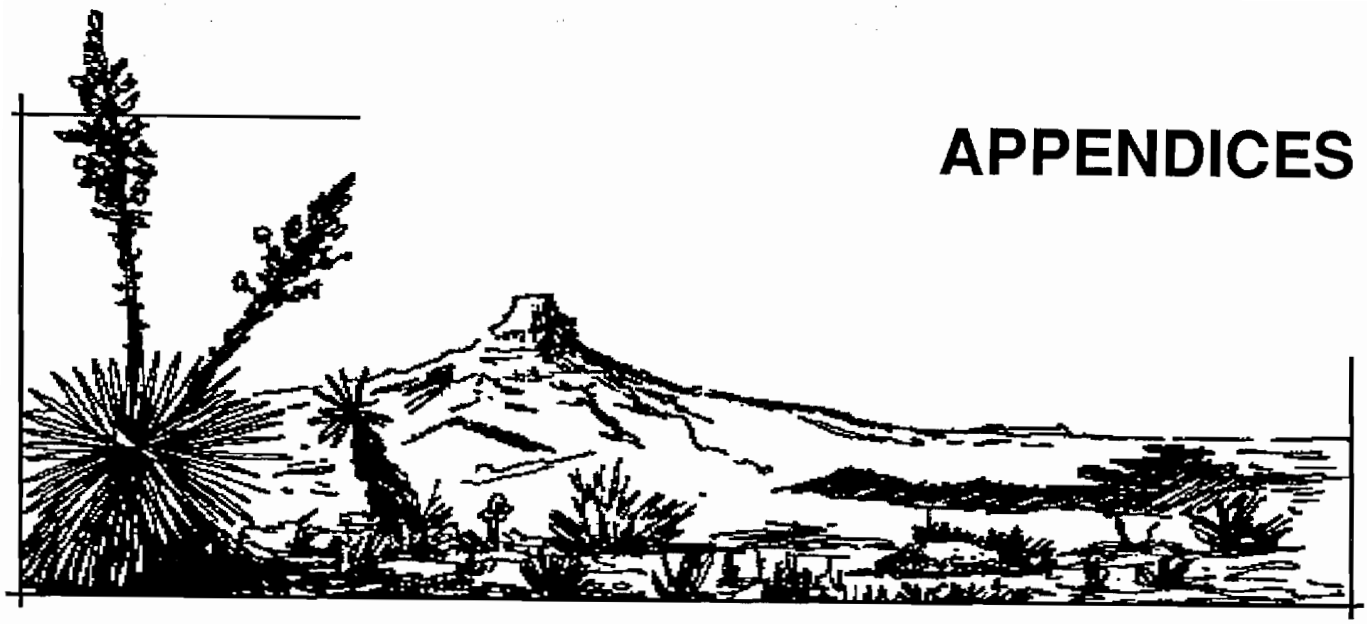


APPENDICES

Appendix 1
Allotment Status and Summary of Rangeland Programs

	ALLOTMENT	Category	Preference-AUMs Active	Preference-AUMs Suspended	Public Acres	Date AMP Signed	Base Property	Forage Availability
0001	Alamo Crossing	I	0	0	21906		W	E
0002	Arrastra Mountain	I	1995	0	24050	08-26-83	W	P/E
0003	Artillery Range	I	4016	0	76171		W	P/E
0005	Bagdad	I	1740	702	26000		W	P/E
0006	Bateman Springs	M	540	660	18646		W	P/E
0007	Big Ranch A	I	5397	363	110542	09-09-82	W	P/E
0081	Big Ranch B	C	0	0	114504		W	E
0008	Big Sandy	I	6084	1901	64913		W	P/E
0009	Black Mesa A & B	I	2712	463	30845	09-01-84	W+L	P/E
0010	Black Mountain A	I	1247	1735	52904	02-05-85	W	P/E
0011	Boriana A	M	2279	0	27570		W	P/E
0079	Boriana B	C	0	0	10220		W	E
0013	Burro Creek	I	880	0	6352	09-12-83	W	P/E
0014	Burro Creek Ranch	I	1674	0	34967		W	P/E
0015	Middle Water	M	553	200	14536		W	P/E
0016	Cane Springs Wash	C	120	69	2310		W	P/E
0017	Canyon Ranch	I	1822	0	18419		W	P/E
0018	Castle Rock	I	297	0	5128	08-17-82	W	P/E
0019	Cedar Canyon	M	3797	0	44958		W	P/E
0020	Cerbat	I	1953	0	19086	09-01-80	W	P/E
0021	Chicken Springs	I	3456	1763	94953		W	P/E
0022	Chino Springs	I	0	0	18992		W	E
0023	Clay Springs	M	406	0	6770		W	P
0024	Cook Canyon	I	269	0	4583		W	P/E
0026	Crozier Canyon	I	14439	0	106175	10-01-80	W	P
0027	Curtain	I	195	0	3250	09-01-81	W	P/E
0028	Diamond Joe	I	1404	917	16223		W	P/E
0029	Diamond Bar A	I	3088	390	63073	08-19-82	W	P/E
0080	Diamond Bar B	C	0	0	0		W	E
0030	Dolan Springs	M	1752	0	37222	09-10-82	W	P/E
0031	DOR	C	0	0	1269		W	E
0032	Feldspar	C	72	0	640		W	P/E

(continued)

Appendix 1 (continued)
Allotment Status and Summary of Rangeland Programs

	ALLOTMENT	Category	Preference-AUMs Active	Preference-AUMs Suspended	Public Acres	Date AMP Signed	Base Property	Forage Availability
0032	Feldspar	C	72	0	640		W	P/E
0035	Francis Creek	I	9750	0	77948		W	P/E
0036	Gediondia	M	552	221	13643		W	P/E
0037	Gold Basin	I	2592	0	48153	08-19-82	W	P/E
0038	Gray Wash	I	373	0	8887		W	P/E
0039	Greenwood Community	I	993	0	15842		W	P/E
0040	Greenwood Peak Comm	I	2080	0	36180		W	P/E
0041	Groom Peak	I	265	0	4861		W	P/E
0042	Hackberry	I	3781	0	32881	03-01-83	W	P/E
0043	Happy Jack Wash	C	1082	0	21343		W	P/E
0046	Hot Springs	C	52	0	1057		W	P/E
0047	Hualapai Peak	I	2052	432	24914	08-26-83	W	P
0050	Hibernia Peak A	I	380	0	14600	11-20-84	W	P
0083	Hibernia Peak B	C	120	0	335		W	P/E
0051	La Cienega	I	2400	4353	72877	07-07-89	W	P/E
0052	Lazy Yu A	M	941	0	12852		W	P/E
0054	Los Molinos	I	2256	564	17600		W	P/E
0055	Mineral Park	I	824	0	11123	09-01-81	W	P/E
0056	Mud Springs	I	1564	627	30998	08-08-83	W	P/E
0057	Music Mountain	I	1824	627	18664	09-01-80	W	P
0058	Mt. Tipton	I	618	63	8564		W	P
0059	Peacock Mountain	C	132	0	1169		W	P
0060	Pine Springs	I	583	0	6601	08-13-82	W	P/E
0062	Quail Springs	I	2614	0	31304	09-01-81	W	P/E
0064	Sandy	C	60	138	1524		W	P/E
0066	Stockton Hill	M	444	108	2912	09-01-81	W	P/E
0067	Turkey Track	C	62	0	713		W	P/E
0068	Thumb Butte	C	0	0	18050		W	E
0070	Truxton Canyon A	I	294	294	5645		W	P
0088	Truxton Canyon B	C	18	0	414		W	P
0071	Upper Music Mtn	I	2503	0	43677	09-01-80	W	P/E
0072	Valentine	M	648	0	5160		W	P
0074	West Peacock	C	204	0	1849		W	P
0076	Wikieup	I	684	0	8446		W	P/E
0077	Walapai Ranch	C	1020	0	10794		W	P/E
0078	Yellow Pine	I	5940	0	58506		W	P/E
0087	Little Cane	C	372	0	5542		W	P/E
0086	Cane Springs	I	2661	2164	40590	09-01-81	W	P/E
0101	C. O. Bar	C	792	0	5265		L	P
0102	Chambers Lease	C	132	0	852		L	P
0103	Gibson Cattle Co.	M	1968	0	16784		L	P/E
0104	Globe Ranch	C	240	0	1274		L	P
0105	JJJ Corporation	C	24	36	29017		L	P/E
0107	Kellis Lease	C	48	216	1745		L	P/E
0111	7L Cattle Co.	M	1800	0	9688		L	P/E
0115	Yolo Ranch Lease	C	564	0	3704		L	P/E
0116	Byner Cattle Co.	C	564	312	3928		L	P/E
0034	Fort Mac Ewen A	I	1796	726	34929	09-01-80	W	P/E
0082	Fort Mac Ewen B	C	0	0	31174		W	E
0061	Portland Springs	C	0	0	8709		W	E
0073	Walnut Creek	I	5843	2026	79701		W	P/E

I = Improve C = Custodial M = Maintain E = Ephemeral only P/E = Perennial/Ephemeral
P = Perennial only W = Water Base L = Land Base
Source: Kingman Resource Files

The Rangeland Program in the Cerbat-Black Mountains Planning Unit

A final environmental impact statement for this area was prepared and made available to the public in September 1978. It analyzed several alternative courses of action and selected *Alternative B* as the most realistic and workable to achieve the stated multiple-use objectives. The objectives were to:

- sustain livestock production by providing more and better quality forage
- improve wildlife habitat by providing more forage, cover and water
- reduce soil erosion and increase water infiltration by increasing vegetative ground cover and litter
- enhance recreational values by increasing the abundance and vigor of vegetation

The actions to be carried out to achieve the above objectives were:

- initial adjustments to stocking rates based on range survey
- reviewing and rewriting the proposed allotment management plans
- building range improvements as needed
- limiting grazing use on key species to 50 percent of the current year's growth

By September 1980, grazing use adjustments had been completed on 26 allotments in the Cerbat-Black Mountains Planning Unit, either as proposed in the range survey or through agreement on a different number based on additional field review. Three additional allotments retained their ephemeral designation (Portland Spring, Thumb Butte and Silver Creek) and eight additional allotments were placed in custodial management, without adjustments to grazing use (Cook Canyon, Jones Spring, Valentine, Walapai Ranch, Feldspar, Long Mountain, Peacock Mountain and West Peacock).

Sixteen allotment management plans on 19 grazing allotments were written and signed in the years from 1980 to 1985. Grazing permits were cancelled on the Silver Creek, Jones Spring and Long Mountain grazing allotments. The Middle Water, Big Ranch B, Diamond Bar B, Fort Mac Ewen B and Truxton Canyon B allotments were created as a result of subdividing existing allotments. An active land exchange program has substantially altered landownership patterns and caused numerous changes to grazing preference.

A change in BLM range management policy in the early 1980s required categorization of grazing allotments to facilitate prioritizing them for management. Currently there are 21 Improve category allotments, 7 Maintain allotments and 11 Custodial allotments (see table preceding this appendix).

Numerous range improvement projects have been constructed on public lands to facilitate implementation of allotment management plans.

Monitoring studies have been installed on all Improve and Maintain category allotments within the Cerbat-Black Mountains Planning Unit, with the purpose of detecting changes in vegetation composition, measuring levels of grazing use and determining distribution patterns of livestock grazing.

The Rangeland Program in the Hualapai-Aquarius Planning Unit

A final grazing environmental impact statement for this area was made available to the public in August 1981. It analyzed five alternatives for grazing management and selected the Proposed Action as the alternative which best met the planning areas' social, economic and environmental needs. The objectives of the proposed grazing management program were to:

- improve range and watershed condition and water quality
- increase forage production and ensure long-term stability of public lands livestock operators
- protect wild burro and wildlife habitat and riparian communities
- protect special status species habitat and areas of special natural, scenic, historic, cultural and scientific value

The actions to be carried out to achieve the above objectives were:

- allocation of vegetation to livestock, wildlife, burros, watershed protection, recreation and plant maintenance based on a 1979-80 rangeland inventory, management framework plan recommendations, additional field studies and consultation with affected interests
- limiting grazing use on key forage plants from 40 to 60 percent
- designation of 51 grazing allotments into one of four levels of grazing management
- development of allotment management plans on 28 high priority allotments
- development of range improvements to meet management objectives on individual allotments
- use of mitigation and resource enhancement measures in the range program
- monitoring to document condition and trend and to evaluate management programs
- consideration of proposals under the experimental stewardship program
- cooperation with livestock operators, the Soil Conservation Service, the Arizona State Land Department, the Arizona Range Research Task Force, the University of Arizona Extension Service and other affected interests

Changes in the Code of Federal Regulations and the issuance of a new BLM grazing management policy in 1982 caused two important changes to the proposed action in the final environmental impact statement. The first was that livestock numbers would not be adjusted solely on the basis of the range survey, but would be based on rangeland monitoring over time. The second was that grazing allotments would not be managed according to the four levels proposed in the environmental impact statement, but would be placed into one of three selective management categories.

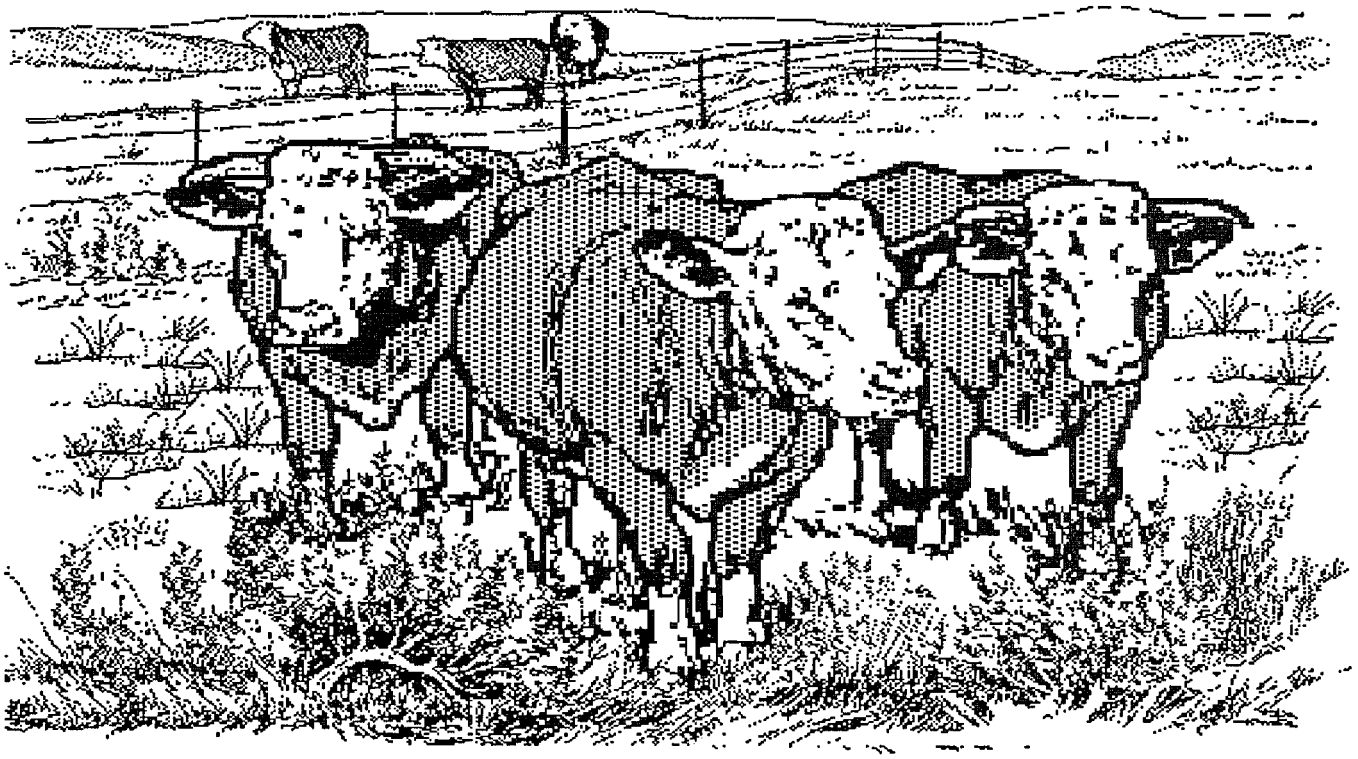
By September 1983, 47 grazing use adjustments had been completed. Shortly thereafter, four more grazing use adjustments were finalized, three of which were settled before an administrative law judge.

All allotments were placed into selective management categories in 1983, with there being 2 Maintain category allotments, 25 Improve allotments and 23 Custodial allotments.

An active land exchange program in the Kingman Resource Area has substantially altered landownership patterns and caused numerous changes to grazing preference. Allotment boundary adjustments and public land losses resulting from exchange have caused several allotments to be eliminated (Fancher Mountain, Kayser Wash, Round Valley, Trout Creek, White Hills, Bottleneck Wash, Yellow Pine B, Cane Springs Wash B and Sandy B). Lazy YU B allotment was cancelled, pending land exchange proposals. Presently, there are 5 Maintain allotments, 24 Improve allotments and 12 Custodial allotments in the Hualapai-Aquarius Planning Unit.

Six allotment management plans on seven grazing allotments have been completed and signed (Arrastra Mountain, Burro Creek, Haulapai Peak, Black Mesa/Lines, Hibernia Peak and La Cienega). Of these, only the Burro Creek Plan has been implemented. Numerous range improvement projects have been constructed on public lands to facilitate implementation of plans.

Monitoring studies have been installed on all Improve and Maintain allotments within the Hualapai/Aquarius Planning Unit, with the purpose of detecting changes in vegetative composition, measuring levels of grazing use and determining distribution patterns of grazing livestock.



Manage For Information Potential

Cultural resources included under this objective are capable of contributing useful scientific, historic or management information. This information potential is to be protected to the extent needed, by physical or administrative means, until the potential has been realized through appropriate study.

Cultural resources which would be managed for their information potential have one or both of the following characteristics.

-- They are suitable for scientific study using currently available research techniques, including study that would result in their physical alteration.

-- They are suitable for controlled experimental studies which would aid in the management of other cultural properties -- studies, for example, that are aimed at understanding the effects of natural or human-caused impacts to cultural properties, effectiveness of protection or monitoring efforts and similar objectives.

Cultural properties to be managed for their information potential may be studied for one or more of the following.

-- They are suitable for study to satisfy the needs of an academic research proposal.

-- They are suitable for short- or long-term establishment of archaeological field schools.

-- They are subjects of data recovery designed to mitigate the impacts of a competing land use.

-- They are suitable for monitoring the effects of natural or human-caused impacts to cultural properties.

Such studies must be in accordance with BLM-approved research designs, data recovery plans and recordation standards. BLM and non-BLM personnel using cultural resources for this purpose must comply with the provisions of the Archaeological Resources Protection Act of 1979. Uses which will affect National Register-listed or -eligible properties will require consultation in accordance with 36 CFR 800 and applicable memoranda of agreement.

The information potential of cultural resources managed under this objective will be protected through monitoring of selected geographical areas or high-value sites and occasional monitoring of others. Stabilization, fencing, signing, electronic and aerial and ground surveillance as well as public awareness efforts will be employed to achieve this objective.

Manage for Conservation

Cultural resources included under this objective have overriding scientific, prehistoric and/or historic importance. Because of scarcity, a research potential that surpasses the current state-of the-art, singular historical or architectural interest or comparable reasons, such resources are not considered appropriate subjects of studies which would result in their physical alteration. They will be managed to maintain their present condition and protect them from potentially conflicting land or resource uses.

The National Register-listed archaeological site known as Bighorn Cave will partially be managed under the conservation objective. The site has been altered both authorized research and by vandalism, but it is believed that intact deposits remain that with advanced methods of data collection and analysis may yield new information that has potential to advance knowledge of the Archaic to Formative transition time periods.

At least some archaeological sites from selected classes of cultural properties representing transition time periods may be identified in future activity plans to create a data bank to be managed under this objective. The purpose is to preserve some of these sites for future study when analytical techniques are more sophisticated and the research contributions of these resources can be maximized. Management emphasis will be placed on protecting these resources with their cultural material in place. Only nondestructive studies and analysis will be permitted.

The management objective for these cultural properties may be changed from conservation to information potential upon determining that their research values can be realized through state-of-the-art methods of data collection and analysis. Such studies would then be subject to the standards and provisions identified under management for information potential.

Cultural properties of this class may be managed under the public values objective if their information potential has been achieved to the point where educational, recreational and other public values would not result in the loss of important scientific values. Interpretive efforts such as trails, signs and brochures may be considered for Bighorn Cave after any additional test excavations have been completed and access to the interior of the site has been controlled. Other interpretive efforts for cultural properties under this management category may be considered but would not have a high priority.

Measures to conserve these cultural resources for the future will include, but not be limited to, high-priority status for monitoring (electronic, aerial and ground) and evaluating access that does not conflict with other resource uses. Stabilization efforts, such as erosion control, will be implemented as needed.

(continued)

Manage for Public Values

Cultural resources included under this objective are particularly useful for their sociocultural, educational, recreational or other public values. Their locations will be managed in a manner that gives adequate consideration to these values.

Cultural resources which would generally be managed for public values possess one or both of the following characteristics.

-- They are perceived by a social and/or cultural group as having attributes which contribute to maintaining the heritage or existence of that group. Locations of traditional cultural or religious importance to Native Americans or historical sites connected with living pioneer descendants, for example, would be of this kind.

-- They are appropriate for interpretive development as exhibits in place for educational and recreational uses by the general public. Cultural resources of this kind which have been identified in the Resource Management Plan area are the Carrow-Stephens ranches, the Neal petroglyphs, the Dolan Springs petroglyphs and the Mineral Park historic mining area.

Accessibility, public demand, public sensitivity, cost-effectiveness and feasibility will be considered, among other factors, in managing cultural properties of this kind for educational or recreational use. Management might include signs, self-guided interpretive trails, brochures, supervised archaeological excavation, mapping and other forms of recordation, stabilization, visitor facilities, on-site public tours and long-term group stewardships.

Cultural resources identified by contemporary social and/or cultural groups would take into account the concerns and sensitivities of the groups involved. Information on such resources would be protected from public disclosure to the extent allowed by statute.

Management of cultural resources for public values will be carried out with an awareness of any information potential such resources might possess. Any development of a cultural property for educational or recreational use will be done in such a manner as to safeguard important scientific information and will be subject to the requirements of appropriate laws and regulations.

Cultural Resource Plans

Cultural resources in the Resource Management Plan area will be allocated to specific uses in the subsequent cultural resource management plan. Project plans containing detailed management prescriptions for selected cultural properties will be developed after use allocations have been made. Cultural properties to be managed for conservation will receive the highest priority for project planning. Areas for which project plans will be prepared are, in priority order, Bighorn Cave, Carrow-Stephens ranches, Bullhead City/Western Bajada including the Beale-Mojave Road, Black Mountains, Dolan Springs petroglyphs, Burro Creek, Wright Creek, Joshua Tree/ Grand Wash Cliffs, Neal petroglyphs and Mineral Park historic area.

Classes of Cultural Properties in the Area

I. Habitation (includes, not limited to):
   A. Houses
      1) pithouses (prehistoric Indian: Amacava and Cohonina)
      2) rock (Prescott Culture pueblos, early mining, ranching)
      3) wood (historic mining, ranching, homesteads and towns)
      4) log (historic mining, homesteads)
      5) brush (prehistoric and historic Indian: Cerbat, Hualapai, Paiute, Yavapai and Mojave)
      6) adobe (historic mining, ranching, homesteads and towns)
      7) metal (corrugated tin for historic mining, ranching, homesteads and towns)
   B. Camps (often with cleared areas for wickiups, tents and sleeping)
   C. Rock shelters and caves
II. Agriculture (includes, not limited to):
   A. Fields
   B. Irrigation canals
   C. Aqueducts
   D. Dams
   E. Terraces
   F. Orchards
III. Resource Utilization (includes, not limited to):
   A. Artifact scatters
   B. Mines and/or mills
   C. Quarries
   D. Roasting pits
   E. Trash middens
   F. Isolated bedrock grinding slicks
   G. Storage cists
IV. Sociocultural
   A. Transportation and Trade
      1) trails (prehistoric and historic)
      2) roads
      3) railroads
         a) standard gauge
         b) narrow gauge
   B. Rock art
   C. Historic inscriptions
   D. Community rooms (kivas, schoolhouses, town halls, etc.)
   E. Mortuary (cemeteries, cremation areas, etc.)
   F. Shrines

Appendix 3
Alternative 1 Public Lands Identified for Disposal

Township and Range	Section	Subdivision	Acreage
Meadview Area			
T. 30 N., R. 17 W.,	24	All	640
	26	All	640
	34	All	640
	36	All	640
T. 30 N., R. 16 W.,	30	W1/2	320
T. 29 N., R. 17 W.,	2	All	640
	10	All	640
	12	All	640
	14	All	640
T. 29 N., R. 16 W.,	6	W1/2	320
Black Mountains/Detrital Valley Area			
T. 27 N., R. 21 W.,	24	E1/2; W1/2SW1/4	400
	36	NE1/4NE1/4	40
T. 27 N., R. 20 W.,	16	N1/2NE1/4; SE1/4NE1/4	120
	18	All	633
	28	All	640
	30	All	635
White Hills Area			
T. 27 N., R. 19 W.,	16	All	640
	20	All	640
Dolan Springs Area			
T. 26 N., R. 18 W.,	4	All	640
	6	All	632
	8	SW1/4	160
	10	All	640
	18	All	637
	20	All	640
	30	E1/2; E1/2W1/2	480
T. 26 N., R. 19 W.,	12	All	640
	14	All	640
	22	All	640
	24	All	640
	26	All	640
	28	All	640
	32	All	640
	34	S1/2; S1/2N1/2; NE1/4NE1/4; N1/2NW1/4	600
T. 25 N., R. 20 W.,	4	SE1/4	160
	8	All	640
	10	N1/2	320
	12	N1/2; SE1/4	480
	16	All	640
	20	All	640
	22	All	640

(continued)

Appendix 3 (continued)
Alternative 1 Public Lands Identified for Disposal

Township and Range	Section	Subdivision	Acreage
T. 25 N., R. 20 W., (cont.)	24	W1/2	320
	26	All	640
	28	All	640
	32	All	640
	34	All	640
	36	All	640
T. 25 N., R. 19 W.,	4	W1/2	320
	6	N1/2; N1/2SW1/4	395
	10	All	640
	12	All	640
	14	All	640
	16	N1/2NW1/4; N1/2SW1/4NW1/4; E1/2SW1/4NW1/4; SE1/4SW1/4NW1/4; SW1/4; SE1/4	475
	22	All	640
	26	All	640
	28	All	640
	32	N1/2; SW1/4	480
T. 24 N., R. 20 W.,	4	All	566
	10	SE1/4	160
	12	N1/2; E1/2SW1/4; SE1/4	560
	14	NW1/4; S1/2	480
	15	W1/2NE1/4; NE1/4NW1/4	120
	16	All	640
	22	All	640
	24	All	640
	28	All	640
	34	W1/2	320
	36	All	640
T. 24 N., R. 19 W.,	8	SW1/4NW1/4; S1/2	360
	18	All	604
	20	All	640
	30	All	606
Golden Valley			
T. 22 N., R. 19 W.,	12	All	640
	14	All	640
	20	All	640
	22	All	640
	28	All	640
	30	NE1/4; N1/2NW1/4; E1/2SE1/4NW1/4; NE1/4NE1/4SW1/4	270
T. 21 N., R. 18 W.,	8	W1/2NW1/4; portion of E1/2NE1/4	140
West of McConnico			
T. 20 N., R. 18 W.,	12	N1/2;N1/2S1/2; Portions of S1/2S1/2	510
T. 20 N., R. 17 W.,	6	Lots 8, 19-27, 35-37, 45-46; S1/2SE1/4; portion of N1/2SE1/4	961
	8	West of I-40	38
Shingle Canyon			
T. 19 N., R. 18 W.,	8	All	640

(continued)

Appendix 3 (continued)
Alternative 1 Public Lands Identified for Disposal

Township and Range	Section	Subdivision	Acreage
Walnut Creek			
T. 18 N., R. 18 W.,	2	All	624
T. 19 N., R. 17 W.,	30	West of I-40	139
Hualapai Valley			
T. 26 N., R. 16 W.,	10	All	640
	14	All	640
	16	All	640
	22	All	640
	24	All	640
	26	All	640
	34	All	640
	36	All	640
T. 26 N., R. 15 W.,	30	All	638
	32	All	640
T. 25 N., R. 16 W.,	2	All	640
	12	All	640
T. 25 N., R. 15 W.,	4	All	637
	6	All	638
	8	All	640
	10	All	630
	14	All	640
	18	All	63
	20	All	640
	22	All	640
	24	All	640
	26	All	640
	30	All	640
	34	All	640
T. 24 N., R. 16 W.,	16	All	640
	20	All	640
	30	All	1,018
	32	All	640
T. 24 N., R. 15 W.,	4	All	716
	8	All	640
	10	All	640
	12	All	640
	13	N1/2NW1/4; SE1/4NW1/4; NE1/4SW1/4	160
	14	All	640
	22	All	640
	24	All	640
	26	E1/2	320
	28	All	640
T. 24 N., R. 14 W.,	18	All	640
	20	E1/2	320
	30	All	640
	32	N1/2NE1/4	80

(continued)

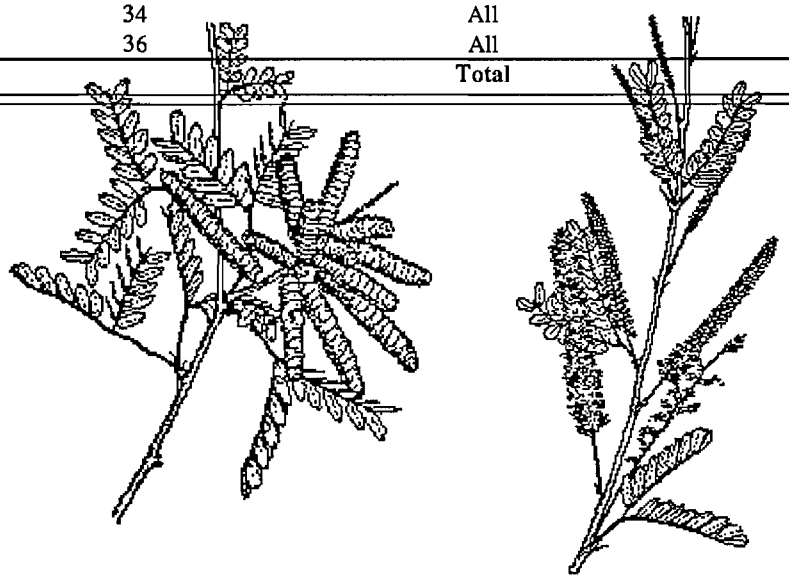
Appendix 3 (continued)
Alternative 1 Public Lands Identified for Disposal

Township and Range	Section	Subdivision	Acreage
T. 23 N., R. 17 W.,	24	East of Stockton Hill Road	44
	25	East of Stockton Hill Road	13
T. 23 N., R. 16 W.,	20	NE1/4NE1/4	40
Kingman Area			
T. 22 N., R. 17 W.,	2	East of Stockton Hill Road	223
	11	Portions of NW1/4NW1/4 and SW1/4NW1/4 East of Stockton Hill Road; SE1/4NW1/4	69
	14	S1/2SW1/4; SW1/4SE1/4	120
	26	All	640
T. 22 N., R. 15 W.,	34	S1/2NE1/4	80
T. 21 N., R. 16 W.,	13	North of I-40	360
East of Fort Mohave			
T. 19 N., R. 21 W.,	20	SW1/4SW1/4NW1/4NW1/4; W1/2SW1/4NW1/4; W1/2NE1/4SW1/4NW1/4; SE1/4NE1/4SW1/4NW1/4; SE1/4SW1/4NW1/4; SW1/4SE1/4NW1/4; S1/2SE1/4SE1/4NW1/4; N1/2NW1/4NE1/4SW1/4; NE1/4NE1/4SW1/4; NE1/4SE1/4NE1/4SW1/4; NW1/4NW1/4SE1/4; NW1/4SW1/4NW1/4SE1/4	85
	28	NE1/4	160
	29	S1/2N1/2; S1/2	480
	30	S1/2NE1/4; E1/2SE1/4NW1/4; S1/2SW1/4SE1/4NW1/4; E1/2SW1/4; SE1/4	325
T. 18 N., R. 21 W.,	6	S1/2SE1/4	80
	7	E1/2	320
	18	E1/2	320
	19	NE1/4; E1/2SE1/4	240
T. 16 1/2 N., R. 20 1/2 W.,	22	E1/2	330
	23	All	670
	25	All	640
	26	All	640
	27	E1/2	314
	34	E1/2	313
	35	All	640
T. 16 1/2 N., R. 20 W.,	30	All	617
	32	All	640
T. 16 N., R. 20 1/2 W.,	1	All	640
	3	E1/2	311
	10	E1/2	310
	11	N1/2; N1/2SW1/4; SE1/4SW1/4; SE1/4	600
	12	All	640
T. 16 N., R. 20 W.,	6	All	619
	15	North of I-40	356
T. 16 N., R. 19 W.,	18	North of I-40	156

(continued)

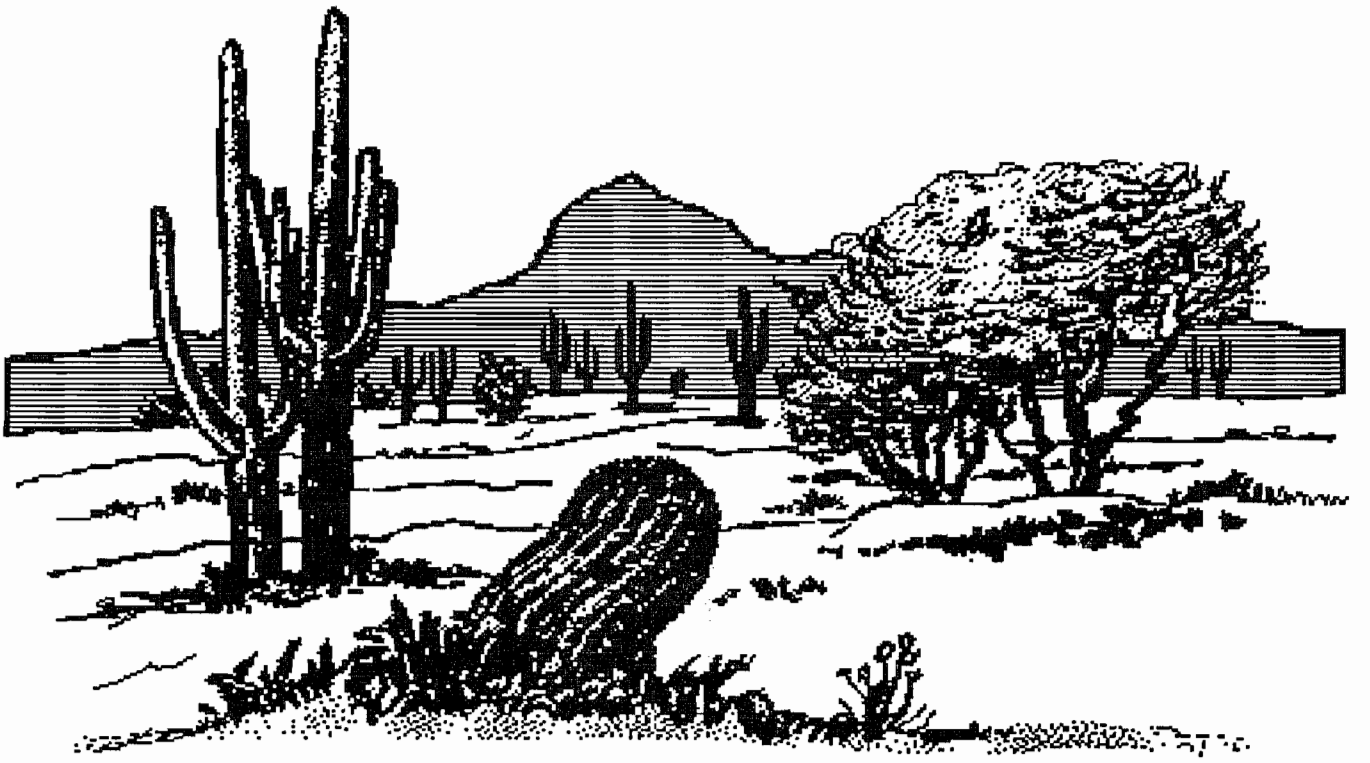
Appendix 3 (continued)
Alternative 1 Public Lands Identified for Disposal

Township and Range	Section	Subdivision	Acreage
Yucca Area			
T. 18 N., R. 18 W.,	24	East of I-40	343
	36	East of I-40	520
T. 18 N., R. 17 W.,	20	All	640
	28	All	640
	30	All	1,114
	32	All	640
	34	All	640
T. 17 N., R. 18 W.,	1	Lots 1, 2; S1/2NE1/4; N1/2N1/2SE1/4; SW1/4NW1/4SE1/4	210
T. 17 N., R.17 W.,	2	All	636
	4	All	637
	8	All	640
	10	All	640
	14	All	640
	16	All	640
	20	All	640
	22	All	640
	24	All	640
	26	All	640
	28	All	640
	30	All	1,118
	32	All	640
	34	All	640
	36	All	640
T. 17 N., R. 16 W.,	18	All	640
	20	All	640
	30	All	639
	32	All	640
T. 16 1/2 N., R. 18 W.,	22	All	532
	24	All	518
	26	All	640
	34	All	640
	36	All	640
		Total	102,547



Appendix 4
Alternative 1 Recreation and Public Purposes Disposal Areas

Township and Range	Section	Subdivision	Acreage
Golden Valley			
T. 22 N., R. 18 W.,	8	W1/2NW1/4,E1/2NE1/4	160
Dolan Springs			
T. 26 N., R. 18 W.,	8	SW1/4	160
T. 25 N., R. 19 W.,	10	S1/2	320
Yucca			
T. 17 N., R. 17 W.,	28	All	640
Detrital Valley			
T. 27 N., R. 19 W.,	16	All	640
Hualapai Valley			
T. 24 N., R. 14 W.,	18	All	640
Meadview			
T. 29 N., R. 17 W.,	14	All	640
		Total	**3,200**



Appendix 5
Alternative 1 Communication Sites

Township and Range	Section	Subdivision	Acreage
Oatman			
T. 19 N., R. 20 W.,	13	SW1/4NW1/4; NW1/4SW1/4	.72*
	14	SE1/4NE1/4	1.68*
Getz Peak			
T. 20 N., R. 15 W.,	17	NE1/4SE1/4	.84*
	17	SE1/4SE1/4	2.28*
Potato Patch II			
T. 20 N., R. 15 W.,	19	SW1/4SE1/4	6.80
Potato Patch I			
T. 20 N., R. 15 W.,	30	NW1/4NE1/4; SW1/4SE1/4	10.00
Hayden Peak			
T. 20 N., R. 15 W.,	30	SW1/4SE1/4	22.50
Windy Point			
T. 24 N., R. 18 W.,	36	SW1/4SW1/4NE1/4,SE1/4SE1/4NW1/4,NW1/4NW1/4SE1/4	20.0*
North Mount Perkins			
T. 25 N., R. 21 W.,	3	NW1/4NE1/4, E1/2SE1/4, W1/2SW1/4	5.76*
Mount Perkins			
T. 25 N., R. 21 W.,	10	SE1/4NE1/4	.038*
Willow Beach			
T. 27 N., R. 21 W.,	16	NW1/4SW1/4NW1/4	2.50*
Patterson Slope			
T. 29 N., R. 17 W.,	34	E1/2NW1/4NW1/4	10.00*

*Acreage is estimated until a communication site plan and/or site environmental analysis determines area of development.

