive-sided flycatcher	EEIS BLM/FS	1.2	3.4	3.5	3.2	3.2
		EEIS CumEff	1.2	3.4	3.7	3.5	3.5
		UCRB BLM/FS	1.2	3.2	3.4	3.0	3.1
		UCRB CumEff	1.2	3.3	3.6	3.4	3.4
FOR	Rufous hummingbird	EEIS BLM/FS	2.4	2.6	2.9	2.6	2.5
		EEIS CumEff	2.4	2.8	3.3 <sup>5</sup>	3.0	3.0
		UCRB BLM/FS	2.3	2.5	2.9	2.5	2.5
		UCRB CumEff	2.3	2.8	3.3 <sup>5</sup>	3.0	3.0
FOR	Rufous-sided towhee	EEIS BLM/FS	2.6	2.4	2.4	2.5	2.5
		EEIS CumEff	2.6	2.4	2.4	2.5	2.5
		UCRB BLM/FS	2.5	2.3	2.3	2.5	2.5
		UCRB CumEff	2.5	2.4	2.4	2.5	2.5
FOR	Western bluebird	EEIS BLM/FS	2.2	3.0	3.5 <sup>5</sup>	2.4 <sup>5</sup>	2.6
		EEIS CumEff	2.2	3.1	3.8 <sup>5</sup>	2.7	2.9
		UCRB BLM/FS	2.2	3.0	3.5 <sup>5</sup>	2.4 <sup>5</sup>	2.6
		UCRB CumEff	2.2	3.1	3.8 <sup>5</sup>	2.7	2.9
FOR	Western tanager	EEIS BLM/FS	1.1	1.1	1.3	1.1	1.1
		EEIS CumEff	1.1	1.1	1.7 <sup>5</sup>	1.5	1.5
		UCRB BLM/FS	1.1	1.1	1.3	1.1	1.1
		UCRB CumEff	1.1	1.1	1.7 <sup>5</sup>	1.5	1.5
FOR	White-winged crossbill	EEIS BLM/FS	3.0	3.0	3.4	3.2	2.9
		EEIS CumEff	2.9	2.9	3.3	3.0	2.7
		UCRB BLM/FS	3.0	3.0	3.4	3.2	2.9
		UCRB CumEff	2.9	2.9	3.3	3.0	2.7
FOR	Wilson's warbler	EEIS BLM/FS	3.2	3.5	3.6	3.4	3.3
		EEIS CumEff	3.2	3.5	3.6	3.4	3.3
		UCRB BLM/FS	3.2	3.4	3.6	3.4	3.3
		UCRB CumEff	3.2	3.4	3.6	3.4	3.3
FOR	Winter wren	EEIS BLM/FS	2.2	3.0	3.6 <sup>5</sup>	3.0	3.2
		EEIS CumEff	2.2	3.5	3.7	3.4	3.6
		UCRB BLM/FS	2.0	2.9	3.3	2.8	3.0
		UCRB CumEff	2.0	3.3	3.8	3.3	3.5
GS	Black rosy finch	EEIS BLM/FS	4.0	4.0	4.3	4.0	4.0
		EEIS CumEff	4.0	4.0	4.3	4.0	4.0
		UCRB BLM/FS	4.0	4.0	4.0	4.0	4.0
		UCRB CumEff	4.0	4.0	4.0	4.0	4.0
GS	Bobolink	EEIS BLM/FS	3.7	4.4	4.6	4.1	4.3
		EEIS CumEff	3.4	4.6	4.7	4.4	4.5
		UCRB BLM/FS	3.3	4.3	4.5	4.0	4.1
		UCRB CumEff	3.3	4.4	4.5	4.2	4.2
GS	Brewer's blackbird	EEIS BLM/FS	1.1	1.1	1.4	1.1	1.1
		EEIS CumEff	1.1	1.5	2.1 <sup>5</sup>	2.0	2.0
		UCRB BLM/FS	1.1	1.1	1.4	1.1	1.1
		UCRB CumEff	1.1	1.5	1.9	2.0	2.0
GS	Brewer's sparrow	EEIS BLM/FS	1.3	1.4	2.8 <sup>5</sup>	2.8 <sup>5</sup>	3.0 <sup>5</sup>
		EEIS CumEff	1.3	2.3	3.2 <sup>5</sup>	3.3 <sup>5</sup>	3.3 <sup>5</sup>
		UCRB BLM/FS	1.4	2.0	2.9 <sup>5</sup>	2.8 <sup>5</sup>	2.9 <sup>5</sup>
		UCRB CumEff	1.3	2.6	3.3 <sup>5</sup>	3.3 <sup>5</sup>	3.3 <sup>5</sup>
GS	Grasshopper sparrow	EEIS BLM/FS	3.6	4.9	4.9	4.8	4.9
		EEIS CumEff	1.9	4.9	4.9	4.8	4.9
		UCRB BLM/FS	2.8	4.0	4.1	4.0	4.0
		UCRB CumEff	2.6	3.9	3.9	3.8	3.8
GS	Horned lark	EEIS BLM/FS	2.5	1.5	1.4	1.3	1.3
		EEIS CumEff	2.5	1.5	2.3 <sup>5</sup>	2.3 <sup>5</sup>	2.3 <sup>5</sup>
		UCRB BLM/FS	2.5	1.5	1.4	1.3	1.3
		UCRB CumEff	2.5	1.5	2.3 <sup>5</sup>	2.3 <sup>5</sup>	2.3 <sup>5</sup>
GS	Lark sparrow	EEIS BLM/FS	1.3	1.4	2.8 <sup>5</sup>	2.8 <sup>5</sup>	3.0 <sup>5</sup>
		EEIS CumEff	1.3	2.5	3.2 <sup>5</sup>	3.2 <sup>5</sup>	3.2 <sup>5</sup>



Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
GS	Loggerhead shrike	UCRB BLM/FS	1.4	2.0	2.9 <sup>5</sup>	2.8 <sup>5</sup>	2.9 <sup>5</sup>
		UCRB CumEff	1.4	2.6	3.3 <sup>5</sup>	3.3 <sup>5</sup>	3.3 <sup>5</sup>
		EEIS BLM/FS	1.7	2.3	3.0 <sup>5</sup>	2.9 <sup>5</sup>	3.0 <sup>5</sup>
		EEIS CumEff	1.7	2.8	3.4 <sup>5</sup>	3.2	3.6 <sup>5</sup>
		UCRB BLM/FS	1.7	2.3	2.9 <sup>5</sup>	2.9 <sup>5</sup>	3.0 <sup>5</sup>
GS	Sage sparrow	UCRB CumEff	1.7	2.8	3.4 <sup>5</sup>	3.2	3.5 <sup>5</sup>
		EEIS BLM/FS	1.2	1.3	2.5 <sup>5</sup>	2.4 <sup>5</sup>	2.6 <sup>5</sup>
		EEIS Cum/Eff	1.2	2.4	3.1 <sup>5</sup>	3.1 <sup>5</sup>	3.1 <sup>5</sup>
		UCRB BLM/FS	1.2	1.3	2.5 <sup>5</sup>	2.4 <sup>5</sup>	2.6 <sup>5</sup>
		UCRB CumEff	1.2	2.4	3.1 <sup>5</sup>	3.1 <sup>5</sup>	3.1 <sup>5</sup>
GS	Sage thrasher	EEIS BLM/FS	1.3	1.4	2.8 <sup>5</sup>	2.8 <sup>5</sup>	3.0 <sup>5</sup>
		EEIS CumEff	1.3	2.5	3.2 <sup>5</sup>	3.2 <sup>5</sup>	3.2 <sup>5</sup>
		UCRB BLM/FS	1.4	1.8	2.9 <sup>5</sup>	2.8 <sup>5</sup>	2.9 <sup>5</sup>
		UCRB CumEff	1.3	2.6	3.2 <sup>5</sup>	3.2 <sup>5</sup>	3.3 <sup>5</sup>
		EEIS BLM/FS	1.2	1.4	1.9 <sup>5</sup>	1.8	1.9 <sup>5</sup>
GS	Vesper sparrow	EEIS CumEff	1.1	1.7	2.4 <sup>5</sup>	2.3 <sup>5</sup>	2.4 <sup>5</sup>
		UCRB BLM/FS	1.2	1.3	1.9 <sup>5</sup>	1.8	1.9 <sup>5</sup>
		UCRB CumEff	1.1	1.7	2.4 <sup>5</sup>	2.3 <sup>5</sup>	2.4 <sup>5</sup>
		EEIS BLM/FS	1.1	1.1	1.4	1.3	1.4
		EEIS CumEff	1.1	1.1	1.6	1.5	1.6
RIP	Red-eyed vireo	UCRB BLM/FS	1.1	1.1	1.4	1.3	1.4
		UCRB CumEff	1.1	1.1	1.6	1.5	1.6
		EEIS BLM/FS	3.4	3.7	3.7	3.5	3.6
		EEIS CumEff	3.3	3.7	3.8	3.6	3.7
		UCRB BLM/FS	3.4	3.6	3.7	3.4	3.5
RIP	Red-winged blackbird	UCRB CumEff	3.3	3.7	3.7	3.6	3.6
		EEIS BLM/FS	2.1	2.4	2.7	2.3	2.3
		EEIS CumEff	2.1	2.5	3.1 <sup>5</sup>	2.8	2.9
		UCRB BLM/FS	2.1	2.4	2.7	2.3	2.3
		UCRB CumEff	2.1	2.5	3.1 <sup>5</sup>	2.8	2.8
RIP	Veery	EEIS BLM/FS	2.7	3.3	3.4	3.2	3.3
		EEIS CumEff	2.7	3.6	3.7	3.4	3.5
		UCRB BLM/FS	2.4	3.3	3.4	3.1	3.2
		UCRB CumEff	2.4	3.5	3.6	3.4	3.5
		EEIS BLM/FS	2.6	3.4	3.6	3.4	3.4
RIP	Willow flycatcher	EEIS CumEff	2.5	3.6	3.7	3.6	3.6
		UCRB BLM/FS	2.6	3.4	3.6	3.4	3.4
		UCRB CumEff	2.4	3.6	3.7	3.6	3.6
		EEIS BLM/FS	2.4	3.4	3.5	3.3	3.3
		EEIS CumEff	2.4	3.5	3.7	3.5	3.5
RIP	Yellow warbler	UCRB BLM/FS	2.4	3.4	3.5	3.3	3.3
		UCRB CumEff	2.4	3.5	3.7	3.5	3.5
		EEIS BLM/FS	3.5	4.5	4.8	4.5	4.6
		EEIS CumEff	3.4	4.9	4.9	4.8	4.7
		UCRB BLM/FS	3.3	4.5	4.8	4.5	4.6
RIP	Yellow-billed cuckoo	UCRB CumEff	3.3	4.9	4.9	4.7	4.8
		EEIS BLM/FS	2.5	3.5	3.6	3.4	3.5
		EEIS CumEff	2.4	3.6	3.7	3.5	3.5
		UCRB BLM/FS	2.5	3.5	3.6	3.4	3.4
		UCRB CumEff	2.4	3.6	3.7	3.5	3.5
WD	Ash-throated flycatcher	EEIS BLM/FS	2.1	1.9	2.3	3.3 <sup>5</sup>	2.6 <sup>5</sup>
		EEIS CumEff	2.1	1.9	2.5 <sup>5</sup>	3.0 <sup>5</sup>	2.8 <sup>5</sup>
		UCRB BLM/FS	2.1	1.9	2.3	3.3 <sup>5</sup>	2.6 <sup>5</sup>
		UCRB CumEff	2.1	1.9	2.5 <sup>5</sup>	3.0 <sup>5</sup>	2.8 <sup>5</sup>
		EEIS BLM/FS	3.0	2.9	3.1	3.5 <sup>5</sup>	3.4 <sup>5</sup>
WD	Bushtit	EEIS CumEff	3.0	2.9	3.1	3.5 <sup>5</sup>	3.4 <sup>5</sup>
		UCRB BLM/FS	3.4	2.9	3.2	3.5 <sup>5</sup>	3.4 <sup>5</sup>
		UCRB CumEff	3.4	2.9	3.2	3.5 <sup>5</sup>	3.4 <sup>5</sup>
		EEIS BLM/FS	1.1	1.1	1.1	1.1	1.1
		EEIS CumEff	1.1	1.1	1.4	1.4	1.4
WD	Chipping sparrow	UCRB BLM/FS	1.1	1.1	1.1	1.1	1.1
		UCRB CumEff	1.1	1.1	1.4	1.4	1.4

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
WD	Green-tailed towhee	EEIS BLM/FS	2.7	2.5	2.8	2.4	2.5
		EEIS CumEff	2.7	2.5	2.8	2.4	2.5
		UCRB BLM/FS	2.7	2.5	2.8	2.4	2.5
		UCRB CumEff	2.7	2.5	2.8	2.4	2.5

### BATS and SMALL MAMMALS

Habitat & Populations							
BAT	Fringed myotis	EEIS BLM/FS <sup>4</sup>	2.7	3.7	4.2	3.7	3.5
		EEIS CumEff	2.7	3.9	4.8 <sup>5</sup>	4.5 <sup>5</sup>	4.4
		UCRB BLM/FS <sup>4</sup>	2.7	3.7	4.2	3.4	3.5
		UCRB CumEff	2.7	3.9	4.8 <sup>5</sup>	4.5 <sup>5</sup>	4.4
BAT	Hoary bat	EEIS BLM/FS <sup>4</sup>	2.2	3.2	3.7	3.3	3.4
		EEIS CumEff	2.2	3.6	4.4 <sup>5</sup>	4.1 <sup>5</sup>	4.1 <sup>5</sup>
		UCRB BLM/FS <sup>4</sup>	2.2	3.2	3.6	3.3	3.4
		UCRB CumEff	2.2	3.6	4.5 <sup>5</sup>	4.1	4.1 <sup>5</sup>
BAT	Long-eared myotis	EEIS BLM/FS <sup>4</sup>	2.4	3.6	3.7	3.4	3.4
		EEIS CumEff	2.4	3.9	4.5 <sup>5</sup>	4.1	4.1
		UCRB BLM/FS <sup>4</sup>	2.4	3.6	3.7	3.4	3.4
		UCRB CumEff	2.4	3.9	4.5 <sup>5</sup>	4.1	4.1
BAT	Long-legged myotis	EEIS BLM/FS <sup>4</sup>	2.4	3.7	4.0	3.2 <sup>5</sup>	3.3
		EEIS CumEff	2.4	4.0	4.7 <sup>5</sup>	4.3	4.2
		UCRB BLM/FS <sup>4</sup>	2.4	3.7	3.8	3.2	3.3
		UCRB CumEff	2.4	4.0	4.7 <sup>5</sup>	4.3	4.2
BAT	Pale western big-eared bat	EEIS BLM/FS <sup>4</sup>	3.1	4.0	4.4	4.0	3.9
		EEIS CumEff	3.1	4.1	4.8 <sup>5</sup>	4.5	4.5
		UCRB BLM/FS <sup>4</sup>	3.1	4.0	4.4	4.0	3.8
		UCRB CumEff	3.1	4.1	4.8 <sup>5</sup>	4.5	4.5
BAT	Silver-haired bat	EEIS BLM/FS <sup>4</sup>	2.5	3.4	3.9 <sup>5</sup>	3.1	3.2
		EEIS CumEff	2.4	3.7	4.4 <sup>5</sup>	4.1	4.2
		UCRB BLM/FS <sup>4</sup>	2.5	3.4	3.9	3.1	3.2
		UCRB CumEff	2.4	3.7	4.4 <sup>5</sup>	4.1	4.2
BAT	Spotted bat	EEIS BLM/FS <sup>4</sup>	4.0	4.2	4.4	4.3	4.2
		EEIS CumEff	4.0	4.4	4.6	4.5	4.5
		UCRB BLM/FS <sup>4</sup>	4.0	4.2	4.4	4.3	4.2
		UCRB CumEff	4.0	4.4	4.6	4.5	4.5
BAT	Western small-footed myotis	EEIS BLM/FS <sup>4</sup>	2.2	3.3	4.3 <sup>5</sup>	3.7	3.2
		UCRB BLM/FS <sup>4</sup>	2.2	3.3	4.3 <sup>5</sup>	3.7	3.2
SMM	Northern flying squirrel	EEIS BLM/FS <sup>4</sup>	2.1	3.5	3.9	3.1	3.0 <sup>5</sup>
		EEIS CumEff	2.2	3.6	4.5 <sup>5</sup>	4.3 <sup>5</sup>	4.1 <sup>5</sup>
		UCRB BLM/FS <sup>4</sup>	2.1	3.5	3.9	3.0	3.0
		UCRB CumEff	2.2	3.5	4.4 <sup>5</sup>	4.2 <sup>5</sup>	4.1 <sup>5</sup>
SMM	Pygmy rabbit	EEIS BLM/FS	3.7	4.5	4.5	4.5	4.5
		UCRB BLM/FS	3.7	4.5	4.5	4.5	4.5
SMM	White-tailed jackrabbit	EEIS BLM/FS	1.8	2.8	2.8	2.8	2.8
		EEIS CumEff	1.8	3.7	3.7	3.7	3.7
		UCRB BLM/FS	1.8	2.8	2.8	2.8	2.8
		UCRB CumEff	1.8	3.7	3.7	3.7	3.7

### CARNIVORES and UNGULATES

Habitat and Populations							
CAR	American marten	EEIS BLM/FS <sup>4</sup>	2.5	4.0	4.4	3.4 <sup>5</sup>	3.0 <sup>5</sup>
		EEIS CumEff <sup>4</sup>	2.5	4.0	4.6 <sup>5</sup>	4.4	4.1
		UCRB BLM/FS <sup>4</sup>	2.1	3.7	4.2	3.0 <sup>5</sup>	2.7 <sup>5</sup>
		UCRB CumEff <sup>4</sup>	2.1	4.3	4.4	4.1	3.6 <sup>5</sup>