Appendix 6

SPECIAL STATUS SPECIES

Federally Listed, Proposed and Candidate Species of known or possible occurrence

Common Name (Scientific Name)	[1]Status	General Distribution	Suitable Habitat on Public Lands	[2]Presence	Remarks
Plant Species					
Arizona cliffrose (*Purshia subinteqra*)	E	Four sites across central Arizona	Near Burro Creek at Six-Mile Crossing	Conf	Occurs on limy tuff soils of Tertiary freshwater lakebed deposits on rolling hills of the Sonoran Desert
White-margined penstemon (*Penstemon albomarginatus*)	C-2	Three sites, one each in Arizona, California and Nevada	Near Yucca	Conf	One extended population in Arizona on sandy washes and alluvial terraces
Two-color beard-tongue (*Penstemon bicolor ssp. roseus*)	C-2	Black Mountains west to southern Nevada	Black Mountains and Wilson Ridge	Conf	Mohave Desert, dry washes in volcanic hills
Peach Springs freckled milkvetch (*Astragalus lentiginosus var. (ambiguus)*)	C-2	Peach Springs vicinity	Truxton Valley	Pot	Great Basin grassland on limestone-derived soils
Frazier's wild buckwheat (*Eriogonum ripleyi*)	C-2	Known from two widely separated areas near Aubrey Valley and Horseshoe Reservoir	Between Peach Springs and Valentine	Pot	Tertiary calcareous clay hills
Parish Indian mallow (*Abutilon parishii*)	C-2	Santa Catalina, Tucson and Mazatzal mountains and near Little Ship Wash (Yavapai County)	Granitic hills in the Aquarius Mountains	Pot	Occurs in widely scattered, small populations
Welsh phacelia (*Phacelia welshii*)	C-2	Western Painted Desert	Near Gray Mountain	Conf	Chinle Formation badlands; type locality on BLM
Fickeisen Navajo cactus (*Pediocactus peeblesianus var. fickeiseniae*)	C-1	Arizona Strip southeast to Grand Canyon and western Painted Desert	Near Gray Mountain	Conf	Great Basin grassland in the Navajo Desert
Aquarius milkvetch (*Astragalus newberryi var. aquarii*)	SS	Only one site, with Arizona cliffrose	Near Burro Creek at Six-Mile Crossing	Conf	Same as described above for Arizona cliffrose
Nevin birdsbeak (*cordylanthus nevinii*)	SS	Southern California, Transverse and Peninsular ranges and rare in west central Arizona	Hualapai Mountains and Hualapai and Hayden peaks areas	Conf	Ponderosa pine forest
Crownless milkweed vine (*Cynanchum utahense*)	SS	Southwestern Utah, southern Nevada and southern California and scattered in western Arizona	Near Wickieup, Dolan Springs, Yucca and Hardyville	Conf	Sandy loam uplands with creosotebush, rayless goldenhead and big galleta in the Mohave Desert
Mohave sandpaper bush (*Petalonyx nitidus*)	SS	Eastern California, southern Nevada and rare in west central Arizona	Black Mountains, Lost Cabin Wash and near Franconia	Conf	Rhyolite outcrops

(continued)

Appendix 6 (continued)
SPECIAL STATUS SPECIES
Federally Listed, Proposed and Candidate Species of known or possible occurrence

Common Name (Scientific Name)	[1]Status	General Distribution	Suitable Habitat on Public Lands	[2]Presence	Remarks
Plant Species (continued)					
Shrubby senna *(Senna armata)*	SS	Southern California, southern Nevada and rare in west central Arizona	West side of Black Mountains at Willow Beach and Cottonwood Valley on Lake Mead NRA	Pot	Gravelly washes and fan terraces in lower Mohave Desert: reported near Yucca
Striped horsebrush *(Tetradymia argyraea)*	SS	Eastern California and rare in southern Nevada and northwestern Arizona	Cerbat Pinnacles above Dolan Springs	Conf	Rocky slopes with pinyon pine on andesite outcrops
Mohave cottonthorn *(Tetradymia argyraea)*	SS	Southern California, southern Nevada and rare in northwestern Arizona	Detrital Valley on east side of Black Mountains	Conf	Ballenas and upper fan terraces with blackbrush in the Mohave Desert
Three-hearts *(Tricardia watsonii)*	SS	Southern California northeast to Nevada and Utah and scattered in northwestern Arizona	Sacramento Valley southwest of Kingman	Pot	Creosotebush scrub and Joshua tree woodland in the Mohave Desert
California flannelbush *(Fremontodendron californica)*	SS	California chaparral; scattered in central Arizona mountain	Sam Spring in the Aquarius Mountains	Conf	Shrub in the interior chaparral on rocky slopes
Animal Species					
Bald eagle (*Haliaeetus leucocephalus*)	E(E)	Winter migrants statewide near lakes and streams; nests along Salt and Verde rivers and Bill Williams drainage	Alamo Lake, Burro Creek, Francis Creek and tributaries	V	Occupied breeding area; BLM-managed livestock, mining and wild burros
			Burro Creek, Francis Creek and tributaries	V	Recently discovered breeding area in Burro Creek: important wintering areas
Peregrine falcon (*Falco peregrinus*)	E(C)	Statewide in migration; resident in areas near tall cliffs and water	Black Mountains	P	Breeding known on adjacent National Park Service lands
			Burro Creek	P	Suitable habitat, breeding status unknown
			Cerbats and Pinnacles	P	Very high prairie falcon density; one recently discovered peregrine aerie
			Grand Wash Cliffs	P	Excellent cliff habitat; breeding documented
			Alamo Lake	P	Peregrines repeatedly observed during breeding season

(continued)

Appendix 6 (continued)
SPECIAL STATUS SPECIES
Federally Listed, Proposed and Candidate Species of known or possible occurrence

Common Name (Scientific Name)	[1]Status	General Distribution	Suitable Habitat on Public Lands	[2]Presence	Remarks
Animal Species (continued)					
Hualapai Mexican vole (*Microtus mexicanus hualpaiensis*)	E(E)	Known only from a few isolated spring sites in the Hualapai Mountains, principally in mixed conifer and ponderosa pine forests	Hualapai Mountains	V	Habitat severely damaged by livestock grazing and erosion
			Music Mountain	P	Unverified, but possible
Arizona southwest toad (*Bufo microscapho microscaphus*)	C-2	Occurs sporadically throughout northern Arizona	Burro and Francis creeks	V	No realistic handle on the status of this species
Yavapai leopard frog (*Rana yavapaiensis*)	C-2	Recent taxonomic split of species statewide	Burro and Francis creeks and Bill Williams River		Much concern over statewide decline
Desert tortoise (*Gopherus agassizi*)	C-2 (C)	Typically in Sonoran desertscrub and semidesert grassland; occurs primarily on rocky slopes and less often on lower bajadas and flats; also in extreme eastern Mohave Desert in northwest/central Arizona	Paloverde-mixed cacti cresosotebush-bursage communities throughout the resource area	V	Suitable habitat abundant; distribution and habitat categorization data recently acquired
Mexican garter snake (*Thamnophis eques*)	C-2	Central and southeastern Arizona	1904 recorded in Mohave Valley; now extirpated from Mohave County		Historic location on the Colorado River
White-faced ibis (*Plegadis chihi*)	C-2	Occurs as vagrant statewide	Dirt tanks, Alamo Lake		
Ferruginous hawk (*Buteo regails*)	C-2 (T)	Uncommon, but widely distributed summer resident of grassy plains; fairly common winter resident in northern and southeastern Arizona	Grassland communities in Hualapai Valley and Bozarth and Goodwin mesas	V	More common in recent years; does not breed in Arizona
				V	Extremely rare as a breeder; widely distributed winter resident
California black rail (*Laterallus jamaicensis coturniculus*)	C-1	Bill Williams River, Mittry Lake	Alamo Lake	P	Unlikely to occur in the resource area
Mountain plover (*Charadrus montanus*)	C-2	Statewide or migrant	Resource area-wide	P	Possible as migrant; unverified
Long-billed curlew (*Mumenius americanus*)	C-2	Sporadic Arizona distribution	Dirt Tanks, Alamo Lake, ponds and streams	V	Uncommon, but verified

(continued)

Appendix 6 (continued)
SPECIAL STATUS SPECIES
Federally Listed, Proposed and Candidate Species of known or possible occurrence

Common Name (Scientific Name)	[1]Status	General Distribution	Suitable Habitat on Public Lands	[2]Presence	Remarks
Animal Species (continued)					
Spotted owl (*Strix occidentalis*)	C-2 (T)	Breeds locally in steep, wooded canyons of mountain and high mesas, principally in northeastern half of Arizona	Hualapai Mountains	V	Very rare; no recent breeding records
Southwestern willow flycatcher (*Empidonax traillii extimus*)	C-2	Likely to occur as migrant statewide	Unknown in the resource area	P	Unverified in the resource area
Mexican long-tongued bat (*Choenycteris mexicana*)	C-2	Arizona distribution unknown	Unknown	P	Unverified in the resource area
California leaf-nosed bat (*Myotis lucifugus*)	C-2	Common in western Arizona	Burro Creek, Black Mountains	V	Commonly encountered in mine shafts
Occult little brown bat (*Myotis lucifugus occultus*)	C-2	Central, eastern Arizona	Possible in eastern part of Cerbat and Aquarius Planning Units	P	Unverified
Southwestern cave myotis (*Myotis velifer brevis*)	C-2	Includes central Arizona	Unknown	P	Taxonomic questions exist
Spotted bat (*Euderma maculatum*)	C-2	Yuma to the Kaibab Plateau, sparsely distributed	Unknown	P	Unverified
Greater western mastiff bat (*Eumops perotis californicus*)	C-2	Includes western Arizona	Secret Pass, Black Mountains, Hualapai-Aquarius Planning Unit	V	
Hualapai pocket gopher (*Thomomys umbrinus hualpaiensis*)	C-2	Known only from the Hualapai Mountains, Mohave County	Hualapai Mountains	P	No recent records
Yavapai Arizona pocket mouse (*Perognathus amplus amplus*)	C-2	Includes west-central Arizona	Lower Big Sandy River and Alamo Lake areas	V	
MacNeill sooty wing skipper (*Hesperopsis gracielae*)	C-2	Extreme western Arizona	Unknown	P	Feeds only on *Atriplex lentiformes*, Quail-bush
Wandering skipper (*Pseudocopaeodes eunus eunus*)	C-2	Unknown	Unknown	P	Suspected in Arizona; prefers seeps, desert saltgrasses
Kingman springsnail	C-2	Black Mountains	Burns Spring	V	Endemic species
Common black-hawk (*Buteo anthracinus anthracinus*)	(C)	Locally distributed; summer resident along some perennial streams with well developed broadleaf forest stands	Burro and Francis creeks	V	Highest breeding assemblage in North America.

(continued)

Appendix 6 (continued)
SPECIAL STATUS SPECIES
Federally Listed, Proposed and Candidate Species of known or possible occurrence

Common Name (Scientific Name)	[1]Status	General Distribution	Suitable Habitat on Public Lands	[2]Presence	Remarks
Animal Species (continued)					
Osprey (*Pandion haliaetus carolinensis*)	(T)	As a migrant it may appear almost anywhere; nests below Mogollon Rim; rare summer and uncommon winter resident along Colorado River	Burro Creek and Alamo Lake	V	Uncommon migrant; no documented breeding on resource area
Colorado River roundtail chub (*Gila robusta robusta*)	(E)	Streams of west-central Arizona; Arizona Game and Fish Commission "Threatened Native Wildlife in Arizona"	Burro and Francis creeks	V	Population trend unknown
Great egret (*Casmerodius albus*)	(E)	Breeding colonies are principally restricted to a few sites along the Colorado River below Bullhead City	Bill Williams drainage (Alamo Lake, Burro Creek and Bill Williams River)	V	Uncommon migrant; no documented breeding activity
Snowy egret (*Egretta thula*)	(T)	Breeding colonies very local; largely restricted to a few sites along the Colorado River below Bullhead City	Bill Williams drainage (Alamo Lake, Burro Creek and Bill Williams River)	V	Uncommon migrant; no documented breeding activity
Northern goshawk (*Accipiter gentilis*)	(C)	Nests locally in coniferous forests of the mountains and high mesas in the eastern half of Arizona	Hualapai Mountains	V	Rare breeder
Clark's grebe (*Aechmophorus clarkii*)	(C)	Breeding colonies restricted to two locations on the Colorado River	Alamo Lake	V	No breeding records
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	(T)	Nests along wooded streams primarily in central and southern parts of Arizona; extirpated from most lower Sonoran areas	Big Sandy River and Burro Creek	V	Very rare; last recorded in 1979; taxonomic questions on validity of monotypic species status

[1] Status - E - Federally endangered (E) State endangered
P - Federally proposed
(T) - State threatened
C1 - Category 1 candidate
C2 - Category 2 candidate
(C) - State candidate
(SS) - BLM-sensitive species proposed to and/or recommended from the Arizona Game and Fish Nongame Data Management system

[2] Presence - Conf - Confirmed
Pot - Potential
V - Verified
P - Probable

Source: Kingman Resource Area Files

Appendix 7
Riparian Areas

Stream Name	Approximate Length (miles)	Approximate Acreage	**RACE Inventory (fiscal year)
Adjacent to			
Grapevine Springs	0.9	23	88
Alamo Lake	5.5	138	89
Antelope Wash	6.6	165	88
Aquarius Canyon	2.5	63	92
Bar Wash	7.5	190	92
Beecher Well	3.6	90	90
Big Sandy River	34.9	871	90
Bill Williams River *	6.5	163	89
Blue Tank	13.9	348	91
Boulder Creek	12.3	308	88
Bull Canyon	12.9	323	91
Burro Creek	50.5	1263	89
Burro Springs	2.8	70	90
Cane Springs	12.6	315	92
Cataract Creek	4.9	123	92
Cedar Wash	4.9	123	88
Cholla Spring Canyon	2.2	55	92
Conger Bull Creek	7.3	183	88
Cottonwood Canyon	2.4	60	90
Cottonwood Creek	2.8	70	91
Cottonwood Creek	1.9	48	89
Cow Creek	4.6	115	90
Creamery Canyon	2.7	68	91
Crow Canyon	7.1	178	90
Crozier Wash	5.4	135	88
Deluge Wash	6.5	163	89
Devil's Canyon	14.8	370	90
Dugwell Canyon	2.4	60	91
Francis Creek	18.9	472	90
Grand Springs	0.5	13	90
Grapevine Canyon	1.4	35	88
Grapevine Wash	3.1	78	88
Grave Yard Wash	6.0	150	92
Groom Spring Wash	5.7	143	92
Hair Clipper	6.5	163	92
Hibernia Canyon	10.9	273	91
Horse Canyon	3.9	98	90
Santa Maria River *	12.0	300	89
Kaiser Spring	2.0	50	89
Moss Wash	5.2	130	88
Pipeline Springs	2.5	63	90
Sawmill Creek	2.8	70	90
Silver Creek	2.4	60	92

Appendix 7 (continued)
Riparian Areas

Stream Name	Approximate Length (miles)	Approximate Acreage	**RACE Inventory (fiscal year)
Soap Canyon	2.5	63	88
Stone Spring Canyon	3.0	75	91
Sycamore Creek	17.7	443	90
Tanker Wash	6.5	163	92
Tompkins Canyon	2.4	60	92
Trout Creek	14.8	370	92
Truxton Wash	12.8	320	88
Unnamed	0.6	15	92
Unnamed (Adjacent to Union Pass)	0.8	20	91
Unnamed (East of Finger Butte)	1.7	43	92
Unnamed (East of Mount Nutt)	2.1	53	92
Unnamed (North of Standard Mine)	1.9	48	90
Unnamed (North of Thimble Mountains)	0.9	23	90
Unnamed (South of Century Mine)	2.1	53	90
Unnamed (South of Hibernia Canyon)	0.5	13	91
Wagon Wheel	3.6	90	90
Walnut Creek	7.2	180	92
Wheeler Wash	6.8	170	88
Wilder Creek	2.2	55	92
Willow Creek	2.7	68	92
Willow Creek	1.5	38	92
Wright Creek	9.5	238	88
Yellow Flower	2.8	70	92
Total	**432.9**	**10,462**	

* Denotes streams that form resource area boundaries
** Denotes riparian area condition evaluation
Source: Kingman Resource Area Files

Appendix 8
Alternative 1 Legal Vehicular Access Acquisitions

Name	Township and Range	Section
Antelope Spring	T. 26 N., R. 18 W.,	8, 16, 17, 21, 28, 34
Antelope Well	T. 19 N., R. 13 W.,	19, 20, 28, 29
Aubrey Peak	T. 15 N., R. 14 W.,	8
Bar I-L Wash	T. 17 N., R. 16 W.,	15, 27
Barth	T. 20 N., R. 20 W.,	23
Basin Well	T. 22 N., R. 20 W.,	2, 3, 15, 27
Big Sandy with spur	T. 17 N., R. 13 W.,	14, 26
Black Rock	T. 19 N., R. 17 W.,	15
Buck Mountain	T. 16 N., R. 18 W.,	3, 15
	T. 16.5 N., R. 18 W.,	27
Burro Loop with spurs	T. 13 N., R. 13 W.,	3
	T. 14 N., R. 13 W.,	5, 15, 17, 21, 23, 29, 33
Butcher Camp	T. 27 N., R. 18 W.,	7, 9, 15, 23
	T. 27 N., R. 19 W.,	1, 2, 3, 5
	T. 28 N., R. 19 W.,	31, 33, 35
Cactus Mountain	T. 17 N., R. 17 W.,	9,18
Cave Spring	T. 21 N., R. 19 W.,	33
Cedar Spring	T. 25 N., R. 15 W.,	15, 19, 21
	T. 25 N., R. 16 W.,	25
Chapin Wash	T. 11 N., R. 13 W.,	4, 6, 11
	T. 12 N., R. 13 W.,	31, 32, 33
Clay Springs	T. 26 N., R. 15 W.,	5, 7
	T. 27 N., R. 15 W.,	15, 21, 33
Cliff Wash	T. 23 N., R. 14 W.,	1, 11
Copper Spring	T. 17 N., R. 16 W.,	3
Copperville	T. 17 N., R. 14 W.,	3, 4, 5, 7, 9, 11, 13
	T. 17 N., R. 15 W.,	13, 15, 17
	T. 17 N., R. 16 W.,	23
Corral	T. 14 N., R. 14 W.,	7, 17
Cottonwood Canyon	T. 19 N., R. 20 W.,	3
Coyote	T. 25 N., R. 20 W.,	21, 29, 31
	T. 25 N., R. 21 W.,	35

Appendix 8 (continued)
Alternative 1 Legal Vehicular Access Acquisitions

Name	Township and Range	Section
Creamy Canyon with spur	T. 16 N., R. 16 W.,	2, 11, 14, 15, 22, 27
	T. 16.5 N., R. 16 W.,	21, 23, 25, 35, 36
Crescent	T. 23 N., R. 14 W.,	5
	T. 24 N., R. 14 W.,	31
Crozier Spring	T. 24 N., R. 13 W.,	5, 26, 27
Detrital Wash	T. 23 N., R. 19 W.,	7, 18
	T. 23 N., R. 20 W.,	1
	T. 24 N., R. 20 W.,	7, 17, 21, 26, 27, 35
Devil's Canyon	T. 28 N., R. 16 W.,	34, 35
Eagle Rock Well	T. 15 N., R. 14 W.,	7, 8
	T. 16 N., R. 15 W.,	36
Falls Spring	T. 20 N., R. 15 W.,	5, 6
	T. 21 N., R. 15 W.,	32
Fig Spring	T. 19 N., R. 18 W.,	6
	T. 19 N., R. 19 W.,	1, 2, 3
	T. 20 N., R. 19 W.,	3, 9, 15, 21, 27, 33
	T. 21 N., R. 19 W.,	29, 33, 34
Flattop with spur	T. 16 N., R. 16 W.,	18, 19, 20, 28
	T. 16 N., R. 17 W.,	3, 5, 11, 13, 15
	T. 16.5 N., R. 17 W.,	31
	T. 16.5 N., R. 18 W.,	21, 23, 25, 27
Getz Peak	T. 20 N., R. 15 W.,	20
Goldbug Mine	T. 13 N., R. 13 W.,	17
Goldroad Well	T. 19 N., R. 19 W.,	21
Goodwin Mesa	T. 16 N., R. 11 W.,	22
Granite Peak	T. 16.5 N., R. 15 W.,	19, 29, 33
	T. 17 N., R. 15 W.,	33
Grapevine Canyon	T. 30 N., R. 15 W.,	33
	T. 30 N., R. 16 W.,	13, 25
Grapevine Spring	T. 24 N., R. 13 W.,	5, 29
Hibernia Canyon	T. 18 N., R. 14 W.,	2, 10, 11, 14, 15, 16, 17, 19
	T. 18 N., R. 15 W.,	11, 13, 15
Hualapai Canyon	T. 20 N., R. 15 W.,	9
	T. 21 N., R. 15 W.,	28
Little Cottonwood	T. 23 N., R. 13 W.,	27, 29, 33, 36
Lost Cabin Spring	T. 24 N., R. 20 W.,	17

Appendix 8 (continued)
Alternative 1 Legal Vehicular Access Acquisitions

Name	Township and Range	Section
McConnico	T. 20 N., R. 17 W.,	9
McCracken	T. 14 N., R. 15 W.,	14, 15, 21
Middle	T. 25 N., R. 20 W.,	7, 15, 19, 21
	T. 25 N., R. 21 W.,	1
Mount Perkins	T. 25 N., R. 21 W.,	1
	T. 26 N., R. 21 W.,	22
Mud Spring	T. 16 N., R. 16 W.,	4, 9, 13, 14, 15
	T. 16.5 N., R. 16 W.,	29, 33
	T. 17 N., R. 16 W.,	35
North Tank	T. 28 N., R. 15 W.,	29
Old Camp Well	T. 19 N., R. 16 W.,	33
Old Trails	T. 18 N., R. 17 W.,	19, 21
	T. 18 N., R. 18 W.,	25
Pearson Falls	T. 17 N., R. 13 W.,	2, 10, 11
Pilgrim Mine	T. 23 N., R. 19 W.,	2
Pine Lake	T. 20 N., R. 15 W.,	20, 21
Pipeline	T. 16.5 N., R. 18 W.,	21
	T. 17 N., R. 17 W.,	5, 17, 18, 19, 31
	T. 18 N., R. 17 W.,	29
	T. 21 N., R. 16 W.,	28, 32
Porter Mine	T. 26 N., R. 21 W.,	3
Portland Mine	T. 23 N., R. 21 W.,	14, 15
	T. 24 N., R. 21 W.,	25
Potts Mountain with spur	T. 11 N., R. 14 W.,	4, 9
	T. 12 N., R. 14 W.,	28
Red Horn Spring	T. 24 N., R. 12 W.,	19
Roadside Tank	T. 15 N., R. 15 W.,	21, 29, 31
Rock Creek	T. 17 N., R. 17 W.,	15
	T. 18 N., R. 17 W.,	9, 11
Secret Pass	T. 21 N., R. 19 W.,	29
Senator Mine	T. 27 N., R. 19 W.,	5, 7
	T. 27 N., R. 20 W.,	13
	T. 28 N., R. 19 W.,	3, 11, 14, 15, 16, 21, 29

Appendix 8 (continued)
Alternative 1 Legal Vehicular Access Acquisitions

Name	Township and Range	Section
Senator Mountain	T. 29 N., R. 19 W.,	23, 25, 35
	T. 27 N., R. 20 W.,	15, 16, 21
	T. 28 N., R. 20 W.,	13, 25, 35
Shot Up Tank	T. 15 N., R. 16 W.,	5, 7
	T. 16 N., R. 16 W.,	27, 28, 33
Shot Up Well	T. 14 N., R. 17 W.,	3, 10, 15, 16
	T. 15 N., R. 17 W.,	7, 17, 29, 33
	T. 16 N., R. 17 W.,	7, 19, 31
	T. 16.5 N., R. 17 W.,	19, 31
	T. 16.5 N., R. 18 W.,	24
	T. 17 N., R. 17 W.,	17, 20, 29, 33
Stone Corral	T. 24 N., R. 14 W.,	23, 27, 29
Stouts Well	T. 14 N., R. 15 W.,	3, 11
	T. 15 N., R. 14 W.,	8
	T. 15 N., R. 15 W.,	35
Sugarloaf Mountain	T. 21 N., R. 20 W.,	16
	T. 22 N., R. 20 W.,	31
	T. 22 N., R. 21 W.,	25, 35
Thumb Butte	T. 20 N., R. 20 W.,	27, 28
	T. 21 N., R. 20 W.,	28, 29, 32, 33
Township Line	T. 14 N., R. 15 W.,	5
	T. 14 N., R. 17 W.,	1, 3, 5
	T. 15 N., R. 15 W.,	31, 33
	T. 15 N., R. 16 W.,	31, 33, 35
	T. 15 N., R. 17 W.,	31, 33, 35
Twin Mills	T. 21 N., R. 19 W.,	2, 11
	T. 22 N., R. 19 W.,	18, 19, 29, 33, 34, 35
	T. 22 N., R. 20 W.,	2, 13
	T. 23 N., R. 20 W.,	9, 11, 23, 27, 35
Vock Canyon	T. 23 N., R. 17 W.,	3, 4, 5, 8, 9
	T. 24 N., R. 17 W.,	35, 36
Wabayuma Peak	T. 18 N., R. 16 W.,	11
Walnut Creek	T. 19 N., R. 16 W.,	7
	T. 19 N., R. 17 W.,	7, 15, 18
Water Tank	T. 15 N., R. 16 W.,	23, 27, 29, 31, 33
Willow Creek with spur	T. 16 N., R. 17 W.,	1
	T. 16.5 N., R 17 W.,	35
Various unnamed roads	T. 16.5 N., R. 18 W.,	27, 33
	T. 20 N., R. 16 W.,	2, 5, 8, 9, 10, 11, 15, 27, 28, 29

Appendix 9
Alternative 1 Acquisitions by Resource Activity

Township and Range	Section	Subdivision	Acreage
WILDERNESS			
T. 20 N., R. 20 W.,	23	SW1/4; S1/2NW1/4; NW1/4NW1/4; W1/2SW1/4SE1/4	300
T. 18 N., R. 16 W.,	11	N1/2N1/2; N1/2SW1/4NW1/4; E1/2 SE1/4SW1/4NW1/4; SE1/4NW1/4	225
T. 12 N., R. 11W.,	16	Mining Claim	16
T. 25 N., R. 18 W.,	17	NW1/4; N1/2NE1/4; SE1/4NE1/4	280
T. 16 N., R. 10 W.,	25	Mining Claim	5
T. 25 N., R. 18 W.,	4	SW1/4NW1/4	40
T. 25 N., R. 18 W.,	20	SE1/4SE1/4	40
T. 20 N., R. 20 W.,	35	Mining Claim	5
T. 19 N., R. 20 W.,	2	Mining Claim	5
T. 25 N., R. 18 W.,	33	All	640
T. 24 N., R. 18 W.,	9	All	640
T. 18 N., R. 16 W.,	5	S1/2SW1/4	80
T. 18 N., R. 16 W.,	8	NW1/4NW1/4	40
T. 18 N., R. 16 W.,	15	NE1/4SE1/4; SW1/4NW1/4; NW1/4SE1/4 NW1/4; W1/2NW1/4SW1/4; W1/2NE1/4SW1/4	210
T. 18 N., R. 16 W.,	17	N1/2NW1/4; SW1/4; W1/2SE1/4; W1/2NE1/4 SE1/4; SE1/4SE1/4	380
T. 18 N., R. 16 W.,	21	NW1/4NW1/4; SE1/4SE1/4	80
T. 18 N., R. 16 W.,	23	NE1/4NW1/4	40
T. 18 N., R. 16 W.,	27	S1/2SW1/4	80
T. 18 N., R. 16 W.,	29	SE1/4NE1/4	40
T. 18 N., R. 16 W.,	31	W1/2NE1/4	80
		Total	**3,226**
RECREATION			
T. 29 N., R. 17 W.,	25	All	640
T. 29 N., R. 17 W.,	35	N1/2	320
T. 20 N., R. 19 W.,	33	All	640
T. 20 N., R. 20 W.,	2	All	525
T. 20 N., R. 20 W.,	3	SE1/4SW1/4; N1/2SW1/4; SE1/4	280
T. 14 N., R. 12 W.,	23	All	640
T. 14 N., R. 12 W.,	24	W1/2	320
T. 28 N., R. 17 W.,	3	All	640
T. 29 N., R. 16 W.,	19	NW1/4NW1/4	40
T. 18 N., R. 15 W.,	7	N1/2, N1/2S1/2; SW1/4SW1/4; SW1/4SE1/4	560
T. 29 N., R. 17 W.,	27	All	640
T. 30 N., R. 16 W.,	23	All	640
T. 29 N., R. 16 W.,	29	All	640
T. 29 N., R. 16 W.,	31	S1/2	320
T. 30 N., R. 16 W.,	31	E1/2	320
T. 30 N., R. 16 W.,	29	All	640
		Total	**7,805**
WILDLIFE			
Pine Peak			
T. 17 N., R. 15 W.,	3	All	643
	9	All	640
	11	All	640

(continued)