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	H	Period/Outcome <sup>3</sup>			
				C	1	2	3
CAR	Fisher	EEIS BLM/FS <sup>4</sup>	3.9	4.8	4.9	4.2 <sup>5</sup>	4.5
		EEIS CumEff <sup>4</sup>	3.9	4.9	4.9	4.9	4.6
		UCRB BLM/FS <sup>4</sup>	2.8	3.8	4.1	3.4	4.1
		UCRB CumEff <sup>4</sup>	2.8	4.8	4.7	4.7	4.3 <sup>5</sup>
CAR	Gray wolf	EEIS BLM/FS	1.7	2.3	2.5	2.3	2.1
		EEIS CumEff	1.8	4.3	4.4	4.3	4.0
		UCRB BLM/FS	1.3	2.1	2.2	2.1	1.9
		UCRB CumEff	1.3	4.2	4.4	4.3	4.1
CAR	Grizzly bear	EEIS BLM/FS	1.7	4.4	4.5	4.4	4.2
		EEIS CumEff	1.6	4.9	4.9	4.9	4.7
		UCRB BLM/FS	1.4	4.0	4.1	4.1	3.8
		UCRB CumEff	1.5	4.8	4.9	4.8	4.6
CAR	Lynx	EEIS BLM/FS <sup>4</sup>	3.0	4.4	4.6	4.6	4.2
		EEIS CumEff <sup>4</sup>	3.0	4.6	4.8	4.8	4.6
		UCRB BLM/FS <sup>4</sup>	3.0	4.4	4.5	4.6	4.1
		UCRB CumEff <sup>4</sup>	3.0	4.6	4.8	4.8	4.6
CAR	Wolverine	EEIS BLM/FS <sup>4</sup>	3.0	4.4	4.5	4.4	4.2
		EEIS CumEff <sup>4</sup>	4.0	4.6	5.0	4.9	4.4
		UCRB BLM/FS <sup>4</sup>	3.0	4.0	4.1	4.1	3.8
		UCRB CumEff <sup>4</sup>	4.0	5.0	5.0	4.9	4.3 <sup>5</sup>
UNG	California bighorn sheep	EEIS BLM/FS <sup>4</sup>	3.5	4.6	4.6	4.6	4.9
		EEIS CumEff <sup>4</sup>	3.5	4.7	4.7	4.7	4.9
		UCRB BLM/FS <sup>4</sup>	3.5	4.6	4.6	4.6	4.9
		UCRB CumEff <sup>4</sup>	3.5	4.7	4.7	4.7	4.9
UNG	Pronghorn	EEIS BLM/FS <sup>4</sup>	3.0	3.5	3.9	3.3	3.9
		EEIS CumEff <sup>4</sup>	3.0	4.1	4.3	4.3	4.3
		UCRB BLM/FS <sup>4</sup>	2.0	2.5	3.0 <sup>5</sup>	2.3	3.0 <sup>5</sup>
		UCRB CumEff <sup>4</sup>	2.0	3.4	4.3 <sup>5</sup>	4.3 <sup>5</sup>	4.3 <sup>5</sup>
UNG	Woodland caribou	EEIS BLM/FS	4.5	5.0	5.0	5.0	4.5
		EEIS CumEff	4.5	5.0	5.0	5.0	4.6
		UCRB BLM/FS	4.5	5.0	5.0	5.0	4.5
		UCRB CumEff	4.5	5.0	5.0	5.0	4.6

<sup>1</sup> Group: PLT - vascular plants; AMP - amphibians; REP - reptiles; WAT - waterbirds and shorebirds; GAM - gamebird; RAP - raptor; CAV - cavity nester; FOR - forest birds; GS - grassland/shrub birds; RIP - riparian birds; WD - woodland birds; BAT - bat; SMM - small mammal; CAR - carnivore; UNG - ungulate.

<sup>2</sup> Area: EEIS BLM/FS - Eastern Oregon and Washington planning area, BLM and Forest Service lands only; EEIS CumEff - all lands in Eastern Oregon and Washington planning area; UCRB BLM/FS - Upper Columbia Basin planning area, BLM and Forest Service lands only; UCRB CumEff - all lands in Upper Columbia Basin planning area.

<sup>3</sup> Period / Option: H - historical pre-European settlement period; C - current; 1 - Option 1; 2 - Option 2; 3 - Option 3

<sup>4</sup> Species for which panelists' scores were adjusted by Science Team. Scores were adjusted when considered to reflect a misinterpretation or incomplete understanding of the management alternatives or their outcomes, or the species ecology.

<sup>5</sup> Mean outcome for alternative departs from current outcome by greater than or equal to 0.50 units. Outcomes reported in table were rounded to 0.1 units; but, differences were calculated to 0.01 units. Hence, departure calculated from the table may be misleading.

Table C-2—Mean likelihood scores of viability outcomes for selected species or habitat and species groups for evaluation of ICBEMP management options. Likelihood scores for each period or option to 100 points. High scores indicate high likelihood of an outcome. Means are calculated from the individual likelihood scores of panelists.

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
<b>Vascular Plants</b>								
PLT	<i>Astragalus mulfordiae</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	60	30	65	50
			4	20	40	60	25	40
			5	0	0	10	10	10
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	70	30	60	50
			4	20	20	60	30	40
			5	0	10	10	10	10
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	70	30	65	50
			4	20	30	60	25	40
			5	0	0	10	10	10
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	60	20	55	40
			4	20	40	60	30	40
			5	0	0	20	15	20
PLT	<i>Astragalus oniciformis</i>	UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	60	40	60	70
			4	10	40	40	30	20
			5	0	0	20	10	10
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	60	50	60	50
			4	10	40	45	30	40
			5	0	0	5	10	10
PLT	<i>Astragalus paysonii</i>	UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	70	70	90	85
			4	20	30	30	10	15
			5	0	0	0	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	70	70	90	85
			4	20	30	30	10	15
			5	0	0	0	0	0
PLT	<i>Astragalus solitarius</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	70	70	80	70
			4	20	30	30	20	30
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	70	70	80	70
			4	20	30	30	20	30
			5	0	0	0	0	0
PLT	<i>Astragalus yoder-williamsii</i>	UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	70	80	90	80
			4	10	20	10	5	10

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
			5	0	10	10	5	10
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	70	80	90	80
			4	10	20	10	5	10
			5	0	10	10	5	10
PLT	<i>Botrychium ascendens</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	80	70	80
			4	50	50	20	30	20
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	0	0	0
			4	50	50	40	40	30
			5	0	0	60	60	70
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	0	0	0
			4	50	50	40	40	40
			5	0	0	60	60	60
PLT	<i>Botrychium crenulatum</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	30	40	60
			4	50	50	30	40	30
			5	0	0	40	20	10
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	30	40	60
			4	50	50	30	40	30
			5	0	0	40	20	10
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	40	40	10	20	40
			4	60	60	40	40	40
			5	0	0	50	40	20
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	40	40	0	0	0
			4	60	60	40	40	40
			5	0	0	60	60	60
PLT	<i>Botrychium paradoxum</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	40	40	40
			4	50	50	60	60	60
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	40	40	40
			4	50	50	60	60	60
			5	0	0	0	0	0
PLT	<i>Calochortus longebarbatus</i> <i>var. longebarbatus</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	70	55	60	65
			4	20	30	45	40	35
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	65	50	55	60
			4	20	35	50	45	40
			5	0	0	0	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
PLT	<i>Calochortus longebarbatus</i> var. <i>peckii</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	100	80	80	80	90
			4	0	20	20	20	10
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	100	75	80	80	90
			4	0	25	20	20	10
			5	0	0	0	0	0
PLT	<i>Calochortus nitidus</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	60	30	30	50	20
			4	40	70	70	50	80
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	60	25	25	45	20
			4	40	75	75	55	80
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	10	10	20	25	20
			4	90	90	80	75	80
			5	0	0	0	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	70	10	5	5	0		
	4	30	30	20	20	10		
	5	0	60	75	75	90		
PLT	<i>Castilleja chlorotica</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	80	90	90	70
			4	10	20	10	10	30
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	80	90	90	65
			4	10	20	10	10	35
			5	0	0	0	0	0
PLT	<i>Collomia mazama</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	90	90	90	90
			4	10	10	10	10	10
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	90	90	90	90
			4	10	10	10	10	10
			5	0	0	0	0	0
PLT	<i>Cypripedium fasciculatum</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	70	10	10	10	0
			3	30	60	60	80	70
			4	0	30	30	10	30
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	70	10	10	10	10
			3	30	60	60	70	70
			4	0	25	25	15	15
			5	0	5	5	5	5

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
PLT	<i>Grindelia howellii</i>	UCRB BLM/FS	1	0	0	0	0	0
			2	70	80	70	90	80
			3	30	10	20	10	20
			4	0	10	10	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	60	70	70	90	85
			3	40	20	20	5	15
			4	0	10	10	5	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	50	60	70	70
			4	0	50	40	30	30
			5	100	0	0	0	0
UCRB CumEff	1		0	0	0	0	0	
	2		0	0	0	0	0	
	3		0	60	85	85	85	
	4		60	40	15	15	15	
	5		40	0	0	0	0	
PLT	<i>Hackelia cronquistii</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	40	30	50	45
			4	50	60	60	45	45
			5	0	0	10	5	10
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	30	30	40	40
			4	50	70	70	60	60
			5	0	0	0	0	0
PLT	<i>Haplopappus liatrisformis</i>	UCRB BLM/FS	1	0	0	0	0	0
			2	80	0	0	0	0
			3	20	0	0	0	0
			4	0	20	10	10	10
			5	0	80	90	90	90
		UCRB CumEff	1	0	0	0	0	0
			2	80	0	0	0	0
			3	20	0	0	0	0
			4	0	15	10	10	10
			5	0	85	90	90	90
PLT	<i>Howellia aquatilis</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	80	75	75	75	75
			5	20	25	25	25	25
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	60	60	60	50	50
			4	40	20	20	30	30
			5	0	20	20	20	20
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	90	85	85	90
			4	10	5	10	10	5
			5	0	5	5	5	5
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	90	90	80	80	90		
	4	10	5	10	10	5		
	5	0	5	10	10	5		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
PLT	<i>Lomatium suksdorfii</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	50	50	50	50	50
			5	50	50	50	50	50
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	60	50	40	40	40
			4	40	50	60	60	60
			5	0	0	0	0	0
PLT	<i>Mimulus pygmaeus</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	80	80	85	80
			4	10	20	20	15	20
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	80	80	85	80
			4	10	20	20	15	20
			5	0	0	0	0	0
PLT	<i>Mimulus washingtonensis</i> var. <i>washingtonensis</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	30	20	20	30	20
			4	70	80	80	70	80
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	30	20	20	30	20
			4	70	80	80	70	80
			5	0	0	0	0	0
PLT	<i>Mirabilis macfarlanei</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	5	5	10	20
			4	10	90	90	80	70
			5	0	5	5	10	10
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	0	10	10	10
			4	10	50	50	60	70
			5	0	50	40	30	20
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	90	25	25	30	30
			4	10	70	70	65	70
			5	0	5	5	5	0
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	90	10	10	20	20		
	4	10	80	80	70	70		
	5	0	10	10	10	10		
PLT	<i>Penstemon glaucinus</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	40	70	80	80	75
			4	60	30	20	20	25
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	40	70	80	80	75
			4	60	30	20	20	25
			5	0	0	0	0	0



Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
PLT	<i>Penstemon lemhiensis</i>	UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	70	40	40	90	40
			4	30	50	50	10	60
			5	0	10	10	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	70	30	30	80	40
			4	30	60	60	20	60
			5	0	10	10	0	0
PLT	<i>Polemonium pectinatum</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	60	50	50	55	50
			5	40	50	50	45	50
		EEIS CumEff	1	0	0	0	0	0
			2	80	0	0	0	0
			3	20	0	0	0	0
			4	0	10	5	5	5
			5	0	90	95	95	95
PLT	<i>Silene spaldingii</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	10	0
			4	50	50	50	50	50
			5	50	50	50	40	50
		EEIS CumEff	1	0	0	0	0	0
			2	80	0	0	0	0
			3	20	0	0	0	0
			4	0	20	10	10	10
			5	0	80	90	90	90
PLT	<i>Stephanomeria malheurensis</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	100	100	100	100	100
PLT	<i>Trifolium thompsonii</i>	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	40	50	45
			4	50	50	60	50	55
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	50	45	55	50
			4	50	50	55	45	50
			5	0	0	0	0	0
<b>Amphibians and Reptiles</b>								
AMP	Coeur d'alene salamander	UCRB BLM/FS <sup>5</sup>	1	0	0	0	00	
			2	0	0	0	0	0
			3	40	3	0	5	10
			4	50	63	45	70	75
			5	10	33	55	25	15
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	40	3	0	0	3
			4	50	57	15	28	45
			5	10	40	85	72	52
AMP	Spotted frog species B	EEIS BLM/FS	1	20	0	0	0	0
			2	30	0	0	0	0
			3	35	60	30	65	73
			4	10	30	50	25	20
			5	5	10	20	10	8

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
AMP	Northern leopard frog	EEIS CumEff	1	20	0	0	0	0		
			2	30	0	0	0	0		
			3	35	60	25	58	65		
			4	10	30	55	30	25		
			5	5	10	20	13	10		
		UCRB BLM/FS	1	25	0	0	0	3		
			2	50	20	5	20	23		
			3	15	50	40	55	58		
			4	10	30	50	25	18		
			5	0	0	5	0	0		
		UCRB CumEff	1	25	0	0	0	0		
			2	50	20	0	18	20		
			3	15	50	40	50	55		
			4	10	30	55	33	25		
			5	0	0	5	0	0		
		AMP	Northern leopard frog	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
					2	17	0	0	0	0
					3	50	17	0	15	20
					4	33	20	27	30	30
					5	0	63	73	55	50
				EEIS CumEff	1	0	0	0	0	0
					2	17	0	0	0	0
					3	50	17	0	0	0
					4	33	20	3	8	15
					5	0	63	97	92	85
UCRB BLM/FS <sup>5</sup>	1			3	0	0	0	0		
	2			33	0	0	0	5		
	3			33	0	0	20	30		
	4			30	30	7	33	35		
	5			0	70	93	47	30		
UCRB CumEff	1			3	0	0	0	0		
	2			33	0	0	0	0		
	3			33	0	0	0	0		
	4			30	23	3	5	15		
	5			0	77	97	95	85		
AMP	Spotted frog species A	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	60	0	0	10	20		
			3	30	50	20	50	55		
			4	10	40	50	35	20		
			5	0	10	30	5	5		
		EEIS CumEff	1	0	0	0	0	0		
			2	60	0	0	0	0		
			3	30	50	20	45	50		
			4	10	40	50	40	40		
			5	0	10	30	15	10		
AMP	Tailed frog	EEIS BLM/FS	1	0	0	0	0	0		
			2	50	25	0	30	38		
			3	25	45	13	40	35		
			4	20	18	65	18	18		
			5	5	13	23	13	10		
		EEIS CumEff	1	0	0	0	0	0		
			2	50	25	0	0	0		
			3	25	45	8	45	55		
			4	20	18	25	38	33		
			5	5	13	68	18	13		
		UCRB BLM/FS	1	0	0	0	0	0		
			2	47	23	3	27	35		
			3	28	43	18	42	37		
			4	22	22	57	22	22		
			5	3	12	22	10	7		
		UCRB CumEff	1	0	0	0	0	0		
			2	47	23	3	5	7		
			3	28	43	20	45	50		
			4	22	22	27	37	32		
			5	3	12	50	13	12		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
AMP	Western toad	EEIS BLM/FS	1	40	10	0	15	25		
			2	45	50	20	53	50		
			3	15	35	20	33	25		
			4	0	5	60	0	0		
			5	0	0	0	0	0		
		EEIS CumEff	1	40	0	0	0	0		
			2	45	20	5	18	23		
			3	15	45	15	40	40		
			4	0	25	20	35	30		
			5	0	10	60	8	8		
		UCRB BLM/FS	1	27	7	0	10	17		
			2	43	45	15	40	40		
			3	23	33	23	33	30		
			4	7	13	55	13	12		
			5	0	2	7	3	2		
		UCRB CumEff	1	27	0	0	0	0		
			2	43	18	3	12	17		
			3	23	40	20	35	35		
			4	7	30	23	37	33		
			5	0	12	53	17	15		
		AMP	Woodhouse's toad	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
					2	55	0	0	10	15
					3	40	25	5	25	35
					4	5	65	45	50	45
					5	0	10	50	15	5
EEIS CumEff	1			0	0	0	0	0		
	2			55	0	0	0	0		
	3			40	25	0	0	0		
	4			5	65	30	50	55		
	5			0	10	70	50	45		
UCRB BLM/FS <sup>5</sup>	1			0	0	0	0	0		
	2			25	0	0	10	15		
	3			50	30	5	25	35		
	4			25	65	55	50	45		
	5			0	5	40	15	5		
UCRB CumEff	1			0	0	0	0	0		
	2			25	0	0	0	0		
	3			50	30	0	0	0		
	4			25	65	30	43	45		
	5			0	5	70	58	55		
REP	Common garter snake			EEIS BLM/FS	1	50	0	0	0	0
					2	50	50	0	50	50
					3	0	50	50	50	50
					4	0	0	50	0	0
					5	0	0	0	0	0
		EEIS CumEff	1	50	0	0	0	0		
			2	50	0	0	0	0		
			3	0	50	0	50	50		
			4	0	50	50	50	50		
			5	0	0	50	0	0		
		UCRB BLM/FS	1	50	0	0	0	0		
			2	50	50	23	50	53		
			3	0	40	40	40	43		
			4	0	10	38	10	5		
			5	0	0	0	0	0		
		UCRB CumEff	1	50	0	0	0	0		
			2	50	25	20	23	25		
			3	0	40	18	43	40		
			4	0	35	38	35	35		
			5	0	0	25	0	0		
		REP	Desert horned lizard	EEIS BLM/FS	1	50	45	40	45	50
					2	50	55	60	55	50
					3	0	0	0	0	0
					4	0	0	0	0	0
					5	0	0	0	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
REP	Longnose leopard lizard	EEIS CumEff	1	50	45	40	45	50
			2	50	55	60	55	50
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	50	45	40	45	50
			2	50	55	60	55	50
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	50	45	40	45	50
			2	50	55	60	55	50
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	30	20	30	35
			4	50	60	60	60	55
			5	0	10	20	10	10
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	25	20	25	30
			4	50	60	55	60	60
			5	0	15	25	15	10
UCRB BLM/FS	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	50	30	20	30	35		
	4	50	60	60	60	55		
	5	0	10	20	10	10		
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	50	25	20	25	30		
	4	50	60	55	60	60		
	5	0	15	25	15	10		
REP	Mojave-collared lizard	UCRB BLM/FS	1	0	0	0	0	0
			2	50	30	20	30	35
			3	50	60	60	60	55
			4	0	10	20	10	10
			5	0	0	0	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	50	40	20	25	30		
	4	20	40	40	60	60		
	5	30	20	40	15	10		
REP	Night snake	EEIS BLM/FS	1	50	50	50	50	50
			2	50	50	50	50	50
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	50	0	0	0	0
			2	50	50	50	50	50
			3	0	50	50	50	50
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	50	45	40	45	50
			2	50	55	60	55	50
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	50	40	35	40	45
			2	50	60	65	60	55
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
REP	Painted turtle	EEIS BLM/FS	1	5	0	0	0	5		
			2	50	40	15	45	50		
			3	45	55	50	50	45		
			4	0	5	35	5	0		
			5	0	0	0	0	0		
		EEIS CumEff	1	5	0	0	0	0		
			2	50	20	10	20	20		
			3	45	35	20	40	45		
			4	0	45	40	40	35		
			5	0	0	30	0	0		
		UCRB BLM/FS	1	0	0	0	0	0		
			2	50	35	18	40	50		
			3	50	65	58	60	50		
			4	0	0	25	0	0		
			5	0	0	0	0	0		
		UCRB CumEff	1	0	0	0	0	0		
			2	50	15	10	13	18		
			3	50	35	20	40	45		
			4	0	50	45	48	38		
			5	0	0	25	0	0		
		REP	Rubber boa	EEIS BLM/FS	1	0	0	0	0	0
					2	50	0	0	10	30
					3	50	50	10	50	50
					4	0	50	90	40	20
					5	0	0	0	0	0
EEIS CumEff	1			0	0	0	0	0		
	2			50	0	0	0	0		
	3			50	50	0	10	30		
	4			0	50	10	50	50		
	5			0	0	90	40	20		
UCRB BLM/FS	1			0	0	0	0	0		
	2			25	0	0	5	15		
	3			50	48	25	48	50		
	4			25	53	75	48	35		
	5			0	0	0	0	0		
UCRB CumEff	1			0	0	0	0	0		
	2			25	0	0	0	0		
	3			50	45	15	25	38		
	4			25	55	40	55	53		
	5			0	0	45	20	10		
REP	Sagebrush lizard			EEIS BLM/FS	1	50	50	50	50	50
					2	50	50	50	50	50
					3	0	0	0	0	0
					4	0	0	0	0	0
					5	0	0	0	0	0
		EEIS CumEff	1	50	0	0	0	0		
			2	50	50	50	50	50		
			3	0	50	50	50	50		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	50	40	35	40	45		
			2	50	60	65	60	55		
			3	0	0	0	0	0		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		UCRB CumEff	1	50	30	20	25	30		
			2	50	40	35	40	40		
			3	0	30	45	35	30		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		REP	Sharptail snake	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
					2	0	0	0	0	0
					3	50	0	0	10	30
					4	50	50	30	45	50
					5	0	50	70	45	20

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
REP	Short-horned lizard	EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	0	0	0	0
			4	50	50	0	10	50
			5	0	50	100	90	50
		EEIS BLM/FS	1	50	50	50	50	50
			2	50	50	50	50	50
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	50	0	0	0	0
			2	50	50	50	50	50
			3	0	50	50	50	50
			4	0	0	0	0	0
			5	0	0	0	0	0
UCRB BLM/FS	1	50	40	30	40	45		
	2	50	60	70	60	55		
	3	0	0	0	0	0		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
UCRB CumEff	1	50	35	30	35	45		
	2	50	65	70	65	55		
	3	0	0	0	0	0		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
REP	Striped whipsnake	EEIS BLM/FS	1	50	50	50	50	50
			2	50	50	50	50	50
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	50	0	0	0	0
			2	50	50	50	50	50
			3	0	50	50	50	50
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	35	30	35	40
			4	50	55	55	55	50
			5	0	10	15	10	10
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	50	35	30	30	35		
	4	50	55	55	60	55		
	5	0	10	15	10	10		
REP	Western pond turtle	EEIS BLM/FS	1	40	10	0	20	20
			2	30	30	30	40	40
			3	30	50	50	40	40
			4	0	10	10	0	0
			5	0	0	10	0	0
		EEIS CumEff	1	40	0	0	0	0
			2	30	0	0	0	0
			3	30	10	0	10	10
			4	0	20	10	20	20
			5	0	70	90	70	70
<b>Habitat and Species Groups -- Waterbirds and Shorebirds</b>								
WAT	1: Open water birds	EEIS BLM/FS	1	0	0	0	0	0
			2	7	2	0	7	1
			3	91	46	37	65	53
			4	2	46	48	24	41
			5	0	6	15	4	5

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>				
					C	1	2	3	
WAT 2: Common loon	EEIS CumEff		1	0	0	0	0	0	
			2	2	3	0	9	2	
			3	90	51	43	59	53	
			4	8	38	44	28	40	
			5	0	8	13	4	5	
	UCRB BLM/FS		1	0	0	0	0	0	
			2	2	1	0	6	2	
			3	80	61	36	67	65	
			4	18	28	48	22	31	
			5	0	10	16	5	2	
	UCRB CumEff		1	0	0	0	0	0	
			2	4	6	2	12	4	
			3	78	59	38	60	61	
			4	18	27	46	24	33	
			5	0	8	14	4	2	
	EEIS BLM/FS		1	0	0	0	0	0	
			2	0	0	0	4	4	
			3	26	39	28	40	36	
			4	74	61	60	56	60	
			5	0	0	12	0	0	
	EEIS CumEff		1	0	0	0	0	0	
			2	6	16	10	16	16	
			3	36	40	34	41	40	
			4	58	44	46	43	44	
			5	0	0	10	0	0	
UCRB BLM/FS		1	0	0	0	0	0		
		2	0	0	0	4	4		
		3	18	45	34	44	42		
		4	82	55	54	52	54		
		5	0	0	12	0	0		
UCRB CumEff		1	0	0	0	0	0		
		2	0	16	14	16	16		
		3	37	35	24	34	33		
		4	63	49	49	50	51		
		5	0	0	13	0	0		
WAT 3: Wood duck, mergansers	EEIS BLM/FS		1	0	0	0	0	0	
			2	2	12	6	25	15	
			3	40	36	36	42	41	
			4	58	42	42	29	38	
			5	0	10	16	4	6	
	EEIS CumEff		1	0	0	0	0	0	
			2	1	9	5	22	13	
			3	36	34	33	41	41	
			4	63	46	39	33	40	
			5	0	11	23	4	6	
	UCRB BLM/FS		1	0	5	2	6	5	
			2	16	23	18	29	27	
			3	74	45	38	46	43	
			4	10	19	28	15	19	
			5	0	8	14	4	6	
	UCRB CumEff		1	0	6	5	6	6	
			2	16	18	15	23	22	
			3	72	44	30	51	42	
			4	12	24	31	17	18	
			5	0	8	19	3	12	
	WAT 4: Goldeneyes	EEIS BLM/FS		1	0	0	0	0	0
				2	0	0	0	0	0
				3	40	24	10	44	30
				4	60	70	61	54	64
				5	0	6	29	2	6
EEIS CumEff			1	0	0	0	0	0	
			2	0	0	0	0	0	
			3	41	30	15	42	29	
			4	59	65	65	56	65	
			5	0	5	20	2	6	

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
WAT 5: Western snowy plover	UCRB BLM/FS	1	1	0	0	0	0	0
		2	0	0	0	0	0	0
		3	50	34	12	53	38	
		4	50	62	65	43	60	
		5	0	4	23	4	2	
	UCRB CumEff	1	1	0	0	0	0	0
		2	0	0	0	0	0	0
		3	51	30	15	46	36	
		4	49	63	64	50	62	
		5	0	7	21	4	2	
	EEIS BLM/FS	1	1	0	0	0	0	0
		2	0	0	0	0	0	0
		3	0	0	0	0	0	0
		4	100	100	88	97	100	
		5	0	0	12	3	0	
EEIS CumEff	1	1	0	0	0	0	0	
	2	0	0	0	0	0	0	
	3	0	0	0	0	0	0	
	4	100	90	82	90	90		
	5	0	10	18	10	10		
WAT 6: Harlequin duck	EEIS BLM/FS	1	1	0	0	0	0	0
		2	0	0	0	0	0	0
		3	60	0	0	50	19	
		4	40	50	19	50	57	
		5	0	50	81	0	24	
	EEIS CumEff	1	1	0	0	0	0	0
		2	0	0	0	0	0	0
		3	70	0	0	45	14	
		4	30	43	15	55	57	
		5	0	57	85	0	29	
	UCRB BLM/FS	1	1	0	0	0	0	0
		2	20	0	0	0	0	0
		3	40	0	0	60	19	
		4	40	50	21	32	57	
		5	0	50	79	8	24	
UCRB CumEff	1	1	0	0	0	0	0	
	2	20	0	0	0	0	0	
	3	40	0	0	52	15		
	4	40	41	17	34	59		
	5	0	59	83	14	26		
WAT 7: Herons, egrets	EEIS BLM/FS	1	1	0	0	0	0	0
		2	0	0	0	0	0	0
		3	100	64	61	76	61	
		4	0	30	35	20	34	
		5	0	6	4	4	5	
	EEIS CumEff	1	1	0	0	0	0	0
		2	0	4	2	6	5	
		3	100	69	60	71	59	
		4	0	19	34	19	31	
		5	0	8	4	4	5	
	UCRB BLM/FS	1	1	0	0	0	0	0
		2	0	0	0	0	0	0
		3	80	68	55	74	68	
		4	20	28	39	23	30	
		5	0	4	6	3	2	
UCRB CumEff	1	1	0	0	0	0	0	
	2	0	0	0	0	0	0	
	3	82	67	53	68	64		
	4	18	29	41	28	34		
	5	0	4	6	4	2		
WAT 8: Dabbling ducks	EEIS BLM/FS	1	1	0	0	0	0	0
		2	30	12	9	11	11	
		3	70	58	46	73	65	
		4	0	28	41	16	24	
		5	0	2	4	0	0	



Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
WAT 9: Spotted sandpiper	EEIS CumEff		1	0	0	0	0	0
			2	44	16	12	15	13
			3	56	57	42	67	66
			4	0	25	42	18	21
			5	0	2	4	0	0
	UCRB BLM/FS		1	0	0	0	0	0
			2	18	4	3	12	5
			3	80	60	47	66	61
			4	2	35	45	22	34
			5	0	1	5	0	0
	UCRB CumEff		1	0	0	0	0	0
			2	25	8	7	9	8
			3	75	58	43	63	56
			4	0	31	44	28	36
			5	0	3	6	0	0
	EEIS BLM/FS		1	0	0	0	0	0
			2	46	54	43	51	52
			3	54	46	51	49	48
			4	0	0	6	0	0
			5	0	0	0	0	0
	EEIS CumEff		1	0	0	0	0	0
			2	50	55	51	55	56
			3	50	45	43	45	44
			4	0	0	6	0	0
			5	0	0	0	0	0
UCRB BLM/FS		1	0	0	0	0	0	
		2	48	54	43	51	52	
		3	52	46	51	49	48	
		4	0	0	6	0	0	
		5	0	0	0	0	0	
UCRB CumEff		1	0	0	0	0	0	
		2	52	54	51	59	60	
		3	48	46	43	41	40	
		4	0	0	6	0	0	
		5	0	0	0	0	0	
WAT 10: Greater sandhill crane	EEIS BLM/FS		1	0	0	0	0	0
			2	5	0	0	3	0
			3	80	50	34	69	50
			4	15	50	65	29	50
			5	0	0	1	0	0
	EEIS CumEff		1	0	0	0	0	0
			2	8	3	4	5	3
			3	79	56	39	70	54
			4	14	41	56	25	44
			5	0	0	1	0	0
	UCRB BLM/FS		1	0	0	0	0	0
			2	11	10	3	10	5
			3	73	61	46	68	53
			4	16	29	51	23	43
			5	0	0	0	0	0
	UCRB CumEff		1	0	0	0	0	0
			2	13	5	3	8	4
			3	71	63	45	70	51
			4	16	33	53	23	45
			5	0	0	0	0	0
WAT 11: Rails, avocets	EEIS BLM/FS		1	0	0	0	0	0
			2	0	0	0	1	0
			3	69	54	36	69	52
			4	31	46	54	30	46
			5	0	0	10	0	2

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>				
					C	1	2	3	
WAT 12: Curlew, willet	EEIS CumEff	1	0	0	0	0	0	0	
		2	8	2	2	3	2		
		3	64	55	36	70	52		
		4	28	43	53	27	44		
		5	0	0	9	0	2		
	UCRB BLM/FS	1	0	0	0	0	0	0	
		2	0	0	0	0	0	0	
		3	59	45	31	63	43		
		4	41	55	60	37	56		
		5	0	0	9	0	1		
	UCRBCumEff	1	0	0	0	0	0	0	
		2	4	2	2	3	2		
		3	64	50	34	69	50		
		4	32	48	56	28	47		
		5	0	0	8	0	1		
	EEIS BLM/FS	1	0	0	0	0	0	0	
		2	0	0	0	0	0	0	
		3	28	10	3	21	9		
		4	73	90	95	79	89		
		5	0	0	3	0	3		
	EEIS CumEff	1	0	0	0	0	0	0	
		2	0	0	0	0	0	0	
		3	33	14	5	24	13		
		4	68	86	93	76	85		
		5	0	0	3	0	3		
UCRB BLM/FS	1	0	0	0	0	0	0		
	2	0	0	0	0	0	0		
	3	28	10	3	18	9			
	4	73	90	95	83	89			
	5	0	0	3	0	3			
UCRB CumEff	1	0	0	0	0	0	0		
	2	0	0	0	0	0	0		
	3	33	14	5	24	13			
	4	68	86	93	76	85			
	5	0	0	3	0	3			
WAT 13: Upland sandpiper	EEIS BLM/FS <sup>5</sup>	1	2	0	0	0	0	0	
		2	68	0	0	0	0	0	
		3	30	0	0	0	0	0	
		4	0	0	0	25	15		
		5	0	100	100	75	85		
	EEIS CumEff	1	2	0	0	0	0	0	
		2	66	0	0	0	0	0	
		3	32	0	0	0	0	0	
		4	0	0	0	12	2		
		5	0	100	100	88	98		
	UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0	0	
		2	66	0	0	0	0	0	
		3	34	0	0	0	0	0	
		4	0	0	0	25	15		
		5	0	100	100	75	85		
	UCRB CumEff	1	0	0	0	0	0	0	
		2	66	0	0	0	0	0	
		3	34	0	0	0	0	0	
		4	0	0	0	12	2		
		5	0	100	100	88	98		
	WAT 14: Common snipe	EEIS BLM/FS	1	0	0	0	0	0	0
			2	20	12	9	20	15	
			3	74	68	55	67	63	
			4	6	20	34	13	22	
			5	0	0	2	0	0	
EEIS CumEff		1	0	0	0	0	0	0	
		2	18	12	10	18	14		
		3	76	66	53	68	62		
		4	6	22	35	14	24		
		5	0	0	2	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
WAT	15: Migrant sandpipers	UCRB BLM/FS	1	0	0	0	0	0
			2	20	12	9	20	15
			3	74	68	55	67	63
			4	6	20	34	13	22
			5	0	0	2	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	18	12	10	18	14
			3	76	66	53	68	62
			4	6	22	35	14	24
			5	0	0	2	0	0
		EEIS BLM/FS	1	32	20	15	25	24
			2	52	51	48	48	48
			3	16	29	35	27	28
			4	0	0	2	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	36	25	17	26	25
			2	50	53	53	53	53
			3	14	22	28	21	22
			4	0	0	2	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	28	12	5	22	12
			2	57	59	57	54	59
			3	15	29	36	24	29
			4	0	0	2	0	0
			5	0	0	0	0	0
UCRB CumEff	1	35	24	13	25	22		
	2	51	55	56	56	57		
	3	14	21	29	19	21		
	4	0	0	2	0	0		
	5	0	0	0	0	0		
<b>Raptors and Gamebirds</b>								
GMB	Band-tailed pigeon	EEIS BLM/FS	1	34	4	2	16	4
			2	31	28	26	23	33
			3	32	40	42	43	39
			4	3	24	30	18	24
			5	0	4	0	0	0
		EEIS CumEff	1	36	2	1	15	3
			2	28	26	25	21	31
			3	33	42	41	39	40
			4	3	24	33	25	26
			5	0	6	0	0	0
		UCRB BLM/FS	1	0	0	0	0	4
			2	2	4	4	16	12
			3	22	22	36	29	30
			4	48	36	44	46	44
			5	28	38	16	9	10
		UCRB CumEff	1	0	0	0	0	0
			2	2	2	2	16	16
			3	24	22	36	27	28
			4	47	36	44	46	44
			5	27	40	18	11	12
GMB	Blue grouse	EEIS BLM/FS	1	42	16	14	27	22
			2	44	50	44	56	60
			3	14	34	36	17	18
			4	0	0	6	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	44	16	16	27	23
			2	42	49	42	56	59
			3	14	35	36	17	18
			4	0	0	6	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	54	14	17	29	25