Appendix 9 (continued)
Alternative 1 Acquisitions by Resource Activity

Township and Range	Section	Subdivision	Acreage
WILDLIFE (continued)			
Union Pass			
T. 21 N., R. 20 W.,	11	All	640
	12	N1/2	298
Hualapai Foothills II			
T. 20 N., R. 17 W.,	19	East of I-40 right-of-way	310
	28	Mining claim in SW1/4NW1/4	20
	29	NW1/4; S1/2	480
T. 17 N., R. 16 W.,	1	NW1/4NW1/4; SE1/4NE1/4	80
	3	S1/2NE1/4; SE1/4; S1/2SW1/4; NE1/4SW1/4	360
	8	All	640
	9	N1/2	320
	15	All	640
	17	All	640
T. 16.5 N., R. 17 W.,	25	All	640
T. 16.5 N., R. 16 W.,	19	All	521
	21	All	521
	23	All	522
	25	All	640
	27	All	640
	29	All	640
	31	All	636
	32	SW1/4; SW1/4SE1/4	200
	33	All	640
	35	All	640
	36	NW1/4NW1/4	40
T. 16.5 N., R. 15 W.,	31	All	623
T. 16 N., R. 16 W.,	1	All	639
	2	All	638
	3	All	637
	4	All	638
	5	All	638
	6	All	635
	8	All	640
	9	All	640
	10	All	640
	11	All	640
	12	All	640
	13	All	640
	14	All	640
	15	All	640
	17	All	640
	20	All	640
	21	All	640
	22	All	640
	23	All	640
	24	All	640
	25	All	640
	26	All	640
	27	All	640
	35	All	640
	36	E1/2; W1/2SW1/4; N1/2NW1/4; SW1/4NW1/4	520

(continued)

Appendix 9 (continued)
Alternative 1 Acquisitions by Resource Activity

Township and Range	Section	Subdivision	Acreage
WILDLIFE (continued)			
T. 16 N., R. 15 W.,	5	W1/2; W1/2E1/2; NE1/4NE1/4; E1/2SE1/4	598
	6	All	622
	7	All	623
	8	All	640
	9	All	640
	17	All	640
	19	All	622
	21	All	640
	29	All	640
	31	All	625
	33	All	640
	36	All	640
T. 16 N., R. 14 W.,	27	All	640
T. 15 N., R. 15 W.,	1	SE1/4NW1/4	160
	2	All	638
	3	All	638
	5	All	639
	7	All	629
	9	All	640
	11	All	640
	14	SE1/4	160
	15	All	640
	17	All	640
	19	All	632
	21	All	640
	23	E1/2; E1/2W1/2; NW1/4NW1/4; W1/2SW1/4	600
	35	All	640
T. 15 N., R. 14 W.,	1	N1/2; W1/2SW1/4	399
	4	All	638
	5	S1/2; S1/2NE1/4	300
	7	All	627
	8	All	640
	9	All	640
	13	W1/2NW1/4	80
	17	SE1/4SE1/4	40
	19	All	
	23	SW1/4NW1/4	40
	30	W1/2NW1/4	74
T. 15 N., R. 13 W.,	19	SW1/4	154
	24	W1/2NE1/4; W1/2SE1/4; E1/2	480
	25	SW1/4	160
	27	All	640
	29	S1/2; S1/2N1/2	480
	33	All	640
	35	All	640
T. 14 N., R. 12 W.,	5	N1/2	323
	7	All	633
	9	All	640
	17	S1/2	320
	19	All	634
	21	All	640
	27	E1/2	320
	29	N1/2; SW1/4; NE1/4NE1/4; S1/2SE1/4	600
	31	All	636
	33	All	640

(continued)

Appendix 9 (continued)
Alternative 1 Acquisitions by Resource Activity

Township and Range	Section	Subdivision	Acreage
WILDLIFE (continued)			
T. 18 N., R. 17 W.,	9	S1/2N1/2; W1/2SW1/4; NE1/4SW1/4	280
	11	All	640
	35	All	640
T. 18 N., R. 16 W.,	31	W1/2NE1/4; NW1/4NW1/4	120
T. 17 N., R. 16 W.,	19	All	638
	31	All	640
T. 16.5 N., R. 17 W.,	23	All	516
McCracken Mountains			
T. 14 N., R. 14 W.,	19	All	632
	31	All	634
T. 14 N., R. 15 W.,	3	All	637
	9	All	640
	11	All	640
	13	All	640
	23	All	640
	25	All	640
	27	All	640
	35	All	640
T. 13 N., R. 15 W.,	3	S1/2	320
	11	All	640
	13	W1/2; NE1/4NE1/4	360
	15	All	640
	23	W1/2	320
T. 13 N., R. 14 W.,	5	All	640
Pine Flat			
T. 18 N., R. 15 W.,	7	N1/2; N1/2S1/2; N1/2SE1/4; SW1/4SE1/4; N1/2 SW1/4; SW1/4SW1/4	543
Black Mtns HMP	22	All	640
T. 26 N., R. 21 W.,	33	NE1/4	160
	36	All	640
T. 25 N., R. 22 W.,	25	All	640
	27	All	640
T. 25 N., R. 21 W.,	1	Mining Claims in N1/2	120
T. 24 N., R. 21 W.,	9	All	640
	33	NW1/4SW1/4	40
T. 23 N., R. 20 W.,	21	All	640
	33	All	640
T. 22 N., R. 20 W.,	4	SE1/4SE1/4	40
	9	E1/2	320
	15	All	640
	17	All	640
	19	All	637
	21	All	640
	29	All	640
	31	N1/2; N1/2S1/2	478
	33	All	640
T. 22 N., R. 21 W.,	13	All	640
	25	All	640

(continued)

Appendix 9 (continued)
Alternative 1 Acquisitions by Resource Activity

Township and Range	Section	Subdivision	Acreage
WILDLIFE (continued)			
T. 20 N., R. 20 W.,	2	All	685
	3	SE1/4; E1/2SW1/4; NW1/4SW1/4	280
	23	SW1/4; W1/2SW1/4SE1/4; S1/2NW1/4; NW1/4NW1/4	300
T. 20 N., R. 19 W.,	21	All	640
	33	All	640
T. 19 N., R. 19 W.,	21	All	640
Cerbat Mountains Herd Management Area			
T. 28 N., R. 16 W.,	11	NW1/4SW1/4	40
T. 23 N., R. 13 W.,	5	All	639
T. 23 N., R. 14 W.,	3	All	640
	9	N1/2; SE1/4; E1/2SW1/4	560
	11	All	640
T. 24 N., R. 14 W.,	11	All	640
	13	All	364
	17	All	640
	21	All	640
	23	All	640
	25	All	365
T. 24 N., R. 16 W.,	7	All	1017
T. 25 N., R. 14 W.,	9	All	640
	11	All	640
	25	All	640
	31	All	640
	35	All	640
T. 25 N., R. 15 W.,	27	All	640
	28	All	640
	29	All	640
	36	All	640
T. 25 N., R. 18 W.,	4	SW1/4NW1/4	40
Hualapai Mountains			
T. 20 N., R. 15 W.,	9	NW1/4NE1/4; NE1/4NW1/4; Mining Claims	135
	16	All	640
	21	S1/2SW1/4	80
T. 13 N., R. 16 W.,	23	All	640
	25	All	640
	26	SE1/4; SW1/4NE1/4; SE1/4NW1/4; E1/2SW1/4	320
	27	All	640
	35	All	640
T. 13 N., R. 15 W.,	29	All	640
	31	All	639
		Total	**101,022**
		Total Alternative 1 Acquisitions	**112,053**

Appendix 10
Alternative 2 Mineral Closures to Protect Critical Resources

Township and Range	Section	Subdivision	Acreage
JOSHUA TREE HABITAT			
Federal Minerals to be Closed to Mineral Entry			
T. 29 N., R. 17 W.,	24	All	640
	26	All	640
	34	E1/2	320
	35	S1/2	320
	36	All	640
T. 29 N., R. 16 W.,	18	All	638
	20	All	640
	30	All	639
	32	All	640
T. 28 N., R. 17 W.,	10	N1/2N1/2NE1/4; N1/2NW1/4	120
T. 28 N., R. 16 W.,	6	N1/2	167
		Total	**5,404**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 29 N., R. 17 W.,	25	All	640
	27	E1/2	320
	35	N1/2	320
T. 29 N., R. 16 W.,	7	E1/2	320
	19	All	638
	21	All	640
	29	All	640
	31	All	640
T. 28 N., R. 17 W.,	1	N1/2N1/2	162
	2	All	642
	3	All	640
	11	N1/2N1/2N1/2	80
		Total	**5,682**
CULTURAL AND HISTORICAL			
Federal Minerals to be Closed to Mineral Entry			
T. 17 N., R. 13 W.,	36	W1/2SW1/4	80
T. 16.5 N., R. 13 W.,	21	W1/2; SW1/4SE1/4	276
	22	E1/2; E1/2W1/2	414
	27	E1/2; NW1/4; NW1/4SW1/4	520
	28	SW1/4NE1/4; NW1/4; N1/2SW1/4	280
		Total	**1,570**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 20 N., R. 20 W.,	33	All	640
T. 17 N., R. 13 W.,	35	SE1/4	160

(continued)

Appendix 10 (continued)
Alternative 2 Mineral Closures to Protect Critical Resources

Township and Range	Section	Subdivision	Acreage
CULTURAL AND HISTORICAL (continued)			
T. 16.5 N., R. 13 W.,	21	NE1/4; N1/2SE1/4; SE1/4SE1/4	235
	22	W1/2W1/2	138
	27	NE1/4SW1/4	40
	28	N1/2NE1/4; SE1/4NE1/4	120
		Total	**1,333**
Federal Minerals to be Closed to Mineral Entry			
T. 20 N., R. 21 W.,	34	All	640
	35	All	640
T. 19 N., R. 21 W.,	2	All	641
	4	All	645
	6	All	641
	8	All	640
	10	All	640
	14	All	640
	22	All	640
	24	All	640
	26	All	640
	28	E1/2; S1/2NW1/4; SW1/4	560
	34	All	640
	36	All	640
		Total	**8,887**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 20 N., R. 21 W.,	32	S1/2	320
	33	All	640
T. 19 N., R. 21 W.,	3	All	507
	5	All	497
	7	E1/2; NW1/4; N1/2SW1/4	562
	9	All	640
	11	All	640
	15	All	640
	23	All	640
	25	All	640
	27	All	640
	33	All	640
	35	All	640
		Total	**7,646**
THREATENED AND ENDANGERED SPECIES HABITAT			
Federal Minerals to be Closed to Mineral Entry			
T. 20 N., R. 15 W.,	32	All	640
T. 19 N., R. 15 W.,	4	W1/2NW1/4; SW1/4; W1/2SE1/4	321
	6	E1/2E1/2	161
	28	All	640
T. 17 N., R. 15 W.,	2	W1/2	321

(continued)

Appendix 10 (continued)
Alternative 2 Mineral Closures to Protect Critical Resources

Township and Range	Section	Subdivision	Acreage
THREATENED AND ENDANGERED SPECIES HABITAT (continued)			
Federal Minerals to be Closed to Mineral Entry			
T. 14 N., R. 11 W.,	1	All	639
	2	SE1/4	160
	11	NE1/4	160
	12	N1/2N1/2	160
		Total	**3,202**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 20 N., R. 15 W.,	33	NW1/4	160
T. 19 N., R. 15 W.,	5	All	644
T. 17 N., R. 15 W.,	3	All	643
		Total	**1,447**
	Total Federal Minerals to be Closed to Mineral Entry		**19,063**
	Total Non-Federal Minerals to be Acquired-Not Open to Mineral Entry		**16,108**

Appendix 11
Alternative 2 Mineral Closures in Riparian Areas

Wright Creek Riparian Area of the Wright and Cottonwood Creeks ACEC

Township and Range	Section	Subdivision	Acreage
Federal Minerals to Be Closed to Mineral Entry			
T. 24 N., R. 13 W.,	36	NE1/4; NW1/4; SW1/4; N1/2SE1/4	560
T. 23 N., R. 12 W.,	6	E1/2; E1/2NW1/4	400
	8	NE1/4; NW1/4; NE1/4SW1/4; SE1/4	520
	9	W1/2SW1/4	80
	10	NE1/4, NW1/4; N1/2SW1/4; SE1/4	560
	14	SW1/4NE1/4; NW1/4; SW1/4; SE1/4	520
	23	NW1/4NE1/4; SE1/4NE1/4	80
	24	SW1/4NE1/4; NW1/4; NE1/4SW1/4;NW1/4SW1/4; SE1/4SW1/4; SE1/4	480
	36	E1/2NE1/4	80
T. 23 N., R. 11 W.,	30	Lots 6, 7, 18, 19	188
		Total	**3,468**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 24 N., R. 12 W.,	31	S1/2NW1/4; SW1/4; W1/2SE1/4; SE1/4SE1/4	351
T. 23 N., R. 12 W.,	5	SW1/4	160
	9	S1/2N1/2; E1/2SW1/4; N1/2SE1/4	320
	15	NE1/4	160
	23	N1/2NE1/4; SE1/4NE1/4	120
	25	W1/2	320
T. 23 N., R. 11 W.,	31	Lots 6, 7, 15, 16, 17, 18, 19, 20, 21, 22	430
		Total	**1,861**

Cottonwood Creek Riparian Area of the Wright and Cottonwood Creeks ACEC

Federal Minerals to Be Closed to Mineral Entry			
T. 23 N., R. 13 W.,	22	NE1/4SW1/4; N1/2SE1/4	120
	24	S1/2N1/2; S1/2	480
T. 23 N., R. 12 W.,	19	S1/2NW1/4	81
	28	S1/2SW1/4	80
	30	NE1/4; NE1/4NW1/4; N1/2SE1/4	594
	32	N1/2NE1/4	80
		Total	**1,435**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 23 N., R. 13 W.,	23	S1/2N1/2; N1/2S1/2	320
T. 23 N., R. 12 W.,	19	W1/2SW1/4; S1/2SE1/4	159
	29	S1/2NW1/4; S1/2	400
	33	W1/2E1/2; W1/2	480
		Total	**1,359**

Burro Creek Riparian Area of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Federal Minerals to Be Closed to Mineral Entry			
T. 14 N., R. 11 W.,	12	SE1/4SE1/4	40
	13	NE1/4NE1/4; SW1/4NE1/4; SE1/4NE1/4; NW1/4; N1/2S1/2	440

Appendix 11 (continued)
Alternative 2 Mineral Closures in Riparian Areas

Township and Range	Section	Subdivision	Acreage
Burro Creek Riparian Area of Critical Environmental Concern (Continued)			
T. 14 N., R. 11 W.,	14	N1/2; SW1/4; W1/2SE1/4; NE1/4SE1/4	600
	15	S1/2S1/2; NE1/4SE1/4	200
	16	NW1/4SE1/4; S1/2S1/2	200
	17	SW1/4NE1/4; S1/2NW1/4; S1/2	440
	18	SE1/4NE1/4; E1/2SE1/4	120
	19	NE1/4; E1/2NW1/4; SW1/4; W1/2SE1/4; NE1/4SE1/4	480
	20	N1/2; NW1/4SW1/4	360
	21	N1/2; N1/2SW1/4	400
	22	N1/2; N1/2SW1/4; NW1/4SE1/4	440
	23	NW1/4NE1/4; NW1/4	200
	30	W1/2NE1/4; NW1/4; NW1/4SW1/4	280
T. 14 N., R. 12 W.,	10	SE1/4SW1/4; S1/2SE1/4	120
	11	SW1/4SW1/4	39
	14	SW1/4NE1/4; NW1/4; SW1/4; W1/2SE1/4; SE1/4SE1/4	480
	15	N1/2; N1/2S1/2	480
		Total	**5,279**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 15 N., R. 10 W.,	29	SE1/4SW1/4; SW1/4SE1/4	80
	32	All	640
T. 14 N., R. 10 W.,	5	NE1/4NE1/4; W1/2NE1/4; NW1/4; SW1/4	441
	7	SW1/4NE1/4; SE1/4NW1/4; SW1/4	232
	8	NW1/4	160
	18	NW1/4NE1/4	40
T.14 N., R. 12 W.,	13	SW1/4SW1/4	40
	23	N1/2N1/2; SE1/4NE1/4; NE1/4SE1/4	240
		Total	**1,873**
Three Rivers Riparian Area of Critical Environmental Concern			
Federal Minerals to Be Closed to Mineral Entry			
T. 14 N., R. 13 W.,	22	SE1/4SE1/4	40
	24	N1/2; W1/2SW1/4	400
	26	E1/2NE1/4; SW1/4NE1/4; S1/2NW1/4; NW1/4SW1/4; N1/2SE1/4; SW1/4SE1/4	360
	34	SE1/4SW1/4	40
	35	S1/2SW1/4; NE1/4SW1/4	120
T. 13 N., R. 13 W.,	2	W1/2NW1/4; NW1/4SW1/4	120
	4	E1/2SE1/4	80
	10	W1/2NE1/4; NE1/4NE1/4: NW1/4; N1/2SW1/4; SW1/4SW1/4	400
	16	NE1/4; E1/2W1/2; N1/2SE1/4; SW1/4SE1/4	440
	22	SW1/4NW1/4; W1/2SW1/4	120
	26	S1/2NW1/4; SW1/4	240
	28	NE1/4	160
	34	E1/2E1/2	160
	35	W1/2; S1/2SE1/4	400
	36	S1/2SW1/4	80

Appendix 11 (continued)
Alternative 2 Mineral Closures in Riparian Areas

Three Rivers Riparian Area of Critical Environmental Concern (Continued)

Township and Range	Section	Subdivision	Acreage
Federal Minerals to Be Closed to Mineral Entry			
T. 12 N., R. 13 W.,	2	E1/2; NW1/4; SE1/4SW1/4	368
	3	NE1/4	84
	11	E1/2; E1/2W1/2; SW1/4NW1/4; NW1/4SW1/4	560
	12	SW1/4; SW1/4SE1/4	120
	13	NE1/4; N1/2NW1/4; SE1/4NW1/4; N1/2SE1/4	360
T. 12 N., R. 12 W.,	17	SW1/4NW1/4; W1/2SW1/4	120
	18	S1/2NE1/4; W1/2; SE1/4	554
	19	E1/2; E1/2W1/2	480
	20	W1/2W1/2	160
	28	W1/2SW1/4	80
	29	NW1/4NW1/4; S1/2NW1/4; S1/2	440
	30	E1/2; E1/2NW1/4; NE1/4SW1/4	440
	31	NE1/4NE1/4	40
	32	N1/2; N1/2SE1/4; SE1/4SE1/4	440
	33	W1/2E1/2; W1/2	480
T. 11 N., R. 14 W.,	32	SE1/4SW1/4; S1/2SE1/4	126
T. 11 N., R. 13 W.,	12	SE1/4SW1/4; E1/2SE1/4; SW1/4SE1/4	160
	13	All	640
	14	S1/2NE1/4; SE1/4SW1/4; SE1/4	280
	22	S1/2SW1/4; SE1/4	240
	23	E1/2; E1/2W1/2; SW1/4NW1/4; NW1/4SW1/4	560
	24	N1/2; N1/2S1/2; S1/2SW1/4	560
	25	SE1/4NE1/4; W1/2NW1/4; E1/2SW1/4; SE1/4	360
	26	N1/2; SW1/4; W1/2SE1/4	560
	27	E1/2; E1/2W1/2	480
	34	W1/2NE1/4; E1/2NW1/4; SW1/4; W1/2SE1/4	400
	35	NW1/4	160
T. 11 N., R. 12 W.,	4	W1/2E1/2; W1/2	420
	5	E1/2E1/2	140
	7	SE1/4NE1/4; S1/2	355
	8	NE1/4NE1/4; S1/2N1/2; S1/2	520
	9	NE1/4	160
	10	S1/2NW1/4; N1/2SE1/4; SE1/4SE1/4	200
	11	S1/2S1/2	320
	12	S1/2S1/2	320
	13	Portion north of river	170
	14	Portion north of river	110
	15	SE1/4SW1/4; SE1/4SE1/4	80
T. 11 N., R. 11 W.,	7	S1/2S1/2	158
	8	S1/2S1/2	160
	10	S1/2S1/2	160
	11	S1/2S1/2	160
	12	SE1/4NE1/4; S1/2SW1/4; SE1/4	280

Appendix 11 (continued)
Alternative 2 Mineral Closures in Riparian Areas

Three Rivers Riparian Area of Critical Environmental Concern (Continued)

Township and Range	Section	Subdivision	Acreage
Federal Minerals to Be Closed to Mineral Entry			
T. 11 N., R. 11 W., (continued)	13	SW1/4; W1/2SE1/4	240
	14	S1/2	320
	15	N1/2; N1/2S1/2	480
	16	NE1/4; N1/2NW1/4	240
	17	N1/2S1/2	160
	18	S1/2NW1/4NE1/4; NW1/4	176
T. 11 N., R. 10 W.,	3	NW1/4NE1/4; NW1/4; W1/2SW1/4	280
	4	SE1/4NE1/4; S1/2SW1/4; S1/2SE1/4; NE1/4SE1/4	240
	5	S1/2	320
	6	S1/2SW1/4; SE1/4	228
	7	NE1/4; W1/2	458
	8	N1/2N1/2	160
	9	N1/2	320
T. 12 N., R. 10 W.,	25	S1/2SE1/4; NE1/4SE1/4	120
	34	SE1/4SW1/4; SE1/4	200
	35	S1/2NE1/4; SE1/4NW1/4; S1/2	440
	36	N1/2; SW1/4	480
T. 12 N., R. 9 W.,	19	S1/2SE1/4	80
	20	SW1/4SW1/4	40
	29	S1/2NE1/4; NW1/4; N1/2S1/2	354
	30	E1/2; SW1/4	474
	31	NW1/4	160
T. 10 N., R. 15 W.,	3	SE1/4SE1/4; S1/2	360
T. 10 N., R. 14 W.,	4	SE1/4NW1/4; E1/2SW1/4; W1/2SE1/4	200
	5	N1/2NE1/4; N1/2NW1/4; SW1/4NW1/4	198
	6	NE1/4; S1/2NW1/4	236
	9	S1/2NE1/4; NW1/4NE1/4; E1/2NW1/4; NE1/4SW1/4; N1/2SE1/4SE1/4SE1/4	360
	10	W1/2SW1/4; SE1/4SW1/4; SW1/4SE1/4	160
	13	N1/2	324
	14	N1/2	320
	15	NE1/4; N1/2NW1/4; SE1/4NW1/4	280
T. 10 N., R. 13 W.	1	NE1/4; W1/2; N1/2SE1/4	561
	2	All	643
	3	All	642
	4	E1/2SW1/4; SE1/4	240
	7	S1/2NE1/4; NE1/4NE1/4; NE1/4SW1/4; S1/2SW1/4; N1/2SE1/4;SW1/4SE1/4	363
	8	N1/2; N1/2SW1/4	400
	9	NE1/4; N1/2NW1/4; SE1/4NW1/4	280
	10	N1/2	320
	18	W1/2NW1/4NE1/4NW1/4	127
		Total	**28,109**

Appendix 11 (continued)
Alternative 2 Mineral Closures in Riparian Areas

Three Rivers Riparian Area of Critical Environmental Concern (Continued)

Township and Range	Section	Subdivision	Acreage
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 14 N., R. 13 W.,	23	E1/2E1/2; S1/2SW1/4; SW1/4SE1/4	280
	24	E1/2SW1/4; SE1/4	240
	25	N1/2NW1/4; SW1/4NW1/4	120
	26	NW1/4NE1/4; N1/2NW1/4; SW1/4SW1/4	160
	27	E1/2; SE1/4NW1/4; E1/2SW1/4	440
	34	E1/2	320
	35	W1/2NE1/4; NW1/4; NW1/4SW1/4	280
T. 13 N., R. 13W.,	3	All	641
	9	E1/2	320
	21	W1/2NE1/4; SE1/4NE1/4; W1/2NW1/4; NE1/4SW1/4; SE1/4	400
	27	W1/2NE1/4; SE1/4NE1/4; NW1/4; N1/2SE1/4; SE1/4SE1/4	400
T. 12 N., R. 9 W.,	29	Mining Claims in E1/2	46
T. 11 N., R. 13 W.,	24	S1/2SE1/4	80
	25	W1/2NE1/4; E1/2NW1/4	160
	26	E1/2SE1/4	80
	34	E1/2E1/2	160
	35	E1/2; SW1/4	480
	36	All	640
T. 11 N., R. 12 W.,	9	NW1/4; S1/2	480
	10	SW1/4; SW1/4SE1/4	200
	13	N1/2 south of river; S1/2SW1/4; E1/2SE1/4	300
	14	S1/2NE1/4; NW1/4; E1/2SE1/4	320
	15	N1/2; W1/2SW1/4; NE1/4SW1/4; W1/2SE1/4; NE1/4SE1/4	120
	16	All	640
	17	All	640
	18	E1/2SE1/4; SW1/4SE1/4	360
	19	All	640
	20	N1/2; N1/2SW1/4	400
	21	NW1/4	160
	29	SW1/4; SW1/4SE1/4	200
	30	All	633
	31	N1/2; N1/2S1/2	476
	32	NW1/4; N1/2SW1/4	240
T. 11 N., R. 11 W.,	15	S1/2S1/2	160
	16	S1/2NW1/4; S1/2	400
	17	N1/2	320
	18	NE1/4NE1/4	40
T. 10 N., R. 15 W.,	1	SW1/4NW1/4; S1/2	356
	2	S1/2N1/2; S1/2	480
	11	NE1/4NE1/4	40
	12	N1/2N1/2	160
T. 10 N., R. 14 W.,	4	SW1/4NW1/4; W1/2SW1/4	120
	5	S1/2NE1/4; SE1/4NW1/4; N1/2S1/2	280
	6	SW1/4; N1/2SE1/4; SW1/4SE1/4	276
	9	NW1/4NW1/4	40
	14	N1/2S1/2	160
	15	N1/2SE1/4	80
T. 10 N., R. 13 W.,	11	N1/2	320
	12	NW1/4	160
		Total	**14,448**
		Federal Minerals Closed to Mineral Entry	**38,291**
		Non-federal Minerals Acquired - Close to Mineral Entry	**19,541**

Appendix 12
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
Meadview Area			
T. 30 N., R. 17 W.,	24	All	640
	26	All	640
	36	All	640
T. 30 N., R. 16 W.,	30	W1/2	320
T. 29 N., R. 17 W.,	2	All	640
	10	All	640
	12	All	640
	14	All	640
T. 29 N., R. 16 W.,	6	W1/2	320
Detrital Valley Area			
T. 27 N., R. 21 W.,	24	NE1/4; W1/2SW1/4	240
	36	NE1/4NE1/4	40
T. 27 N., R. 20 W.,	16	N1/2NE1/4; SE1/4NE1/4	120
	18	All	633
	28	All	640
	30	All	635
White Hills Area			
T. 27 N., R. 19 W.,	16	S1/2	320
	20	All	640
Dolan Springs Area			
T. 27 N., R. 18 W.,	26	All	640
	28	All	640
	34	All	640
	36	All	640
T. 26 N., R. 18 W.,	4	All	640
	6	All	632
	8	SW1/4	160
	10	All	640
	18	All	637
	20	All	640
	30	E1/2; E1/2W1/2	480
T. 26 N., R. 19 W.,	12	All	640
	14	All	640
	22	All	640
	24	All	640
	26	All	640
	28	All	640
	32	All	640
	34	S1/2; S1/2N1/2; NE1/4NE1/4; N1/2NW1/4	600
T. 25 N., R. 20 W.,	4	SE1/4	160
	8	All	640
	10	N1/2	320
	12	N1/2; SE1/4	480

(continued)

Appendix 12 (continued)
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
T. 25 N., R. 20 W., (continued)	16	All	640
	20	All	640
	22	All	640
	24	W1/2	320
	26	All	640
	28	All	640
	32	All	640
	34	All	640
	36	All	640
T. 25 N., R. 19 W.,	4	W1/2	320
	6	N1/2; N1/2SW1/4	395
	12	All	640
	14	All	640
	16	N1/2NW1/4; N1/2SW1/4NW1/4; E1/2SW1/4NW1/4; SE1/4SW1/4NW1/4; SW1/4; SE1/4	475
	22	All	640
	26	All	640
	28	All	640
	32	N1/2; SW1/4	480
T. 24 N., R. 20 W.,	4	All	566
	10	SE1/4	160
	12	N1/2; E1/2SW1/4; SE1/4	560
	14	NW1/4; S1/2	480
	15	W1/2NE1/4; NE1/4NW1/4	120
	16	All	640
	22	All	640
	24	All	640
	28	All	640
	34	W1/2	320
	36	All	640
T. 24 N., R. 19 W.,	4	All	495
	8	SW1/4NW1/4; S1/2	360
	18	All	604
	20	All	640
	30	All	606
Golden Valley Area			
T. 23 N., R. 19 W.,	13	All	616
	23	All	640
	24	All	624
	26	All	640
	34	All	640
	36	All	637
T. 23 N., R. 18 W.,	3	All federal	180
	4	All federal, except lots 3, 16, 17, 18, 20 and SE1/4NW1/4	406
	5	All federal	471
	8	All	640
	9	S1/2SW1/4; SE1/4	240
	10	All federal	455
	16	All	640
	20	All	640
	27	E1/2NE1/4	80

(continued)

Appendix 12 (continued)
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
T. 23 N., R. 18 W., (continued)	28	All	640
	30	All	640
	32	All federal	360
	34	All	640
T. 22 N., R. 19 W.,	2	All	676
	10	All	640
	12	All	640
	14	All	640
	16	All	640
	20	All	640
	30	NE1/4; N1/2NW1/4; E1/2SE1/4NW1/4; NE1/4NE1/4SW1/4	270
[1]T. 22 N., R. 18 W.,	3	All	691
	5	All	677
	6	All	670
	7	All	637
	8	All	640
	9	All	640
	15	All	640
	16	All	640
	17	All	640
	18	All	637
	19	All	636
	20	All	640
	21	All	640
	22	All	640
	26	All	640
	27	All	640
	28	All	640
	29	All	640
	30	All	636
	32	All	640
	33	All	640
	34	All	640
	35	All	640
T. 21 N., R. 19 W.,	4	All	641
	5	All	641
	8	All	640
	9	All	640
	16	W1/2	320
	17	All	640
	20	All	640
Southwest of McConnico			
T. 20 N., R. 18 W.,	12	N1/2; N1/2S1/2; Portions of S1/2S1/2	510
T. 20 N., R. 17 W.,	4	Lots 1, 5-10; S1/2	574
	6	Lots 8, 19-27, 35-37, 45-46	801
	8	Lots 1-4, E1/2; SE1/4NW1/4; E1/2SW1/4	480
	9	NW1/4NE1/4; W1/2SW1/4; SE1/4SW1/4	160
	17	All	640
	18	Lots 21, 24, 25, 27, 30, SE1/4SE1/4	149
Shingle Canyon			
T. 19 N., R. 18 W.,	8	All	640

[1] Primarily for exchange to the state of Arizona

(Continued)

Appendix 12 (continued)
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
Walnut Creek			
T. 18 N., R. 18 W.,	2	All	624
T. 19 N., R. 17 W.,	30	West of I-40	139
Hualapai Valley			
T. 26 N., R. 16 W.,	10	All	640
	14	All	640
	16	All	640
	22	All	640
	24	All	640
	26	All	640
	34	All	640
	36	All	640
T. 26 N., R. 15 W.,	30	All	638
	32	All	640
T. 25 N., R. 16 W.,	2	All	640
	12	All	640
T. 25 N., R. 15 W.,	4	All	637
	6	All	638
	8	All	640
	10	All	630
	14	All	640
	18	All	639
T. 24 N., R. 16 W.,	2	NE1/4NE1/4; NW1/4NE1/4; SW1/4NE1/4; NW1/4; NE1/4SW1/4; NW1/4SW1/4; SW1/4SW1/4	400
	4	All	640
	8	All	640
	16	All	640
	20	All	640
	30	All	1,018
	32	All	640
T. 24 N., R. 15 W.,	4	All	716
	8	All	640
	10	All	640
	12	All	640
	13	N1/2NW1/4; SE1/4NW1/4; NE1/4SW1/4	160
	14	All	640
	22	All	640
	24	All	640
	26	E1/2	320
	28	All	640
T. 24 N., R. 14 W.,	18	All	640
	20	E1/2	320
	30	N1/2	320
	32	N1/2NE1/4	80
T. 23 N., R. 17 W.,	24	East of Stockton Hill Road	44
	25	East of Stockton Hill Road	13
T. 23 N., R. 16 W.,	20	NE1/4NE1/4	40

(continued)

Appendix 12 (continued)
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
T. 22 N., R. 17 W.,	2	East of Stockton Hill Road	223
	11	Portions of NW1/4NW1/4 and SW1/4NW1/4 East of Stockton Hill Road, SE1/4NW1/4	69
	26	All	640
T. 22 N., R. 15 W.,	34	S1/2NE1/4	80
T. 21 N., R. 16 W.,	13	North of I-40	360
Mohave Valley			
T. 19 N., R. 21 W.,	[2]4	All	640
	[2]5	All	640
	[2]6	All	640
	[1]7	NE1/4; NW1/4; N1/2SW1/4; SE1/4	560
	[1]8	All	640
	[1]9	All	640
East of Fort Mohave			
T. 19 N., R. 21 W.,	20	SW1/4SW1/4NW1/4NW1/4; W1/2SW1/4NW1/4; W1/2NE1/4SW1/4NW1/4; SE1/4NE1/4SW1/4NW1/4; SE1/4SW1/4NW1/4; SW1/4SE1/4NW1/2; S1/2SE1/4SE1/4NW1/4; N1/2NW1/4NE1/4SW1/4; NE1/4NE1/4SW1/4; NE1/4SE1/4NE1/4SW1/4; NW1/4NW1/4SE1/4; NW1/4SW1/4NW1/4SE1/4	85
	29	S1/2N1/2; S1/2	480
	30	S1/2NE1/4; E1/2SE1/4NW1/4; S1/2SW1/4SE1/4NW1/4; E1/2SW1/4; SE1/4	325
T. 18 N., R. 21 W.,	7	SE1/4	160
	[1]8	All	640
	[1]9	All	640
	[1]16	All	640
	[1]17	All	640
	18	E1/2	320
	19	NE1/4; E1/2SE1/4	240
	[1]20	All	640
	[1]21	All	640
	[1]28	All	640
	[1]29	All	640
	[1]33	All	640
[1]T. 17 N., R. 21 W.,	[1]4	All	519
	[1]9	All	640
T. 16.5 N., R. 20.5 W.,	22	E1/2	330
	23	All	670
	25	All	640
	26	All	640
	27	E1/2	314
	34	E1/2	313
	35	All	640
T. 16.5 N., R. 20 W.,	30	All	617
	32	All	640

[1] Primarily for exchange to the state of Arizona
[2] For exchange to the state of Arizona only

(continued)

Appendix 12 (continued)
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
T. 16 N., R. 20.5 W.,	1	All	640
	3	E1/2	311
	10	E1/2	310
	11	N1/2; N1/2SW1/4; SE1/4SW1/4; SE1/4	600
	12	All	640
	13	North of I-40	440
T. 16 N., R. 20 W.,	6	All	619
	15	North of I-40	356
	17	North of I-40	320
	18	North of I-40	347
T. 16 N., R. 19 W.,	18	North of I-40	156
Yucca Area			
T. 18 N., R. 18 W.,	24	East of I-40	343
	36	East of I-40	520
T. 18 N., R. 17 W.,	20	All	640
	30	All	1,114
	32	All	640
T. 17 N., R. 18 W.,	1	Lots 1, 2; S1/2NE1/4; N1/2N1/2SE1/4; SW1/4NW1/4SE1/4	210
T. 17 N., R.17 W.,	4	All	637
	8	All	640
	20	All	640
	28	All	640
	30	All	1,118
	32	All	640
	34	All	640
Dutch Flat Area			
T. 16.5 N., R. 18 W.,	22	All	532
	24	All	518
	26	All	640
	34	All	640
	36	All	640
[3]T. 16.5 N., R. 17 W.,	20	All	519
	28	All	640
	30	All	626
	32	All	640
	34	All	640
[3]T. 16 N., R. 18 W.,	2	All	640
	4	All	640
	10	All	640
	12	All	640
	14	All	640
[3]T. 16 N., R. 17 W.,	2	S1/2NW1/4; SW1/4	240

[3] Public lands in the Dutch Flat area would be exchanged only for state and private lands in the Hualapai Mountains, Dutch Flat and McCracken Mountains containing important habitat for desert tortoise or Hualapai Mexican vole. If all Santa Fe lands can be acquired, these lands would be dropped from disposal.