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
			2	44	50	41	54	57
			3	2	36	37	17	18
			4	0	0	5	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	56	14	17	29	25
			2	44	50	43	55	59
			3	0	36	40	16	16
			4	0	0	0	0	0
			5	0	0	0	0	0
GMB	Columbian sharp-tailed grouse	EEIS BLM/FS	1	74	0	0	0	0
			2	26	0	0	2	2
			3	0	2	2	16	6
			4	0	20	32	58	45
			5	0	78	66	24	47
		EEIS CumEff	1	76	0	0	0	0
			2	24	0	0	4	4
			3	0	2	2	22	10
			4	0	32	39	52	41
			5	0	66	59	22	45
		UCRB BLM/FS	1	62	0	0	0	0
			2	38	0	0	2	2
			3	0	2	2	16	6
			4	0	32	37	59	45
			5	0	66	61	23	47
		UCRB CumEff	1	66	0	0	0	0
			2	34	0	0	2	2
			3	0	2	2	24	12
			4	0	36	42	53	41
			5	0	62	56	21	45
GMB	Mountain quail	EEIS BLM/FS	1	0	0	0	0	0
			2	62	2	0	8	6
			3	22	27	28	42	42
			4	16	54	47	43	38
			5	0	17	25	7	14
		EEIS CumEff	1	0	0	0	0	0
			2	68	2	0	0	0
			3	26	36	33	55	47
			4	6	57	59	45	51
			5	0	5	8	0	2
		UCRB BLM/FS	1	0	0	0	0	0
			2	18	0	0	0	0
			3	38	0	2	12	8
			4	32	18	22	36	29
			5	12	82	76	52	63
		UCRB CumEff	1	0	0	0	0	0
			2	24	0	0	0	0
			3	37	2	3	12	8
			4	35	22	24	43	33
			5	4	76	73	45	59
GMB	Sage grouse	EEIS BLM/FS	1	42	0	0	16	5
			2	54	16	8	47	43
			3	4	52	47	33	42
			4	0	28	41	4	10
			5	0	4	4	0	0
		EEIS CumEff	1	48	0	0	14	5
			2	49	22	10	49	43
			3	3	49	48	34	43
			4	0	25	38	3	9
			5	0	4	4	0	0
		UCRB BLM/FS	1	44	0	0	20	5
			2	52	18	10	42	41
			3	4	56	49	34	42
			4	0	24	39	4	12
			5	0	2	2	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
RAP	Bald eagle	UCRB CumEff	1	50	0	0	14	3
			2	47	22	10	48	42
			3	3	53	50	35	44
			4	0	23	38	3	11
			5	0	2	2	0	0
		EEIS BLM/FS	1	0	0	0	0	0
			2	32	6	10	19	16
			3	60	42	52	70	70
			4	8	42	30	11	14
			5	0	10	8	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	44	0	8	23	21
			3	50	45	49	66	66
			4	6	43	33	11	13
			5	0	12	10	0	0
UCRB BLM/FS	1	0	0	0	0	0		
	2	32	6	10	19	16		
	3	60	42	52	70	70		
	4	8	42	30	11	14		
	5	0	10	8	0	0		
RAP	Barred owl	UCRB CumEff	1	0	0	0	0	0
			2	44	0	8	23	21
			3	50	45	49	66	66
			4	6	43	33	11	13
			5	0	12	10	0	0
		EEIS BLM/FS	1	0	12	6	0	8
			2	12	60	49	21	56
			3	56	28	33	42	32
			4	18	0	12	35	4
			5	14	0	0	2	0
		EEIS CumEff	1	0	6	8	6	0
			2	0	52	42	24	52
			3	6	42	38	41	36
			4	10	0	12	29	12
			5	84	0	0	0	0
UCRB BLM/FS	1	2	2	8	6	10		
	2	18	32	51	50	62		
	3	58	38	35	34	26		
	4	22	28	6	10	2		
	5	0	0	0	0	0		
UCRB CumEff	1	0	2	12	10	8		
	2	0	24	51	47	60		
	3	0	34	31	33	22		
	4	14	32	6	10	10		
	5	86	8	0	0	0		
RAP	Boreal owl	EEIS BLM/FS	1	2	0	0	0	2
			2	2	0	2	2	2
			3	24	18	16	28	38
			4	32	40	37	35	36
			5	40	42	45	35	22
		EEIS CumEff	1	0	0	0	0	2
			2	2	2	2	2	2
			3	16	16	17	20	29
			4	46	38	35	38	40
			5	36	44	46	40	27
		UCRB BLM/FS	1	2	0	2	2	3
			2	36	7	10	24	26
			3	36	42	34	36	40
			4	24	24	39	32	30
			5	2	27	15	6	1
UCRB CumEff	1	0	0	2	2	3		
	2	22	7	10	10	12		
	3	38	40	36	45	49		
	4	30	26	39	39	36		
	5	10	27	13	4	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
RAP	Burrowing owl	EEIS BLM/FS	1	56	0	0	0	0
			2	38	33	31	37	34
			3	6	42	44	44	45
			4	0	21	21	19	21
			5	0	4	4	0	0
		EEIS CumEff	1	70	0	0	0	0
			2	26	38	33	37	35
			3	4	43	48	46	43
			4	0	19	17	17	22
			5	0	0	2	0	0
		UCRB BLM/FS	1	52	0	0	0	0
			2	42	36	32	39	35
			3	6	40	42	44	45
			4	0	20	20	17	20
			5	0	4	6	0	0
		UCRB CumEff	1	65	0	0	0	0
			2	31	40	34	38	35
			3	4	41	49	47	45
			4	0	19	15	15	20
			5	0	0	2	0	0
RAP	Cooper's hawk	EEIS BLM/FS	1	34	14	12	30	30
			2	50	36	34	50	40
			3	14	48	50	20	28
			4	2	2	4	0	2
			5	0	0	0	0	0
		EEIS CumEff	1	38	19	18	36	35
			2	52	41	39	54	45
			3	10	40	41	10	20
			4	0	0	2	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	34	15	15	31	31
			2	50	36	34	50	40
			3	14	47	47	19	27
			4	2	2	4	0	2
			5	0	0	0	0	0
		UCRB CumEff	1	38	16	16	32	32
			2	52	43	40	58	48
			3	10	41	42	10	20
			4	0	0	2	0	0
			5	0	0	0	0	0
RAP	Ferruginous hawk	EEIS BLM/FS	1	2	0	0	0	0
			2	66	24	23	52	44
			3	32	56	57	46	52
			4	0	18	18	2	4
			5	0	2	2	0	0
		EEIS CumEff	1	6	0	0	0	0
			2	70	29	32	55	49
			3	24	66	66	45	51
			4	0	5	2	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	2	0	0	0	0
			2	64	22	21	50	42
			3	34	58	59	48	54
			4	0	18	18	2	4
			5	0	2	2	0	0
		UCRB CumEff	1	6	0	0	0	0
			2	70	29	32	55	49
			3	24	66	66	45	51
			4	0	5	2	0	0
			5	0	0	0	0	0
RAP	Flammulated owl	EEIS BLM/FS	1	1	0	0	0	0
			2	76	2	1	26	14
			3	21	40	20	60	51
			4	2	38	39	13	27
			5	0	20	40	1	8

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
RAP	Great gray owl	EEIS CumEff	1	1	0	0	0	0
			2	76	2	1	25	13
			3	21	39	19	61	51
			4	2	39	38	13	28
			5	0	20	42	1	8
		UCRB BLM/FS	1	1	0	0	0	0
			2	76	2	1	26	14
			3	21	40	20	60	51
			4	2	38	39	13	27
			5	0	20	40	1	8
		UCRB CumEff	1	1	0	0	0	0
			2	76	2	1	26	14
			3	21	40	20	60	51
			4	2	38	39	13	27
			5	0	20	40	1	8
		EEIS BLM/FS	1	0	0	0	0	0
			2	10	4	0	2	2
			3	48	44	38	49	50
			4	36	32	40	45	30
			5	6	20	22	4	18
EEIS CumEff	1		0	0	0	0	0	
	2		13	7	4	8	8	
	3		51	44	43	50	50	
	4		30	29	31	38	24	
	5		6	20	22	4	18	
UCRB BLM/FS	1		0	0	0	0	0	
	2		20	6	14	22	23	
	3		62	46	44	56	43	
	4		16	38	34	22	32	
	5		2	10	8	0	2	
UCRB CumEff	1	2	0	0	0	0		
	2	22	8	18	24	27		
	3	58	44	39	52	38		
	4	16	39	35	24	33		
	5	2	9	8	0	2		
EEIS BLM/FS	1	0	0	0	0	0		
	2	21	10	8	19	11		
	3	53	38	33	46	41		
	4	21	43	46	30	40		
	5	5	10	14	5	8		
	EEIS CumEff	1	0	0	0	0	0	
		2	26	14	10	23	14	
		3	51	46	41	53	49	
		4	19	35	39	23	30	
		5	4	5	10	3	8	
	UCRB BLM/FS	1	0	0	0	0	0	
		2	21	8	6	15	6	
		3	53	38	33	48	43	
		4	21	45	48	33	44	
		5	5	10	14	5	8	
UCRB CumEff	1	0	0	0	0	0		
	2	28	10	6	18	6		
	3	50	48	43	50	48		
	4	19	38	41	30	39		
	5	4	5	10	3	8		
EEIS BLM/FS	1	0	0	0	0	0		
	2	30	20	16	24	19		
	3	50	49	46	54	54		
	4	20	29	35	21	24		
	5	0	2	3	1	3		
	EEIS CumEff	1	0	0	0	0	0	
		2	35	25	19	27	22	
		3	52	47	50	51	52	
		4	13	28	29	22	24	
		5	0	0	2	0	2	
RAP	Merlin	EEIS BLM/FS	1	0	0	0	0	0
			2	30	20	16	24	19
			3	50	49	46	54	54
			4	20	29	35	21	24
			5	0	2	3	1	3
		EEIS CumEff	1	0	0	0	0	0
			2	35	25	19	27	22
			3	52	47	50	51	52
			4	13	28	29	22	24
			5	0	0	2	0	2

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
RAP	Northern goshawk	UCRB BLM/FS	1	0	0	0	0	0		
			2	30	20	19	27	21		
			3	51	53	48	53	57		
			4	19	27	33	20	22		
			5	0	0	0	0	0		
		UCRB CumEff	1	0	0	0	0	0		
			2	33	27	22	30	24		
			3	53	50	53	51	56		
			4	14	23	25	19	20		
			5	0	0	0	0	0		
		EEIS BLM/FS	1	16	8	5	16	11		
			2	54	46	35	48	44		
			3	30	35	44	29	37		
			4	0	11	16	7	8		
			5	0	0	0	0	0		
		EEIS CumEff	1	20	10	6	20	12		
			2	55	51	39	50	47		
			3	25	32	46	24	37		
			4	0	7	9	6	4		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	16	9	6	16	11		
			2	56	38	33	47	49		
			3	28	36	54	34	40		
			4	0	17	7	3	0		
			5	0	0	0	0	0		
UCRB CumEff	1	20	10	8	20	14				
	2	52	44	35	42	43				
	3	28	32	53	37	42				
	4	0	14	4	1	1				
	5	0	0	0	0	0				
RAP	Northern pygmy-owl	EEIS BLM/FS	1	65	44	35	59	51		
			2	35	53	60	40	46		
			3	0	4	5	1	3		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		EEIS CumEff	1	66	45	36	60	53		
			2	34	53	60	40	46		
			3	0	3	4	0	1		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	68	46	38	61	51		
			2	33	50	58	38	46		
			3	0	4	5	1	3		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		UCRB CumEff	1	69	48	39	63	53		
			2	31	50	58	38	46		
			3	0	3	4	0	1		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		RAP	Northern saw-whet owl	EEIS BLM/FS	1	71	37	32	56	49
					2	27	56	58	38	44
					3	2	7	10	6	7
					4	0	0	0	0	0
					5	0	0	0	0	0
EEIS CumEff	1			74	38	32	57	50		
	2			24	56	60	39	45		
	3			2	6	8	4	5		
	4			0	0	0	0	0		
	5			0	0	0	0	0		
UCRB BLM/FS	1			73	39	32	58	51		
	2			27	54	60	38	42		
	3			0	7	8	4	7		
	4			0	0	0	0	0		
	5			0	0	0	0	0		



Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
RAP	Swainson's hawk	UCRB CumEff	1	76	40	32	59	52
			2	24	54	62	39	43
			3	0	6	6	2	5
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS BLM/FS	1	23	32	32	35	31
			2	59	51	53	52	55
			3	14	17	15	13	14
			4	4	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	23	27	27	30	26
			2	59	51	53	55	58
			3	14	20	18	14	14
			4	4	2	2	1	2
			5	0	0	0	0	0
		UCRB BLM/FS	1	23	32	32	35	31
			2	53	51	53	52	55
			3	20	17	15	13	14
			4	4	0	0	0	0
			5	0	0	0	0	0
UCRB CumEff	1	23	27	27	30	26		
	2	53	51	53	55	58		
	3	20	20	18	14	14		
	4	4	2	2	1	2		
	5	0	0	0	0	0		
RAP	Western screech owl	EEIS BLM/FS	1	0	0	0	0	0
			2	56	33	22	46	43
			3	44	58	67	53	57
			4	0	9	11	1	0
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	61	29	20	48	47
			3	39	59	67	52	53
			4	0	12	13	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	56	33	22	46	43
			3	44	58	67	53	57
			4	0	9	11	1	0
			5	0	0	0	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	59	31	22	47	45
			3	41	57	65	53	55
			4	0	12	13	0	0
			5	0	0	0	0	0
<b>Woodpeckers, Nuthatches, and swifts</b>								
CAV	Black-backed woodpecker	EEIS BLM/FS	1	0	0	0	0	0
			2	80	3	0	15	15
			3	20	83	19	73	80
			4	0	15	58	13	5
			5	0	0	24	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	80	0	0	13	13
			3	20	80	16	70	73
			4	0	20	55	18	15
			5	0	0	29	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	80	5	4	23	23
			3	20	80	16	68	73
			4	0	15	59	10	5
			5	0	0	21	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
CAV	Downy woodpecker	UCRB CumEff	1	0	0	0	0	0
			2	80	0	0	13	15
			3	20	80	15	68	70
			4	0	20	59	20	15
			5	0	0	26	0	0
		EEIS BLM/FS <sup>5</sup>	1	25	0	0	0	0
			2	75	30	10	25	18
			3	0	70	70	73	78
			4	0	0	20	3	5
			5	0	0	0	0	0
		EEIS CumEff <sup>5</sup>	1	25	0	0	0	0
			2	75	25	15	25	23
			3	0	75	75	73	75
			4	0	0	10	3	3
			5	0	0	0	0	0
UCRB BLM/FS <sup>5</sup>	1	25	0	0	0	0		
	2	75	33	3	25	13		
	3	0	68	75	73	80		
	4	0	0	23	3	8		
	5	0	0	0	0	0		
CAV	Hairy woodpecker	UCRB CumEff <sup>5</sup>	1	25	0	0	0	0
			2	75	30	3	25	13
			3	0	70	80	73	80
			4	0	0	18	3	8
			5	0	0	0	0	0
		EEIS BLM/FS	1	0	0	0	0	0
			2	88	80	45	58	80
			3	13	20	55	43	20
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	85	89	43	60	70
			3	15	11	58	40	30
			4	0	0	0	0	0
			5	0	0	0	0	0
UCRB BLM/FS	1	0	0	0	0	0		
	2	88	85	50	60	83		
	3	13	15	50	40	18		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
CAV	Lewis' woodpecker	UCRB CumEff	1	0	0	0	0	0
			2	88	85	45	63	75
			3	13	15	55	38	25
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS BLM/FS	1	10	0	0	0	0
			2	47	10	0	53	43
			3	43	27	0	40	53
			4	0	63	50	7	3
			5	0	0	50	0	0
		EEIS CumEff	1	10	0	0	0	0
			2	27	10	0	17	17
			3	47	17	0	70	67
			4	17	47	23	13	17
			5	0	27	77	0	0
UCRB BLM/FS	1	15	0	0	0	0		
	2	45	15	0	45	35		
	3	40	30	0	45	60		
	4	0	55	50	10	5		
	5	0	0	50	0	0		
UCRB CumEff	1	15	0	0	0	0		
	2	15	15	0	0	0		
	3	45	15	0	80	75		
	4	25	30	25	20	25		
	5	0	40	75	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
CAV	Pileated woodpecker	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	25	10	0	50	47		
			3	43	40	3	50	53		
			4	32	50	97	0	0		
			5	0	0	0	0	0		
		EEIS CumEff <sup>6</sup>	1	0	0	0	0	0		
			2	25	10	0	50	47		
			3	43	40	3	50	53		
			4	32	50	97	0	0		
			5	0	0	0	0	0		
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	25	15	0	50	45		
			3	50	35	3	50	55		
			4	25	50	97	0	0		
			5	0	0	0	0	0		
		UCRB CumEff <sup>5</sup>	1	0	0	0	0	0		
			2	25	15	0	50	45		
			3	50	35	3	50	55		
			4	25	50	97	0	0		
			5	0	0	0	0	0		
		CAV	Pygmy nuthatch	EEIS BLM/FS	1	0	0	0	3	0
					2	88	13	0	40	20
					3	13	88	43	58	78
					4	0	0	55	0	3
					5	0	0	3	0	0
EEIS CumEff	1			0	0	0	3	0		
	2			88	13	0	40	20		
	3			13	88	43	58	78		
	4			0	0	55	0	3		
	5			0	0	3	0	0		
UCRB BLM/FS	1			0	0	0	0	0		
	2			88	3	0	40	20		
	3			13	98	43	60	78		
	4			0	0	55	0	3		
	5			0	0	3	0	0		
UCRB CumEff	1			0	0	0	0	0		
	2			88	3	0	40	20		
	3			13	98	43	60	78		
	4			0	0	55	0	3		
	5			0	0	3	0	0		
CAV	Red-naped sapsucker			EEIS BLM/FS	1	0	0	0	0	0
					2	100	0	0	30	19
					3	0	75	45	70	56
					4	0	25	30	0	25
					5	0	0	25	0	0
		EEIS CumEff	1	0	0	0	0	0		
			2	100	0	0	25	14		
			3	0	75	43	75	61		
			4	0	25	33	0	25		
			5	0	0	25	0	0		
		UCRB BLM/FS	1	0	0	0	0	0		
			2	100	0	0	30	19		
			3	0	75	45	70	56		
			4	0	25	30	0	25		
			5	0	0	25	0	0		
		UCRB CumEff	1	0	0	0	0	0		
			2	100	0	0	25	14		
			3	0	75	43	75	61		
			4	0	25	33	0	25		
			5	0	0	25	0	0		
		CAV	Three-toed woodpecker	EEIS BLM/FS	1	0	0	0	0	0
					2	45	10	0	5	15
					3	55	89	20	88	79
					4	0	1	60	8	6
					5	0	0	20	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>				
					C	1	2	3	
CAV	Vaux's swift	EEIS CumEff	1	0	0	0	0	0	
			2	45	10	0	5	15	
			3	55	88	20	88	79	
			4	0	3	60	8	6	
			5	0	0	20	0	0	
		UCRB BLM/FS	1	0	0	0	0	0	
			2	45	10	0	5	15	
			3	55	89	20	88	81	
			4	0	1	59	8	4	
			5	0	0	21	0	0	
		UCRB CumEff	1	0	0	0	0	0	
			2	45	10	0	5	15	
			3	55	88	20	88	81	
			4	0	3	59	8	4	
			5	0	0	21	0	0	
		EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0	
			2	3	0	0	3	10	
			3	23	27	0	27	87	
			4	40	73	50	67	3	
			5	33	0	50	3	0	
			EEIS CumEff <sup>5</sup>	1	0	0	0	0	0
				2	0	0	0	0	0
				3	3	0	0	10	63
				4	57	93	25	70	33
				5	40	7	75	20	3
UCRB BLM/FS <sup>5</sup>	1		0	0	0	0	0		
	2		10	0	0	3	10		
	3		23	20	0	27	87		
	4		33	80	50	70	3		
	5		33	0	50	0	0		
UCRB CumEff <sup>5</sup>	1	0	0	0	0	0			
	2	0	0	0	0	0			
	3	10	0	0	10	63			
	4	57	87	25	70	33			
	5	33	13	75	20	3			
CAV	White-breasted nuthatch	EEIS BLM/FS	1	0	0	0	0	0	
			2	88	8	0	20	18	
			3	13	88	43	80	75	
			4	0	5	55	0	8	
			5	0	0	3	0	0	
		EEIS CumEff	1	0	0	0	0	0	
			2	88	8	0	23	18	
			3	13	93	43	78	75	
			4	0	0	55	0	8	
			5	0	0	3	0	0	
		UCRB BLM/FS	1	0	0	0	0	0	
			2	83	10	0	27	23	
			3	17	90	37	73	60	
			4	0	0	63	0	17	
			5	0	0	0	0	0	
UCRB CumEff	1	0	0	0	0	0			
	2	83	10	0	27	23			
	3	17	90	37	73	60			
	4	0	0	63	0	17			
	5	0	0	0	0	0			
CAV	White-headed woodpecker	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0	
			2	63	0	0	33	23	
			3	38	35	2	68	48	
			4	0	53	78	0	30	
			5	0	13	20	0	0	
		EEIS CumEff <sup>5</sup>	1	0	0	0	0	0	
			2	63	0	0	25	20	
			3	38	35	2	75	50	
			4	0	53	65	0	30	
			5	0	13	33	0	0	

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
CAV	Williamson's sapsucker	UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	63	0	0	30	28
			3	38	33	2	70	43
			4	0	55	78	0	30
			5	0	13	20	0	0
		UCRB CumEff <sup>5</sup>	1	0	0	0	0	0
			2	63	0	0	25	25
			3	38	33	2	75	45
			4	0	55	70	0	30
			5	0	13	28	0	0
		EEIS BLM/FS	1	0	0	0	0	0
			2	88	10	0	28	25
			3	13	70	25	63	65
			4	0	20	55	10	10
			5	0	0	20	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	88	10	0	25	25
			3	13	70	25	65	63
			4	0	20	53	10	13
			5	0	0	23	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	88	5	0	23	25
			3	13	75	28	55	65
			4	0	20	58	23	10
			5	0	0	15	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	88	5	0	23	25		
	3	13	75	28	53	63		
	4	0	20	55	25	13		
	5	0	0	18	0	0		
<b>Cuckoos, Hummingbirds, and Passerines</b>								
FOR	Black-chinned hummingbird	EEIS BLM/FS	1	0	0	0	0	0
			2	23	0	0	13	13
			3	78	90	70	70	70
			4	0	10	30	18	18
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	23	0	0	8	6
			3	78	85	53	63	65
			4	0	15	43	28	28
			5	0	0	5	3	1
		UCRB BLM/FS	1	0	0	0	0	0
			2	23	0	0	13	13
			3	78	90	70	70	70
			4	0	10	30	18	18
			5	0	0	0	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	23	0	0	5	6		
	3	78	85	53	63	65		
	4	0	15	43	30	28		
	5	0	0	5	3	1		
FOR	Broad-tailed hummingbird	UCRB BLM/FS	1	3	0	0	0	0
			2	58	3	0	13	8
			3	40	70	53	68	69
			4	0	28	43	20	24
			5	0	0	5	0	0
		UCRB CumEff	1	3	0	0	0	0
			2	58	0	0	5	5
			3	40	58	45	63	61
			4	0	40	51	33	34
			5	0	3	4	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
FOR	Chestnut-backed chickadee	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	20	37
			3	83	75	20	57	63
			4	17	25	80	23	0
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	20	37
			3	83	75	20	57	63
			4	17	25	80	23	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	17	0	0	20	37
			3	83	83	20	57	63
			4	0	17	80	23	0
			5	0	0	0	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	17	0	0	20	37
			3	83	83	20	57	63
			4	0	17	80	23	0
			5	0	0	0	0	0
FOR	Hammond's flycatcher	EEIS BLM/FS	1	35	0	0	0	0
			2	65	0	0	20	23
			3	0	58	35	70	70
			4	0	43	60	10	8
			5	0	0	5	0	0
		EEIS CumEff	1	75	0	0	0	0
			2	25	0	0	10	13
			3	0	50	30	60	68
			4	0	50	60	30	20
			5	0	0	10	0	0
		UCRB BLM/FS	1	35	0	0	0	0
			2	65	0	0	20	23
			3	0	68	40	70	70
			4	0	33	55	10	8
			5	0	0	5	0	0
		UCRB CumEff	1	75	0	0	0	0
			2	25	0	0	10	13
			3	0	60	30	60	68
			4	0	40	60	30	20
			5	0	0	10	0	0
FOR	Lazuli bunting	EEIS BLM/FS	1	0	0	0	0	0
			2	38	24	18	37	39
			3	62	76	70	63	61
			4	0	0	12	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	38	20	14	23	23
			3	62	67	70	68	67
			4	0	13	16	9	10
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	64	44	36	52	51
			3	36	56	61	48	49
			4	0	0	3	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	64	26	16	28	28
			3	36	68	74	68	64
			4	0	6	10	4	8
			5	0	0	0	0	0
FOR	Olive-sided flycatcher	EEIS BLM/FS	1	80	0	0	0	0
			2	20	0	0	4	2
			3	0	64	51	77	77
			4	0	36	49	19	21
			5	0	0	0	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
FOR	Rufous hummingbird	EEIS CumEff	1	80	0	0	0	0
			2	20	0	0	0	0
			3	0	57	35	54	53
			4	0	43	63	46	47
			5	0	0	2	0	0
		UCRB BLM/FS	1	80	0	0	0	0
			2	20	0	0	10	6
			3	0	84	61	79	82
			4	0	16	39	11	12
			5	0	0	0	0	0
		UCRB CumEff	1	80	0	0	0	0
			2	20	0	0	0	0
			3	0	67	42	63	64
			4	0	33	58	37	36
			5	0	0	0	0	0
		EEIS BLM/FS	1	0	0	0	0	0
			2	61	41	33	48	49
			3	39	59	50	53	51
			4	0	0	18	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	61	34	10	16	18
			3	39	59	50	65	64
			4	0	8	40	19	19
			5	0	0	0	0	0
UCRB BLM/FS	1	0	0	0	0	0		
	2	66	51	33	50	51		
	3	34	49	48	50	49		
	4	0	0	20	0	0		
	5	0	0	0	0	0		
UCRB CumEff	1	0	0	0	0	0		
	2	66	34	10	16	18		
	3	34	59	50	65	64		
	4	0	8	40	19	19		
	5	0	0	0	0	0		
FOR	Rufous-sided towhee	EEIS BLM/FS	1	0	0	0	0	0
			2	44	65	63	48	48
			3	56	35	37	52	52
			4	0	0	0	0	0
			5	0	0	0	0	0
EEIS CumEff	1	0	0	0	0	0		
	2	44	59	60	47	46		
	3	56	41	40	53	54		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
UCRB BLM/FS	1	0	0	0	0	0		
	2	48	70	68	50	50		
	3	52	30	32	50	50		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
UCRB CumEff	1	0	0	0	0	0		
	2	48	63	64	49	48		
	3	52	37	36	51	52		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
FOR	Western bluebird	EEIS BLM/FS	1	0	0	0	0	0
			2	88	3	10	63	45
			3	13	98	40	38	55
			4	0	0	40	0	0
			5	0	0	10	0	0
EEIS CumEff	1	0	0	0	0	0		
	2	88	0	0	49	29		
	3	13	98	40	36	51		
	4	0	3	40	15	20		
	5	0	0	20	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
FOR	Western tanager	UCRB BLM/FS	1	0	0	0	0	0
			2	88	3	10	63	43
			3	13	98	40	38	58
			4	0	0	40	0	0
			5	0	0	10	0	0
		UCRB CumEff	1	0	0	0	0	0
			2	88	0	0	49	26
			3	13	98	40	36	54
			4	0	3	40	15	20
			5	0	0	20	0	0
		EEIS BLM/FS	1	90	90	70	90	90
			2	10	10	30	10	10
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	88	88	46	58	58
			2	12	12	40	34	34
			3	0	0	14	8	8
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	90	90	72	90	90
			2	10	10	28	10	10
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
UCRB CumEff	1	88	88	46	58	58		
	2	12	12	40	34	34		
	3	0	0	14	8	8		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
FOR	White-winged crossbill	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	15
			3	100	100	65	85	85
			4	0	0	35	15	0
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	10	10	0	15	35
			3	90	90	75	70	65
			4	0	0	25	15	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	15
			3	100	100	65	85	85
			4	0	0	35	15	0
			5	0	0	0	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	10	10	0	15	35		
	3	90	90	75	70	65		
	4	0	0	25	15	0		
	5	0	0	0	0	0		
FOR	Wilson's warbler	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	76	48	43	58	71
			4	24	52	57	42	29
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	76	48	43	58	71
			4	24	52	57	42	29
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	61	45	59	74
			4	20	39	55	41	26
			5	0	0	0	0	0



Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
FOR	Winter wren	UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	80	61	45	59	74
			4	20	39	55	41	26
			5	0	0	0	0	0
		EEIS BLM/FS	1	5	0	0	0	0
			2	75	16	3	25	18
			3	20	68	43	55	48
			4	0	16	55	20	35
			5	0	0	0	0	0
		EEIS CumEff	1	5	0	0	0	0
			2	75	3	0	5	0
			3	20	53	33	53	43
			4	0	45	61	43	58
			5	0	0	6	0	0
UCRB BLM/FS	1	10	0	0	0	0		
	2	83	25	10	33	25		
	3	8	68	55	55	49		
	4	0	8	35	13	26		
	5	0	0	0	0	0		
UCRB CumEff	1	10	0	0	0	0		
	2	83	5	0	10	5		
	3	8	63	30	50	43		
	4	0	33	64	40	53		
	5	0	0	6	0	0		
GS	Black rosy finch	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	100	100	67	100	100
			5	0	0	33	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	100	100	67	100	100
			5	0	0	33	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	100	100	100	100	100
			5	0	0	0	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	0	0	0	0	0		
	4	100	100	100	100	100		
	5	0	0	0	0	0		
GS	Bobolink	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	30	0	0	6	4
			4	70	62	44	74	64
			5	0	38	56	20	32
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	62	0	0	10	4
			4	38	42	28	45	44
			5	0	58	72	45	52
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	66	6	2	18	16
			4	34	62	50	64	56
			5	0	32	48	18	28
UCRB CumEff	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	66	0	0	12	12		
	4	34	64	46	58	53		
	5	0	36	54	30	35		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
GS	Brewer's blackbird	EEIS BLM/FS	1	92	90	65	89	86
			2	8	10	29	11	14
			3	0	0	6	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	92	57	20	26	23
			2	8	33	54	52	53
			3	0	10	26	22	24
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	92	90	65	89	86
			2	8	10	29	11	14
			3	0	0	6	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	92	57	30	26	23
			2	8	33	54	52	53
			3	0	10	16	22	24
			4	0	0	0	0	0
			5	0	0	0	0	0
GS	Brewer's sparrow	EEIS BLM/FS	1	71	60	2	4	0
			2	29	40	26	28	25
			3	0	0	58	54	54
			4	0	0	14	14	21
			5	0	0	0	0	0
		EEIS CumEff	1	75	12	0	0	0
			2	25	53	11	12	10
			3	0	32	57	50	48
			4	0	3	32	38	40
			5	0	0	0	0	2
		UCRB BLM/FS	1	64	22	2	4	0
			2	36	60	26	30	27
			3	0	14	56	50	52
			4	0	4	16	16	21
			5	0	0	0	0	0
		UCRB CumEff	1	68	0	0	0	0
			2	32	47	8	12	10
			3	0	45	53	50	48
			4	0	8	39	38	40
			5	0	0	0	0	2
GS	Grasshopper sparrow	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	42	0	0	0	0
			4	58	6	6	21	8
			5	0	94	94	79	92
		EEIS CumEff	1	18	0	0	0	0
			2	74	0	0	0	0
			3	8	0	0	0	0
			4	0	6	6	19	8
			5	0	94	94	81	92
		UCRB BLM/FS	1	0	0	0	0	0
			2	26	0	0	0	0
			3	66	6	6	16	15
			4	8	86	80	73	74
			5	0	8	14	11	11
		UCRB CumEff	1	0	0	0	0	0
			2	40	0	0	2	0
			3	56	16	14	22	20
			4	4	82	84	74	80
			5	0	2	2	2	0
GS	Horned lark	EEIS BLM/FS	1	2	54	57	74	71
			2	42	46	43	26	29
			3	56	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
GS	Lark sparrow	EEIS CumEff	1	2	51	10	11	11
			2	42	49	48	49	49
			3	56	0	42	40	40
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	2	54	57	74	74
			2	42	46	43	26	26
			3	56	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	2	51	10	11	11
			2	42	49	48	49	49
			3	56	0	42	40	40
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS BLM/FS	1	67	58	2	4	0
			2	33	42	26	28	25
			3	0	0	58	54	54
			4	0	0	14	14	21
			5	0	0	0	0	0
		EEIS CumEff	1	71	2	0	0	0
			2	29	49	9	12	10
			3	0	42	59	56	56
			4	0	7	32	32	34
			5	0	0	0	0	0
UCRB BLM/FS	1	60	20	2	4	0		
	2	40	62	26	30	27		
	3	0	14	56	50	52		
	4	0	4	16	16	21		
	5	0	0	0	0	0		
UCRB CumEff	1	64	0	0	0	0		
	2	36	47	8	12	10		
	3	0	45	53	50	54		
	4	0	8	39	38	34		
	5	0	0	0	0	2		
EEIS BLM/FS	1	34	11	1	4	2		
	2	66	48	26	25	25		
	3	0	41	45	44	42		
	4	0	0	28	27	31		
	5	0	0	0	0	0		
EEIS CumEff	1	34	8	0	0	0		
	2	66	28	10	14	8		
	3	0	40	40	53	28		
	4	0	22	46	33	61		
	5	0	2	4	0	3		
UCRB BLM/FS	1	34	11	1	3	2		
	2	66	48	31	31	30		
	3	0	41	43	41	38		
	4	0	0	25	25	30		
	5	0	0	0	0	0		
UCRB CumEff	1	34	8	0	0	0		
	2	66	28	10	14	10		
	3	0	40	42	55	29		
	4	0	22	46	31	58		
	5	0	2	2	0	3		
EEIS BLM/FS	1	77	66	7	10	2		
	2	23	34	41	44	42		
	3	0	0	46	40	48		
	4	0	0	6	6	8		
	5	0	0	0	0	0		
EEIS Cum/ Eff	1	81	4	0	0	0		
	2	19	56	19	22	20		
	3	0	34	53	50	50		
	4	0	6	28	28	30		
	5	0	0	0	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
GS	Sage thrasher	UCRB BLM/FS	1	77	66	7	10	2		
			2	23	34	41	44	42		
			3	0	0	46	40	48		
			4	0	0	6	6	8		
			5	0	0	0	0	0		
		UCRB CumEff	1	81	2	0	0	0		
			2	19	58	19	22	20		
			3	0	34	53	50	50		
			4	0	6	28	28	30		
			5	0	0	0	0	0		
		EEIS BLM/FS	1	71	60	2	4	0		
			2	29	40	26	28	25		
			3	0	0	58	54	54		
			4	0	0	14	14	21		
			5	0	0	0	0	0		
		EEIS CumEff	1	75	2	0	0	0		
			2	25	51	12	15	14		
			3	0	41	55	54	53		
			4	0	6	33	31	33		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	64	40	2	4	0		
			2	36	44	26	30	27		
			3	0	12	56	50	52		
			4	0	4	16	16	21		
			5	0	0	0	0	0		
UCRB CumEff	1	68	0	0	0	0				
	2	32	51	10	15	12				
	3	0	43	56	54	51				
	4	0	6	34	31	35				
	5	0	0	0	0	2				
GS	Vesper sparrow	EEIS BLM/FS	1	80	64	30	35	30		
			2	20	36	54	51	54		
			3	0	0	16	14	16		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		EEIS CumEff	1	86	40	4	6	4		
			2	14	49	54	57	54		
			3	0	11	42	37	42		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	80	66	30	35	30		
			2	20	34	54	51	54		
			3	0	0	16	14	16		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		UCRB CumEff	1	86	40	4	6	4		
			2	14	48	53	55	53		
			3	0	12	43	39	43		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		GS	Western meadowlark	EEIS BLM/FS	1	92	90	60	70	60
					2	8	10	40	30	40
					3	0	0	0	0	0
					4	0	0	0	0	0
					5	0	0	0	0	0
EEIS CumEff	1			92	90	41	49	43		
	2			8	10	59	51	57		
	3			0	0	0	0	0		
	4			0	0	0	0	0		
	5			0	0	0	0	0		
UCRB BLM/FS	1			92	90	60	70	60		
	2			8	10	40	30	40		
	3			0	0	0	0	0		
	4			0	0	0	0	0		
	5			0	0	0	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
RIP	Red-eyed vireo	UCRB CumEff	1	92	90	41	49	43
			2	8	10	59	51	57
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	65	38	34	51	48
			4	35	63	66	49	53
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	73	30	19	36	38
			4	28	70	81	64	63
			5	0	0	0	0	0
UCRB BLM/FS	1	0	0	0	0	0		
	2	0	0	0	0	0		
	3	65	45	38	56	53		
	4	35	55	63	44	48		
	5	0	0	0	0	0		
RIP	Red-winged blackbird	UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	75	38	26	39	44
			4	25	63	74	61	56
			5	0	0	0	0	0
		EEIS BLM/FS	1	2	0	0	0	0
			2	84	56	34	71	73
			3	14	44	66	29	27
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	2	0	0	0	0
			2	84	50	12	27	25
			3	14	50	67	62	64
			4	0	0	21	11	11
			5	0	0	0	0	0
UCRB BLM/FS	1	2	0	0	0	0		
	2	84	56	34	71	73		
	3	14	44	66	29	27		
	4	0	0	0	0	0		
	5	0	0	0	0	0		
UCRB CumEff	1	2	0	0	0	0		
	2	84	50	12	27	29		
	3	14	50	67	62	60		
	4	0	0	21	11	11		
	5	0	0	0	0	0		
RIP	Veery	EEIS BLM/FS	1	0	0	0	0	0
			2	28	4	4	8	8
			3	72	58	49	64	58
			4	0	38	47	28	34
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	28	2	2	4	2
			3	72	40	28	55	50
			4	0	58	70	41	48
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	62	6	5	10	10
			3	38	61	53	66	64
			4	0	33	42	24	26
			5	0	0	0	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	62	4	2	6	4		
	3	38	41	32	47	46		
	4	0	55	66	47	50		
	5	0	0	0	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
RIP	Willow flycatcher	EEIS BLM/FS	1	0	0	0	0	0		
			2	44	2	0	2	2		
			3	56	56	40	54	55		
			4	0	42	60	44	43		
			5	0	0	0	0	0		
		EEIS CumEff	1	0	0	0	0	0		
			2	46	0	0	0	0		
			3	54	42	27	42	38		
			4	0	58	73	58	62		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	0	0	0	0	0		
			2	44	2	0	2	2		
			3	56	56	42	54	55		
			4	0	42	58	44	43		
			5	0	0	0	0	0		
		UCRB CumEff	1	0	0	0	0	0		
			2	58	0	0	0	0		
			3	42	42	27	42	42		
			4	0	58	73	58	58		
			5	0	0	0	0	0		
		RIP	Yellow warbler	EEIS BLM/FS	1	0	0	0	0	0
					2	60	0	0	0	0
					3	40	64	50	70	67
					4	0	36	50	30	33
					5	0	0	0	0	0
EEIS CumEff	1			0	0	0	0	0		
	2			62	0	0	0	0		
	3			38	49	33	53	49		
	4			0	51	67	47	51		
	5			0	0	0	0	0		
UCRB BLM/FS	1			0	0	0	0	0		
	2			60	0	0	0	0		
	3			40	64	50	70	67		
	4			0	36	50	30	33		
	5			0	0	0	0	0		
UCRB CumEff	1			0	0	0	0	0		
	2			62	0	0	0	0		
	3			38	49	33	53	49		
	4			0	51	67	47	51		
	5			0	0	0	0	0		
RIP	Yellow-billed cuckoo			EEIS BLM/FS	1	0	0	0	0	0
					2	0	0	0	0	0
					3	55	0	0	0	0
					4	45	50	28	53	45
					5	0	50	73	48	55
		EEIS CumEff	1	0	0	0	0	0		
			2	0	0	0	0	0		
			3	56	0	0	0	0		
			4	44	10	10	28	26		
			5	0	90	90	73	74		
		UCRB BLM/FS	1	0	0	0	0	0		
			2	0	0	0	0	0		
			3	66	0	0	0	0		
			4	34	54	28	53	45		
			5	0	46	73	48	55		
		UCRB CumEff	1	0	0	0	0	0		
			2	0	0	0	0	0		
			3	69	0	0	0	0		
			4	31	13	11	29	28		
			5	0	88	89	71	73		
		RIP	Yellow-breasted chat	EEIS BLM/FS	1	0	0	0	0	0
					2	55	0	0	0	0
					3	45	49	41	61	54
					4	0	51	59	39	46
					5	0	0	0	0	0