(continued)

Appendix 12 (continued)
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
[3]T. 16 N., R. 17 W., (continued)	4	All	640
	6	All	627
	8	All	640
	10	All	640
	12	All	640
	14	All	640
	16	All	640
	18	All	627
	20	All	640
	22	All	640
	24	All	640
	26	All	640
	28	All	640
	30	All	629
	32	E1/2	320
	34	All	640
	36	SE1/4NE1/4; W1/2; S1/2SE1/4	440
[3]T. 16 N., R. 16 W.,	32	All	640
[3]T. 15 N., R. 17 W.,	2	All	641
	4	All	641
	6	All	629
	8	All	640
	10	All	640
	12	All	640
	14	All	640
	16	All	640
	18	All	629
	20	All	640
	22	All	640
	24	All	640
	26	All	640
	28	All	640
	30	All	630
	32	All	640
	34	All	640
	36	All	640
[3]T. 15 N., R. 16 W.,	2	S1/2	320
	4	All	638
	6	All	636
	8	All	640
	10	All	640
	12	S1/2	320
	14	All	640
	16	All	640
	18	All	640
	20	All	640
	22	All	640
	24	All	640
	26	All	640
	28	All	640
	30	All	640

[3] Public lands in the Dutch Flat area would be exchanged only for state and private lands in the Hualapai Mountains, Dutch Flat and McCracken Mountains containing important habitat for desert tortoise or Hualapai Mexican vole. If all Santa Fe lands can be acquired, these lands would be dropped from disposal.

(continued)

Appendix 12 (continued)
Alternative 2 Proposed Disposal Areas

Township and Range	Section	Subdivision	Acreage*
[3]T. 15 N., R. 16 W.,	32	All	640
	34	All	640
	36	All	640
[3]T. 14 N., R. 17 W.,	2	All	640
	4	All	641
	6	All	631
	8	All	640
	12	All	640
	16	N1/2; W1/2SW1/4; SW1/4SW1/4;W1/2SE1/4	500
	18	All	632
		Total	**179,599**

Appendix 13
Alternative 2 Lands Removed from Management Framework Plan Disposal Areas

East of Fort Mohave			
T. 19 N., R. 21 W.,	28	NE1/4	160
Kingman Area			
T. 22 N., R. 17 W.,	14	S1/2SW1/4; SW1/4SE1/4	120
Hualapai Valley			
T. 25 N., R.15 W.,	20	All	640
	22	All	640
	24	All	640
	26	All	640
	30	All	640
	34	All	640
Yucca Area			
T. 18 N., R.17 W.,	28	All	640
	34	All	640
T. 17 N., R.17 W.,	2	All	636
	10	All	640
	14	All	640
	16	All	640
	22	All	640
	24	All	640
	26	All	640
	36	All	640
T. 17 N., R. 16 W.,	18	All	637
	20	All	640
	30	All	639
	32	All	640
		Total	**13,072**

[3] Public lands in the Dutch Flat area would be exchanged only for state and private lands in the Hualapai Mountains, Dutch Flat and McCracken Mountains containing important habitat for desert tortoise or Hualapai Mexican vole. If all Santa Fe lands can be acquired, these lands would be dropped from disposal. Acreages may not be exact.

[4] May be used for sale if there is no interest in exchange.

Appendix 14
Public Lands in Coconino County [1]

Township and Range	Section	Subdivision	Encumbrances	Acreage
T. 18 N., R. 11 E.,	23	Lot 1	None	40.60
T. 23 N., R. 10 E.,	36	All	Recreation and Public Purposes Act Lease (AZA-22307)	640.00
T. 24 N., R. 11 E.,	8	Lots 1-4	Powersite withdrawal	114.59
		NW1/4; E1/2SW1/4	Powersite withdrawal	240.00
	20	Lot 1	Powersite withdrawal	29.95
T. 25 N., R. 11 E.,	18	Lots 1-4	Powersite withdrawal	145.43
	30	Lots 1-4	Powersite withdrawal	121.69
		E1/2W1/2; SW1/4SE1/4	Powersite withdrawal	200.00
	32	Lots 1-4	Powersite withdrawal	151.72
		SW1/4SW1/4	Powersite withdrawal	40.00
T. 26 N., R. 10 E.,	4	Lots 1-6	* CAP withdrawal	197.42
		S1/2NW1/4; SW1/4	CAP withdrawal	240.00
	8	E1/2	CAP withdrawal	320.00
	22	Lots 1-4	CAP withdrawal	138.57
	28	All	CAP withdrawal NE1/4NE1/4, Powersite withdrawal	640.00
	34	Lots 1-4	CAP and powersite withdrawal	178.21
		SW1/4SE1/4	CAP and powersite withdrawal	40.00
		E1/2NW1/4	Powersite withdrawal	80.00
T. 27 N., R. 9 E.,	24	All	None	640.00
T. 27 N., R. 10 E.,	4	Lots 1-4	CAP withdrawal	162.88
		S1/2N1/2; S1/2	CAP withdrawal	480.00
		(Lot 1; SE1/4NE1/4; E1/2SE1/4)	CAP and powersite withdrawal	
	8	All	CAP withdrawal	640.00
	10	Lots 1-3	Powersite withdrawal	61.30
	16	E1/2NE1/4	Powersite withdrawal	80.00
	22	Lots 1-4	CAP and powersite withdrawal	165.80
		NW1/4, W1/2SW1/4	CAP and powersite withdrawal except W1/2NW1/4	240.00
	28	Lots 1-5	CAP and powersite withdrawal	173.49
		NE1/4NW1/4; SW1/4 NW1/4	CAP and powersite withdrawal	80.00
		NW1/4SW1/4; SE1/4 SW1/4	CAP and powersite withdrawal	80.00
		NW1/4NW1/4; SW1/4 SW1/4	CAP withdrawal	80.00
	34	Lot 1	Powersite withdrawal	1.82
T. 30 N., R. 1 E.,	7	Lots 1-4; E1/2W1/2; E1/2	None	633.60
	8	All	None	640.00
			Total	**7,717.07**

* CAP - Central Arizona Project

[1] Public lands under withdrawal will be available for exchange if and when withdrawals are terminated.

Appendix 15
Existing Withdrawals and Classifications

Withdrawals to be Retained for the Hualapai Reservation		Acreage
Executive Order 01368		60.90
Executive Order 12/30/74		160.90
Executive Order-12/22/1898		645.30
	Total	**867.10**

Withdrawals to be Retained if Justified		Acreage
Public Land Order for Peacock Substation		155.30
Public Land Order 492 for Alamo Dam		19,403.12
AR-035844 Application to Expand Public Land Order 492		1,394.76
A-13456 Public Water Reserve 107 (See Appendix 16)		220.00
A-17960 Public Water Reserve 107 (See Appendix 16)		40.00
A-17962 Public Water Reserve 107 (See Appendix 16)		100.00
	Total	**21,623.18**

Classifications to be Terminated if Not Needed		Acreage
Public Land Order 5788 for Burro Creek Campground		310.00
A-17944 Classification Order for Recreation and Public Purposes		12.50
A-17945 Classification Order for Recreation and Public Purposes		9.90
AR-034452 Classification Order for Recreation and Public Purposes		53.90
	Total	**76.30**

Withdrawals to be Revoked (See Appendix 16)		Acreage
A-17962 Public Water Reserve 107		10.00
	Total	**10.00**

CAP Withdrawals to be Revoked

T. 26 N., R. 10 E.,	4	Lots 1-6	Central Arizona Project	197.42
		S1/2NW1/4; SW1/4	Central Arizona Project	240.00
	8	E1/2	Central Arizona Project	320.00
	22	Lots 1-4	Central Arizona Project	138.57
	28	All	Central Arizona Project NE1/4NE1/4 - Powersite	640.00
	34	Lots 1-4	Central Arizona Project and Powersite	178.21
		SW1/4SE1/4	Central Arizona Project and Powersite	40.00
T. 27 N., R. 10 E.,	4	Lots 1-4	Central Arizona Project	162.88
		S1/2N1/2; S1/2	Central Arizona Project	480.00
		Lot 1; SE1/4NE1/4; E1/2SE1/4	Central Arizona Project and Powersite	
	8	All	Central Arizona Project	640.00
	22	Lots 1-4	Central Arizona Project and Powersite	165.80
		NW1/4; W1/2SW1/4	Central Arizona Project and Powersite,	160.72
			except W1/2NW1/4	240.00
	28	Lots 1-5	Central Arizona Project and Powersite	173.49
		NE1/4NW1/4; SW1/4NW1/4	Central Arizona Project and Powersite	80.00
		NW1/4SW1/4; SE1/4SW1/4	Central Arizona Project and Powersite	80.00
		NW1/4NW1/4; SW1/4SW1/4	Central Arizona Project	80.00
			Total	**4,017.09**

Appendix 16
PUBLIC WATER RESERVE WITHDRAWALS

Public Water Reserve 107 Withdrawals to Be Revoked

Township and Range	Section	Subdivision	Acreage
T. 20 N., R. 20 W., A-17962 (WL Spring)	13	SW1/4SE1/4SW1/4	10

Public Water Reserve 107 Withdrawals to Be Modified

Township and Range	Section	Subdivision	Acreage
Change:			
T. 22 N., R. 18 W.,	1	SE1/4SW14	
To:			
T. 22 N., R. 18 W., A-17960 (Little Sweetwater Spring)	1	SW1/4SE1/4	40
Change:			
T. 24 N., R. 21 W.,	21	NW1/4NE1/4NE1/4	
To:			
T. 24 N., R. 21 W., A-17962 (Master Spring)	21	NE1/4NW1/4NE1/4	10
Change:			
T. 19 N., R. 15 W., (Antelope Canyon)	4	NE1/4NE1/4	
To:			
T. 19 N., R. 15 W., A-13456 (New Year's Cabin Spring)	4	NW1/4NE1/4	40
Change:			
T. 20 N., R. 15 W.,	9	W1/2SE1/4SE1/4	
To:			
T. 20 N., R. 15 W., A-13456 (Midway Spring)	9	W1/2NE1/4SE1/4	20
		Total	**110**

Public Water Reserve 107 Withdrawals to Be Retained

Township and Range	Section	Subdivision	Acreage
T. 17 N., R. 19 W., A-17962 (Metate Spring)	6	NW1/4NE1/4NW1/4	10
T. 20 N., R. 19 W., A-17962 (Trough Spring)	6	SW1/4SE1/4	40
T. 25 N., R. 21 W., A-17962 (White Rock Spring)	4	SE1/4SW1/4	40
T. 19 N., R. 15 W., A-13456 (Timber Spring)	4	SW1/4SW1/4	40
T. 20 N., R. 15 W., A-13456 (Sand Bee Spring)	8	NW1/4NE1/4	40
T. 20 N., R. 15 W., A-13456 (Dean Mine Spring)	9	SW1/4NE1/4	40
T. 20 N., R. 15 W., A-13456 (Eagle Spring)	10	SW1/4SW1/4	40
		Total	**250**

Appendix 17
Alternatives 2 and 3 Proposed Recreation and Public Purposes Disposal Areas

Township and Range	Section	Subdivision	Acreage
Detrital Valley			
T. 27 N., R. 21 W.,	24	SE1/4	160
White Hills			
T. 28 N., R. 19 W.,	16 (surface only)	N1/2	320
Golden Valley			
T. 21 N., R. 19 W.,	16	E1/2	320
T. 21 N., R. 18 W.,	8	E1/2NE1/4,W1/2NW1/4	160
T. 22 N., R. 18 W.,	31 (surface only)	All	640
Antares			
T. 24 N., R. 14 W.,	30	S1/2	320
Meadview			
T. 30 N., R. 17 W.,	34	All	640
Mohave Valley			
T. 18 N., R. 21 W.,	4	All	640
	6	S1/2N1/2SW1/4SE1/4; S1/2SW1/4SE1/4; SE1/4SE1/4	70
	7 (surface only)	NE1/4	160
T. 17 N., R. 21 W.,	5 (surface only)	Lots 1-4; S1/2NE1/4;SE1/4NW1/4; E1/2SW1/4; SE1/4	518
	22	S1/2	320
Truxton			
T. 24 N., R. 12 W.,	10	NW1/4	160
Chloride			
T. 23 N., R. 18 W.,	4	Lots 3,16,17,18,20; SE1/4NW1/4	159
Oatman			
T. 19 N., R. 20 W.,	23	Lots 7,10,15	62
	27	Lots 4,7,8,9; SW1/4NW1/4; N1/2SW1/4	216
Dolan Springs			
T. 25 N., R. 19 W.,	10	All	640
Wikieup			
T. 16 N., R. 13 W.,	21	SE1/4	160
	28	NE1/4	160
Yucca/Gem Acres			
T. 17 N., R. 18 W.,	12	W1/2W1/2; NE1/4NW1/4	30
	36	SE1/4	130
McConnico			
T. 20 N., R. 17 W.,	6	SE1/4	160
So Hi			
T. 22 N., R. 17 W.,	25	SE1/4SE1/4SE1/4	10
Hualapai Indian Tribe Cemetery(to be disposed of only to tribe)			
T. 23 N., R. 13 W.,	22	SW1/4NW1/4SW1/4	10
		Total	**6,165**

Appendix 18
Alternative 2 Designated Communication Sites

Township and Range	Section	Subdivision	Acreage
Hayden Peak			
T. 20 N., R. 15 W.,	30	SW1/4SE1/4	22.50
Potato Patch I			
T. 20 N., R. 15 W.,	30	NW1/4NW1/4NE1/4	10.00
Potato Patch II			
T. 20 N., R. 15 W.,	19	SW1/4SW1/4SE1/4SE1/4SE1/4SW1/4	10.00
Getz Peak			
T. 20 N., R. 15 W.,	8	NE1/4SE1/4	10.00[1]
	17	SE1/4SE1/4	10.00[1]
Oatman			
T. 19 N., R.20 W.,	13	W1/2	2.50[1]
	14	NE1/4	15.00[1]
Mount Perkins			
T. 25 N., R. 21 W.,	10	E1/2SW1/4NE1/4W1/2SE1/4NE1/4	1.25[1]
North of Mount Perkins			
T. 25 N., R. 21 W.,	3	NW1/4NW1/4SW1/4	2.50[1]
Willow Beach			
T. 27 N., R. 21 W.,	16	NW1/4SW1/4NW1/4	2.50[1]
	17		
Windy Point			
T. 24 N., R. 18 W.,	36	SW1/4SW1/4NE1/4; SE1/4SE1/4NW1/4NW1/4NW1/4SE1/4	20.00[1]
Patterson Slope			
T. 29 N., R. 17 W.,	34	E1/2NW1/4NW1/4	10.00[1]
Cherum Peak			
T. 23 N., R. 17 W.,	7	E1/2SE1/4NW1/4	2.50[1]
		Total	**118.75**

[1]Acreage is estimated until a communication site plan and/or site environmental analysis determines area of development.

Appendix 19

GRAZING ALLOTMENTS AND WATERSHED MANAGEMENT CATEGORIES

Allotment Name	[1]MLRA	Watershed Condition	Erosion	Category
Alamo Crossing	30-2	S	LV	I
Arrastra Mountain	40-3	S	LV	I
Artillery Range	30-2	S	LV	I
Bagdad	40-3	S	LV	I
Bateman Springs	30-2	S	LV	I
Big Ranch A	30-3	S**	LV	I
Big Ranch B	30-3	S	LV	I
Big Sandy	40-3	S	HV	II
Black Mesa A and B	40-3	S	LV	I
Black Mountain A	30-3	S	LV	I
Boriana A	30-3	S	LV	I
Boriana B	30-3	S	LV	I
Burro Creek	40-3	S	LV	I
Burro Creek Ranch	40-3	S	LV	I
Middle Water	30-3	S	LV	I
Cane Springs Wash	40-3	S**	HV	II
Canyon Ranch	30-3	S	HV	II
Castle Rock	30-3	S	LV	I
Cedar Canyon	30-3	S**	HV	II
Cerbat	30-3	S*	HV	II
Chicken Springs	30-3	S	HV	II
Chino Springs	40-3	S	LV	I
Clay Springs	30-3	S	LV	I
Cook Canyon	30-3	S	LV	I
Crozier Canyon	35-1	U	HR	IV
Curtain	30-3	S	LV	I
Diamond Joe	40-3	S	HV	II
Diamond Bar A	30-3	S**	HV	II
Diamond Bar B	30-3	S	LV	I
Dolan Springs	30-3	S	LV	I
DOR	40-3	S	LV	I
Feldspar	30-3	S	LV	I
Francis Creek	39-4	S	HV	II
Gediondia	30-2	S	LV	I
Gold Basin	30-3	S**	HV	II
Gray Wash	30-3	U	LR	III
Greenwood Community	30-2	S	LV	I
Greenwood Peak Community	40-3	S	LV	I
Groom Peak	40-3	S	LV	I
Hackberry	30-3	S**	HV	II
Happy Jack Wash	30-3	S	LV	I
Hot Spring	40-3	S	LV	I
Hualapai Peak	30-3	S	HV	II
Hibernia Peak A	39-4	S	HV	II
Hibernia Peak B*				
La Cienega	30-3	S**	HV	II

Appendix 19 (continued)
GRAZING ALLOTMENTS AND WATERSHED MANAGEMENT CATEGORIES

Allotment Name	[1]MLRA	Watershed Condition	Erosion	Category
Lazy YU A	30-3	S	LV	I
Los Molinos	40-3	S	HV	II
Mineral Park	30-3	S	LV	I
Mud Springs	30-3	S**	HV	II
Music Mountain	39-2	S**	HV	II
Mount Tipton	39-4	S	LV	I
Peacock Mountain	30-3	S	LV	I
Pine Spring	30-3	S**	LV	I
Quail Springs	30-3	S	HV	II
Sandy	40-3	S	LV	I
Stockton Hill	39-4	S	LV	I
Turkey Track	30-3	S	LV	I
Thumb Butte	30-2	S	LV	I
Truxton Canyon A	30-3	S	LV	I
Truxton Canyon B*				
Upper Music Mountains	39-2	S**	HV	II
Valentine	35-1	S	LV	I
West Peacock	30-3	S	LV	I
Wikieup	40-3	S	LV	I
Walapai Ranch	30-3	S**	HV	II
Yellow Pine	39-4	S	HV	II
Little Cane	40-3	S	LV	I
Cane Springs	30-3	S	HV	II
7 L Cattle Co	35-1	S	LV	I
Fort Mac Ewen A	30-3	U	HR	I
Fort Mac Ewen B	30-2	S	LV	I
Portland Springs	30-2	S	LV	I
Walnut Creek	30-3	S	HV	II
CO Bar*				
Chambers Lease*				
Gibson*				
Globe Ranch*				
JJJ*				
Kellis Lease*				
Yolo Ranch*				
Byner*				

[1] Major land resource area

*These allotments were not rated because public land acreage involved is relatively small and parcels are isolated and unmanageable.

S Watershed conditions on the allotment are satisfactory (see glossary).
S** Watershed conditions on the allotment are mostly satisfactory, but there are localized problem areas.
U Watershed conditions on the allotment are unsatisfactory (see glossary).
LV Soils on the allotment generally have a low vulnerability to erosion.
HV Soils on the allotment generally have a high vulnerability to erosion.
LR Soils on the allotment generally have a low responsiveness to treatment for erosion problems.
HR Soils on the allotment generally have a high responsiveness to treatment for erosion problems.

Appendix 20
Alternative 2 Acquisitions by Resource Activity

Township and Range	Priority	Section	Subdivision	Acreage
Acquire Mineral Estate on Lands Identified for Recreation and Public Purposes				
T. 27 N., R. 19 W.,		16	N1/2	320
T. 22 N., R. 18 W.,		31	ALL	640
T. 18 N., R. 21 W.,		7	NE1/4	160
T. 17 N., R. 21 W.,		5	Lots 1-4; S1/2NE1/4; SE1/4NW1/4; SE1/4SW1/4; SE1/4	518
			Total	**1,638**

CULTURAL ACQUISITION

Carrow-Stephens Ranches				
T. 16.5 N., R. 13 W., (Area 1)	1	28	W1/2NW1/4NE1/4; SE1/4NW1/4NE1/4; S1/2NE1/4NW1/4NE1/4	35
Barth (Bighorn Cave)				
T. 20 N., R. 20 W.,	2	23	W1/2	320
Neal Petroglyphs				
T. 24 N., R. 16 W.,	3	7	All	1017
X-Bar-1 Petroglyphs				
T. 22 N., R. 13 W.,	4		All	721
Carrow-Stephens Ranches(Area 2)				
T. 17 N., R. 13 W.,	5	35	SE1/4	160
T. 16.5 N., R. 13 W.,		21	Lots 1, 2; N1/2SE1/4SE1/4	235
		22	Lot 4; W1/2SW1/4	138
		28	E1/2NE1/4	80
		27	NE1/4SW1/4	40
			Total	**2,746**

RECREATION ACQUISITION

T. 29 N., R. 17 W.,	1	25	All	640
T. 29 N., R. 17 W.,	2	35	N1/2	320
T. 20 N., R. 19 W.,	3	33	All	640
T. 20 N., R. 20 W.,	4	2	All	525
T. 20 N., R. 20 W.,	5	3	SE1/4SW1/4; N1/2SW1/4; SE1/4	280
T. 14 N., R. 12 W.,	6	23	All	640
T. 14 N., R. 12 W.,	7	24	W1/2	320
T. 28 N., R. 17 W.,	8	3	All	640
T. 29 N., R. 16 W.,	9	19	NW1/4NW1/4	40
T. 18 N., R. 15 W.,	10	7	N1/2; N1/2S1/2; SW1/4SW1/4; SW1/4SE1/4	560
T. 29 N., R. 17 W.,	11	27	All	640
T. 30 N., R. 16 W.,	12	23	All	640
T. 29 N., R. 16 W.,	13	29	All	640
T. 29 N., R. 16 W.,	14	31	S1/2	320
T. 30 N., R. 16 W.,	15	31	E1/2	320
T. 30 N., R. 16 W.,	16	29	All	640
			Total	**7,805**

WILDERNESS ACQUISITION

T. 20 N., R. 20 W.,	1	23	SW1/4; S1/2NW1/4; NW1/4NW1/4; W1/2SW1/4SE1/4	300
T. 18 N., R. 16 W.,	2	11	N1/2N1/2; N1/2SW1/4NW1/4; E1/2SE1/4SW1/4NW1/4; SE1/4NW1/4	225
T. 12 N., R. 11 W.,	3	16	Mining Claim	16
T. 25 N., R. 18 W.,	4	17	NW1/4; N1/2NE1/4; SE1/4NE1/4	280
T. 16 N., R. 10 W.,	5	25	Mining Claim	5
T. 25 N., R. 18 W.,	6	4	SW1/4NW1/4	40
T. 25 N., R. 18 W.,	7	20	SE1/4SE1/4	40
T. 20 N., R. 20 W.,	8	35	Mining Claim	5
T. 19 N., R. 20 W.,	9	2	Mining Claim	5
T. 25 N., R. 18 W.,	10	33	All	640
T. 24 N., R. 18 W.,	11	9	All	640
T. 18 N., R. 16 W.,	12	5	S1/2SW1/4	80
	13	8	NW1/4NW1/4	40
	14	15	NE1/4SE1/4; SW1/4NW1/4; NW1/4SE1/4NW1/4; W1/2 NW1/4SW1/4; W1/2NE1/4SW1/4	210
	15	17	N1/2NW1/4; SW1/4; W1/2SE1/4; SE1/4SE1/4	380

Appendix 20 (continued)
Alternative 2 Acquisitions by Resource Activity

Township and Range	Priority	Section	Subdivision	Acreage
WILDERNESS ACQUISITION (continued)				
T. 18 N., R. 16 W.	16	21	NW1/4NW1/4; SE1/4SE1/4	80
	17	23	NE1/4NW1/4	40
	18	27	S1/2SW1/4	80
	19	29	SE1/4NE1/4	40
	20	31	W1/2NE1/4	80
WILDLIFE ACQUISITION			**Total**	**3,226**
HUALAPAI MOUNTAINS				
T. 18 N., R. 15 W.,	1	7	N1/2; N1/2S1/2; SW1/4SE1/4; SW1/4SW1/4	543
T. 17 N., R. 15 W.,	1	3	All	643
		9	All	640
		11	All	640
			Total	**2,466**
UNION PASS CROSSOVER				
T. 21 N., R. 20 W.,	2	11	All	640
			N1/2	320
			Total	**960**
DESERT TORTOISE HABITAT CATEGORY I				
Eastern Bajada	3	23	N1/2; N1/2SE1/4; SW1/4SE1/4	440
T. 19 N., R. 19 W.,		21	All	640
McCracken Mountains				
T. 14 N., R. 14 W.,	3	19	All	632
		31	All	634
T. 14 N., R. 15 W.,		3	All	638
		9	All	640
		11	All	640
		13	All	640
		14	S1/2	320
		15	All	640
		21	All	640
		23	All	640
		25	All	640
		27	All	640
		35	All	640
T. 13 N., R. 15 W.,		3	S1/2	320
		11	All	640
		13	W1/2; NE1/4NE1/4	360
		15	All	640
		23	W1/2	320
T. 13 N., R. 14 W.,		5	All	640
Poachie				
T. 13 N., R. 13 W.,	3	21	NE1/4	160
		27	N1/2	320
T. 13 N., R. 12 W.,		7	All	638
T. 13 N., R. 10 W.,		2	SW1/4	160
		3	SW1/4	160
			Total	**13,422**
DESERT TORTOISE HABITAT CATEGORY II				
T. 20 N., R. 17 W.,	4	19	East of I-40 right-of-way	316
		28	Mining claim in SW1/4NW1/4	20
		29	NW1/4; S1/2	480

Township and Range	Priority	Section	Subdivision	Acreage
WILDLIFE ACQUISITION (continued)				
DESERT TORTOISE HABITAT CATEGORY II (CONTINUED)				
T. 19 N., R. 17 W.,	4	15	S1/2; NW1/4	80
		21	SW1/4SW1/4	40
T. 18 N., R. 17 W.,		9	S1/2N1/2; W1/2SW1/4; NE1/4SW1/4	280
		11	All	640
		21	All	640
		27	All	640
		35	All	640
T. 18 N., R. 16 W.,		5	S1/2SW1/4	80
		8	NW1/4NW1/4	40
		17	N1/2NW1/4; SW1/4	240
		31	W1/2NE1/4; NW1/4NW1/4	119
T. 18 N., R. 15 W.,		1	All	640
		3	N1/2; SW1/4; N1/2SE1/4	560
		5	All	640
		7	N1/2; N1/2S1/2; SW1/4SW1/4; SW1/4SE1/4	560
		9	All	640
		11	NW1/4NE1/4; SE1/4NE1/4; NE1/4S21/4; SW1/4; SW1/4SE1/4	320
		13	NW1/4N1/4; N1/2NW1/4; SE1/4NW1/4; E1/2 SW1/4; SE1/4SE1/4	280
		15	All	640
		17	NE1/4; S1/2NW1/4; NE1/4NW1/4; S1/2	600
		19	All	640
		21	All	640
		23	NE1/4NE1/4; NW1/4; SW1/4; W1/2SE1/4	200
		25	W1/2NE1/4; NE1/4NW1/4; W1/2SW1/4; N1/2 SE1/4	280
		26	W1/12NE1/4; SE1/4NW1/4	120
		27	All	640
		29	All	640
		31	All	640
		33	All	640
		35	N1/2NE1/4; SE1/4NE1/4; W1/2; S1/2SE1/4	520
T. 17 N., R. 16 W.,		3	SW1/4SW1/4	40
		8	All	640
		9	N1/2	320
		15	All	640
		17	All	640
		19	All	638
		21	All	640
		23	All	640
		25	All	640
		27	All	640
		29	All	640
		31	All	640
		33	All	640
		35	All	
T. 17 N., R. 15 W.,		19	SW1/4	160
		31	All	639
T. 17 N., R. 14 W.,		4	SW1/4NE1/4; SW1/4SW1/4	80
		5	All	640
		6	SE1/4SE1/4	40
		7	E1/2NE1/4; NW1/4; N1/2SW1/4; SE1/4SW1/4; SW1/4SE1/4	400
		9	All	640
		17	N1/2; N12/2SE1/4; SE1/4SE1/4	440
		18	All	176

Township and Range	Priority	Section	Subdivision	Acreage
WILDLIFE ACQUISITION (continued)				
DESERT TORTOISE HABITAT CATEGORY II (CONTINUED)				
T. 17 N., R. 15 W.,	**4**	**1**	**All**	**640**
		3	**All**	**640**
		5	**All**	**640**
		7	**All**	**640**
		9	**All**	**640**
		11	**All**	**640**
		12	**All**	
		13	**W1/2; All non-federal**	**320**
		15	**All**	**640**
		17	**All**	**640**
		21	**All**	**640**
		23	**All**	**640**
		27	**All**	**640**
		29	**NE1/4; NE1/4NW1/4; SW1/4SW1/4; SE1/4SE1/4**	**320**
		33	**All**	**640**
T. 16.5 N., R. 17 W.,		23	All	516
		25	All	640
T. 16.5 N., R. 16 W.,		19	All	511
		21	All	521
		23	All	522
		25	All	640
		27	All	640
		29	All	640
		31	All	636
		32	SW1/4; SW1/4SE1/4	200
		33	All	640
		35	All	640
			NW1/4NW1/4	40
T. 16.5 N., R. 15 W.,		19	SW1/4SW1/4	36
		31	All	622
T. 16.5 N., R. 15 W.,		**21**	**S1/2**	**320**
		29	**All**	**640**
		33	**All**	**640**
T. 16 N., R. 16 W.,		1	All	639
		2	All	638
		3	All	637
		4	All	638
		5	All	638
		6	All	595
		8	All	640
		9	All	640
		10	All	640
		11	All	640
		12	All	640
		13	All	640
		14	All	640
		15	All	640
		17	All	640
		21	All	640

Township and Range	Priority	Section	Subdivision	Acreage
WILDLIFE ACQUISITION (continued)				
DESERT TORTOISE HABITAT CATEGORY II (CONTINUED)				
T. 16 N., R. 16 W.,	4	22	All	640
		23	All	640
		24	All	640
		25	All	640
		26	All	640
		27	All	640
		35	All	640
		36	E1/2; W1/2W1/2; NE1/4NW1/4	520
T. 16 N., R. 15 W.,		5	W1/2; SE1/4; W1/2NE1/4; SE1/4NE1/4	600
		6	All	622
		7	All	623
		8	All	640
		9	All	640
		17	All	640
		19	All	622
		21	All	640
		29	All	640
		31	All	625
		33	All	640
		36	All	640
T. 16 N., R. 14 W.,		27	All	640
T. 15 N., R. 16 W.,		1	All	639
T. 15 N., R. 15 W.,		1	SE1/4NW1/4	40
		2	All	638
		3	All	638
		5	All	639
		7	All	629
		9	All	640
		11	All	640
		14	SE1/4	160
		15	All	640
		17	All	640
		19	All	632
		21	All	640
		23	E1/2; E1/2W1/2; E1/2SW1/4; NW1/4SW1/4	600
		35	All	640
T. 15 N., R. 14 W.,		1	N1/2; W1/2SW1/4	399
		4	All	638
		5	S1/2; S1/2NE1/4	400
		7	All	627
		8	All	640
		9	All	640
		13	W1/2NW1/4	80
		17	SE1/4SE1/4	40
		23	SW1/4NW1/4	160
		30	W1/2NW1/4	75
T. 15 N., R. 13 W.,		19	SW1/4	160
		24	W1/2NE1/4; W1/2SE1/4; E1/2SW1/4	240
		25	All	640
		27	S1/2; S1/2N1/2	480
		29	All	640
		33	All	640
		35	All	640
T. 15 N., R. 12 W.,		29	SW1/4	160

Appendix 20 (continued)
Alternative 2 Acquisitions by Resource Activity

Township and Range	Priority	Section	Subdivision	Acreage
WILDLIFE ACQUISITION (continued)				
DESERT TORTOISE HABITAT CATEGORY II (CONTINUED)				
T. 14 N., R. 12 W.,		5	N1/2	323
		7	All	633
		9	All	640
		17	S1/2	320
T. 14 N., R. 12 W.,	4	19	All	634
		21	All	640
		27	E1/2	320
		29	N1/2; SW1/4; NE1/4SE1/4; S1/2SE1/4	600
		31	All	636
		33	All	640
T. 14 N., R. 13 W.,		1	W1/2	307
		3	All	612
		11	All	640
		13	All	640
		24	SE1/4; E1/2SW1/4	240
		25	E1/2	320
T. 13 N., R. 10 W.,		19	All	642
		28	SW1/4	160
		29	SE1/4	160
			Total	**68,152**
HISTORIC VOLE				
T. 20 N., R. 15 W.,	5	16	All	640
		21	S1/2SW1/4	80
		9	**Total**	**720**
BIGHORN SHEEP BLACK MOUNTAINS				
T. 26 N., R. 21 W.,	6	22	All	640
		33	NE1/4	160
		36	All	640
T. 25 N., R. 22 W.,		25	All	640
		27	All	640
T. 24 N., R. 21 W.,		9	All	640
		33	NW1/4SW1/4	40
T. 23 N., R. 20 W.,		21	All	640
		33	All	640
T. 22 N., R. 20 W.,		4	SE1/4SE1/4	40
		9	E1/2	320
		15	All	640
		17	All	640
		19	All	637
		21	All	640
		29	All	640
		31	N1/2; N1/2S1/2	478
		33	All	640
T. 22 N., R. 21 W.,		13	All	640
		25	All	640
T. 21 N., R. 20 W.,		11	All	640
		16	All	640
T. 20 N., R. 20 W.,		2	All	525
		3	SE1/4; E1/2SW1/4; NW1/4SW1/4	280
		23	SW1/4; W1/2SW1/4SE1/4; S1/2NW1/4; NW1/4NW1/4	300
T. 20 N., R. 19 W.,		21	All	640
		33	All	640
T. 19 N., R. 19 W.,		21	All	640
			Total	**14,940**