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
WD	Ash-throated flycatcher	EEIS CumEff	1	0	0	0	0	0		
			2	60	0	0	0	0		
			3	40	36	30	50	50		
			4	0	64	70	50	50		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	0	0	0	0	0		
			2	55	0	0	0	0		
			3	45	49	44	63	61		
			4	0	51	56	38	39		
			5	0	0	0	0	0		
		UCRB CumEff	1	0	0	0	0	0		
			2	60	0	0	0	0		
			3	40	36	30	50	50		
			4	0	64	70	50	50		
			5	0	0	0	0	0		
		EEIS BLM/FS	1	15	24	10	0	5		
			2	63	65	58	13	48		
			3	23	11	30	51	35		
			4	0	0	3	31	13		
			5	0	0	0	5	0		
		EEIS CumEff	1	15	24	5	0	0		
			2	63	65	53	23	39		
			3	23	11	35	54	43		
			4	0	0	8	24	19		
			5	0	0	0	0	0		
UCRB BLM/FS	1	15	24	10	0	5				
	2	61	64	56	13	46				
	3	24	13	31	50	36				
	4	0	0	3	33	13				
	5	0	0	0	5	0				
UCRB CumEff	1	15	24	5	0	0				
	2	61	64	53	23	39				
	3	24	13	35	54	43				
	4	0	0	8	24	19				
	5	0	0	0	0	0				
WD	Bushtit	EEIS BLM/FS	1	0	0	0	0	0		
			2	0	25	20	0	0		
			3	100	65	55	50	60		
			4	0	10	25	50	40		
			5	0	0	0	0	0		
		EEIS CumEff	1	0	0	0	0	0		
			2	0	25	20	0	0		
			3	100	65	55	50	60		
			4	0	10	25	50	40		
			5	0	0	0	0	0		
		UCRB BLM/FS	1	0	0	0	0	0		
			2	0	25	15	0	0		
			3	65	65	55	50	60		
			4	35	10	30	50	40		
			5	0	0	0	0	0		
		UCRB CumEff	1	0	0	0	0	0		
			2	0	25	15	0	0		
			3	65	65	55	50	60		
			4	35	10	30	50	40		
			5	0	0	0	0	0		
		WD	Chipping sparrow	EEIS BLM/FS	1	95	93	93	95	95
					2	5	8	8	5	5
					3	0	0	0	0	0
					4	0	0	0	0	0
					5	0	0	0	0	0
EEIS CumEff	1			95	86	60	64	64		
	2			5	14	40	36	36		
	3			0	0	0	0	0		
	4			0	0	0	0	0		
	5			0	0	0	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
WD	Green-tailed towhee	UCRB BLM/FS	1	95	93	93	95	95
			2	5	8	8	5	5
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		UCRB CumEff	1	95	86	60	64	64
			2	5	14	40	36	36
			3	0	0	0	0	0
			4	0	0	0	0	0
			5	0	0	0	0	0
		EEIS BLM/FS	1	0	0	0	0	0
			2	35	58	26	56	49
			3	65	43	71	44	51
			4	0	0	3	0	0
			5	0	0	0	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	35	58	26	56	49
			3	65	43	71	44	51
			4	0	0	3	0	0
			5	0	0	0	0	0
		UCRB BLM/FS	1	0	0	0	0	0
			2	35	58	26	56	49
			3	65	43	71	44	51
			4	0	0	3	0	0
			5	0	0	0	0	0
UCRB CumEff	1	0	0	0	0	0		
	2	35	58	26	56	49		
	3	65	43	71	44	51		
	4	0	0	3	0	0		
	5	0	0	0	0	0		
<b>Bats and Small Mammals</b>								
BAT	Fringed myotis	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	35	0	0	2	7
			3	63	33	17	43	45
			4	2	60	47	43	42
			5	0	7	36	12	6
		EEIS CumEff	1	0	0	0	0	0
			2	35	0	0	0	0
			3	63	22	0	3	10
			4	2	65	20	47	40
			5	0	13	80	50	50
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	28	0	0	5	7
			3	70	33	17	48	45
			4	2	60	48	45	42
			5	0	7	35	2	6
		UCRB CumEff	1	0	0	0	0	0
			2	35	0	0	0	0
			3	63	22	0	3	10
			4	2	65	22	47	43
			5	0	13	78	50	47
BAT	Hoary bat	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	78	6	0	14	22
			3	22	70	43	50	34
			4	0	22	47	31	28
			5	0	2	10	5	16
		EEIS CumEff	1	0	0	0	0	0
			2	78	0	0	0	0
			3	22	56	13	20	18
			4	0	30	37	51	52
			5	0	14	50	29	30



Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
BAT	Long-eared myotis	UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	78	4	0	14	20
			3	22	70	45	49	30
			4	0	24	48	33	36
			5	0	2	7	4	14
		UCRB CumEff	1	0	0	0	0	0
			2	78	0	0	0	0
			3	22	56	5	20	17
			4	0	30	40	54	53
			5	0	14	55	26	30
		EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	62	0	0	10	10
			3	38	50	36	50	50
			4	0	44	56	35	30
			5	0	6	8	5	10
		EEIS CumEff	1	0	0	0	0	0
			2	62	0	0	0	0
			3	38	28	8	19	21
			4	0	56	38	48	51
			5	0	16	54	33	28
UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0		
	2	62	0	0	5	10		
	3	38	50	37	55	50		
	4	0	44	57	35	30		
	5	0	6	6	5	10		
UCRB CumEff	1	0	0	0	0	0		
	2	62	0	0	0	0		
	3	38	28	8	19	21		
	4	0	56	39	48	49		
	5	0	16	53	33	30		
BAT	Long-legged myotis	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	65	0	0	14	13
			3	35	44	24	56	45
			4	0	46	54	30	42
			5	0	10	22	0	0
		EEIS CumEff	1	0	0	0	0	0
			2	65	0	0	0	0
			3	35	23	0	5	15
			4	0	58	30	61	50
			5	0	20	70	34	35
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	65	0	0	11	13
			3	35	44	35	60	50
			4	0	46	46	25	30
			5	0	10	19	4	7
		UCRB CumEff	1	0	0	0	0	0
			2	65	0	0	0	0
			3	35	23	0	5	15
			4	0	58	31	59	53
			5	0	20	69	36	33
BAT	Pale western big-eared bat	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	6	0	0	0	0
			3	78	12	2	13	20
			4	14	72	52	78	69
			5	2	16	46	9	11
		EEIS CumEff	1	0	0	0	0	0
			2	6	0	0	0	0
			3	78	12	0	2	3
			4	14	68	24	46	40
			5	2	20	76	52	57

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
BAT	Silver-haired bat	UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	6	0	0	0	0		
			3	78	12	2	13	30		
			4	14	72	54	79	59		
			5	2	16	44	8	11		
		UCRB CumEff	1	0	0	0	0	0		
			2	6	0	0	0	0		
			3	78	12	0	2	3		
			4	14	70	25	44	41		
			5	2	18	75	54	56		
		EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	52	2	0	15	10		
			3	46	54	30	63	63		
			4	2	44	48	18	22		
			5	0	0	22	4	5		
		EEIS CumEff	1	0	0	0	0	0		
			2	60	0	0	2	0		
			3	40	40	7	26	18		
			4	0	46	42	32	43		
			5	0	14	51	40	39		
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	52	2	0	18	10		
			3	46	54	34	61	62		
			4	2	44	44	17	25		
			5	0	0	22	4	3		
UCRB CumEff	1	0	0	0	0	0				
	2	60	0	0	2	0				
	3	40	40	7	26	18				
	4	0	46	43	33	43				
	5	0	14	50	39	39				
BAT	Spotted bat	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	0	0	0	0	0		
			3	5	5	3	3	5		
			4	90	75	55	65	75		
			5	5	20	43	33	20		
		EEIS CumEff	1	0	0	0	0	0		
			2	0	0	0	0	0		
			3	5	0	0	0	0		
			4	90	60	43	53	55		
			5	5	40	58	48	45		
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	0	0	0	0	0		
			3	5	5	3	3	5		
			4	90	75	58	68	75		
			5	5	20	40	30	20		
		UCRB CumEff	1	0	0	0	0	0		
			2	0	0	0	0	0		
			3	5	0	0	0	0		
			4	90	60	45	55	55		
			5	5	40	55	45	45		
		BAT	Western small-footed myotis	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
					2	80	0	0	0	10
					3	20	70	0	50	60
					4	0	30	70	30	30
					5	0	0	30	20	0
UCRB BLM/FS <sup>5</sup>	1			0	0	0	0	0		
	2			80	0	0	0	10		
	3			20	70	0	50	60		
	4			0	30	70	30	30		
	5			0	0	30	20	0		
SMM	Northern flying squirrel	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	90	15	0	24	25		
			3	10	40	29	51	54		
			4	0	33	51	20	21		
			5	0	13	20	5	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>					
					C	1	2	3		
SMM	Pygmy rabbit	EEIS CumEff	1	0	0	0	0	0		
			2	83	10	0	0	0		
			3	18	43	5	18	20		
			4	0	33	43	44	49		
			5	0	15	53	39	31		
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	90	15	0	25	26		
			3	10	40	40	53	55		
			4	0	33	32	20	10		
			5	0	13	28	2	9		
		UCRB CumEff	1	0	0	0	0	0		
			2	83	10	0	0	0		
			3	18	45	5	20	20		
			4	0	33	46	45	49		
			5	0	13	49	35	31		
		SMM	White-tailed jackrabbit	EEIS BLM/FS	1	0	0	0	0	0
					2	0	0	0	0	0
					3	40	0	0	0	0
					4	50	50	50	50	50
					5	10	50	50	50	50
				UCRB BLM/FS	1	0	0	0	0	0
					2	0	0	0	0	0
					3	40	0	0	0	0
					4	50	50	50	50	50
					5	10	50	50	50	50
SMM	White-tailed jackrabbit	EEIS BLM/FS	1	20	0	0	0	0		
			2	80	20	20	20	20		
			3	0	80	80	80	80		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
		EEIS CumEff	1	20	0	0	0	0		
			2	80	10	10	10	10		
			3	0	20	20	20	20		
			4	0	60	60	60	60		
			5	0	10	10	10	10		
		UCRB BLM/FS	1	20	0	0	0	0		
			2	80	20	20	20	20		
			3	0	80	80	80	80		
			4	0	0	0	0	0		
			5	0	0	0	0	0		
UCRB CumEff	1	20	0	0	0	0				
	2	80	10	10	10	10				
	3	0	20	20	20	20				
	4	0	60	60	60	60				
	5	0	10	10	10	10				
<b>Carnivores and Ungulates</b>										
CAR	American marten	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0		
			2	50	4	2	4	20		
			3	50	22	10	50	60		
			4	0	42	36	46	20		
			5	0	32	52	0	0		
		EEIS CumEff <sup>6</sup>	1	0	0	0	0	0		
			2	50	4	0	2	4		
			3	50	22	8	12	21		
			4	0	42	29	33	34		
			5	0	32	63	53	41		
		UCRB BLM/FS <sup>5</sup>	1	24	0	0	0	0		
			2	42	12	2	20	40		
			3	34	34	17	60	50		
			4	0	26	41	20	10		
			5	0	28	40	0	0		

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
CAR	Fisher	UCRB CumEff <sup>5</sup>	1	24	0	0	0	0
			2	42	4	0	2	6
			3	34	16	16	21	44
			4	0	30	27	39	37
			5	0	50	57	38	13
		EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	12	0	0	0	1
			3	22	2	1	28	12
			4	34	14	13	24	25
			5	32	84	86	48	62
		EEIS CumEff <sup>5</sup>	1	0	0	0	0	0
			2	12	0	0	0	0
			3	22	2	0	2	12
			4	34	10	8	10	20
			5	32	88	92	88	68
CAR	Gray wolf	UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	40	0	0	0	0
			3	40	40	20	70	20
			4	20	40	50	20	50
			5	0	20	30	10	30
		UCRB CumEff <sup>5</sup>	1	0	0	0	0	0
			2	40	0	0	0	0
			3	40	2	3	1	16
			4	20	14	22	31	43
			5	0	84	75	68	41
		EEIS BLM/FS	1	40	12	8	12	20
			2	50	42	42	47	48
			3	10	46	46	41	32
			4	0	0	4	0	0
			5	0	0	0	0	0
EEIS CumEff	1	36	0	0	0	0		
	2	48	4	2	6	10		
	3	16	8	8	6	14		
	4	0	42	43	44	44		
	5	0	46	47	44	32		
UCRB BLM/FS	1	68	22	18	22	36		
	2	30	43	44	43	39		
	3	2	35	34	35	25		
	4	0	0	4	0	0		
	5	0	0	0	0	0		
UCRB CumEff	1	68	4	0	0	0		
	2	30	4	0	1	3		
	3	2	4	8	9	16		
	4	0	42	46	46	50		
	5	0	46	46	44	31		
CAR	Grizzly bear	EEIS BLM/FS	1	44	0	0	0	0
			2	44	0	0	0	4
			3	10	12	4	4	11
			4	2	40	47	50	49
			5	0	48	49	46	36
		EEIS CumEff	1	46	0	0	0	0
			2	46	0	0	0	2
			3	8	2	0	0	4
			4	0	8	6	8	19
			5	0	90	94	92	75
		UCRB BLM/FS	1	62	8	4	5	10
			2	32	4	6	6	4
			3	6	10	6	6	16
			4	0	38	44	43	40
			5	0	40	40	40	30

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
CAR	Lynx	UCRB CumEff	1	58	0	0	0	2
			2	32	0	0	0	4
			3	10	4	2	4	6
			4	0	8	10	8	8
			5	0	88	88	88	80
		EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	10	0	0	0	2
			3	80	12	0	0	17
			4	10	40	42	42	41
			5	0	48	58	58	40
		EEIS CumEff <sup>6</sup>	1	0	0	0	0	0
			2	10	0	0	0	0
			3	80	0	4	4	0
			4	10	42	15	15	42
			5	0	58	81	81	58
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	10	0	0	0	2
			3	80	12	0	0	20
			4	10	40	50	42	44
			5	0	48	50	58	34
UCRB CumEff <sup>5</sup>	1	0	0	0	0	0		
	2	10	0	0	0	0		
	3	80	0	4	4	0		
	4	10	40	15	15	42		
	5	0	60	81	81	58		
CAR	Wolverine	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	10	0	0	0	0
			3	80	12	4	4	11
			4	10	40	47	50	54
			5	0	48	49	46	35
		EEIS CumEff <sup>6</sup>	1	0	0	0	0	0
			2	0	0	0	0	0
			3	36	0	0	0	19
			4	30	38	0	6	21
			5	34	62	100	94	60
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	10	4	7	9	9
			3	80	20	13	12	21
			4	10	44	41	43	50
			5	0	32	39	36	20
		UCRB CumEff <sup>5</sup>	1	0	0	0	0	0
			2	0	0	0	0	0
			3	36	0	0	0	26
			4	30	4	2	8	23
			5	34	96	98	92	51
UNG	California bighorn sheep	EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	0	0	0	0
			4	50	40	40	40	10
			5	0	60	60	60	90
		EEIS CumEff <sup>6</sup>	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	0	0	0	0
			4	50	30	30	30	10
			5	0	70	70	70	90
		UCRB BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	0	0	0	0
			4	50	40	40	40	10
			5	0	60	60	60	90

Group <sup>1</sup>	Species Name	Area <sup>2</sup>	Outcome <sup>3</sup>	H	Period/Outcome <sup>4</sup>			
					C	1	2	3
UNG	Pronghorn	UCRB CumEff <sup>5</sup>	1	0	0	0	0	0
			2	0	0	0	0	0
			3	50	0	0	0	0
			4	50	30	30	30	10
			5	0	70	70	70	90
		EEIS BLM/FS <sup>5</sup>	1	0	0	0	0	0
			2	10	0	0	0	0
			3	80	50	25	70	25
			4	10	50	60	30	60
			5	0	0	15	0	15
		EEIS CumEff <sup>5</sup>	1	0	0	0	0	0
			2	10	0	0	0	0
			3	80	20	10	10	10
			4	10	50	50	50	50
			5	0	30	40	40	40
		UCRB BLM/FS <sup>5</sup>	1	10	0	0	0	0
			2	80	60	20	70	20
			3	10	30	60	30	60
			4	0	10	20	0	20
			5	0	0	0	0	0
UCRB CumEff <sup>5</sup>	1	10	0	0	0	0		
	2	80	0	0	0	0		
	3	10	60	10	10	10		
	4	0	40	50	50	50		
	5	0	0	40	40	40		
UNG	Woodland caribou	EEIS BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	50	0	0	0	46
			5	50	100	100	100	54
		EEIS CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	50	0	0	0	42
			5	50	100	100	100	58
		UCRB BLM/FS	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	50	0	0	0	46
			5	50	100	100	100	54
		UCRB CumEff	1	0	0	0	0	0
			2	0	0	0	0	0
			3	0	0	0	0	0
			4	50	0	0	0	42
			5	50	100	100	100	58

<sup>1</sup> Group: PLT - vascular plants; AMP - amphibians; REP - reptiles; WAT - waterbirds and shorebirds; GAM - gamebirds; RAP - raptors; CAV - cavity nester; FOR - forest birds; GS - grassland/shrub birds; RIP - riparian birds; WD - woodland birds; BAT - bat; SMM - small mammal; CAR - carnivore; UNG - ungulate.

<sup>2</sup> Area: EEIS BLM/FS - Eastern Oregon and Washington planning area, BLM and Forest Service lands only; EEIS CumEff - all lands in Eastern Oregon and Washington planning area; UCRB BLM/FS - Upper Columbia Basin planning area, BLM and Forest Service lands only; UCRB CumEff - all lands in Upper Columbia Basin planning area.

<sup>3</sup> Outcome: 1- contiguous; 2 - gaps; 3 - patchy; 4 - isolated; 5 - scarce. See figure C.1 for a complete description.

<sup>4</sup> Period/Option: H - historical pre-European settlement period; C - current; 1 - Option 1; 2 - Option 2; 3 - Option 3.

<sup>5</sup> Species for which panelists' scores were adjusted by Science Team. Scores were adjusted when considered to reflect a misinterpretation or incomplete understanding of the management alternatives or their outcomes, or the species ecology.



Figure C-1—Habitat and population outcome scales.

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# APPENDIX D.

## CURRENT AND PROJECTED OUTCOMES FOR SPECIES WITH CURRENT OUTCOMES OF 4 OR 5.

(See appendix C for presentation of definitions and outcomes of viability for individual species.)

This appendix presents projected habitat outcomes on Forest Service and Bureau of Land Management lands (outcome rating system is described in appendix C) for individual species with current Outcomes of 4 and 5 (patchy/poorly distributed habitat with concern of extirpation/viability loss). Outcomes for vascular plant and vertebrate species were analyzed in two EIS planning areas of the Interior Columbia Basin Ecosystem Management Project--eastern Oregon and Washington, (EEIS) (tables D-1, D-2, and D-3); and, Idaho and western Montana, (UCRB) (tables D-4, D-5, and D-6).

The analysis is intended to describe likely future conditions for habitats and species given specific management options, and provide for comparison of those conditions to current conditions. Projected future conditions that result in improvements from current conditions should generally be considered as positive outcomes. Projected declines from current conditions may be viewed as negative.

The risk of extirpation/viability loss for a given species was estimated in two ways: (1) by a weighted mean Outcome of 4 or 5, and (2) by the number of likelihood points in Outcome 5 (see Evaluation of Alternatives--Terrestrial, Methodology section). The Science Integration Team chose 20 or more points in Outcome 5 as a conservative threshold of extirpation. Tables D-1 and D-4 display the species with 20 or more risk likelihood points in Outcome 5 for current conditions or three management options. A species with a "D5" listing in these tables would have the highest risk of extirpation/viability loss compared with other scores and outcomes. To be considered an "increaser," weighted mean outcome needed to improve by 0.5 or more from the current condition for a given species.

Option 1 results in the highest number of species at risk of extirpation with 20 or more points in Outcome 5 compared to the other options. Options 2 and 3 equally, would have the lowest number of species at risk of extirpation. As a group, carnivores and ungulates would have relatively higher risk of extirpation/viability loss, compared with other species groups considered in this assessment. Option 1 would result in the highest number of species (25 in UCRB, and 19 in EEIS) that change from a high likelihood of persistence and viability of having a risk of extirpation/viability loss, out of the total species analyzed (132 and 141, respectively). Percentage-wise, Option 1 would have a negative effect on species, while Options 2 and 3 effect a relatively low number of species.

Options 2 and 3 would result in significant improvements in conditions and viability outcomes for 15 to 20 species (tables D-3 and D-5), whereas Option 1 would not improve conditions for any species. Each option would result in declining conditions for at least some species (tables D-2 and D-6). "Decreaser" species have a weighted mean score of 3.4 or less for current conditions with projected outcomes for an option being 3.5 or greater.

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Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. XX p. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

Table D-1—Species with at least 20 or more likelihood points in viability in Outcome 5, under current conditions or under projected management options for FS/BLM lands in eastern Oregon and Washington.

Category	Current	Option 1	Option 2	Option 3
<b>Plants:</b>				
Crenulate grape-fern	A4	B4	B4	
Howellia	B4	B4	B4	B4
Suksdorf's lomatium	C5	C5	C5	C5
Washington polemonium	C5	C5	B5	C5
Spalding's campion	C5	C5	B4	C5
Malheur wire-lettuce	D5	D5	D5	D5
<b>Amphibians/Reptiles:</b>				
Columbian spotted frog	A4	B4		
Northern leopard frog	C5	C5	C4	C4
Oregon spotted frog	A4	B4		
Tailed frog	A3	B4		
Woodhouse's toad	A4	C5		
Long-nosed leopard lizard	A4	B4		
Sharptail snake	C5	C5	C4	B4
<b>Waterbirds/Shorebirds:</b>				
Goldeneyes	A4	B4		
Harlequin duck	C5	C5		B4
Upland sandpiper	D5	D5	C5	C5
<b>Raptors/Gamebirds:</b>				
Columbian sharp-tailed grouse	C5	C5	B4	B4
Mountain quail	A4	B4		
Boreal owl	B4	B4	B4	B4
Flammulated owl	B4	B4		
Great gray owl	B4	B4		
<b>Woodpeckers, Nuthatches, &amp; Swifts:</b>				
Black-backed woodpecker	A3	B4		
Lewis' woodpecker	A4	C5		
Red-naped sapsucker	A3	B4		
Three-toed woodpecker	A3	B4		
Vaux's swift	A4	C5		
White-headed woodpecker	A4	B4		
Williamson's sapsucker	A3	B4		
<b>Cuckoos, Passerines, &amp; Hummingbirds:</b>				
Black-rosy finch	A4	B4		
Bobolink	B4	C5	B4	B4
Grasshopper sparrow	C5	C5	C5	C5
Yellow-billed cuckoo	C5	C5	B5	C5

Table D-1—(continued) Species with at least 20 or more likelihood points in viability in Outcome 5, under current conditions or under projected management options for FS/BLM lands in eastern Oregon and Washington.

Category	Current	Option 1	Option 2	Option 3
<b>Bats &amp; Small Mammals:</b>				
Fringed myotis	A4	B4		
Hoary bat	A3			
Long-legged myotis	B4	B4		
Pale western big-eared bat	A4	B4		
Silver-haired bat	A3	B4		
Spotted bat	B4	B4	B4	B4
Western small-footed myotis	A3	B4	B4	
Northern flying squirrel	A4	B4		
Pgymy rabbit	A4	C5	C5	
<b>Carnivores &amp; Ungulates:</b>				
American marten	B4	C4		
Fisher	C5	C5	B4	C5
Grizzly bear	B4	B5	B4	B4
Lynx	B4	C5	C5	B4
Wolverine	B4	B5	B4	B4
California bighorn sheep	C5	C5	C5	C5
	D5	D5	D5	D5
Total of "B"		26	13	10
Total of "C"		18	8	9
Total of "D"		3	2	2
<b>Grand Total</b>		<b>47</b>	<b>23</b>	<b>21</b>

Includes all species with at least 20 points in outcome 5 for any option. Weighted mean scores are included for reference.

A = 0-19 points in Outcome 5

B = 20-49 points in Outcome 5

C = 50-99 points in Outcome 5

D = 100 points in Outcome 5

3 = Favorable outcome.

4/5 = Less favorable outcome.

Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. XX p. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

Table D-2—Outcomes for species that currently have a “favorable” outcome (3.4 or less) changing to a “less favorable” outcome (3.5 or greater), under management options on FS/BLM lands in eastern Oregon and Washington.

Species	Current	Option 1	Option 2	Option 3
Mulford's milk-vetch	3	4	4	4
Long-bearded mariposa-lily	3	4		
Tailed Frog	3	4		
Black-backed Woodpecker	3	4		
Piliated Woodpecker	3	4		
Pygmy Rabbit	3	4		
Red-naped Sapsucker	3	4		
Three-toed Woodpecker	3	4		
White-breasted Nuthatch	3	4		
Williamson's Sapsucker	3	4		
Chestnut-backed Chickadee	3	4		
Olive-sided Flycatcher	3	4		
Western Bluebird	3	4		
Winter Wren	3	4		
Veery	3			
Willow Flycatcher	3	4		
Yellow Warbler	3	4		
Bushtit	3			
Hoary Bat	3	4		
Silver Haired Bat	3	4		
Western Small-footed Myotis	3	4	4	
Total number of species		19	2	1
Percent of total (141) species analyzed		13	>1	<1

Favorable outcome = a weighted mean score of (3.4 or less).

Less favorable outcome = a weighted mean score of (3.5 or more).

Scores were rounded to integers.

Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. XX p. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

Table D-3—Species with better viability outcomes (0.5 or more) under management options, than under current conditions on FS/BLM lands in eastern Oregon and Washington.

Species	Current	Option 1	Option 2	Option 3
Rubber Boa	3.5*			2.9**
Sharptail Snake	4.5*			3.9
Oregon Spotted Frog	3.6*			3.1**
Woodhouse's Toad	3.9*			3.4**
Columbian Sharp-tailed Grouse	4.8*		4.0	
Sage Grouse	3.2		2.3	2.6
Bald Eagle	3.6*		2.9**	3.0**
Boreal Owl	4.2*			3.7
Cooper's Hawk	2.4		1.9	
Ferruginous Hawk	3.0		2.5	
Flammulated Owl	3.8*		2.9**	3.3**
Harlequin Duck	4.5*		3.5	
Lewis' Woodpecker	3.5*		2.5**	2.5**
Piliated Woodpecker	3.4		2.5	2.6
Red-naped Sapsucker	3.3		2.7	
Vaux's Swift	3.7*			2.9**
White-headed Woodpecker	3.8*		2.7**	3.1**
Chestnut-backed Chickadee	3.3			2.6
Hammond's Flycatcher	3.5*		2.9**	2.9**
Western Bluebird	3.0		2.4	
Long-legged Myotis	3.7*		3.2**	
Northern Flying Squirrel	3.5*			3.0**
Marten	4.0*		3.4**	3.0**
Fisher	4.8*		4.2	
Woodland Caribou	5.0*			4.5
Total:	25.0	0	16.0	17.0

\* = Species with less favorable outcomes (3.5 or more).

\*\* = Favorable outcomes ( 3.4 or less) projected to result from option implementation-- represents a significant improvement in habitat conditions.

Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. XX p. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

Table D-4—Species with at least 20 or more likelihood points in viability Outcome 5, under current conditions or under projected management options for FS/BLM lands in Idaho and western Montana.

Category	Current	Option 1	Option 2	Option 3
<b>Plants:</b>				
Upward-lobed moonwort	A4	C4	C4	C5
Crenulate grape-fern	A4	C4	B4	B4
Palouse goldenweed	C5	C5	C5	C5
<b>Amphibians/Reptiles:</b>				
Coeur d'Alene salamander	B4	C5	B4	
Northern leopard frog	C5	C5	B4	B4
Tailed frog	A3	B4		
Woodhouse's toad	A4	B4		
Long-nosed leopard lizard	A4	B4		
<b>Waterbirds/shorebirds:</b>				
Goldeneyes	A4	B4		
Harlequin duck	C5	C5		B4
Upland sandpiper	D5	D5	C5	C5
<b>Raptors/Gamebirds:</b>				
Columbian sharp-tailed grouse	C5	C5	B4	B4
Mountain quail	C5	C5	C4	C5
Flammulated owl	B4	B4		
<b>Woodpeckers, Nuthatches &amp; Swifts:</b>				
Black-backed woodpecker	A3	B4		
Lewis' woodpecker	A3	C5		
Red-naped sapsucker	A3	B4		
Three-toed woodpecker	A3	B4		
Vaux's swift	A4	C5		
White-headed woodpecker	A4	B4		
<b>Cuckoos, Passerines &amp; Hummingbirds:</b>				
Bobolink	B4	B5		B4
Grasshopper sparrow	A4			
Yellow-billed cuckoo	B5	C5	B5	C5
<b>Bats &amp; Small Mammals:</b>				
Fringed myotis	A4	B4		
Pale western big-eared bat	A4	B4		
Silver-haired bat	A4	B4		
Spotted bat	A4	B4	B4	B4
Western small-footed myotis	A3	B4	B4	
Northern flying squirrel		A4	B4	
Pygmy rabbit	C5	C5	C5	C5

Table D-4 (continued)—Species with at least 20 or more likelihood points in viability Outcome 5, under current conditions or under projected management options for FS/BLM lands in Idaho and western Montana (continued).

Category	Current	Option 1	Option 2	Option 3
<b>Carnivores&amp;Ungulates:</b>				
American marten	B4	B4		
Fisher	B4	B4		B4
Grizzly bear	B4	B4	B4	B4
Lynx	B4	C5	C5	B4
Wolverine	B4	B5	B4	B4
California bighorn sheep	C5	C5	C5	C5
Woodland caribou	D5	D5	D5	C5
Total of "B"		20	9	10
Total of "C"		14	7	8
Total of "D"		2	1	0
<b>Grand Total</b>		<b>36</b>	<b>17</b>	<b>18</b>
A = 0-19 points in Outcome 5		3 = Favorable outcome		
B = 20-49 points in Outcome 5		4/5 = Less Favorable outcome		
C = 50-99 points in Outcome 5				
D = 100 points in Outcome 5				

Note: Includes all species with at least 20 points in outcome 5 for any option. Weighted mean scores are included for reference.

Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. XX p. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

Table D-5—Species with better viability outcomes (0.5 or more) under management options, than under current conditions on FS/BLM lands in Idaho and western Montana.

Species	Current	Option 1	Option 2	Option 3
Lemhi penstemon	3.7*		3.1	
Northern Leopard Frog	4.7*			3.9
Harlequin Duck	4.5*		3.5	
Band-tailed Pigeon	4.1*		3.5	3.4**
Columbian Sharp-tailed Grouse	4.8*		4.0	
Sagegrouse	3.1		2.2	2.6
Bald Eagle	3.6*		2.9**	3.0**
Boreal Owl	3.7*		3.2**	3.0**
Cooper's Hawk	2.4		1.9	
Ferruginous Hawk	3.0		2.5	
Flammulated Owl	3.8*		2.9**	3.3**
Great Gray Owl	3.5*		3.0	
Lewis' Woodpecker	3.4*		2.7**	2.7**
Piliated Woodpecker	3.4		2.5	2.6
Red-naped Sapsucker	3.2		2.7	
Vaux's Swift	3.8*			2.9**
White-headed Woodpecker	3.8*		2.7**	3.1**
Chestnut-backed Chickadee	3.2			2.6
Hammond's Flycatcher	3.4*		2.9**	2.9**
Western Bluebird	3.0		2.4	
Long-legged Myotis	3.7*		3.2**	
Silver Haired Bat	3.4			
Northern Flying Squirrel	3.5*		3.0	3.0**
Marten	3.7*		3.0**	2.7**
Woodland Caribou	5.0*			4.5
<b>Totals:</b>	<b>25</b>	<b>0</b>	<b>20</b>	<b>15</b>

\* = Species with less favorable outcomes (3.5 or more).