Appendix 20 (continued)
Alternative 2 Acquisitions by Resource Activity

Township and Range	Priority	Section	Subdivision	Acreage
WILDLIFE ACQUISITION (continued)				
CASTANEDA HILLS				
T. 13 N., R. 16 W.,	7	23	All	640
		25	All	640
		26	SE1/4; SW1/4NE1/4; SE1/4NW1/4; E1/2SW1/4	320
		27	All	640
		35	All	640
T. 13 N., R. 15 W.,		29	All	640
		31	All	639
			Total	4,159
CERBAT MOUNTAINS HMP				
T. 23 N., R. 13 W.,		5	All	639
T. 23 N., R. 14 W.,	8	3	All	640
			N1/2; SE1/4; E1/2SW1/4	560
			All	640
T. 24 N., R. 14 W.,		11	All	640
		13	All	364
		17	All	640
		21	All	640
		23	All	640
		25	All	366
T. 24 N., R. 16 W.,		7	All	1,017
T. 25 N., R. 14 W.,		9	All	640
		11	All	640
		25	All	640
		31	All	640
		35	All	640
T. 25 N.,R. 15 W.,		27	All	640
		28	All	640
		29	All	640
		36	All	640
			Total	12,546
HUALAPAI MOUNTAINS				
T. 20 N., R. 15 W.,		9	NW1/4NE1/4; NE1/4NW1/4; Mining Claims	135
		16	All	640
		21	S1/2SW1/4	80
T. 13 N., R. 16 W.,		23	All	640
		25	All	640
		26	SW1/4NE1/4; SE1/4NW1/4; E1/2SW1/4; SE1/4	320
		27	All	640
		35	All	640
T. 13 N., R. 15 W.,		29	All	640
		31	All	639
			Total	5,014
			Total for Wildlife	144,554
SPECIAL STATUS SPECIES ACQUISITION (Plants)				
T. 17 N., R. 17 W.,	1	11	All	640
		13	All	640
		15	All	640
		23	All	640
		25	All	640
T. 17 N., R. 16 W.,		17	All	640
		19	All	638
		21	All	640
		26	All	640
		27	All	640
		31	All	640

Appendix 20 (continued)
Alternative 2 Acquisitions by Resource Activity

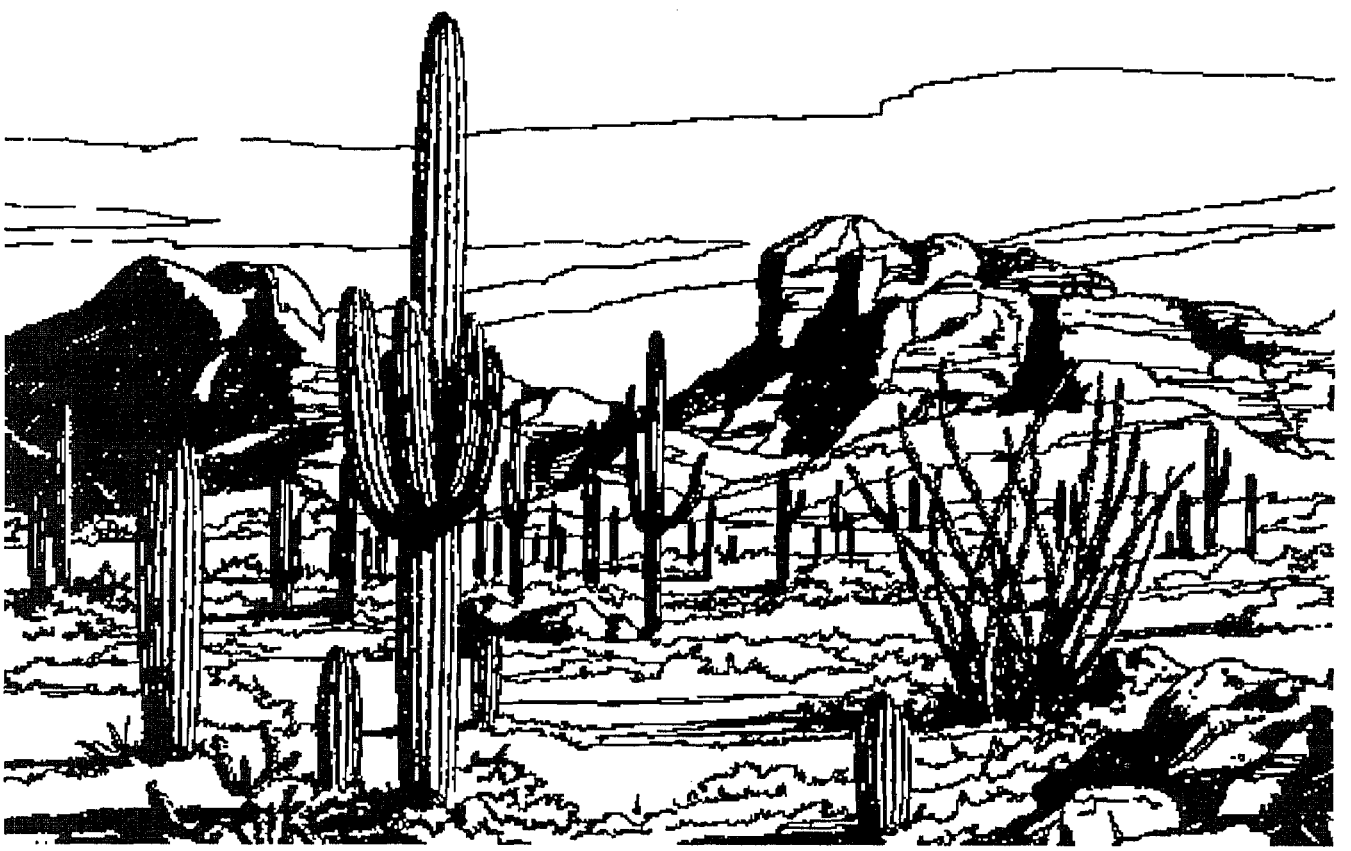
Township and Range	Priority	Section	Subdivision	Acreage
SPECIAL STATUS SPECIES ACQUISITION (Plants) (continued)				
T. 17 N., R. 16 W.,		33	All	640
		35	All	640
T. 16.5 N., R. 17 W.,		23	All	516
		25	All	640
T. 16.5 N., R. 16 W.,		19	All	511
		21	All	521
		27	All	640
		29	All	640
		31	All	636
		32	SW1/4; SW1/4SE1/4	200
		33	All	640
		35	All	640
T. 16 N., R. 16 W.,		1	All	639
		2	All	638
		3	All	637
		4	All	638
		5	All	638
		6	All	595
		8	All	640
		9	All	640
		10	All	640
		11	All	640
			Total	**20,887**
RIPARIAN ACQUISITION				
BURRO CREEK				
T. 15 N., R. 10 W.,	1	26	S1/2SW1/4	80
		27	NW1/4; SE1/4; N1/2SW1/4; SE1/4SW1/4	440
		28	E1/2NW1/4; NW1/4SW1/4; NE1/4	280
		29	SW1/4	160
		32	All	640
T. 14 N., R. 10 W.,		5	W1/2; W1/2NE1/4	400
		7	N1/2; SE1/4; E1/2SW1/4; NW1/4SW1/4	596
		8	W1/2NW1/4	80
T. 14 N., R. 12 W.,		9	S1/2	320
		10	Mining claims	
		11	Mining claims	49
		14	Mining claims	
		15	Mining claims	
		17	S1/2	320
		19	All	634
		23	N1/2	320
		24	All	640
			Total	**4,959**
BILL WILLIAMS				
T. 10 N., R. 13 W.,	2	18	Mining claims	88
T. 10 N., R. 14 W.,		4	W1/2SW1/4; SW1/4NW1/4	120
		5	S1/2NE1/4; SE1/4NW1/4; N1/2SE1/4; SW1/4	360
		6	S1/2	316
		9	W1/2NW1/4	80
		14	S1/2	320
		15	S1/2	320

Appendix 20 (continued)
Alternative 2 Acquisitions by Resource Activity

Township and Range	Priority	Section	Subdivision	Acreage
RIPARIAN ACQUISITION (continued)				
T. 10 N., R. 15 W.,		1	All	627
		2	All	640
		10	All	640
		11	All	640
		12	All	627
			Total	**3,174**
BIG SANDY RIVER FROM COE WITHDRAWAL TO SIGNAL				
T. 13 N., R. 13 W.,	3	21	All	640
		27	All	640
			Total	**1,280**
SIGNAL TO HIGHWAY BRIDGE				
T. 14 N., R. 13 W.,	4	1	W1/2	307
		12	NE1/4SW1/4; NW1/4SE1/4	80
		13	All	640
		23	SE1/4SE1/4	40
		24	E1/2SW1/4; NW1/4SE1/4	120
			Total	**1,187**
T. 15 N., R. 13 W.,		2	SE1/4SE1/4	40
		11	NE1/4; E1/2SE1/4	240
		12	SW1/4	160
		13	All	640
		24	W1/2NE1/4; E1/2SW1/4; W1/2SE1/4	240
		25	All	640
		35	All	640
			Total	**2,907**
SANTA MARIA				
T. 11 N., R. 10 W.,	5	2	All	641
T. 11 N., R. 11 W.,		15	S1/2S1/2	160
		16	S1/2; S1/2NW1/4	400
		17	N1/2	320
		18	NE1/4NE1/4	40
			Total	**1,561**
BIG SANDY SIGNAL TO HIGHWAY BRIDGE				
T. 13 N., R. 13 W.,	6	3	All	641
		9	All	640
T. 14 N., R. 13 W.,		26	NW1/4NE1/4; N1/2NW1/4	640
		27	All	120
		34	E1/2	320
		35	N1/2SE1/4; NW1/4SW1/4	520
			Total	**2,881**
WRIGHT CREEK				
T. 23 N., R. 12 W.,	7	15	NE1/4	160
			Total	**160**
COTTONWOOD CREEK				
T. 23 N., R. 12 W.,	8	29	W1/2SW1/4	80
T. 23 N., R. 13 W.,		22	N1/2	320
			Total	**400**

Appendix 20 (continued)
Alternative 2 Acquisitions by Resource Activity

Township and Range	Priority	Section	Subdivision	Acreage
RIPARIAN ACQUISITION (continued)				
UPSTREAM FROM WSA BOUNDARY - BURRO CREEK				
T. 17 N., R. 9 W.,	9	25	E1/2	320
		35	E1/2	320
		36	N1/2	320
T. 16.5 N., R. 9 W.,		22	Portion of NW1/4	16
		23	All	545
		28	All	640
		32	E1/2	320
		33	W1/2	320
			Total	**4,405**
UPPER BURRO CREEK				
T. 16 N., R. 9 W.,		5	All	639
		7	All	621
		8	NW1/4	160
		18	W1/2	303
		20	W1/2	320
			Total	**2,043**
MISCELLANEOUS SPRINGS				
T. 28 N., R. 16 W.,	10	11	NW1/4SW1/4	40
T. 25 N., R. 18 W.,		4	SW1/4NW1/4	40
T. 17 N., R. 16 W.,		1	NW1/4NW1/4; SE1/4NE1/4	80
		3	S1/2NE1/4; SE/4; S1/2SW1/4; NE1/4SW1/4	360
			Total	**520**
			Total For Riparian	**25,170**
			Total Alternative 2 Acquisition	**183,201**



Appendix 21

Alternative 2 Acquisitions for Kingman Regional Park

Township and Range	Section	Subdivision	Acreage
T. 21 N., R. 17 W.,	8	S1/2NE1/4; SW1/4NW1/4; SW1/4 SW1/4SE1/4	254
	9	All	628
	10	E1/2	320
	11	NW1/4	160
	16	All	625
	17	All	640
	22	W1/2NE1/4; W1/2; SE1/4	560
	27	SW1/4	160
	29	N1/2NW1/4	80
	33	E1/2	317
	34	NE1/4NW1/4	40
		Total	**3,784**

Alternative 2 Acquisitions for Wildlife Corridors

Township and Range	Section	Subdivision	Acreage
T. 27 N., R. 18 W.,	11	All	640
	13	All	640
	23	All	640
	25	All	640
T. 27 N., R. 17 W.,	19	All	633
	29	All	640
	31	All	633
T. 25 N., R. 21 W.,	35	All	640
T. 24 N., R. 21 W.,	9	All	640
T. 24 N., R. 19 W.,	35	All	640
T. 24 N., R 13 W.,	13	All	640
T. 24 N., R. 12 W.,	17	All	640
	19	All	626
T. 21 N., R. 20 W.,	11	All	640
	12	N1/2	298
T. 21 N., R. 17 W.,	8	S1/2NE1/4; SW1/4NW1/4; SW1/4;SW1/4SE1/4	254
	9	All	628
	16	All	625
	17	All	640
	26	S1/2	320
	27	SW1/4	160
	33	W1/2	320
	34	NE1/4; NE1/4NW1/4; SW1/4SW1/4; SE1/4SW1/4; SE1/4	360
	35	All	640
	36	All	640
T. 20 N., R. 17 W.,	2	Lots 1-12; S1/2	799
	3	Lots 1-12; S1/2	812

(continued)

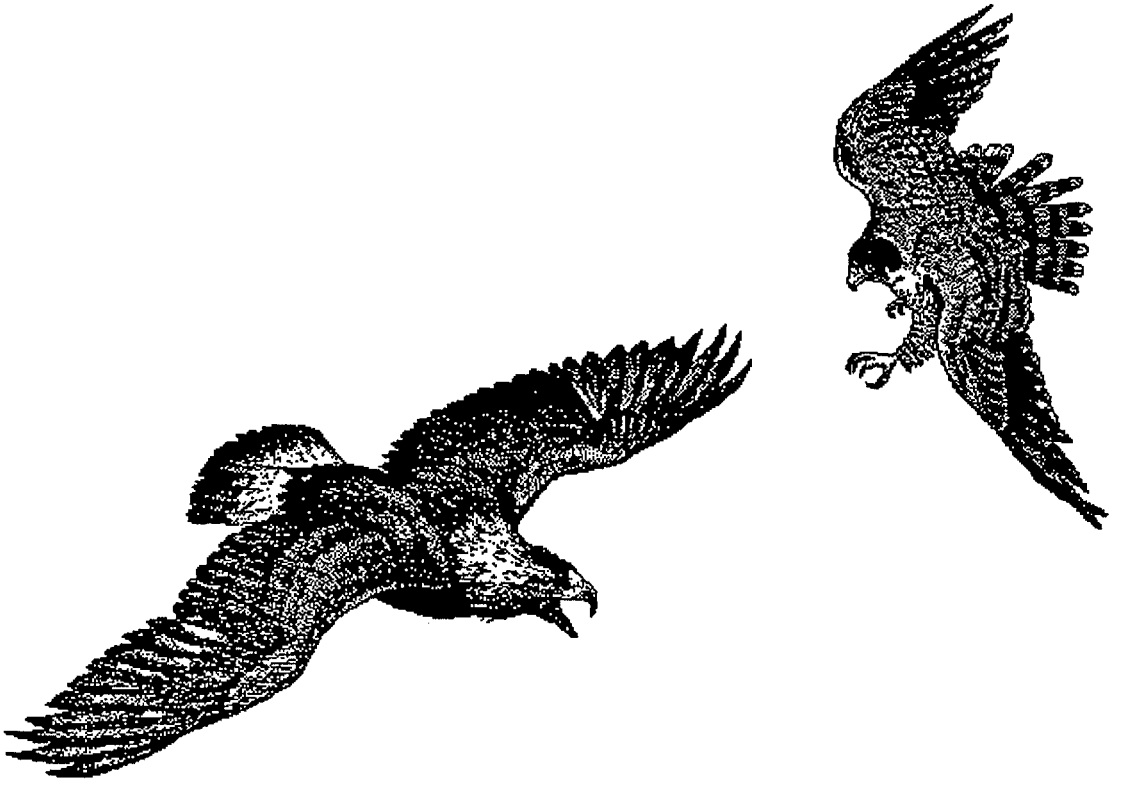
Appendix 21 (continued)
Alternative 2 Acquisitions for Wildlife Corridors

Township and Range	Section	Subdivision	Acreage
T. 18 N., R. 18 W.,	11	All	640
	13	All	640
	15	All	640
T. 17 N., R. 13 W.,	35	W1/2NE1/4; SE1/4	240
T. 16.5 N., R. 19 W.,	25	All	640
T. 16.5 N., R. 18 W.,	19	All	646
	31	W1/2; S1/2SE1/4	381
T. 16.5 N., R. 13 W.,	21	Lots 1, 2; N1/2 SE1/4; SE1/4SE1/4	235
	22	Lot 4; W1/2SW1/4	138
	27	NE1/4SW1/4	40
	28	E1/2NE1/4; W1/2NW1/4NW1/4; SE1/4NW1/4NE1/4; S1/2NE1/4NW1/4NE1/4	115
T. 16 N., R. 18 W.,	7	N1/2	311
T. 15 N., R. 15 W.,	35	All	640
T. 14 N., R. 15 W.,	3	All	638
	9	All	640
	11	All	640
	13	All	640
	14	S1/2	320
	15	All	640
	17	All	640
	19	All	634
	21	All	640
	23	All	640
	25	All	640
	27	All	640
	29	All	640
	31	All	634
	33	All	640
	35	All	640
T. 14 N., R. 14 W.,	7	All	632
	17	All	640
	19	All	632
	21	All	640
	29	All	640
	31	All	634
T. 14 N., R. 12 W.,	24	E1/2	320
	25	All	640
	35	All	640
	36	All	640

(continued)

Appendix 21 (continued)
Alternative 2 Acquisitions for Wildlife Corridors

Township and Range	Section	Subdivision	Acreage
T. 13 N., R. 16 W.,	23	All	640
	25	All	640
	26	SW1/4NE1/4; SE1/4NW1/4; E1/2SW1/4; SE1/4	320
	27	All	640
	35	All	640
T. 13 N., R. 15 W.,	3	S1/2	320
	5	All	639
	7	All	636
	9	All	640
	11	All	640
	15	All	640
	17	All	640
	29	All	640
	31	All	639
T. 13 N., R. 10 W.,	19	All	642
	28	SW1/4	160
	29	SE1/4	160
		Total	**46,252**



Appendix 22
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Joshua Tree Forest-Grand Wash Cliffs			
Surface and Minerals			
T. 30 N., R. 16 W.,	23	All	640
	29	All	640
	31	E1/2	320
T. 29 N., R. 17 W.,	21	E1/2	320
	25	All	640
	27	All	640
	35	N1/2	320
T. 29 N., R. 16 W.,	19	NW1/4NW1/4	40
	29	All	640
	31	S1/2	320
T. 28 N., R. 17 W.,	3	All	640
		Total	**5,160**
Non-federal Minerals			
T. 30 N., R. 16 W.,	9	All	640
	11	SW1/4; W1/2SE1/4	240
	15	All	640
	17	All	640
	19	E1/2	320
	21	All	640
	27	All	640
	33	All	640
	35	All	640
T. 29 N., R. 16 W.,	3	All	639
	5	All	639
	7	E1/2	320
	9	All	640
	11	All	640
	15	All	640
	17	All	640
	19	E1/2; S1/2NW1/4; NE1/4NW1/4; SW1/4	639
	21	All	640
	23	All	640
	31	N1/2	320
	33	All	640
T. 28 N., R. 17 W.,	1	All	642
	2	All	642
	11	All	640
	13	N1/2; SW1/4; N1/2SE1/4	560
T. 28 N., R. 16 W.,	5	N1/2NE1/4; NW1/4; W1/2SW1/4	320
	7	W1/2	309
		Total	**15,199**

(continued)

Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Black Mountains			
Surface and Minerals			
T. 26 N., R. 21 W.,	22	All	640
	33	NE1/4	160
	36	All	640
T. 25 N., R. 22 W.,	25	All	640
	27	All	640
T. 24 N., R. 21 W.,	9	All	640
	25	S1/2NE1/4; W1/2NW1/4; NE1/4SW1/4; SE1/4	360
	33	NW1/4SW1/4	40
T. 22 N., R. 20 W.,	4	SE1/4SE1/4	40
	9	E1/2	320
	17	All	640
	19	All	637
	27	All	640
	29	All	640
	31	N1/2; N1/2S1/2	478
	33	All	640
T. 21 N., R. 20 W.,	11	All	640
	12	N1/2	320
	16	All	640
T. 20 N., R. 20 W.,	2	All	525
	3	SE1/4; E1/2SW1/4; NW1/4SW1/4	280
	23	SW1/4; W1/2SW1/4SE1/4; S1/2NW1/4NW1/4	200
		Total	**10,400**
Non-federal Minerals			
T. 26 N., R. 21 W.,	19	All	634
	21	All	640
	31	All	636
	33	SE1/4	160
T. 25 N., R. 22 W.,	1	All	640
	3	All	640
	11	All	640
	13	All	640
	15	All	640
	23	All	640
T. 25 N., R. 21 W.,	1	N1/2; SW1/4; S1/2SW1/4	561
	3	N1/2NE1/4; W1/2; S1/2SE1/4; NW1/4SE1/4	522
	5	All	642
	7	All	639
	9	All	640
	11	All	640
	13	NW1/4NE1/4; W1/2; S1/2SE1/4	440
	15	All	640
	17	All	640
	19	All	638

(continued)

Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
T. 25 N., R. 21 W., (continued)	23	SE1/4SW1/4; S1/2SE1/4	120
	27	SW1/4	160
T. 24 N., R. 21 W.,	1	All	567
	3	All	569
	5	All	577
	15	W1/2	320
	17	All	640
	21	All	640
	27	All	640
	29	All	640
	33	E1/2; NW1/4; E1/2SW1/4; NW1/4SW1/4	600
	35	All	640
T. 24 N., R. 20 W.,	31	All	622
T. 23 N., R. 21 W.,	1	All	640
	3	All	636
	11	E1/2; NW1/4	480
	13	All	640
	15	W1/2	320
	23	All	640
	25	All	640
T. 22 N., R. 21 W.,	1	All	642
T. 22 N., R. 20 W.,	5	All	642
	7	All	633
T. 20 N., R. 20 W.,	32	All	640
T. 19 N., R. 20 W.,	29	S1/2S1/2	160
	30	S1/2S1/2	161
	31	NW1/4; S1/2	486
	36	All	640
T. 18 N., R. 20 W.,	2	All	626
T. 16.5 N., R. 19 W.,	19	All	652
		Total	**27,925**

Wright and Cottonwood Creeks Riparian and Cultural
Surface and Minerals

T. 24 N., R. 12 W.,	31	NE1/4NE1/4	40
T. 23 N., R. 13 W.,	13	All	640
	22	N1/2	320
	27	NW1/4SE1/4	40
	36	All	640
T. 23 N., R. 12 W.,	15	NW1/4	160
	19	W1/2SW1/4	79
	30 and 31	Mining Claims	76
	31	E1/2NE1/4; E1/2SW1/4; SE1/4; mining claims	315
	33	NE1/4NE1/4	40
	35	SE1/4SE1/4	40

(continued)

Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
T. 23 N., R. 11 W.,	31	Lot 6	48
T. 22 N., R. 13 W.,	1	S1/2SW1/4	80
	2	All	724
		Total	**3,242**
Non-federal Minerals			
T. 24 N., R. 12 W.,	31	NW1/4NE1/4; S1/2NE1/4; NW1/4; S1/2	588
T. 23 N., R. 13 W.,	23	All	640
	25	N1/2; N1/2SW1/4; NW1/4SE1/4	440
	27	All	640
	35	S1/2	320
T. 23 N., R. 12 W.,	5	S1/2	320
	7	All	635
	9	N1/2; E1/2SW1/4; SE1/4	560
	11	W1/2	320
	13	NW1/4; W1/2SW1/4	240
	15	NW1/4; S1/2	480
	17	All	640
	19	E1/2SW1/4; SE1/4; E1/2NE1/4	320
	21	All	640
	23	NE1/4NE1/4SW1/4NE1/4; NW1/4; NE1/4SW1/4; N1/2SE1/4	360
	25	All	640
	27	All	640
	29	All	640
	33	S1/2NE1/4; NW1/4NE1/4; NW1/4; S1/2	600
	35	N1/2; SW1/4; N1/2SE1/4; SW1/4SE1/4	600
T. 23 N., R. 11 W.,	31	Lots 3-5, 7-10, 15-22	989
		Total	**11,252**

Hualapai Mountain Research Natural Area

Surface and Minerals			
T. 17 N., R. 15 W.,	3	All	643
T. 18 N., R. 15 W.,	7	N1/2; W1/2SW1/4; NE1/4SW1/4; N1/2SE1/4; NE1/4SE1/4	543
		Total	**1,186**
Non-federal Minerals			
T. 20 N., R. 15 W.,	33	NW1/4	40
T. 19 N., R. 15 W.,	5	All	644
	29	W1/2	320
		Total	**1,004**

(continued)

Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
White-Margined Beard-tongue Reserve			
Surface and Minerals			
T. 18 N., R. 17 W.,	35	All	640
T. 18 N., R. 16 W.,	31	W1/2NE1/4; NW1/4NW1/4 (surface only)	119
T. 17 N., R. 17 W.,	1	All	638
	11	All	640
	13	All	640
	15	All	640
	23	All	640
	25	All	640
T. 17 N., R. 16 W.,	8	All (surface only)	640
	9	N1/2	320
	17	All	640
	19	All	638
	21	All	640
	27	All	640
	29	All	640
	31	All	640
	33	All	640
T. 16.5 N., R. 17 W.,	23	All	516
	25	All	640
T. 16.5 N., R. 16 W.,	19	All	507
	21	All	518
	29	All	640
	31	All	627
	32	SW1/4; SW1/4SE1/4	200
	33	All	640
T. 16 N., R. 16 W.,	3	All	637
	4	All	638
	5	All	638
	6	All	636
	9	All	640
	10	All	640
		Total	**18,152**
Non-federal Minerals			
T. 17 N., R. 17 W.,	2	All	636
	16	All	640
	36	All	640
T. 17 N., R. 16 W.,	7	All	637
	9	S1/2	320
	32	All	640
		Total	**3,513**

(continued)

Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Carrow-Stephens Ranches			
Surface and Minerals			
T. 16.5 N., R. 13 W.,	21	Lot 2; NW1/4SE1/4	98
	28	S1/2NE1/4NW1/4NE1/4; W1/2NW1/4NE1/4	35
		Total	**133**
McCracken Desert Tortoise Habitat			
Surface and Minerals			
T. 14 N., R. 15 W.,	3	All	638
	9	All	640
	11	All	640
	13	All	640
	14	S1/2	320
	15	All	640
	17	E1/2	320
	21	E1/2	320
	23	All	640
	25	All	640
	27	All	640
	35	All	640
T. 14 N., R. 14 W.,	19	All	632
	31	All	634
T. 13 N., R. 15 W.,	3	S1/2	320
	9	SE1/4	160
	11	All	640
	13	NE1/4NE1/4; W1/2	360
	15	All	640
	21	NE1/4; N1/2SE1/4; SE1/4SE1/4	280
	23	W1/2	320
T. 13 N., R. 14 W.,	5	All	640
		Total	**11,344**
Non-federal Minerals			
T. 13 N., R. 15 W.,	1	All	641
	3	N1/2	321
	21	W1/2; SW1/4SE1/4	360
	23	E1/2	320
T. 13 N., R. 14 W.,	7	All	636
	17	All	640
	19	E1/2E1/2	160
	29	NE1/4; W1/2; E1/2SE1/4	560
		Total	**3,638**

(continued)

Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Poachie Desert Tortoise Habitat			
Surface and Minerals			
T. 13 N., R. 12 W.,	7	All	638
T. 13 N., R. 10 W.,	2	SW1/4	160
	3	SE1/4	160
	1, 2, 11, 12	Mining Claims	189
		Total	**1,147**
Non-federal Minerals			
T. 13 N., R. 12 W.,	5	All	637
		Total	**637**
Aubrey Peak Bighorn Sheep Habitat			
Non-federal Minerals			
T. 12 N., R. 14 W.,	17	SE1/4NE1/4NW1/4; W1/2NE1/4NW1/4; NW1/4NW1/4	70
		Total	**70**
Burro Creek Riparian and Cultural			
Surface and Minerals			
T. 17 N., R. 9 W.,	24	That portion of SE1/4 south of Baca Float (surface only)	260
	25	All	640
	35	All (surface only)	680
	36	N1/2	320
T. 16.5 N., R. 9 W.,	21	All (surface only)	546
	22	All (surface only)	546
	23	All	545
	27	All	640
	28	All (surface only on W1/2)	640
	29	All (surface only)	640
	32	All	640
	33	All	640
T. 16 N., R. 9 W.,	4	NW1/4NW1/4 (surface only)	40
	5	All	639
	6	All	615
	7	All	621
	8	NW1/4NE1/4; NW1/4	200
	18	W1/2 (surface only)	303
	19	W1/2 (surface only)	304
T. 15 N., R. 10 W.,	1	SE1/4 (surface only)	160
T. 14 N., R. 12 W.,	11	N1/2; N1/2SW1/4; SW1/4; SE1/4 (surface only)	600
	13	All	640
	23	All	640
	24	All (surface and minerals on SE1/4)	640

(continued)

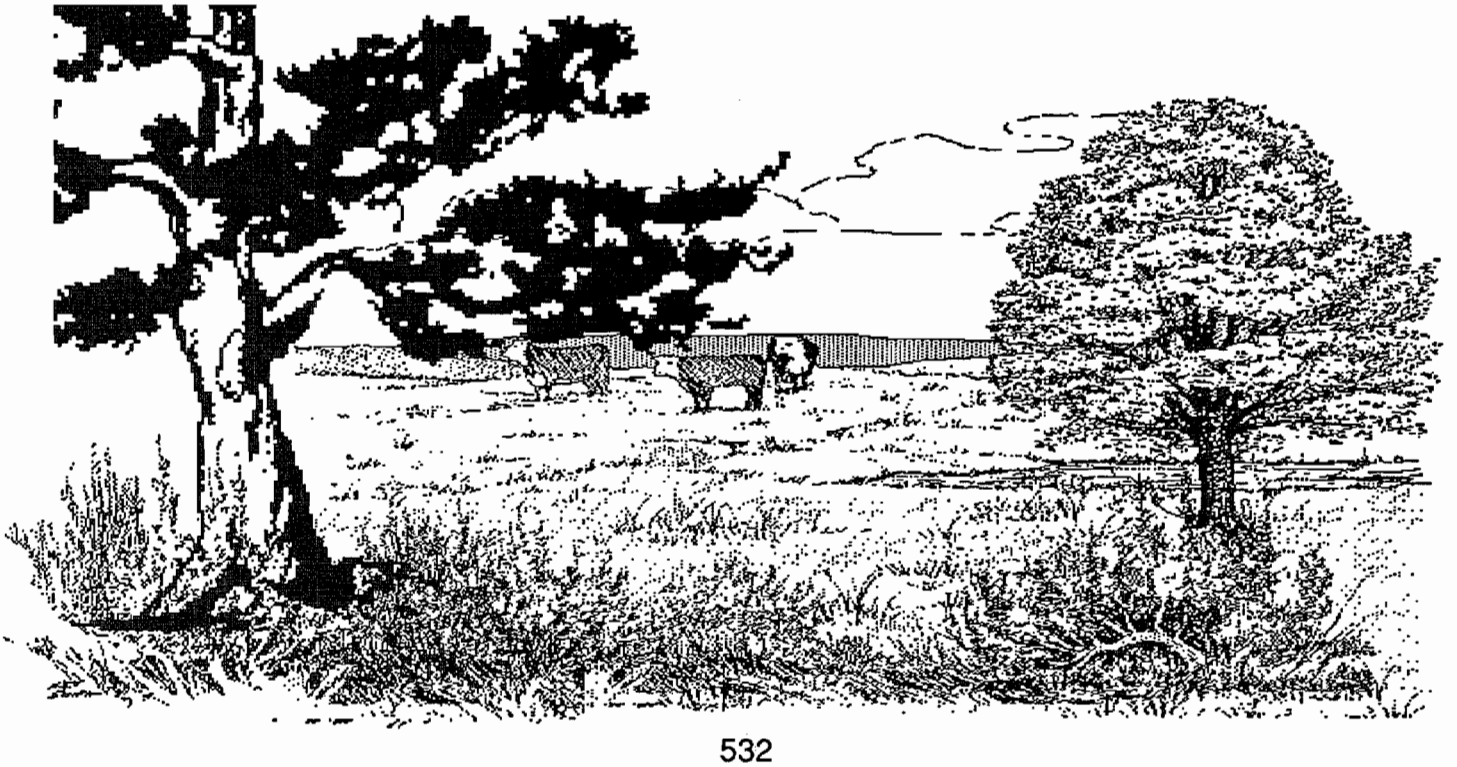
Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
T. 14 N., R 12 W., (continued)	25	All (surface only)	640
		Total	**12,769**
Non-federal Minerals			
T. 16 N.,. R. 10 W.,	1	SW1/4NW1/4; SW1/4; W1/2SE1/4	280
		Total	**280**
Three Rivers Riparian			
Big Sandy **Surface and Minerals**			
T. 14 N., R. 13 W.,	23	All	640
	24	E1/2SW1/4; SE1/4	240
	25	All	640
	26	NW1/4NE1/4; N1/2NW1/4; SW1/4SW1/4; E1/2SW1/4	240
	27	All	640
	33	All	640
	34	E1/2	320
	35	E1/2; NW1/4; NW1/4SW1/4	520
T. 13 N., R. 13 W.,	1	W1/2NE1/4; NW1/4; SW1/4; SE1/4	560
	3	All	640
	9	All	640
	11	N1/2	320
	17	All	640
	21	All	640
	27	All	640
		Total	**7,960**
Alamo Lake Area **Surface and Minerals**			
T. 11 N., R. 13 W.,	24	S1/2SE1/4	80
	25	NE1/4NE1/4; W1/2NE1/4; E1/2NW1/4; W1/2SW1/4	280
	26	E1/2SE1/4	80
	34	E1/2E1/2	160
	35	NE1/4; S1/2	480
T. 11 N., R. 12 W.,	9	W1/2; SE1/4	480
	10	SW1/4; SW1/4SE1/4	200
	14	S1/2NE1/4; E1/2NW1/4; NE1/4SE1/4	200
	17	NW1/4; NW1/4SW1/4	200
	18	NE1/4SE1/4; S1/2SE1/4	120
	19	N1/2; SW1/4	472
		Total	**2,752**
Santa Maria **Surface and Minerals**			
T. 12 N., R. 9 W.,	29	Mining Claims in E1/2	46

(continued)

Appendix 22 (continued)
Alternative 2 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
T. 11 N., R. 11 W.,	15	S1/2S1/2	160
	16	S1/2NW1/4; S1/2	400
	17	N1/2	320
	18	NE1/4NE1/4	40
T. 11 N., R. 10 W.,	2	All	641
		Total	**1,567**
Bill Williams **Surface and Minerals**			
T. 10 N., R. 15 W.,	1	All	627
	2	All	640
	10	All	640
	11	All	640
	12	All	627
T. 10 N., R. 14 W.,	4	SW1/4NW1/4; W1/2SW1/4	120
	5	S1/2NE1/4; SE1/4NW1/4; SW1/4; N1/2SE1/4	360
	6	S1/2	316
	9	W1/2NW1/4	80
	14	S1/2	320
	15	S1/2	320
T. 10 N., R. 13 W.,	17 and 18	Mining Claims	182
		Total	**4,872**
		Total for Surface and Minerals	**80,624**
		Total for Non-federal Minerals	**63,518**



Appendix 23
Alternative 2 Legal Vehicular Access Acquisitions

Legal access would be acquired across private and state lands for administrative and public vehicular use on the following roads and trails. Only administrative vehicular access would be acquired on Black Butte and Pine Lake.