\*\* = Favorable outcomes (3.4 or less) projected to result from option implementation--represents a significant improvement in habitat conditions.

Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. XX p. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).



Table D-6—Outcomes for species that currently have a “favorable” outcome (3.4 or less) changing to a “less favorable” outcome (3.5 or greater), under management options on FS/BLM lands in Idaho and western Montana.

Species	Current	Option 1	Option 2	Option 3
Mulford's milk-vetch	3	4	4	4
Picabo milkvetch	3	4	4	
Columbian Spotted Frog	3	4		
Tailed Frog	3	4		
Western Frog	3	4		
Hérons, egrets	3	4		
Great Sandhill Crane	3	4		
Black-backed Woodpecker	3	4		
Lewis' Woodpecker	3	5		
Piliated Woodpecker	3	4		
Pygmy Rabbit	3	4		
Red-naped Sapsucker	3	4		
Three-toed Woodpecker	3	4		
White-breasted Nuthatch	3	4		
Williamson's Sapsucker	3	4		
Broad-tailed Hummingbird	3			
Chestnut-backed Chickadee	3	4		
Hammond's Flycatcher	3	4		
Western Bluebird	3	4		
Wilson's Warbler	3	4		
Willow Flycatcher	3	4		
Yellow Warbler	3	4		
Bushtit	3			
Hoary Bat	3	4		
Silver Haired Bat	3	4		
Western Small-footed bat	3	4	4	
Total number of species		24	3	1
Percent of total (132) species analyzed		18%	2%	<1%

Favorable outcome = a weighted mean score of (3.4 or less).

Less favorable outcome = a weighted mean score of (3.5 or more).

Scores were rounded to integers.

Source: Quigley, Thomas M.; Lee, Kris; Arbelbide, S.J., tech. eds. 1996. Evaluation of EIS Alternatives by the Science Integration Team. Gen Tech. Rep. PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. XX p. (Quigley, Thomas M., tech. ed. The Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

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# APPENDIX E.

## COMMON AND SCIENTIFIC NAMES OF SPECIES DISCUSSED IN THE DOCUMENT.

Common name	Scientific name <sup>1</sup>
<b>Flora:</b>	
Alder	<i>Alnus hill</i>
Bitter brush	<i>Purshia tridentata</i> (Pursh) DC.
Blue-leaved penstemon	<i>Penstemon glaucinus</i>
Broad-fruit mariposa	<i>Calochortus nitidus</i>
Brome-grass	<i>Bromus</i> L.
Buck rush	<i>Ceanothus cuneatus</i> (Hook.) T. & G.
Cheatgrass	<i>Bromus tectorum</i> L.
Clustered lady's-slipper	<i>Cypripedium fasciculatum</i>
Crenulate grape-fern	<i>Botrychium crenulatum</i>
Crested wheatgrass	<i>Agropyron cristatum</i> (L.) Gaertn.
Cronquist's stickseed	<i>Hackelia cronquistii</i>
Douglas-fir	<i>Pseudotsuga menziesii</i> (Mirbel) Franco.
Grand fir	<i>Abies grandis</i> (Dougl.) Forbes
Green-tinged paintbrush	<i>Castilleja chlorotica</i>
Howellia	<i>Howellia aquatilis</i>
Howell's gumweed	<i>Grindelia howellii</i>
Huckleberries	<i>Vaccinium</i> L.
Idaho fescue	<i>Festuca idahoensis</i> Elmer
Juniper	<i>Juniperus</i> L.
Kentucky bluegrass	<i>Poa pratensis</i> L.
Knapweed	<i>Centaurea</i> L.
Leafy spurge	<i>Euphorbia esual</i> L.
Lemhi penstemon	<i>Penstemon lemhiensis</i>
Lodgepole pine	<i>Pinus contorta</i> Dougl.
Long-bearded mariposa-lily	<i>Calochortus longebarbatus</i> var. <i>Longebarbatus</i>
Macfarlane's four-o'clock	<i>Mirabilis macfarlanei</i>
Malheur wire-lettuce	<i>Stephanomeria malheurensis</i>
Manzanita	<i>Arctostaphylos</i> Adans.
Mountain hemlock	<i>Tsuga mertensiana</i> (Bong.) Carr.
Mt. Mazama collomia	<i>Collomia mazama</i>
Mulford's milk-vetch	<i>Astragalus mulfordiae</i>

Osgoodmountains milkvetch  
Palouse goldenweed  
Payson's milkvetch  
Peck's mariposa-lily  
Picabo milkvetch  
Ponderosa pine  
Pygmy monkeyflower  
Sagebrush  
Spalding's campion  
Subalpine fir  
Suksdorf's lomatium  
Thompson's clover  
Twin-spike moonwort  
Upward-lobed moonwort  
Washington monkeyflower  
Washington polemonium  
Weak milk-vetch  
Western hemlock  
Western juniper  
Western redcedar  
Western white pine  
Wheat  
White bark pine  
White fir  
Willow

*Astragalus yoder-williamsii*  
*Haplopappus liatriformis*  
*Astragalus paysonii*  
*Calochortus longebarbatus* var. *Peckii*  
*Astragalus oniciformis*  
*Pinus ponderosa* Dougl.  
*Mimulus pygmaeus*  
*Artemisia* L.  
*Silene spaldingii*  
*Abies lasiocarpa* (Hook.) Nutt.  
*Lomatium suksdorfii*  
*Trifolium thompsonii*  
*Botrychium paradoxum*  
*Botrychium ascendens*  
*Mimulus washingtonensis* var. *washingtonensis*  
*Polemonium pectinatum*  
*Astragalus solitarius*  
*Tsuga heterophylla* (Raf.) Sarg.  
*Juniperus occidentalis* Hook.  
*Thuja plicata* Donn.  
*Pinus monticola* Dougl.  
*Triticum aestivum* L.  
*Pinus albicaulis* Engelm.  
*Abies concolor* (Gord. & Glend.) Lindl.  
*Salix* L.

**Fish:**

Bass  
Bull trout  
Brook trout  
Chinook salmon  
Goose Lake sucker  
Klamath Largescale sucker  
Lahontan Cutthroat trout  
Lost River sucker  
Malheur sculpin  
Margined sculpin  
Pacific lamprey  
Pit-Klanath Brook lamprey

*Micropterus* spp.  
*Salvelinus confluentus*  
*Salvelinus fontinalis*  
*Oncorhynchus tshawytscha*  
*Catostomus occidentalis lacusanserinus*  
*Catostomus snyderi*  
*Oncorhynchus clarki henshawi*  
*Deltistes luxatus*  
*Cottus bairdi* ssp.  
*Cottus marginatus*  
*Lampetra tridentata*  
*Lampetra lethophaga*

Pygmy whitefish  
Rainbow trout  
Redband trout  
Shorthead sculpin  
Shortnose sucker  
Slender sculpin  
Sockeye salmon  
Steelhead  
Torrent sculpin  
Walleye  
Westslope cutthroat trout  
Wood River Bridgelip sucker  
Wood River sculpin  
Yellowstone cutthroat trout

*Prosopium coulteri*  
*Oncorhynchus mykiss*  
*Oncorhynchus mykiss* ssp.  
*Cottus confusus*  
*Chasmistes brevirostris*  
*Cottus tenuis*  
*Oncorhynchus nerka*  
*Oncorhynchus mykiss mykiss*  
*Cottus rhotheus*  
*Stizostedion vitreum vitreum*  
*Oncorhynchus clarki lewisi*  
*Catostomus columbianus hubbsi*  
*Cottus leiopomus*  
*Oncorhynchus clarki bouvieri*

**Birds:**

Ash-throated flycatcher  
Bald eagle  
Band-tailed pigeon  
Barred owl  
Black-backed woodpecker  
Black-capped rosy finch  
Black-chinned hummingbird  
Blue grouse  
Bobolink  
Boreal owl  
Brewer's blackbird  
Brewer's sparrow  
Broad-tailed hummingbird  
Burrowing owl  
Bushtit  
Chestnut-backed chickadee  
Chipping sparrow  
Chukar  
Columbia sharp-tailed grouse  
Common loon  
Common snipe  
Cooper's hawk  
Downy woodpecker  
Ferruginous hawk

*Myiarchus cinerascens*  
*Haliaeetus leucocephalus*  
*Columba fasciata*  
*Strix varia*  
*Picoides arcticus*  
*Leucosticte arctoa*  
*Archilochus alexandri*  
*Dendragapus obscurus*  
*Dolichonyx oryzivorus*  
*Aegolius funereus*  
*Euphagus cyanocephalus*  
*Spizella breweri*  
*Selasphorus platycercus*  
*Athene cunicularia*  
*Psaltriparus minimus*  
*Parus rufescens*  
*Spizella passerina*  
*Alectoris chukar*  
*Tympanuchus phasianellus columbianus*  
*Gavia immer*  
*Gallinago gallinago*  
*Accipiter cooperii*  
*Picoides pubescens*  
*Buteo regalis*

Flammulated owl	<i>Otus flammeolus</i>
Grasshopper sparrow	<i>Ammodramus savannarum</i>
Gray partridge	<i>Perdix perdix</i>
Greater sandhill crane	<i>Grus canadensis tabida</i>
Great gray owl	<i>Strix nebulosa</i>
Green-tailed towhee	<i>Pipilo chlorurus</i>
Hammond's flycatcher	<i>Empidonax hammondii</i>
Harlequin duck	<i>Histrionicus histrionicus</i>
Horned lark	<i>Eremophila alpestris</i>
Lark bunting	<i>Calamospiza melanocorys</i>
Lark sparrow	<i>Chondestes grammacus</i>
Lazuli bunting	<i>Passerina amoena</i>
Lewis' woodpecker	<i>Melanerpes lewis</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
Long-billed curlew	<i>Numenius americanus</i>
Long-eared owl	<i>Asio otus</i>
Merlin	<i>Falco columbarius</i>
Mountain quail	<i>Oreortyx pictus</i>
Northern goshawk	<i>Accipiter gentilis</i>
Northern pygmy-owl	<i>Glaucidium gnoma</i>
Northern spotted owl	<i>Strix occidentalis caurina</i>
Olive-sided flycatcher	<i>Contopus borealis</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>
Pygmy nuthatch	<i>Sitta pygmaea</i>
Red-eyed vireo	<i>Vireo olivaceus</i>
Red-naped sapsucker	<i>Sphyrapicus nuchalis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Ring-necked pheasant	<i>Phasianus colchicus</i>
Rufous hummingbird	<i>Selasphorus rufus</i>
Rufous-sided towhee	<i>Pipilo erythrophthalmus</i>
Sage grouse	<i>Centrocercus urophasianus</i>
Sage sparrow	<i>Amphispiza belli</i>
Sage thrasher	<i>Oreoscoptes montanus</i>
Short-eared owl	<i>Asio flammeus</i>
Southern red-backed vole	<i>Clethrionomys gapperi</i>
Spotted sandpiper	<i>Actitis macularia</i>
Swainson's hawk	<i>Buteo swainsoni</i>
Three-toed woodpecker	<i>Picoides tridactylus</i>
Upland sandpiper	<i>Bartramia longicauda</i>
Vaux's swift	<i>Chaetura vauxi</i>

Veery  
Vesper sparrow  
Western bluebird  
Western meadowlark  
Western red-backed vole  
Western screech owl  
Western snowy plover  
Western tanager  
White-breasted nuthatch  
White-headed woodpecker  
White-winged crossbill  
Wild turkey  
Willet  
Williamson's sapsucker  
Willow flycatcher  
Wilson's warbler  
Winter wren  
Wood duck  
Woodpecker  
Yellow-billed cuckoo  
Yellow-breasted chat  
Yellow warbler

*Catharus fuscescens*  
*Poocetes gramineus*  
*Sialia mexicana*  
*Sturnella neglecta*  
*Clethrionomys californicus*  
*Otus kennicottii*  
*Charadrius alexandrinus nivosus*  
*Piranga ludoviciana*  
*Sitta carolinensis*  
*Picoides albolarvatus*  
*Loxia leucoptera*  
*Meleagris gallopavo*  
*Catoptrophorus semipalmatus*  
*Sphyrapicus thyroideus*  
*Empidonax traillii*  
*Wilsonia pusilla*  
*Troglodytes troglodytes*  
*Aix sponsa*  
*Picoides* spp.  
*Coccyzus americanus*  
*Icteria virens*  
*Dendroica petechia*

**Mammals:**

American marten  
Black bear  
California bighorn sheep  
Chipmunk  
Elk  
Fisher  
Fringed myotis  
Gray wolf  
Grizzly bear  
Hoary bat  
Long-eared myotis  
Long-legged myotis  
Lynx  
Moose  
Mountain lion  
Mule deer

*Martes americana*  
*Ursus americanus*  
*Ovis canadensis californiana*  
*Tamias* spp.  
*Cervus elaphus*  
*Martes pennanti*  
*Myotis thysanodes*  
*Canis lupus*  
*Ursus arctos*  
*Lasiurus cinereus*  
*Myotis evotis*  
*Myotis volans*  
*Lynx lynx*  
*Alces alces*  
*Felis concolor*  
*Odocoileus hemionus*

Northern flying squirrel  
Pale western big-eared bat  
Pronghorn antelope  
Pygmy rabbit  
Rocky Mountain elk  
Rocky Mountain gray wolf  
Silver-haired bat  
Spotted bat  
Squirrel  
Washington ground squirrel  
Western small-footed myotis  
White tail deer  
White-tailed jack rabbit  
Wolverine  
Woodland caribou

*Glaucomys sabrinus*  
*Plecotus townsendii pallescens*  
*Antilocapra americana*  
*Brachylagus idahoensis*  
*Cervus elaphus nelsonii*  
*Canis lupis irremotus*  
*Lasionycteris noctivagans*  
*Euderma maculatum*  
*Ammospermophilus* spp.  
*Spermophilus washingtoni*  
*Myotis ciliolabrum*  
*Odocoileus virginianus*  
*Lepus townsendii*  
*Gulo gulo*  
*Rangifer tarandus caribou*

#### **Amphibians and Reptiles:**

Coeur d'Alene salamander  
Common garter snake  
Desert horned lizard  
Longnose leopard lizard  
Mojave black-collared lizard  
Night snake  
Northern leopard frog  
Painted turtle  
Rubber boa  
Sagebrush lizard  
Sharptail snake  
Short-horned lizard  
Spotted frog species A  
Spotted frog species B  
Striped whipsnake  
Tailed frog  
Western pond turtle  
Western toad  
Woodhouse's toad

*Plethodon idahoensis*  
*Thamnophis sirtalis*  
*Phrynosoma platyrhinos*  
*Gambelia wislizenii*  
*Crotaphytus bicinctores*  
*Hypsiglena torquata*  
*Rana pipiens*  
*Chrysemys picta*  
*Charina bottae*  
*Sceloporus graciosus graciosus*  
*Contia tenuis*  
*Phrynosoma douglassii*  
*Rana pretiosa* sp. A  
*Rana pretiosa* sp. B  
*Masticophis taeniatus*  
*Ascaphus truei*  
*Clemmys marmorata*  
*Bufo boreas*  
*Bufo woodhousii*

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<sup>1</sup> Source for flora is Hitchcock, C.L and Cronquist, A. 1973. Flora of the Pacific Northwest, an illustrate manual. University of Washington Press, Seattle, Washington. Source for fish, birds, mammals, amphibians, and reptiles is Species-Environment Relations (SER) databases.



## List of Acronyms

BEA	Bureau of Economic Analysis
BLM	Bureau of Land Management
BTUs	British Thermal Units
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ERU	Ecological Reporting Units
ESA	Endangered Species Act
FACA	Federal Advisory Committee Act
FEMAT	Forest Ecosystem Management Assessment Team
FIRE	BEA Finance, Insurance and Real Estate
FS	Forest Service
GIS	Geographic Information System
GPM	General Planning Model
GSP	Gross State Product
HUCs	Hydrologic Unit Code
ICBEMP	Interior Columbia Basin Ecosystem Management Project
ICRB	Interior Columbia River Basin
INFISH	Interior Anadromous Fish Strategy
NEPA	National Environmental Protection Act
NWFP	Northwest Forest Plan
PACFISH	Pacific Anadromous Fish Strategy
PVGs	Potential Vegetation Groups
RVDs	Recreation Visitor Days
SER	Species-Environment Relations
SIC	Standard Industrial Code
SIT	Science Integration Team

## Metric Conversion

Mile (mi)	=1.61 Kilometers (km)
Kilometer (km)	=.62 Miles (mi)
Square Kilometers (km <sup>2</sup> )	=.39 Sq. Miles (mi <sup>2</sup> )
Centimeter (cm)	=.3937 Inches (in)
Meter (m)	=3.28 Feet (ft)
Hectare (ha)	=10,000 Square Meters (m <sup>2</sup> )
Hectare (ha)	=2.47 Acres (ac)
Acre (ac)	=43,560 Square Feet (ft <sup>2</sup> )







Quigley, Thomas M.; Haynes, Richard W.; Graham, Russell T., tech. eds. 1996. Integrated scientific assessment for ecosystem management in the interior Columbia basin and portions of the Klamath and Great Basins. Gen. Tech. Rep. PNW-GTR-382. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 303 p.

The Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin links landscape, aquatic, terrestrial, social, and economic characterizations to describe biophysical and social systems. Integration was achieved through a framework built around six goals for ecosystem management and three different views of the future. These goals are: maintain evolutionary and ecological processes; manage for multiple ecological domains and evolutionary timeframes; maintain viable populations of native and desired non-native species; encourage social and economic resiliency; manage for places with definable values; and, manage to maintain a variety of ecosystem goods, services, and conditions that society wants. Ratings of relative ecological integrity and socioeconomic resiliency were used to make broad statements about ecosystem conditions in the Basin. Currently in the Basin high integrity and resiliency are found on 16 and 20 percent of the area, respectively. Low integrity and resiliency are found on 60 and 68 percent of the area. Different approaches to management can alter the risks to the assets of people living in the Basin and to the ecosystem itself. Continuation of current management leads to increasing risks while management approaches focusing on reserves or restoration result in trends that mostly stabilize or reduce risks. Even where ecological integrity is projected to improve with the application of active management, population increases and the pressures of expanding demands on resources may cause increasing trends in risk.

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