Name	Township and Range	Section
Black Butte	T. 16 N., R. 7 W.,	7, 18, 19, 20
	T. 16 N., R. 8 W.,	2, 11, 12
Black Inky Springs	T. 19 N., R. 16 W.,	5
	T. 20 N., R. 16 W.,	2, 10, 11, 15, 29
Blye Canyon	T. 24 N., R. 11 W.,	7, 19
	T. 24 N., R. 12 W.,	10
Boulder Springs	**T. 20 N., R. 17 W.,**	**8, 16, 17, 21**
Bull Canyon	T. 16.5 N., R. 12 W.,	29, 31
Burch Peak	T. 16.5 N., R. 15 W.,	23, 26
	T. 17 N., R. 15 W.,	29, 33
	T. 17 N., R. 16 W.,	15, 17, 25, 27
Canyon Station Spring	**T. 23 N., R. 17 W.,**	**26, 27, 35**
Devil's Canyon	T. 28 N., R. 16 W.,	34, 35
Goodwin Mesa	T. 16 N., R. 11 W.,	22
Grapevine Canyon	T. 30 N., R. 16 W.,	25
	T. 30 N., R. 15 W.,	33
Groom Peak	T. 15 N., R. 14 W.,	1
Little Cottonwood	T. 23 N., R. 13 W.,	27, 29, 33, 36
Pilgrim Mine	T. 23 N., R. 19 W.,	2
Pine Lake	T. 20 N., R. 15 W.,	20, 21
Portland Mine	T. 23 N., R. 21 W.,	14, 15
	T. 24 N., R. 21 W.,	25
Red Horn Spring	T. 24 N., R. 12 W.,	19
Rock Creek	T. 18 N., R. 17 W.,	9
	T. 19 N., R. 17 W.,	15
Six-Mile Crossing	T. 14 N., R. 10 W.,	17, 18, 20
	T. 15 N., R. 12 W.,	25, 27
Squaw Peak	T. 28 N., R. 21 W.,	4
	T. 29 N., R. 20 W.,	30
	T. 29 N., R. 21 W.,	34, 35, 36
Thumb Butte	T. 20 N., R. 20 W.,	27, 28
	T. 21 N., R. 20 W.,	28, 29, 32, 33
Walnut Creek	T. 19 N., R. 16 W.,	7
	T. 19 N., R. 17 W.,	7, 15, 18

(continued)

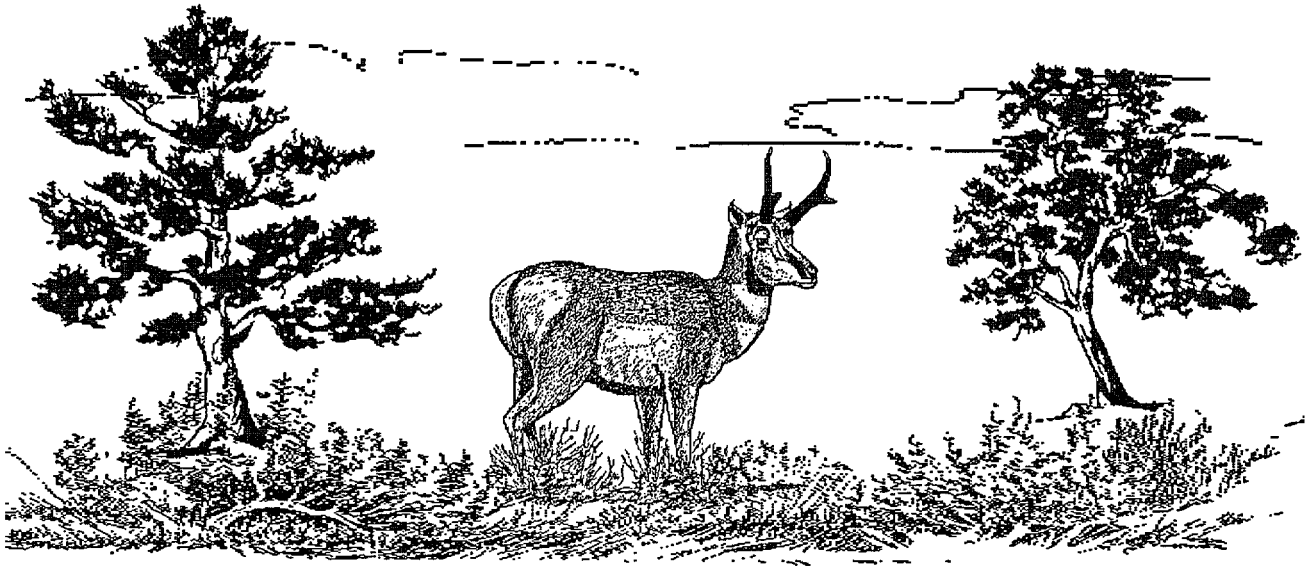
Appendix 23 (continued)
Alternative 2 Legal Vehicular Access Acquisitions

Name	Township and Range	Section
East Warm Springs	T. 16 N., R. 19 W.,	5, 8, 9
	T. 16.5 N., R. 19 W.,	29
West Warm Springs	T. 16.5 N., R. 20 W.,	23, 27, 28, 31, 33
	T. 16.5 N., R. 20.5 W.,	36
Vock Canyon	T. 23 N., R. 17 W.,	3, 4, 5, 9
	T. 24 N., R. 17 W.,	35, 36

Appendix 24
Alternative 2 Roads and Trails To Be Improved

The following roads and trails would be improved at the locations noted.

Name	Township and Range	Section	Miles
Bull Canyon	T. 16.5 N., R. 11 W.,	19, 20, 29, 30	
	T. 16.5 N., R. 12 W.,	21, 24	3
Burro Creek Campground	T. 14 N., R. 11 W.,	18, 19	2.5
Devil's Canyon	T. 28 N., R. 16 W.,	35	1
Goodwin Mesa	T. 16 N., R. 11 W.,	2, 11, 14, 15	
	T. 16.5 N., R. 11 W.,	26, 27, 35	7
Grapevine Canyon	T. 30 N., R. 15 W.,	33	
	T. 30 N., R. 16 W.,	36	1
Hualapai Ridge	T. 17 N., R. 16 W.,	2, 3, 9	
	T. 18 N., R. 15 W.,	6, 7, 18	
	T. 18 N., R. 16 W.,	12, 13, 24, 25, 26, 35	
	T. 19 N., R. 15 W.,	4, 5, 6, 7, 8, 19, 20	20
Iron Basin	T. 28 N., R. 16 W.,	9	.5
Pinky Tank	T. 16 N., R. 10 W.,	2, 3, 4, 8, 9	4
Red Lake	T. 16 N., R. 10 W.,	5, 6, 8, 16	
	T. 16 N., R. 11 W.,	1, 2	5



Appendix 25
Alternative 3 Proposed Changes in Disposal Areas

Township and Range	Section	Subdivision	Acreage
Additions			
T. 22 N., R. 18 W.,	11	All	640
	14	All	640
	23	All	640
	25	All except SE1/4SE1/4SE1/4	630
		Total Additions	2,550
Deletions			
T. 22 N., R. 19 W.,	**20**	**All**	**640**
	30	**NE1/4; N1/2NW1/4; E1/2SE1/4NW1/4; NE1/4NE1/4SW1/4**	**270**
T. 21 N., R. 19 W.,	**4**	**All**	**641**
	5	**All**	**641**
	8	**All**	**640**
	9	**All**	**640**
	16	**W1/2**	**320**
	17	**All**	**640**
	20	**All**	**640**
T. 19 N., R. 21 W.,	**4**	**All**	**640**
	5	**All**	**640**
	6	**All**	**640**
	7	**NE1/4; NW1/4; N1/2SW1/4; SE1/4**	**560**
	8	**All**	**640**
	9	**All**	**640**
		Total Deletions	**8,832**
		Net Loss from Alternative 2	**6,282**

Appendix 26
Alternative 3 Mineral Closures in Riparian Areas

Wright Creek Riparian Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Federal Minerals to Be Closed to Mineral Entry			
T. 24 N., R. 13 W.,	36	NE1/4; NW1/4; SW1/4; N1/2SE1/4	560
T. 23 N., R. 12 W.,	6	E1/2; E1/2NW1/4	400
	8	NE1/4; NW1/4; NE1/4SW1/4; SE1/4	520
	9	W1/2SW1/4	80
	10	NE1/4; NW1/4; N1/2SW1/4; SE1/4	560
	14	SW1/4NE1/4; NW1/4; SW1/4; SE1/4	520
	23	NW1/4NE1/4; SE1/4NE1/4	80
	24	SW1/4NE1/4; NW1/4; NE1/4SW1/4; NW1/4SW1/4; SE1/4SW1/4; SE1/4	480
	36	E1/2NE1/4	80
T. 23 N., R. 11 W.,	30	Lots 6, 7, 18, 19	188
		Total	**3,468**

(continued)

Appendix 26 (continued)
Alternative 3 Mineral Closures in Riparian Areas

Township and Range	Section	Subdivision	Acreage
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 24 N., R. 12 W.,	31	S1/2NW1/4; SW1/4; W1/2SE1/4; SE1/4SE1/4	351
T. 23 N., R. 12 W.,	5	SW1/4	160
	9	S1/2N1/2; E1/2SW1/4; N1/2SE1/4	320
	15	NE1/4	160
	23	N1/2NE1/4; SE1/4NE1/4	120
	25	W1/2	320
T. 23 N., R. 11 W.,	31	Lots 6, 7, 15-22	430
		Total	**1,861**

Cottonwood Creek Riparian Area of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Federal Minerals to Be Closed to Mineral Entry			
T. 23 N., R. 13 W.,	22	NE1/4SW1/4; N1/2SE1/4	120
	24	S1/2N1/2; S1/2	480
T. 23 N., R. 12 W.,	19	S1/2NW1/4	81
	28	S1/2SW1/4	80
	30	NE1/4; NE1/4NW1/4; N1/2SE1/4	594
	32	N1/2NE1/4	80
		Total	**1,435**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 23 N., R. 13 W.,	23	S1/2N1/2; N1/2S1/2	320
T. 23 N., R. 12 W.,	19	W1/2SW1/4; S1/2SE1/4	159
	29	S1/2NW1/4; S1/2	400
	33	W1/2E1/2; W1/2	480
		Total	**1,359**

Burro Creek Riparian Area of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Federal Minerals to Be Closed to Mineral Entry			
T. 15 N., R. 10 W.,	27	NW1/4; N1/2SW1/4	240
	28	N1/2; W1/2SW1/4	400
	29	E1/2E1/2	160
T. 14 N., R. 10 W.,	6	E1/2E1/2	160
	7	SW1/4SW1/4	39
	18	W1/2NW1/4	77
T. 14 N., R. 11 W.,	12	SE1/4SE1/4	40
	13	NE1/4NE1/4; SW1/4NE1/4; SE1/4NE1/4; NW1/4; N1/2S1/2	440
	14	N1/2; SW1/4; W1/2SE1/4; NE1/4SE1/4	600
	15	S1/2S1/2; NE1/4SE1/4	200
	16	NW1/4SE1/4; S1/2S1/2	200
	17	SW1/4NE1/4; S1/2NW1/4; S1/2	440

(continued)

Appendix 26 (continued)
Alternative 3 Mineral Closures in Riparian Areas

Township and Range	Section	Subdivision	Acreage
T. 14 N., R. 11 W., (continued)	18	SE1/4NE1/4; E1/2SE1/4	120
	19	NE1/4; E1/2NW1/4; SW1/4; W1/2SE1/4; NE1/4SE1/4	480
	20	N1/2; NW1/4SW1/4	360
	21	N1/2; N1/2SW1/4	400
	22	N1/2; N1/2SW1/4; NW1/4SE1/4	440
	23	NW1/4NE1/4; NW1/4	200
	30	W1/2NE1/4; NW1/4; NW1/4SW1/4	280
T. 14 N., R. 12 W.,	10	SE1/4SW1/4; S1/2SE1/4	120
	11	SW1/4SW1/4	39
	14	SW1/4NE1/4; NW1/4; SW1/4; W1/2SE1/4; SE1/4SE1/4	480
	15	N1/2; N1/2S1/2	480
		Total	**5,279**

Acquire Non-federal Minerals - Close to Mineral Entry

T. 15 N., R. 10 W.,	29	SE1/4SW1/4; SW1/4SE1/4	80
	32	All	640
T. 14 N., R. 10 W.,	5	NE1/4NE1/4; W1/2NE1/4; NW1/4; SW1/4	441
	7	SW1/4NE1/4; SE1/4NW1/4; SW1/4	232
T. 14 N., R. 10 W.,	8	NW1/4	160
	18	NW1/4NE1/4	40
T. 14 N., R. 12 W.,	13	SW1/4SW1/4	40
	23	N1/2N1/2; SE1/4NE1/4; NE1/4SE1/4	240
		Total	**1,873**

Big Sandy Riparian Area of Critical Environmental Concern

Federal Minerals to be Closed to Mineral Entry

T. 14 N., R. 13 W.,	22	SE1/4SE1/4	40
	24	N1/2; W1/2SW1/4	400
	26	E1/2NE1/4; SW1/4NE1/4; S1/2NW1/4; NW1/4SW1/4; N1/2SE1/4; SW1/4SE1/4	360
	34	SE1/4SW1/4	40
	35	S1/2SW1/4; NE1/4SW1/4	120
T. 13 N., R. 13 W.,	2	W1/2NW1/4; NW1/4SW1/4	120
	4	E1/2SE1/4	80
	10	W1/2NE1/4; NE1/4NE1/4: NW1/4; N1/2SW1/4; SW1/4SW1/4	400
	16	NE1/4; E1/2W1/2; N1/2SE1/4; SW1/4SE1/4	440
	22	SW1/4NW1/4; W1/2SW1/4	120
	26	S1/2NW1/4; SW1/4	240
	28	NE1/4	160
	34	E1/2E1/2	160
	35	W1/2; S1/2SE1/4	400
	36	S1/2SW1/4	80

(continued)

Appendix 26 (continued)
Alternative 3 Mineral Closures in Riparian Areas

Township and Range	Section	Subdivision	Acreage
T. 12 N., R. 13 W.,	2	E1/2; NW1/4; SE1/4SW1/4	368
	3	NE1/4	84
	11	E1/2; E1/2W1/2; SW1/4NW1/4; NW1/4SW1/4	560
	12	SW1/4; SW1/4SE1/4	120
		Total	**3,852**

Acquire Non-federal Minerals - Close to Mineral Entry

T. 14 N., R. 13 W.,	23	E1/2E1/2; S1/2SW1/4; SW1/4SE1/4	280
	24	E1/2SW1/4; SE1/4	240
	25	N1/2NW1/4; SW1/4NW1/4	120
	26	NW1/4NE1/4; N1/2NW1/4; SW1/4SW1/4	160
	27	E1/2; SE1/4NW1/4; E1/2SW1/4	440
	34	E1/2	320
	35	W1/2NE1/4; NW1/4; NW1/4SW1/4	280
T. 13 N., R. 13 W.	3	All	641
	9	E1/2	320
	21	W1/2NE1/4; SE1/4NE1/4; W1/2NW1/4 NE1/4SW1/4; SE1/4	400
	27	W1/2NE1/4; SE1/4NE1/4; NW1/4; N1/2SE1/4; SE1/4SE1/4	400
		Total	**3,601**

Santa Maria Riparian Area of Critical Environmental Concern

Federal Minerals to Be Closed to Mineral Entry

T. 11 N., R. 11 W.,	8	S1/2S1/2	160
	10	S1/2S1/2	160
	11	S1/2S1/2	160
	12	SE1/4NE1/4; S1/2SW1/4; SE1/4	280
	13	SW1/4; W1/2SE1/4	240
	14	S1/2	320
	15	N1/2; N1/2S1/2	480
	16	NE1/4; N1/2NW1/4	240
	17	N1/2S1/2	160
T. 11 N., R. 10 W.,	3	NW1/4NE1/4; NW1/4; W1/2SW1/4	280
	4	SE1/4NE1/4; S1/2SW1/4; S1/2SE1/4; NE1/4SE1/4	240
	5	S1/2	320
	6	S1/2SW1/4; SE1/4	228
	7	NE1/4; W1/2	458
	8	N1/2N1/2	160
	9	N1/2	320
T. 12 N., R. 10 W.,	25	S1/2SE1/4; NE1/4SE1/4	120
	34	SE1/4SW1/4; SE1/4	200
	35	S1/2NE1/4; SE1/4NW1/4; S1/2	440
	36	N1/2; SW1/4	480
T. 12 N., R. 9 W.,	19	S1/2SE1/4	80
	20	SW1/4 SW1/4	40

(continued)

Appendix 26 (continued)
Alternative 3 Mineral Closures in Riparian Areas

Township and Range	Section	Subdivision	Acreage
T. 12 N., R. 9 W., (continued)	29	S1/2NE1/4; NW1/4; N1/2S1/2	354
	30	E1/2; SW1/4	474
	31	NW1/4	160
		Total	**6,554**
Acquire Non-federal Minerals - Close to Mineral Entry			
T. 12 N., R. 9 W.,	29	Mining claims in E1/2	46
T. 11 N., R. 11 W.,	15	S1/2S1/2	160
	16	S1/2NW1/4; S1/2	400
	17	N1/2	320
		Total	**926**
Bill Williams Riparian Area of Critical Environmental Concern			
Federal Minerals to Be Closed to Mineral Entry			
T. 11 N., R. 14 W.,	32	SE1/4SW1/4; S1/2SE1/4	126
T. 10 N., R. 15 W.,	3	SE1/4SE1/4, S1/2	360
T. 10 N., R. 14 W.,	4	SE1/4NW1/4; E1/2SW1/4; W1/2SE1/4	200
	5	N1/2NE1/4; N1/2NW1/4; SW1/4NW1/4	198
	6	NE1/4; S1/2NW1/4	236
	9	S1/2NE1/4; NW1/4NE1/4; E1/2NW1/4; NE1/4SW1/4; N1/2SE1/4; SE1/4SE1/4	360
	10	W1/2SW1/4 SE1/4SW1/4; SW1/4SE1/4	160
	13	N1/2	324
	14	N1/2	320
	15	NE1/4; N1/2NW1/4; SE1/4NW1/4	280
T. 10 N., R. 13 W.,	7	S1/2NE1/4; NE1/4NE1/4 NE1/4SW1/4; S1/2SW1/4; N1/2SE1/4; SW1/4SE1/4	363
	8	N1/2; N1/2SW1/4	400
	18	W1/2NW1/4W1/4	127
		Total	**3,454**
Acquire Non-federal Mineral - Close to Mineral Entry			
T. 10 N., R. 15 W.,	1	SW1/4NW1/4; S1/2	356
	2	S1/2N1/2; S1/2	480
	11	NE1/4NE1/4	40
	12	N1/2N1/2	160
T. 10 N., R. 14 W.,	4	SW1/4NW1/4; W1/2SW1/4	120
	5	S1/2NE1/4; SE1/4NW1/4; N1/2S1/2	280
	6	SW1/4; N1/2SW1/4; SW1/4SE1/4	276
	9	NW1/4NW1/4	40
	14	N1/2S1/2	160
	15	N1/2SE1/4	80
		Total	**1,992**
		Total Federal Minerals Closed to Mineral Entry	**24,101**
		Total Non-federal Minerals Acquired-Not Open to Entry	**11,612**

Appendix 27
Alternative 3 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Joshua Tree Forest-Grand Wash Cliffs			
Surface and Minerals			
T. 29 N., R. 17 W.,	25	All	640
	27	All	640
	35	N1/2	320
T. 29 N., R. 16 W.,	29	All	640
	31	S1/2	320
T. 28 N., R. 17 W.,	3	All	640
		Total	**2,880**
Non-federal Minerals			
T. 29 N., R. 16 W.,	7	E1/2	320
	19	E1/2; S1/2NW1/4; NE1/4NW1/4; SW1/4	639
	21	All	640
	31	N1/2	320
T. 28 N., R. 17 W.,	1	N1/2N1/2	162
	2	All	642
	11	N1/2N1/2	160
		Total	**2,883**
Black Mountains			
Surface and Minerals			
T. 26 N., R. 21 W.,	33	NE1/4	160
T. 24 N., R. 21 W.,	9	All	640
	25	S1/2NE1/4; W1/2NW1/4; NE1/4SW1/4; SE1/4	360
T. 22 N., R. 20 W.,	4	SE1/4SE1/4	40
	9	E1/2	320
	17	All	640
	19	All	637
	21	All	640
	27	All	640
	29	All	640
	33	All	640
T. 19 N., R. 19 W.,	16	SE1/4SW1/4	40
	17	All (surface only)	640
	21	W1/2 (surface only)	320
		Total	**6,357**
Non-federal Minerals			
T. 26 N., R. 21 W.,	21	All	640
	33	SE1/4	160

(continued)

Appendix 27 (continued)
Alternative 3 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
T. 25 N., R. 22 W.,	1	All	641
	11	S1/2	320
	13	All	640
	15	All	640
	23	All	640
T. 25 N., R. 21 W.,	3	N1/2NE1/4; W1/2; S1/2SE1/4; W1/2SE1/4	522
	5	All	642
	7	All	639
	9	All	640
	15	All	640
	17	All	640
	19	All	638
T. 24 N., R. 21 W.,	3	S1/2	320
	5	S1/2	320
	15	W1/2	320
	17	All	640
	21	All	640
	27	All	640
	29	All	640
	33	N1/2	320
	35	All	640
T. 24 N., R. 20 W.,	31	All	622
T. 23 N., R. 21 W.,	1	All	642
	11	E1/2; NW1/4	480
	13	All	640
	25	E1/2	320
T. 22 N., R. 21 W.,	1	E1/2	321
T. 22 N., R. 20 W.,	5	All	642
	7	All	633
		Total	**16,822**

Silver Creek
Non-federal Minerals

T. 20 N., R. 20 W.,	32	All	640
		Total	**640**

Western Bajada Cultural Resource
Non-federal Minerals

T. 19 N., R. 21 W.,	3	All	644
	5	All	644
	7	E1/2; NW1/4; N1/2SW1/4	560
	9	All	640
	11	All	640
	15	All	640
	23	All	640
	25	All	640

(continued)

Township and Range	Section	Subdivision	Acreage
T. 19 N., R. 21 W., (continued)	27	All	640
	33	All	640
	35	All	640
		Total	**6,968**

Wright Creek Riparian

Surface and Minerals

T. 24 N., R. 12 W.,	31	NE1/4NE1/4	40
T. 23 N., R. 12 W.,	15	NE1/4	160
T. 23 N., R. 11 W.,	31	Lot 6	48
		Total	**248**

Non-federal Minerals

T. 24 N., R. 12 W.,	31	NW1/4NE1/4; S1/2NE1/4; NW1/4; S1/2	588
T. 23 N., R. 12 W.,	5	S1/2	320
	7	E1/2	320
	9	N1/2; E1/2SW1/4; SE1/4	560
	11	W1/2	320
	15	SE1/4	160
	23	SE1/4NE1/4	40
	25	All	640
T. 23 N., R. 11 W.,	31	Lots 3-5, 7-10, 15-22	623
		Total	**3,571**

Cottonwood Creek Riparian

Surface and Minerals

T. 23 N., R. 13 W.,	22	N1/2	320
T. 23 N., R. 12 W.,	19	W1/2SW1/4	79
	30, 31	Mining Claims	76
	33	NE1/4NE1/4	40
		Total	**515**

Non-federal Minerals

T. 23 N., R. 13 W.,	23	All	640
T. 23 N., R. 12 W.,	19	E1/2NE1/4; E1/2SW1/4; SE1/4	320
	29	All	640
	33	W1/2NE1/4; SE1/4NE1/4; W1/2SE1/4	600
		Total	**2,200**

(continued)

Appendix 27 (continued)
Alternative 3 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Cottonwood Mountains Cultural			
Surface and Minerals			
T. 22 N., R. 13 W.,	1	S1/2SW1/4	80
	2	All	724
		Total	**804**
Cherokee Point Antelope Habitat			
Non-federal Surface and Minerals			
T. 24 N., R. 12 W.,	15	South of Sante Fe Right-of-Way	320
	17	South of Sante Fe Right-of-Way	15
	21	S1/2NW1/4; NE1/4SE1/4	120
	36	E1/2	320
T. 23 N., R. 11 W.,	7	NE1/4NE1/4	40
	9	SE1/4SW1/4	40
	10	E1/2	320
	29	SE1/4SE1/4	40
		Total	**1,587**
Non-federal Minerals			
T. 24 N., R. 12 W.,	23	All	640
	21	NE1/4; N1/2NW1/4; SW1/4; W1/2SE1/4; SE1/4SE1/4	520
	23	All	640
	25	All	640
	27	All	640
	29	All	640
	33	All	640
T. 24 N., R. 11 W.,	1	S1/2	293
	3	S1/2	292
	5	S1/2	295
	7	E1/2; Lots 1-5, 8-24	1,213
	29	N1/2; SW1/4; N1/2SE1/4; SW1/4SE1/4	600
T. 23 N., R. 12 W.,	1	All	624
	13	E1/2E1/2	160
T. 23 N., R. 11 W.,	2	All	634
	4	All	633
	7	All	1,309
	8	All	640
	10	N1/2; N1/2SW1/4; SW1/4SW1/4; SE1/4	600
	16	All	640
	19	All	1,308
	20	All	640
	22	All	640
	29	N1/2; SW1/4; N1/2SE1/4; SW1/4SE1/4	600
	31	E1/2; Lots 1, 2, 11-14, 23, 24	640
	33	All	640
		Total	**19,747**

(continued)

Appendix 27 (continued)
Alternative 3 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Hualapai Mountain Research Natural Area			
Surface and Minerals			
T. 18 N., R. 15 W.,	7	N1/2; W1/2SW1/4; NE1/4SW1/4; N1/2SE1/4; NE1/4SE1/4	543
T. 17 N., R. 15 W.,	3	All	643
		Total	**1,186**
Non-federal Minerals			
T. 20 N., R. 15 W.,	33	NW1/4	40
T. 19 N., R. 15 W.,	5	All	644
	29	W1/2	320
		Total	**1,004**
White-Margined Beard-tongue Reserve			
Surface and Minerals			
T. 18 N., R. 17 W.,	35	All	640
T. 18 N., R. 16 W.,	31	W1/2NE1/4; NW1/4NW1/4 (surface only)	119
T. 17 N., R. 17 W.,	1	All	638
	11	All	640
	13	All	640
	15	All	640
	23	All	640
	25	All	640
T. 17 N., R. 16 W.,	8	All (surface only)	640
	9	N1/2	320
	17	All	640
	19	All	638
	21	All	640
	27	All	640
	29	All	640
	31	All	640
	33	All	640
T. 16.5 N., R. 17 W.,	23	All	516
	25	All	640
T. 16.5 N., R. 16 W.,	19	All	507
	21	All	518
	29	All	640
	31	All	627
	32	SW1/4; SW1/4SE1/4	200
	33	All	640
T. 16 N., R. 16 W.,	3	All	637
	4	All	638
	5	All	638
	6	All	636

(continued)

Appendix 27 (continued)
Alternative 3 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
T. 16 N., R. 16 W., (continued)		9	All 640
	10	All	640
		Total	**18,152**
Non-federal Minerals			
T. 17 N., R. 17 W.,	2	All	636
	16	All	640
	36	All	640
T. 17 N., R. 16 W.,	7	All	637
	9	S1/2	320
	32	All	640
		Total	**3,513**
Carrow-Stephens Ranches			
Surface and Minerals			
T. 16.5 N., R. 13 W.,	21	Lots 1, 2; N1/2SE1/4; SE1/4SE1/4	240
	22	Lot 4; W1/2SW1/4	138
	28	W1/2NW1/4NE1/4; S1/2NE1/4NW1/4NE1/4; NE1/4SE1/4; E1/2NE1/4; SE1/4NW1/4NE1/4	113
		Total	**491**
McCracken Desert Tortoise Habitat			
Surface and Minerals			
T. 14 N., R. 15 W.,	3	All	638
	9	All	640
	11	All	640
	13	All	640
	14	S1/2	320
	15	All	640
	17	E1/2	320
	21	E1/2	320
	23	All	640
	25	All	640
	27	All	640
	35	All	640
T. 14 N., R. 14 W.,	19	All	632
	31	All	634
T. 13 N., R. 15 W.,	3	S1/2	320
	9	SE1/4	160
	11	All	640
	13	NE1/4NE1/4; W1/2	360
	15	All	640
	21	NE1/4; N1/2SE1/4; SE1/4SE1/4	280
	23	W1/2	320
T. 13 N., R. 14 W.,	5	All	640
		Total	**11,344**

(continued)

Appendix 27 (continued)
Alternative 3 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
Non-federal Minerals			
T. 13 N., R. 15 W.,	1	All	641
	3	N1/2	321
	21	W1/2; SW1/4SE1/4	360
	23	E1/2	320
T. 13 N., R. 14 W.,	7	All	636
	17	All	640
	19	E1/2E1/2	160
	29	NE1/4; W1/2; E1/2SE1/4	560
		Total	**3,638**
Poachie Desert Tortoise Habitat			
Surface and Minerals			
T. 13 N., R. 12 W.,	7	All	638
T. 13 N., R. 10 W.,	2	SW1/4	160
	3	SE1/4	160
	1, 2, 11, 12	Mining Claims	189
		Total	**1,147**
Non-federal Minerals			
T. 13 N., R. 12 W.,	5	All	637
		Total	**637**
Aubrey Peak Bighorn Sheep Habitat			
Non-federal Minerals			
T. 12 N., R. 14 W.,	17	SE1/4NE1/4NW1/4; W1/2NE1/4NW1/4; NW1/4NW1/4	70
		Total	**70**
Burro Creek Riparian and Cultural			
Surface and Minerals			
T. 15 N., R. 10 W.,	26	S1/2SW1/4 (surface only)	80
	27	NW1/4; NW1/4SW1/4; E1/2SW1/4; SE1/4 (surface only)	440
	28	NE1/4; E1/2NW1/4 (surface only); NW1/4SW1/4	280
	29	SE1/4NE1/4; SE1/4SW1/4; SW1/4SE1/4; NE1/4SE1/4	160
	32	All	640
T. 14 N., R. 12 W.,	11	N1/2; N1/2SW1/4SE1/4SE1/4 (surface only)	600
	13	All	640
	23	All	640
	24	All (surface and minerals on SE1/4)	640
	25	All (surface only)	640
T. 14 N., R. 10 W.,	5	NE1/4NE1/4; W1/2NE1/4; W1/2	441
	7	E1/2; NW1/4; NW1/4SW1/4; E1/2SW1/4	596

(continued)

Township and Range	Section	Subdivision	Acreage
T. 14 N., R. 10 W., (continued)	8	W1/2	320
	17	W1/2	320
	18	E1/2; S1/2NW1/4; SW1/4	560
		Total	**6,993**
Three Rivers Riparian			
Big Sandy			
Surface and Minerals			
T. 14 N., R. 13 W.,	23	All	640
	24	E1/2SW1/4; SE1/4	240
	25	All	640
	26	NW1/4NE1/4; N1/2NW1/4; SW1/4SW1/4; E1/2SW1/4	240
	27	All	640
	33	All	640
	34	E1/2	320
	35	E1/2; NW1/4; NW1/4SW1/4	520
T. 13 N., R. 13 W.,	1	W1/2NE1/4; NW1/4; SW1/4; SE1/4	560
	3	All	640
	9	All	640
	11	N1/2	320
	17	All	640
	21	All	640
	27	All	640
		Total	**7,960**
Santa Maria			
Surface and Minerals			
T. 12 N., R. 9 W.,	29	Mining Claims in E1/2	46
T. 11 N., R. 11 W.,	15	S1/2S1/2	160
	16	S1/2NW1/4; S1/2	400
	17	N1/2	320
	18	NE1/4NE1/4	40
T. 11 N., R. 10 W.,	2	All	641
		Total	**1,607**
Bill Williams			
Surface and Minerals			
T. 10 N., R. 15 W.,	1	All	627
	2	All	640
	10	All	640
	11	All	640
	12	All	627
T. 10 N., R. 14 W.,	4	SW1/4NW1/4; W1/2SW1/4	120
	5	S1/2NE1/4; SE1/4NW1/4; SW1/4; N1/2SE1/4	360
	6	S1/2	316

(continued)

Appendix 27 (continued)
Alternative 3 Acquisitions for Areas of Critical Environmental Concern

Township and Range	Section	Subdivision	Acreage
T. 10 N., R. 14 W., (continued)	9	W1/2NW1/4	80
	14	S1/2	320
	15	S1/2	320
T. 10 N., R. 13 W.,	17 and 18	Mining Claims	182
		Total	**4,872**
		Total for Surface and Minerals	**64,396**
		Total for Non-federal Minerals	**63,280**

Appendix 28
Mineral Potential Classification System

Level of Potential

O. The geologic environment, the inferred geologic processes and the lack of mineral occurrences do not indicate potential for accumulation of mineral resources.

L. The geologic environment and the inferred geologic processes indicate low potential for accumulation and preservation of mineral resources.

M. The geologic environment and the inferred geologic processes and the reported occurrences of valid geochemical/ geophysical anomaly indicate moderate potential for accumulation and preservation of mineral resources.

H. The geologic environment, the inferred geologic processes and the reported occurrences or valid geochemical/ geophysical anomaly and the known mines or deposits indicate high potential for accumulation of mineral resources. The "known mines and deposits" do not have to be within the area that is being classified, but have to be within the same type of geologic environment.

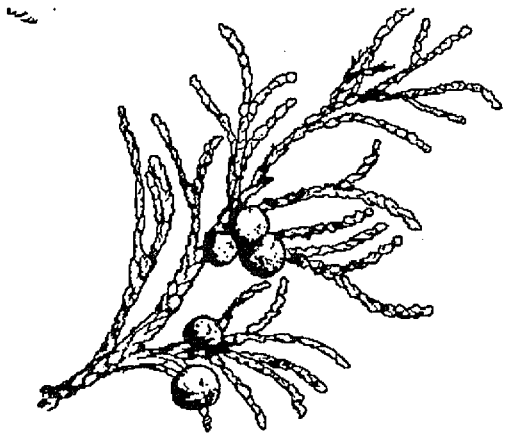
Level of Certainty

B. The available data provide indirect evidence to support or refute the possible existence of mineral resources.

C. The available data provide direct evidence but are quantitatively minimal to support or refute the possible existence of mineral resources.

D. The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

For the determination of no potential, use O/D. This class shall be seldom used, and when used it should be for a specific commodity only. For example, if the available data show that the surface and subsurface type of rock in the respective area is batholithic (igneous intrusive), one can conclude, with reasonable certainty, that the area does not have potential for coal. As used in this classification, "potential" refers to potential for the presence (occurrence) of a concentration of one or more energy and /or mineral resource. It does not refer to or imply potential for development and /or extraction of the mineral resource(s). It does not imply that the potential concentration is or may be economic.



Appendix 29
Production Totals by Mineral Districts

Mineral District	County	Copper (lbs)[1]	Lead (lbs)	Zinc (lbs)	Molybdenum (lbs)	Gold (oz)[2]	Silver (oz)	Manganese (lbs)	Tungsten (st)[3]	Uranium (lbs)	Other (specify)
Aquarius Mtns	Mohave									3.33	0.032 st (Mn)
Artillery	Mohave					*	0.6	95,108.0			
Artillery Peak	LaPaz-Mohave										.243. + (MN)
Black Burro	Mohave	331.0								0.006	0.820 +(MN); 0.029.+ (U)
Bonegas	Mohave				15.0						0.049 + (MN)
Boriana	Mohave	408.0				0.1	12.5		121.3		
Buck Mountains	Mohave	0.3	20.0			3.6	6.0				
Cedar Valley	Mohave		0.6			0.7	6.0				
Chemehuevis	Mohave	0.5	27.0			1.0	3.0		0.15		
Cleopatra	Mohave	480.0	0.5			2.0	12.0				
Cotton Wood	Mohave	457.	0.5			3.0	6.0		0.032		
Cyclopic	Mohave	0.6	10.0			6.11	4.0				
Diamond Joe	Mohave	60.0	40.0	0.3		0.1	30.0				
El Dorado Pass	Mohave	2.0	7.0			7.5	6.0				
Emerald Isle	Mohave	22.167[4]				*	0.4				
Fluorescent	Mohave								0.132		
Garnet Mtn.	Mohave										0.010 st(W)
Gold Basin[5]	**Mohave**	**0.4**	**34.0**			**9.4**	**2.9**				
Gold Hill	**Mohave**					**.040**	**+**				
Greenwood	Mohave	0.4	1.0			1.0	0.6				
Hackberry	Mohave	11.0	150.0	22.0		0.4	81.0				
Hackberry	**Mohave**					**5.0**	**560.0**				
Hualapai	Mohave	7,247.0	897.0	11.40[4]		0.7	99.0				
Kaaba	Mohave	0.2	41.0			0.7	0.55				
Lead Pill	Mohave	28.0	405.0			0.5	2.0				
Lost	Mohave					*	*		0.005		
Lost Basin	Mohave	5.0									
Madril Peak	Mohave	0.6				*					
Maynard	Mohave	12.0	87.0			0.4	100.0			0.270	0.088
McConnico	Mohave	0.2				3.6	1.8				
McCracken	Mohave	10.0	3,031.0	43.0	0.1	0.1	699.0				

Appendix 29
Production Totals by Mineral Districts (continued)

Mineral District	County	Copper (lbs) [1]	Lead (lbs)	Zinc (lbs)	Molybdenum (lbs)	Gold (oz) [2]	Silver (oz)	Manganese (lbs)	Tungsten (st) [3]	Uranium (lbs)	Other (specify)
McCracken (pre-1911)	**Mohave**						**700.0**				
Mesa	Mohave							40.0-80.0			0.3 + (MN)
Minnesota	Mohave	14.0	0.4			0.4	6.0				
Music Mountain	Mohave	3.0	38.0			4.5	12.0				
Oatman	Mohave	60.				1,966	1,147		0.036		
Ophir	Mohave										
Owens	Mohave	3.0	63.0			0.1	10.0				
Pilgrim	Mohave					48.0	72.0				
Pine Peak	Mohave	9.0	178.0	231.0		0.9	13.0				
Rawhide	Mohave	11.0	260.0			*	8.0				
Silverado	Mohave	3.0	39.0				5.0				
Topock	Mohave	3.0				0.1	0.1				
Triple H	Mohave								reserves		
Union Pass/Katherine	Mohave					128.0	313.0				
Virginia	Mohave	1.0	3.0			17.8	17.7				
Walapai	Mohave	666.14[4]	80.10[4]	126.491	53.18[4]	151.0	11.54[4]				
Walapai Hist.	**Mohave**		**10.52**			**41.0**					
Wheeler Wash	Mohave								5.6		
White Hills	Mohave	3.0	12.0			0.4	78.0				
Willow Beach	Mohave					+	+				
Yellow Jacket	Mohave	4.0	0.2	95.0		*	1.0				
Unknown/ Unnamed Districts	Mohave	218.0	326.0	42.0		1.6	42.0				
Cameron	Coconino								1,216.0		289.2 + (U) 213.4 (V_2O_5)
Francis	Coconino	730.0	0.5			0.1	4.0				
Heber	Coconino							996.0			1.1 + (MN)
Johnson & Hayden	Coconino							171.0			0.312 t (MN)
Long Valley	Coconino							4,214.0			4.7 + (MN)
Valle	Coconino	25.0					*				

Appendix 29
Production Totals by Mineral Districts (continued)

Mineral District	County	Copper (lbs) 1	Lead (lbs)	Zinc (lbs)	Molybdenum (lbs)	Gold (oz) 2	Silver (oz)	Manganese (lbs)	Tungsten (st) 3	Uranium (lbs)	Other (specify)
Unkn/ Unnamed Districts	Coconino	20.0					0.07				
Camp Wood	Yavapai					+	*		8.7		
Copper Ridge	Yavapai										
Crosby	Yavapai	21.0	8.5			5.0	4.7				
Eureka (Bagdad)	Yavapai	1.306[4]	7.87[4]	3.62[4]	16.54	67.0	4,691.		reserves	0.116	0.021 + (MN) 0.013 lbs (V_2O_5)
Date Creek	Yavapai									33.0	10.8 st (U) 10.1lb (V_2O_5)
Old Dick	Yavapai	106.40[4]	3.04[4]	306.60[4]		3.5	652.0				
Seligman Iron	Yavapai										(iron)
Tungstonia	Yavapai								7.5		
Zannaropolis	Yavapai								0.110		0.010t(W)
Alamo	La Paz	38.0	16.0			0.1	0.3				

Source Keithnard and others, 1983; USGS MRDS files; Welty and others, 1985.

* = under 100, + = 10 or under

**All figures in thousands

Bold face entries are estimates based on data in Elsing and Heineman (1936)

Bagdad and Mineral Park have been in ongoing production since 1979. Production for 1980 through present is not reflected in these totals.

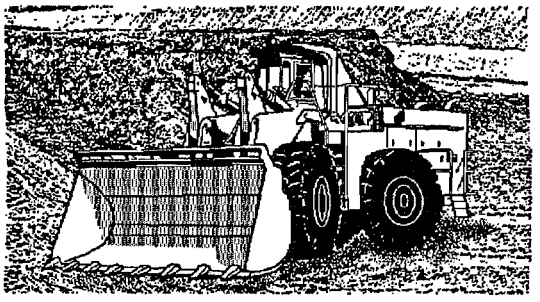
1--lbs - pounds
2--oz - ounces
3--st - short tons
4--Figures are in millions
5--Also includes Goat camp, O.K., Excelsior, Golden Rule

Hualapai/Aquarius MFP
Minerals

Management Framework Plan (MFP) Decisions	Resource Management Plan (RMP) Proposals
M-1.1 The entire planning area, except for withdrawn areas, will remain open to oil and gas leasing.	Decision would be modified by closing the Clay Hills ACEC to mineral leasing.
M-1.2 Prepare an energy leasing EA for identification of sensitive areas in the planning area by FY 83.	Decision dropped.
M-2.1 The entire planning area, except for withdrawn areas, will remain open to mineral location.	Decision would be modified by closing all or part of five ACECs to mineral entry (see Table 11).
M-3.1 Inventory existing sand and gravel pits in the planning area and determine their feasibility for future use. This would be for both free use and material sales.	Decision brought forward unchanged.
M-3.2 Coordinate with state and federal transportation agencies to identify areas of future road construction and begin early designation of materials sites for road construction and maintenance.	Decision brought forward unchanged.
M-3.3 Provide Kingman, Wikieup and Bagdad with a 10-acre community sand and gravel pit for each by FY 84.	Decision dropped.
M-3.4 Leave the planning area open to mineral material disposal, except for the areas recommended for wilderness designation.	Decision would be modified by not allowing mineral material disposals on all or part of five ACECs (see Table 11).
M-3.5 Perform a mineral material trespass inventory on a four-year cycle beginning in FY 81.	Decision brought forward unchanged.

Cerbat/Black Mountains MFP
Minerals

MFP Decisions	RMP Proposals
Keep national resource lands (NRL) open to mining location and mineral leasing.	Decision would be modified by closing all or part of one ACEC (see Table 11).



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Hualapai Aquarius MFP

Lands

MFP Decisions	RMP Proposals
L-1.1 Sell or exchange 480 acres in T. 17 N., R. 18 W., secs. 1 and 24 near Yucca to provide for additional commercial and industrial growth in the area.	Sec. 1 is identified in Appendix 12 for disposal. Section 24 has been dropped from disposal.
L-1.2 Sell or exchange 400 acres in T. 20 N., R. 17 W., sec. 8 near McConnico to provide for additional commercial and industrial growth in the area.	Sec. 8 along with an additional 1,523 acres has been identified in Appendix 12 for disposal.
L-2.1 Modified or accepted six right-of-way corridor recommendations.	Continue designation of five utility corridors as shown on Map 14 as follows: No. 2 - Mead to Phoenix powerline corridor - one mile wide No. 3 - Davis to Prescott powerline corridor - two miles wide No. 5 - San Juan Crossover Line corridor - one mile wide No. 7 - Bagdad Lateral corridor - one mile wide No. 9 - El Paso corridor - two miles wide The MFP identified six corridors, however, two corridors were combined to make one.
L-2.2 Acquire private lands within the corridor boundary segments where public lands predominate.	Decision not accepted.
L-5.1 Initiate revocation procedures on Power Site Project No. 767 dated February 19, 1927.	Through the withdrawal review process, determine what Alamo Lake withdrawals may be revoked. Establish a cooperative management agreement among all agencies involved, i.e., Corps of Engineers, Arizona Game and Fish, State Parks, etc., to designate management of resources and strive for multiple use management.
L-6.1 Develop and pursue a land tenure adjustment program for ownership consolidation for better land resource management and local economic planning and development in the checkerboard areas of the planning area.	Adjust landownership patterns through disposal of lands identified in Appendix 12 for lands high in resource values. Must provide public benefit. Lands have been identified and reserved in Appendix 17 for Recreation and Public Purposes.
L-7.1 Dispose of seven tracts of public land.	Decision not accepted.

Black Mountains MFP

Lands

R-1 Retain national resource lands (NRLs) outside disposal areas and acquire via exchange the remaining private and state lands to consolidate federal ownership.	Retain and acquire where possible public lands not identified in Appendix 12.
R-2 Dispose of NRLs in disposal areas by state selection, Recreation and Public Purposes leases and conveyances and private or state exchange.	Dispose of public land identified in Appendix 12 for land high in resource values. Must provide public benefit.
R-3 NRLs reserved for future R&PP acquisition for Mohave County community uses.	Lands identified in Appendix 17 shall be reserved for Recreation and Public Purpose disposals to meet community needs. In addition, disposal areas identified in Appendix 12 may be available for Recreation and Public Purposes.

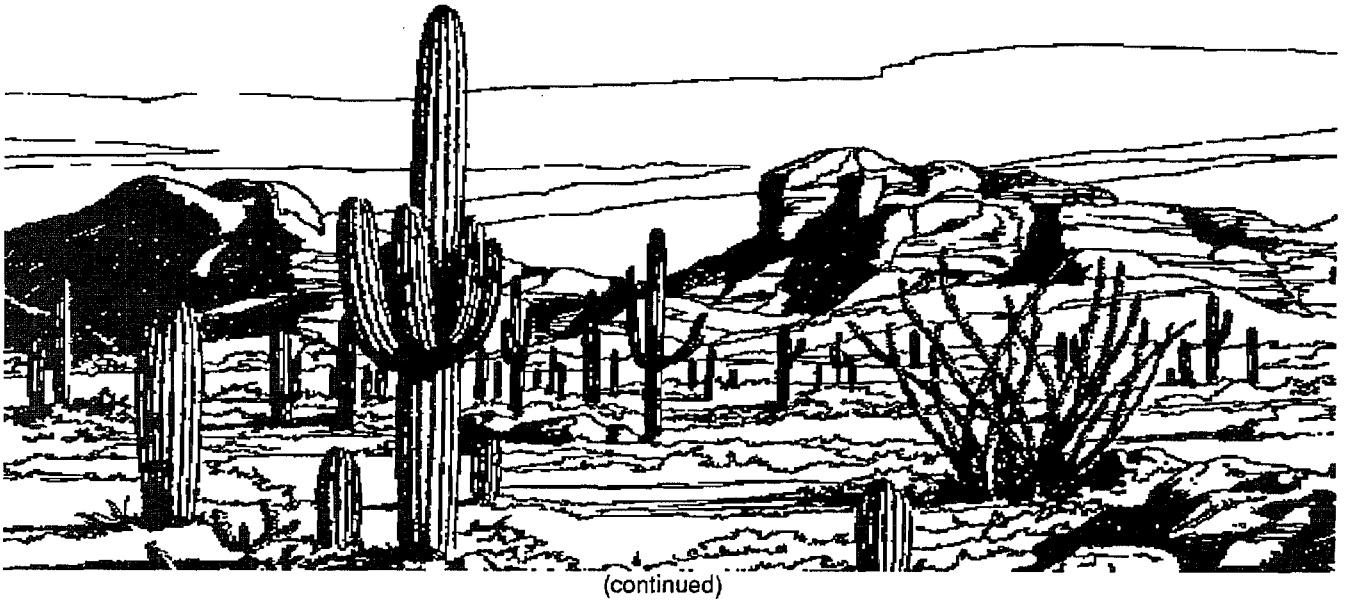
(continued)

Appendix 30 (continued)
Black Mountains MFP
Lands (continued)

MFP Decisions	RMP Proposals
R-4 Cancel Lake Mead exchange classification A-676.	No longer valid.
R-5 Set aside land along U.S. Highway 66 to serve as a scenic corridor and buffer zone.	Decision not accepted.
R-7 Establish two areas as potential communications sites and allow future applications only in these areas.	Continue designation of Willow Beach and Oatman communication sites and designate two additional sites in the Mount Perkins area.
R-8 Revoke the two major withdrawals in the unit: E.O. 5339, 4/25/1930 and E.O. 1/20/1955.	No longer valid.
R-9 Conduct field study to determine if unauthorized uses and occupancy exist.	Request survey, upon funding, to identify and resolve unauthorized use in the town of Oatman.
R-10 Retain the lands for future state selection or exchange programs.	Lands within disposal areas, as shown in Appendix 12, have been identified for state exchange.

Cerbat Mountains MFP
Lands

R-2 Dispose of NRLs in these areas.	Dispose of lands as identified in Appendix 12 for lands with high resource values. Must provide public benefit. Lands identified in Appendix 17 have been identified and reserved for Recreation and Public Purposes.
R-3 Not allow communication sites in the retention areas until a study and written communication site plan has been completed.	Prepare communication site plans for all designated communication sites prior to substantial development, as identified for each site.
R-4 Confine future transmission type rights-of-way to the defined corridors to the maximum extent feasible.	Designate utility corridors as shown on Map 15. Major rights-of-way will be restricted to these corridors as much as technically possible.



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Watershed Management

MFP Decisions	RMP Proposals
W-1.1 Incorporate a program for intensive soils management into the planned allotment management plans on the 12 allotments which contain soils in the critical or moderate condition classes by FY 85.	Brought forward with changes. All grazing allotments are categorized according to current watershed condition, their vulnerability to erosion and their potential for improvement. This rating will form one of the criteria used in establishing priorities for activity plan development. The activity plan will address treatment to insure proper soil management.
W-3.2 Initiate the following special studies:	
a. Search for additional voucher specimens of *Amsonia palmeri* deposited in all herbaria in New Mexico and Texas. Completion date should be FY 82.	a. Dropped. No longer a valid decision. No longer a species of concern.
b. Obtain locality data from all herbaria in the states where *Opuntia pulchella* occurs (Utah, Idaho, Nevada, California) and visit documented localities. Completion date should be FY 82.	b. Dropped. No longer a valid decision. No longer a species of concern.
c. Determine the viability and germination requirements of *Amsonia palmeri* seeds. Study should begin by FY 82.	c. Dropped. No longer a valid decision. No longer a species of concern.
d. Carry out a fecal analysis of samples collected throughout the Burro Creek population of *Cowania subintegra* in T. 14 N., R. 11 W., sec. 1. Study should begin by FY 82.	d. Dropped. No longer a valid decision. Study was completed as planned.
e. Determine the viability and germination requirements of *Cowania subintegra* seeds. Study should begin in FY 82.	e. Brought forward, dropping the 1982 date requirement.
f. Sample and identify the soils found at both known localities of *Cowania subintegra* in T. 14 N., R. 11 W., sec. 1 and in T. 3 S., R. 20 E. and T. 2 S., R. 20 E., sec. 23. Study should begin in FY 82.	f. Brought forward, dropping the 1982 date requirement.
g. Determine the viability and germination requirements of *Sophora arizonica* seeds. Study should begin in FY 82.	g. Dropped. No longer a valid decision. No longer a species of concern.
h. Long-term monitoring studies of exclosed and unfenced populations of *Coryphantha vivipara var. buoflama, Amsonia palmeri, Cowania subintegra, Opuntia curvospina, Opuntia littoralis var.martiniana and Sophora arizonica* should begin by FY 82. These studies will provide data on the plants' population biology, including demography, phenology and productive ecology (pollination, seed dispersal, seed ecology and seedling ecology). Impacts of herbivores, parasites and diseases of various human activities will be documented. These studies should begin by FY 82.	h. Brought forward with changes. With the exception of *Cowania subintegra*, none of the species listed are identified as special status plants. Monitoring of the *Cowania* population will continue.
W-3.3 Continue inventory of additional areas that provide suitable habitat for *Coryphantha vivipara var. buoflama, Amsonia palmeri, Cowania subintegra, Opuntia littoralis var. martiniana, Opuntia curvospina and Opuntia pulchella.*	Brought forward with changes. With the exception of *Cowania subintegra*, these are no longer species of concern. Inventory of suitable habitat for *Cowania* will continue.

(continued)

MFP Decision	RMP Proposal
W-4.2 Reduce livestock numbers on the Burro Creek Allotment to bring grazing in line with current forage production. Develop an allotment management plan for livestock and a habitat management plan for wildlife in concert, each of which will be designed to resolve site-specific problems within the allotment and limit utilization, on any one pasture, in the Hualapai-Hayden-Aspen-Dean peak and Antelope Wash areas to 60%.	Decision brought forward with changes. Actions have been partially accomplished through proper livestock and wildlife habitat management.
W-4.3 Protect threatened and endangered plants by acquiring land in the following areas:	
a. Secs. 5,6,7 and 18 in T. 16 N., R. 9 W., sec. 36 in T. 16 N., R. 10 W., secs. 2,21,22,27,28,29 and 32 in T. 15 N., R. 10 W. and secs. 5,7,8 and 18 in T. 14 N., R. 10 W. along the Burro Creek drainage. Negotiations should be initiated by FY 82.	a. Brought forward with changes. Some parcels have already been acquired for riparian values. Others are identified as priority acquisitions.
b. Sec. 5 in T. 19 N., R. 15 W. along Antelope Wash, secs. 15, 16 and 17 in T. 20 N., R. 15 W. in the Dean Peak area and sec. 31 in T. 20 N., R. 15 W. near Hualapai Peak.	b. Brought forward without change. Sec. 16, T. 20 N., R. 15 W. is identified in the RMP as a priority acquisition for wildlife reasons. All other parcels listed here have already been acquired by the BLM.
W-4.4 Maintain the pristine condition of the vegetation on the unnamed mesa in sec 4 of T. 15 N., R. 11 W., Wabayuma Peak and in upper Yellow Flower and Horse canyons.	Brought forward unchanged.
W-4.5 Continue field studies in the Burro Creek, Goodwin Mesa, Burro Creek Mesa, Yellow Flower-Horse canyons, Antelope Wash, Wabayuma Peak, Hualapai-Hayden—Aspen-Dean peaks, Aubrey Peak and Yucca-Dinosphere areas.	Brought forward unchanged.
W-5.1 Contract for a report to interpret the USGS Bill Williams water quality study in light of BLM needs in FY 85.	Action has been accomplished.
W-5.2 Set up a water quality monitoring system for surface waters within the watershed at the old USGS water quality stations. A contract for a study similar to but with a greater emphasis on BLM needs (W-5.1) than that made for the Bill Williams study, can be made with USGS by FY 85.	Brought forward with changes. The RMP states that the BLM will monitor water quality on public lands in general. Emphasis on water quality is provided in ACEC prescriptions.
W-5.3 Conduct an instream flow study on the Burro Creek Watershed. Critical and optimal flows for habitat maintenance will be determined.	Actions have been accomplished.
W-6.1 Post warning signs of potential excesses of standards for partial body contact recreation along the creek in the area of the campground. Warnings only need to be posted in times when excessive fecal coliform bacteria are expected.	Brought forward unchanged.

(continued)

Appendix 30 (continued)

Black Mountains Planning Unit

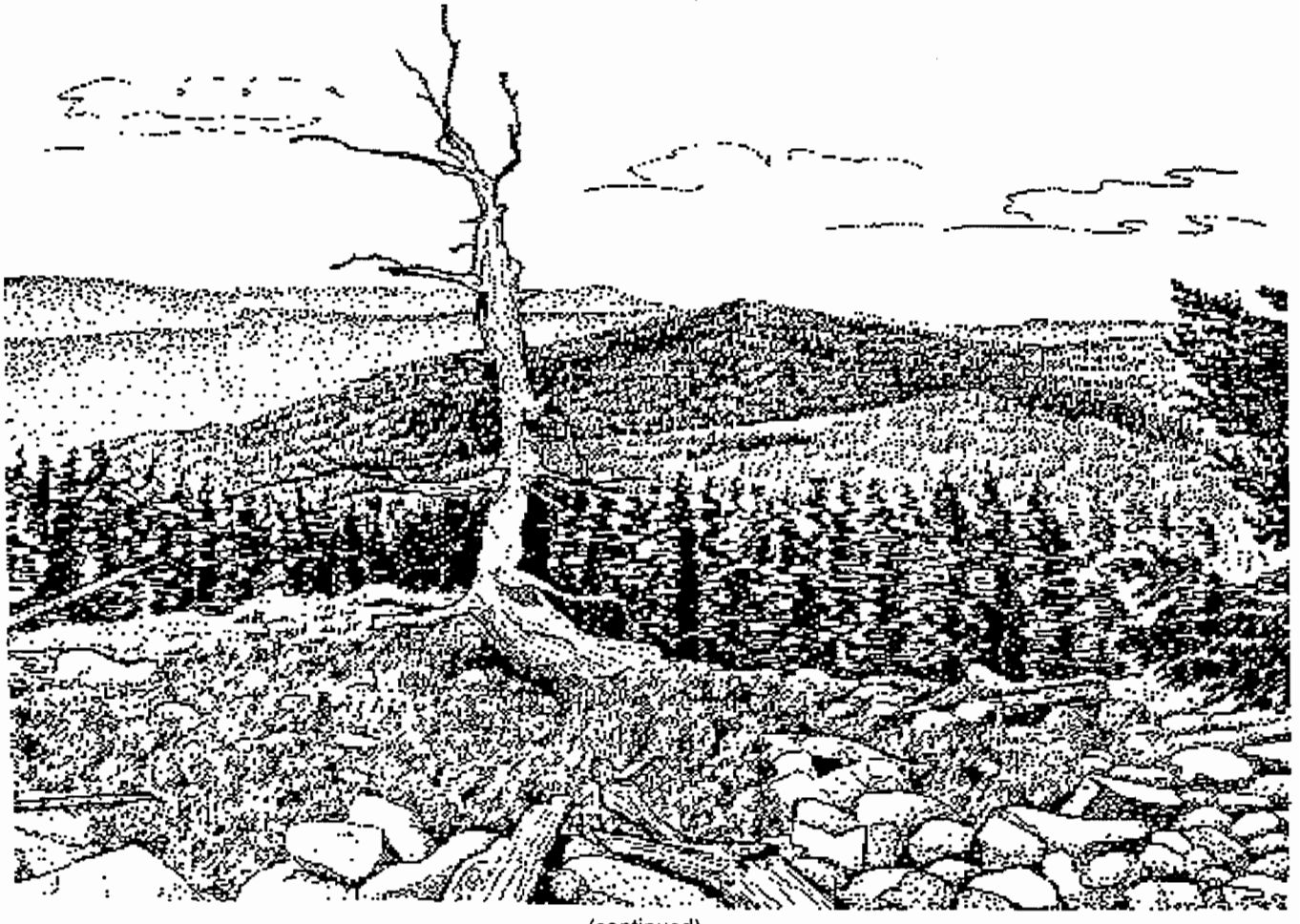
Watershed Management

MFP Decisions	RMP Proposals
Implement grazing management systems with proper livestock numbers and adequate rest to meet the physiological requirements of the vegetation.	Brought forward with minor changes. Watershed conditions could potentially be improved or maintained by implementing one of several types of activity plans (watershed, wildlife, grazing, etc.)

Cerbat Mountains Planning Unit

Watershed Management

MFP Decisions	RMP Proposals
Implement allotment management plans on all R-1 (retention) lands.	Brought forward with some change. Allotment management plans will be developed on allotments in the BLM Improve and Maintain selective management categories.



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Hualapai/Aquarius MFP
Vegetative Products

MFP Decisions	RMP Proposals
F-1.1: Develop and implement an agreement and schedule with Prescott National Forest to provide regular surveillance for observing changes in the natural balance of disease and insect populations in the ponderosa pine stand on Pine Creek in T. 17 N., R. 8 W. Agreement to be developed by 1985. Subject to availability of personnel and funding.	Dropped. No longer a valid decision.
F-1.2: Set up and implement a schedule of inspections by BLM personnel of the Kingman Resource Area to observe changes in the natural balance of disease and insect populations in the ponderosa pine stands in the Hualapai Mountains area. Implement inspection by 1985. Subject to availability of personnel and funding.	Dropped. No longer a valid decision.
F-2.1: Develop and implement an agreement with Prescott National Forest to provide surveillance and initial attack on all fires in the forested area on Pine Creek in T. 17 N., R. 8 W.	Dropped. No longer a valid decision.
F-2.2: Continue the fast initial attack and maximum suppression policy of the Phoenix District as related to the Hualapai Mountains area.	Dropped. No longer a valid decision.
F-3.1: Require that all plants disturbed during land clearing operations be salvaged.	Brought forward without change in all alternatives in "Vegetative Products" section.
F-4.1: Train BLM personnel to observe, recognize and report any activity that might indicate plants are being removed from public lands.	Dropped. No longer a valid decision. The subject is, however, discussed under Law Enforcement in "Support Services."
F-4.2: Initiate a program to inform and educate the public of the unlawfulness, under both federal and state laws, of removing native plants without legal permits.	Brought forward unchanged.
F-5.1: Restrict *Yucca schidigera* cutting to an area south of the south section lines of secs. 19 through 24, T. 20 N., R. 17 W. and to the east of the Hualapai Mountains.	Brought forward with changes. Harvest of this plant will be subject to review of compatibility with other resource values and the ability to harvest on a sustained yield basis.
F-6.1: Delineate and patrol areas designated for free use wood permits. The harvest areas would need to be located on the ground each year.	Dropped. No longer a valid decision.

(continued)

Hualapai/Aquarius MFP
Vegetative Products

MFP Decisions	RMP Proposals
F-7.1: Mark, delineate and patrol areas for Christmas tree cutting (pinyon pine only). Specific areas will be marked each year.	Brought forward with changes. The harvest of Christmas trees would be treated similar to any other harvest demand. It is subject to review of compatibility with other resource values and the ability to harvest on a sustained yield basis.
F-8.1: Develop a fire management program to reduce the underbrush in the ponderosa pine stand in the Hualapai Mountains area. Some areas have heavy stands of old chaparral that should be considered for prescribed burns also.	Dropped. No longer a valid decision. Discussion under Fire Management in the "Management Guidance" section addresses both fuel management and prescribed fire. Fire as a range improvement tool is also possible as part of activity plan (AMP, HMP) development.

Black Mountains Planning Unit
Vegetative Products

MFP Decisions	RMP Proposals
Do not allow commercial sale or the free permit harvesting of juniper tree fence posts or Christmas trees in the unit.	Brought forward with changes. Do not allow the sale or free-use permit harvesting of juniper or pinyon pine trees.
Allow other legal native plants to be made available for local government and non-profit association landscaping use.	The harvest of landscape plants would be allowed only through salvage where vegetation is destined for destruction because of surface disturbance. This salvage program is open to the general public as well as organizations.
Provide for commercial sale of *Yucca schidigera* in management areas.	Dropped. No longer a valid decision. The commercial harvest of any vegetative product from public lands would first be subject to review of compatibility with other resource values and the ability to harvest on a sustained yield basis.

Cerbat Mountains Planning Unit
Vegetative Products

MFP Decisions	RMP Proposals
MFP II Recommendation	
Allow no commercial harvest of woodland species and no free or commercial Christmas tree harvest.	Dropped. No longer a valid decision. The commercial harvest of any vegetative product from public lands would first be subject to review of compatibility with other resource values and the ability to harvest on a sustained yield basis.
Allow fence post cutting and dead firewood gathering for family use.	
Allow commercial sale of yucca in geographic areas 1, 4, 5, 6 and 7.	

(continued)

Black Mountains/Cerbat Planning Unit
Range Management

MFP Decision	Cerbat/Black Mtns. FES	*RPS Update	RMP Proposal
Black Mountains MFP Decision -- Implement allotment management plans and/or grazing systems on all R-1 (retention) lands except in the Boundary Cone, McHeffy and Warm Springs areas that have previously been reserved for wildlife and excluded from livestock grazing. Cerbat MFP II Recommendation -- Implement allotment management plans on all R-1 (retention) lands, except for the Mt. Wilson Wildlife Management Area where livestock grazing will be excluded for the benefit of the desert bighorn sheep.	The proposed allotment management plans, as described in the FES, will be reviewed and rewritten to provide for less complex and less costly plans based on site-specific conditions. This revision will be made in cooperation with the allottees, the Kingman Grazing Advisory Board, the State Land Department, the State Game and Fish Department and other concerned individuals. The AMPs will be dynamic documents, changing as necessary in response to the special conditions of each allotment.	Sixteen of the proposed AMPs were written and signed between 1980 and 1985. Grazing allotments were classified according to the BLM's selective management category criteria. This resulted in there being 21 "I" allotments, 7 "M" allotments and 11 "C" allotments in the planning area. Itemized listing of these allotments can be found in the 1989 Rangeland Program Summary Update for the Cerbat/Black Mountains Planning Area or in the Kingman Resource Management Plan. Category "I" and "M" allotments receive priority for intensive grazing management, so these are the ones which are now planned for AMP development. The Silver Creek, Thumb Butte, Portland Spring and Turkey Track allotments which were scheduled for AMP development in the FES are no longer being considered.	AMP development: Decision carried forward without change. AMPs will be written or revised on all "I" and "M" allotments in the planning area. Priority for AMP development will be based on resource issues present on the allotment. Livestock exclusion in Mount Wilson Range: This refers to the Cerbat mountains MFP-II recommendation to close 24,000 acres to livestock grazing in critical bighorn sheep habitat. This recommendation has not been carried forward into the RMP. The area lies within an allotment currently classified as ephemeral and, lacking water, is unsuitable for grazing as is.
Black Mountains MFP Decision -- Designate the allotments that qualify for ephemeral-perennial and ephemeral range classification.			Allotment classification: This refers to the Black mountains MFP decision to classify allotments as either ephemeral or perennial/ephemeral based on forage availability. This decision is carried forward without change. The results of the ongoing ecological site inventory will provide the information for allotment classification.

Black Mountains/Cerbat Planning Unit
Range Management

MFP Decision	Cerbat/Black Mtns. FES**	*RPS Update	RMP Proposal
Cerbat MFP II Recommendation -- R-2 disposal lands will be interimly managed and licensed for livestock grazing management until their disposal. No new BLM range improvements will be installed on these disposal lands.			Grazing management on disposal lands: This refers to the Cerbat Mountains MFP-II recommendation to manage R-2 disposal lands for grazing until disposal occurs. Lands identified for disposal have changed and are addressed in the Lands and Realty section of this document. The recommendations made for interim grazing management pending disposal are carried forward without change in the RMP.
Cerbat MFP II Recommendation -- Initiate pinon-juniper thinning and seeding projects in geographic areas 1 and 2 for the purpose of increasing forage production.	Range improvements will be constructed in line with the specific management requirements identified for each allotment. The BLM may construct some range improvements on private and state-owned lands when the improvements are essential to the success of grazing systems, when benefits to resources on public lands will result and when the necessary easements and cooperative agreements can be obtained. Construction will start immediately and continue to completion as funds become available.		Pinon-juniper thinning and seeding: This refers to the Cerbat mountains MFP-II recommendation to conduct pinon and juniper eradication in areas on the Music Mountain and Crozier Canyon grazing allotments for the purpose of increasing forage production. The Cerbat/Black Mountains FES stated that range improvements will be constructed to meet management requirements identified for each grazing allotment. Pinon-juniper thinning and seeding as a valid range improvement technique can be initiated following NEPA review. This recommendation is dropped from the RMP, since it is covered elsewhere. Range improvements: The decision to construct range improvements, made in the Cerbat/Black Mountains Grazing FES, is carried forward without change.

Black Mountains/Cerbat Planning Unit
Range Management

MFP Decision	Cerbat/Black Mtns. FES	*RPS Update	RMP Proposal
	The initial stocking rate for the ES area will be 75,188 animal unit months (AUMs), a net reduction of 16,444 AUMs from the current allowable use. Adjustments will range from an 18% increase to a 56% decrease or an average 18% decrease for the ES area.	Stocking rates were established on all allotments in the planning area, either as proposed by range survey or through mutual agreement between the BLM and permittees. Further adjustments to stocking rates in the planning area would be determined by monitoring rangeland use and condition.	Adjustments to stocking rates: Decision carried forward without change. Stocking rates for allotments will be adjusted, if necessary, on the basis of integrated rangeland and habitat monitoring.
	Utilization of key species will be limited to 50% except in allotments containing uncontrolled lands. In these cases, adjustments will be determined using the formula on page I-21 of the ES. Annual adjustments in stocking numbers may be made on the basis of actual use experience acquired in reaching the 50% utilization level of the current year's growth of key species within sample areas. If required, adjustments will be made in authorized livestock grazing use during the subsequent billing period.		Utilization limitations: Limits for utilization of key forage species by grazing livestock within the Cerbat/Black Mountains Planning Unit will remain as described in the FES. This decision is carried forward without change.

*Range Program Summary **Final Environmental Statement

Hualapai/Aquarius Planning Unit
Range Management

MFP/EIS	RPS Updates	RMP Proposal
RM-1.1: Manage 27 allotments (see Table RM-1a) in accordance with the BLM's selective management categories "Improve" and "Maintain." Develop AMPs for these allotments to improve range condition and increase forage for livestock, burros and wildlife. AMPs will specify actions necessary to improve forage conditions while protecting and improving terrestrial and aquatic habitats.	There are now 29 allotments managed in either the "Improve" or "Maintain" categories. The Chino Springs and Alamo Crossing allotments, although ephemeral, were moved to the "Improve" category because of the presence of riparian resources and threatened and endangered species habitat.	No change.
Happy Jack Allotment 0043 should be managed as a custodial allotment due to its low resource value, potential for improvement and the large amount of subdivided private lands.	Action has been accomplished.	
Develop activity plans (AMPs, HMPs, HMAPs) in close coordination with users and resource specialists. Range improvements will be installed as needed to obtain management objectives.	No change.	No change.
Possible wilderness designation could prevent the BLM and the allottees involved from implementing grazing management on the Arrastra Mountain, Artillery Range, Bagdad, Bateman Spring, Burro Creek Ranch, Greenwood Community, Greenwood Peak Community and Black Mesa allotments.	The Arrastra Mountain, Artillery Range, Bagdad, Bateman Spring, Burro Creek Ranch, Greenwood Community, Greenwood Peak Community and Black Mesa allotments remain subject to AMP development.	No change.
Forage allocations will be determined by BLM monitoring studies, which include actual use, utilization, trend in condition and climate. The forage needs for dependent wildlife and a viable herd of 140 burros shall be given priority in making forage allocations. Table RM-1b shows proposed allocations for wildlife, burros		Brought forward with changes. Integrated habitat monitoring would be initiated to determine forage allocations necessary to support a thriving natural ecological balance among all ungulates. Available forage would be allocated for each species.

(continued)

Hualapai/Aquarius Planning Unit
Range Management

MFP/EIS	RPS Updates	RMP Proposal
and livestock. These proposed allocations will be used in conjunction with monitoring data in issuing decisions which adjust livestock numbers. Until present numbers of burros are reduced, the BLM faces a potential over-allocation of forage on some of its public rangelands. If monitoring studies show that forage is being over-allocated on allotments with wild burros, the BLM will temporarily reduce livestock numbers further to compensate for the excess burros. These additional reductions will remain in force until burro numbers are reduced to recommended levels. Future increases in forage production will be allocated first to wildlife, burros will remain at the same levels (140 animals) and any remaining forage will be allocated to livestock.		
Utilization, condition and trend studies should be initiated as soon as possible on selected allotments or at the time of AMP implementation.	Action has been accomplished.	
If the proposed intensive grazing management does not provide the needed improvement and protection of riparian and aquatic habitat, different methods must be found to accomplish this goal. This could include elimination of livestock grazing where it is determined to be an inherent cause of habitat degradation.	No change.	No change.
Initiate monitoring in 1983.	No change.	No change.
Implement AMP development and allocate forage between 1983 and 1991.	AMP development and forage allocation based on results of monitoring will exceed the projected end date of 1991.	No change.

(continued)

Hualapai/Aquarius Planning Unit
Range Management

MFP/EIS	RPS Updates	RMP Proposal
Utilization should not exceed an average 60% and generally range between 40% and 60%.	No change.	No change.
Allotments are listed on Table RM-1a by priority for AMP implementation.	No change.	The priority listing for AMP development shown in the RPS Updates has been targeted in the RMP as needing re-evaluation. A new priority listing will reflect consideration for resource values not identified earlier.
RM-1.2: Designate the allotments listed in Table RM-2a for ephemeral use only and manage as "Custodial" under the BLM's Selective Management Policy. Limited monitoring will be carried out such as some trend studies and utilization during periods of use. Federal investment in range improvements will be minimal. Supervision will occur only during periods of use. AMPs will not be developed.	The Chino Springs and Alamo Crossing allotments were given ephemeral designation. However, in 1989 these two allotments were placed in the "Improve category" because of the presence of riparian resources and T/E species habitat on the allotments.	Brought forward with change. The Chino Springs Allotment would be removed from consideration for any livestock grazing if the Proposed Alternative were selected.
RM-1.3: Manage the allotments listed on Table RM-3a as "Custodial." These allotments will not usually require an AMP but range condition, trend and utilization would be observed through scheduled supervision visits. Monitoring studies may be initiated on a case-by-case basis to assess changes observed through use supervision. Livestock management and supervision will largely be the responsibility of the permittee, along with improvement work. Federal investment will be minimal. AMPs will not usually be prepared unless the permittee desires.	Allotments, taken from Table RM-3a, which continue to he managed Custodially, include Byner Cattle Company 0116, JJJ 2105, Kellis 0107, Hibernia 'B' 0083 (formerly Kent's Cane Spring 'B') and Yolo 0115 (formerly Sweetmilk). The Bottleneck Wash, Fancher Mountain, Round Valley, Cane Spring Wash 'B', Yellow Pine 'B', Trout Creek, Kayser Wash, White Springs and Lazy YU 'B' allotments were cancelled because of land exchange actions.	Brought forward without change.

(continued)

Hualapai/Aquarius Planning Unit
Range Management

MFP/EIS	RPS Updates	RMP Proposal
Allocate forage on the public lands to existing numbers of wildlife with the remainder going to livestock. Table RM-3b shows proposed allocations for wildlife and livestock. These proposed allocations will be used as a basis for grazing agreements, and in conjunction with monitoring data in issuing livestock adjustment decisions.		Decision changed to read, "Integrated habitat monitoring would be initiated to determine forage allocations necessary to support a thriving natural ecological balance among all ungulates. Available forage would be allocated for each ungulate species."
RM-1.4: Develop a fire management program complementary to and coordinated with the range management program. This should include selection of prescribed burn areas, modified suppression areas and intensive control areas.	No change.	Dropped. No longer a valid decision. Identification of prescribed burn areas will be identified during activity plan development to meet resource objectives. Wildfire suppression is covered under the Phoenix District Fire Management Activity Plan and is discussed under the Management Guidance section of the RMP.
RM-1.5: In conjunction with AMP implementation, initiate range studies to provide site-specific information regarding climate, soils and vegetation in the planning area. This would include construction of exclosures on the important range sites in the planning area to assess the impact of various grazing treatments on the vegetation. Studies such as actual use, utilization, condition and trend, phenology, fecal analysis and climate should be implemented.	No change.	No change.
RM-1.6: Test and evaluate, on a small scale, prescribed burns and land treatments in the oakbrush-ceanothus chaparral area for potential rangeland benefits.	No change.	Dropped. No longer a valid decision. This action has already been undertaken.

(continued)

Hualapai/Aquarius Planning Unit
Range Management

MFP/EIS	RPS Updates	RMP Proposal
RM-1.7: Manage the four allotments listed in Table RM-4a as Custodial. These allotments will not usually require an AMP but range condition, trend and utilization would be observed through scheduled supervision visits. Monitoring studies may be initiated on a case-by-case basis to assess changes observed through use supervision. Livestock management and supervision will largely be the responsibility of the permittee, along with improvement work. Federal investment will be minimal. AMPs will not usually be prepared unless the permittee desires.	The Little Cane 0082, Sandy 0064, Cane Springs Wash 0016 and Hot Springs 0046 allotments continue to be managed Custodially.	Brought forward without change.
Allocate forage on the public lands to existing numbers of wildlife with the remainder going to livestock. Table RM-4b shows proposed allocations for wildlife and livestock. These proposed allocations will be used as a basis for grazing agreements and in conjunction with monitoring data in issuing livestock adjustment decisions.		Decision changed to read, "Integrated habitat monitoring would be initiated to determine forage allocations necessary to support a thriving natural ecological balance among all ungulates. Available forage would be allocated for each ungulate species."
RM 2.2: Dispose of these tracts of public lands on allotments listed below by exchanging for lands which would block up public lands elsewhere or which has higher resource value. Retain and protect any of these lands which have significant wildlife, botanical, watershed, mineral, recreational or cultural values.	No change.	Brought forward with considerable change. Public lands identified for disposal or exchange have been expanded upon. This should be addressed in the Lands/Realty Summary.

(continued)

Hualapai/Aquarius Planning Unit
Range Management

MFP/EIS	RPS Updates	RMP Proposal
Public lands to be considered for disposal: Allotment — Acres Aquarius — 80 Cane Springs — 800 Round Valley — 640 Fancher Mountain — 3,150 Francis Creek — 79.71 Trout Creek — 640 Byner Cattle Company — *5,896 JJJ — 303 Hualapai Peak B — **2,880 Yellow Pine B — 636 Cane Spring Wash B — 40 Sandy B — 80 White Springs — 1,400 Kayser Wash — 640.24 * The majority of this is within the Bagdad Copper Mine. Less than 1,000 acres are outside the area disturbed by the mine. ** Exchange for private lands in Hualapai Peak Unit A.		
Decision RM-2.3: Investigate, identify and acquire areas where legal access is necessary to conduct efficient management of public lands.	No change.	Brought forward without change.

(continued)

Cerbat/Black Mountains MFP
Cultural Resources

MFP Decisions	RMP Proposals
Conduct a site inventory of both planning units.	Brought forward without change.
Develop an archaeological protection plan.	Brought forward without change.

Hualapai/Aquarius MFP
Cultural Resources

MFP Decisions	RMP Proposals
Plan and implement impact studies to determine the effects of: a. Increased access, population and visitation. b. Livestock grazing, range improvements and burro program. c. Erosion on all types of cultural resources in the planning area by 1982.	Dropped. No longer a valid decision.
Evaluate the relative effectiveness of protection measures for cultural resources in the planning area by 1990.	Dropped. No longer a valid decision.
Initiate studies to identify existing sociocultural values as well as areas and cultural resource properties with sociocultural values for Native American groups, residents and land users in the planning area by 1981.	Brought forward with elimination of deadline.
Conduct inventory to identify specific cultural resource properties and determine relative amounts of site types in the planning area which should be conserved for future use and/or protected by 1982.	Brought forward with elimination of deadline.
Provide immediate and long-term in situ preservation and protection of selected cultural resources threatened by agents of deterioration by 1985.	Brought forward with elimination of deadline.
Utilize selected cultural resources in the planning area to develop a cultural chronology according to these priorities: a. Initiate studies to refine the use of artifacts and features as chronological indicators, by 1982. b. Initiate studies and permit research projects designed to investigate changes in settlement patterns.	Brought forward with elimination of deadline.

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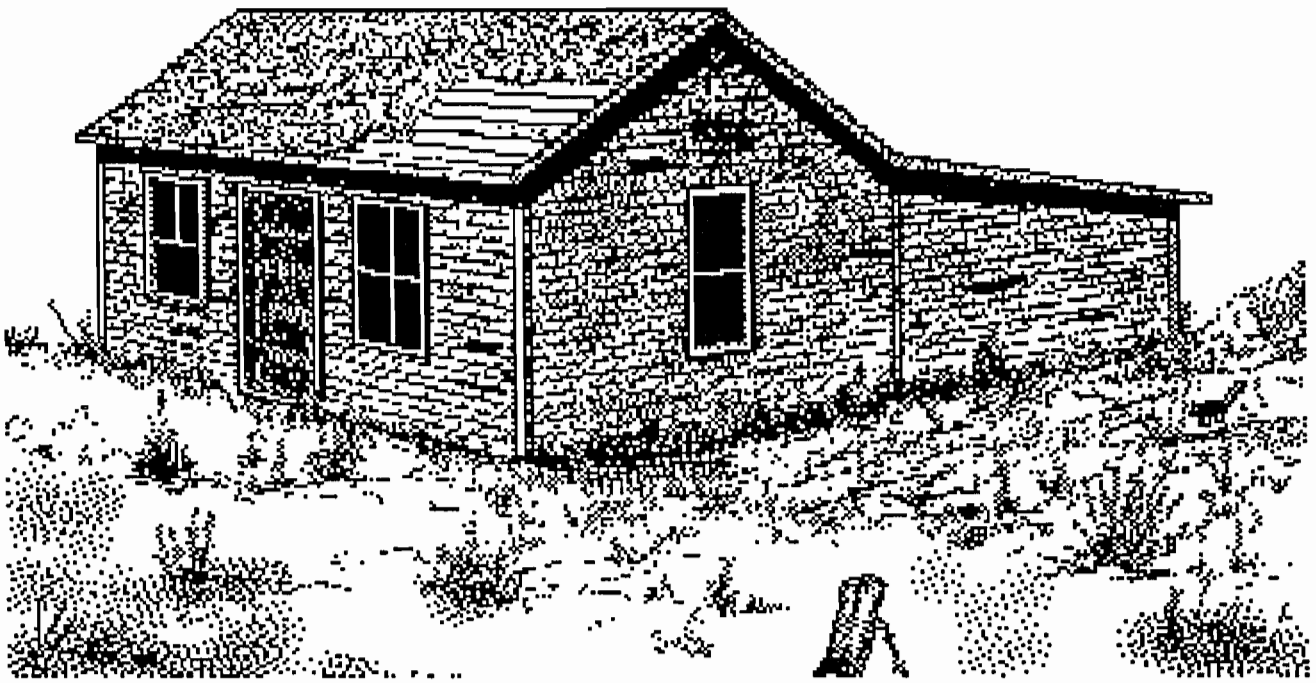
MFP Decision	RMP Proposal
c. Allow projects concerned with the nature and extent of Archaic and Paleo-Indian occupation.	
Utilize cultural resource in the planning area to determine the nature of intersite and intrasite variability in the following ways:	Brought forward with elimination of deadline.
a. Implement studies to verify and refine Class II Phase I inventory site types and determine the function of rockshelters and sites with structural remains by 1982.	
b. Permit research projects to investigate relationships between prehistoric and historic aboriginal populations.	
c. Permit research projects designed to archaeologically confirm the ethnographic range of the Hualapai and Yavapai.	
d. Permit research projects aimed at definition of prehistoric cultural traditions (e.g., Prescott/Cerbat and Amacava/Cerbat) and their distribution.	
e. Allow research projects designed to determine the nature of trade relationships.	
f. Allow research projects to examine evidence of multiple aboriginal use, occupation and social organization.	
Provide environmental data necessary for reconstruction of the prehistoric environment including botanical, hydrological, soils, geological, range, wildlife and climatological information.	Brought forward without change.
Utilize cultural resources in the planning area to improve the understanding of prehistoric utilization of the environment in the following ways:	Dropped. No longer a valid decision.
a. Implement studies to determine correlations between site types and water source type and distance by 1982.	
b. Permit research projects on cultural resource properties to obtain and analyze data on native plants utilized by prehistoric populations.	

(continued)

MFP Decision	RMP Proposal
c. Permit studies to obtain information from cultural resource properties relating to sources of flaked stone materials and other raw materials exploited by prehistoric groups.	
d. Allow research projects to determine the functional specificity of archaeological sites with respect to vegetative procurement and processing.	
e. Permit research projects on cultural resource properties to investigate the nature and extent of prehistoric agriculture.	
Provide environmental data necessary for reconstruction of the prehistoric environment including botanical, hydrological, soils, geological, range, wildlife and climatological information.	Dropped. No longer a valid decision.



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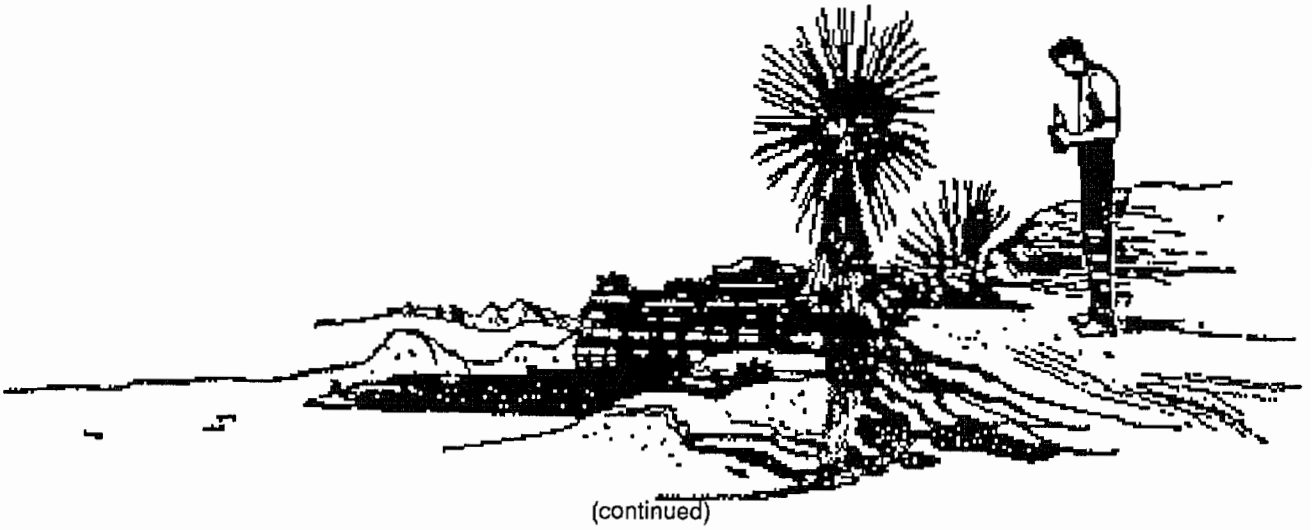
Appendix 30 (continued)
Black Mountains MFP
Recreation

MFP Decisions	RMP Proposals
Conduct an inventory of all public hazards with particular emphasis given to open mine shafts and develop a protection plan.	Dropped. Not needed in a land use plan. Providing for public safety is standard operating procedure in the recreation program; if monitoring/inventory suggests that a hazard exists, steps can be taken to abate the hazard without a specific reference in the RMP.
Assure access for public use and enjoyment of outdoor recreation values via existing roads and trails.	Dropped. No longer valid. Access decisions exist in the final RMP in a more specific form than the general MFP statement above. Off-highway vehicle decisions in the final RMP further refine access via roads and trails. Thus, the MFP decision is no longer needed.
Restrict off-highway vehicle use to designated roads, trails and washes.	Dropped. The final RMP lists off-highway vehicle designations for every acre of BLM-administered public land in the resource area. Generally, the designation limits off-highway vehicle use to existing roads, trails and washes, but in some areas (such as ACECs, wilderness), the designation is more restrictive. The final RMP also designates at least one "open" area.
Initiate a plan for the minimal development of two visitor overlook sites in sec. 12, T. 19 N., R. 20 W.	Decision brought forward essentially unchanged. The legal description is in the Sitgreaves Pass area and the final RMP has identified this site for development as an interpretive overlook.
Conduct a study to determine if Boundary Cone qualifies as a natural (geologic) landmark.	Dropped. It is unclear from the MFP decision if it is referring to Boundary Cone qualifying as a National Natural Landmark or some other administrative designation.



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Appendix 30 (continued)
Cerbat MFP
Recreation

MFP Decisions	RMP Proposals
Identify existing public hazards with particular emphasis given to open mine shafts.	See response to the Black Mountains MFP.
North Music Mountains Natural Scenic Area -- Acquire all private lands on north end of area 1 (shown on MFP II overlay); restrict off-highway vehicle use to existing roads, trails and washes; develop a recreation management plan; take legal steps to assure public access.	Decision dropped. Acquisition of most private land has occurred, as has acquisition of legal access to most of the area. Also, the final RMP has designated the area as an area of critical environmental concern with off-highway vehicles restricted to designated roads, trails, and washes.
Clay Springs Natural Scenic Area -- Consolidate landownership within Clay Springs Canyon area; formally designate area as natural and scenic; restrict off-highway vehicle use to existing roads, trails and washes.	Decision dropped. Landowner consolidation is not likely because the non-BLM land is Indian trust land. A formal designation was not pursued and in the final RMP, off-highway vehicle use in this area is limited to existing roads, trails and washes.
Restrict off-highway vehicles to established roads, trails and washes in the designated natural, scenic and wildlife areas. Remainder of planning unit will remain open.	Decision dropped. Off-highway vehicle designations in the final RMP have very few "open" areas. Most public land has the designation of "limited to existing roads, trails and washes" although in certain areas of critical environmental concern and certainly in wilderness, designations are more restrictive.
Continue BLM administration of the Pack Saddle and Windy Point recreation sites and designate area as natural scenic area. Restrict off-highway vehicles to existing roads, trails and washes.	Decision brought forward unchanged. Will continue administering the two recreation sites and the off-highway vehicle designation remains the same. However, the designation of the area as a natural scenic area is not brought forward. This area does not qualify as an area of critical environmental concern and does not meet the special area designation planning criteria for any other special designation.
Mount Tipton Natural Scenic Area -- Consolidate landownership.	Most viable land exchanges have already been consummated. Inholdings in the Mount Tipton Wilderness Area are targeted for acquisition as a matter of policy.

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Appendix 30 (continued)
Hualapai/Aquarius MFP
Recreation

MFP Decisions	RMP Proposals
Acquire legal access in T. 15 N., R. 12 W., secs. 25, 27 and 29 (Burro Creek/Signal Road area).	Decision modified. Brought forward for secs, 25 and 27. Road through sec. 29 is claimed by the county as a county road.
Manage public lands surrounding the old Greenwood townsite so as to not impact townsite.	Decision modified. Site is in the Three Rivers Riparian ACEC; cultural resources for this ACEC are not discussed in Table 9, but various riparian and wildlife protective measures are addressed that would help protect the townsite as a spin-off benefit.
Designate Burro Creek West as a rockhound area.	Decision dropped. No need for special designation to allow rockhounding.
Designate Burro Creek East as a rockhound area; acquire T. 14 N., R. 10 W., sec. 7, S1/2SW1/4 and sec. 18, N1/2NW1/4.	Decision dropped. No need for special designation to allow rockhounding. Acquisition has been completed except for sec. 7, SE1/4 SW1/4.
Respond affirmatively to off-highway-vehicle-related problems and resolve problems without formal off-highway vehicle designations.	Decision dropped. BLM policy, by virtue of various Executive Orders, is to designate all public land as either open, closed or with some limitations regarding vehicle use. Final RMP has done that.
Blade BLM Road 2123 up to the Wild Cow Recreation Site to enhance snow-related recreation opportunities.	Decision dropped. This is an administrative decision that can be made at any time.
Establish a hiking and horse trail along the crest of the Hualapai Mountains.	Decision modified. A recreation project plan was completed in 1986 (Hualapai Highlights Trail System), but would be superseded by the Hualapai Mountain Recreation Area Management Plan.
Obtain legal access to public lands as shown on an MFP overlay.	Decision brought forward essentially unchanged.
Maintain the Burro Creek Recreation Site.	Decision brought forward unchanged.
Maintain the Wild Cow Recreation Site.	Decision brought forward unchanged.
Construct an interpretive site along Highway 93 at the Big Sandy lakebed formations (T. 15 N., R. 12 W., sec. 18, SW1/4).	Decision dropped.
Construct the Burro Creek interpretive site.	Decision brought forward unchanged. Acquisition completed except for sec. 7, SE1/4 SW1/4. No need to consider further.

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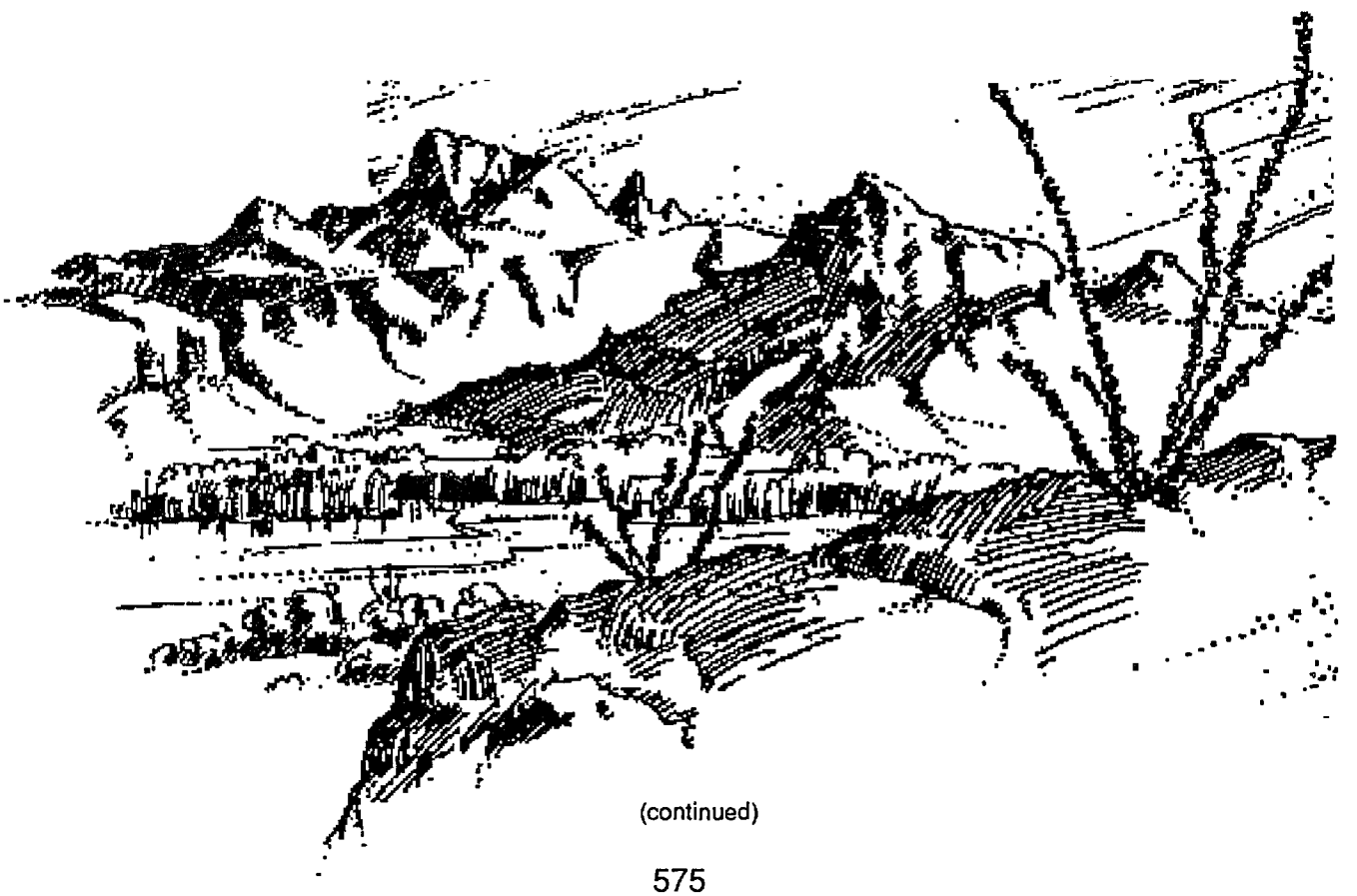
Appendix 30
Hualapai/Aquarius MFP
Recreation

MFP Decision	RMP Proposal
Acquire the Old Crossing camping area.	Decision dropped. Although it is listed in the draft RMP, this site will be dropped from further consideration because of critical habitat needs of the Hualapai Mexican Vole.
Acquire and develop Pine Flat as a recreation site.	
Enter into a cooperative agreement and develop a primitive campground on the northwest side of Alamo Lake.	Decision dropped.
Develop brochures on a variety of subjects, including developed recreation sites, rockhound areas, off-highway vehicle designations, etc.	Decision dropped. No need for a land use plan decision to prepare brochures.
Post suggestion box at Burro Creek and Wild Cow recreation sites.	Decision dropped. No need for a land use plan decision to install suggestion boxes at facilities.
Continue the allotment-based visitor use reporting system.	Decision dropped. The BLM now reports use by special recreation management area.
Continue the use of contrast ratings for visual resource management.	Decision dropped. BLM policy requires use of contrast rating system for analyzing impacts to visual resources. The resource area visual resource management map has been updated.



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Appendix 30 (continued)
Black Mountains
Wildlife

MFP Decisions	RMP Proposals
WL-1, #1 Acquire those non-federal lands that are within critical desert bighorn sheep habitat now in use by desert bighorns.	Decision is brought forward with updated acquisition list shown in appendices 9 and 21.
WL-1, #2 Areas 1 through 4 (MFP-I overlay R-2) should be classified as primitive areas. Areas 1 and 2 should be given a higher priority than areas 3 and 4.	Decision dropped.
WL-1, #3 Burros should be removed from burro-desert bighorn conflict areas (MFP-I overlay R-3) and managed intensively in other areas.	Decision is brought forward and changed to read: "Ungulates would be managed to minimize conflicts among species in the Black Mountains."
WL-1, #4 Classify portions of the following allotments as ephemeral: Big Ranch, Fort MacEwen, Gediondia, Black Mountains and Silver Creek (MFP-T overlay R-4). Remove cattle from the remaining portion of the MacEwen Allotment and rest it for a number of years, or at least greatly reduce the base herd (MFP-I overlay R-4).	Decision dropped as being no longer valid.
WL-1, #5 Motorized vehicle usage in non-primitive desert bighorn areas (MFP-I overlay R-5) should be limited to existing roads, trails and washes and designated areas.	Decision addressed in the RMP off-highway vehicle designations.
WL-1, #6 Develop water sources at high elevations for desert bighorns and fence to exclude cattle and burros (MFP-I overlay R-6 and Table 2). Many of these will also benefit deer.	Actions have been accomplished. Future projects may be considered in the Black Mountains Habitat Management Plan.
WL-1, #7 Develop water sources suitable for small and nongame species and fence to exclude cattle and burros (MFP-I overlay R-7).	Actions have been accomplished. Additional waters may be developed in the Black Mountains Habitat Management Plan.
WL-1, #8 Fence Columbine and Master springs to exclude burro access.	Actions have been accomplished.
WL-1, #9 Contact the Arizona Department of Transportation concerning the placement of road signs to help prevent desert bighorn kills on Hwy 68 in sec. 16, T. 21 N., R. 20 W. (MFP-I overlay R-9).	This issue has been resolved through protective fencing along the highway.
WL-1, #10 The cistern in the NW1/4, sec. 27, T. 21 N., R. 20 W. should be covered or fenced to prevent desert bighorn sheep drownings (MFP-I overlay R-1).	Actions have been accomplished.
WL-1, #11 Desert bighorn lambing grounds should be given special protection (MFP-I overlay R-11). These areas should be closed to mining entry where possible (subject to valid existing claims), transmission lines, communication sites, state selection and RS 2477. Motorized vehicles should be restricted to existing roads, trails and washes.	Decision is brought forward and changed to read: "Desert bighorn sheep lambing grounds would be given special protection. These areas would be closed to transmission lines, communication sites, state selection and RS-2477 rights-of-way. Motorized vehicles would be restricted to existing roads, trails and washes."

(continued)

Black Mountain
Wildlife

MFP Decisions	RMP Proposals
WL-1, #12 Develop a habitat management plan for the Black Mountains Planning Unit giving priority to desert bighorns (MFP-I overlay R-12). Included should be an intense survey by helicopter and foot to locate perennial water sources and pin-point sites for water development for desert bighorns.	Actions have been accomplished.
(Unit-wide) Evaluate big game, livestock and wild burro forage competition. Reserve adequate forage for wildlife. Eliminate or reduce forage competition between big game and livestock.	Decision brought forward unchanged.

Cerbat Mountains
Area-Wide

WL-1, #1 Acquire by private and state exchange about 33,000 acres of non-federal lands initially in the critical deer-livestock competition areas shown on the overlay and other non-federal lands within the critical deer habitat as delineated. These lands are listed in Table 16 of the Unit Resource Analysis.	Decision brought forward with changes. Non-federal lands in crucial mule deer habitat would be acquired through exchange.
WL-1, #2 Do not dispose of any public domain lands in the critical mule deer area shown on the overlay (Objective 2).	Decision brought forward with changes. Do not dispose of public lands in crucial mule deer habitat.
WL-1, #3 Allow no introduction of exotic (non-native) big game herbivores without a thorough analysis and evaluation of all consequences of, and alternatives to, the situation and concurrence on analysis by the Arizona Game and Fish Department.	Decision dropped as not being needed. This is BLM policy.
WL-1, #4 Allow predator control throughout the area using the best legal methods to protect non-predatory (chiefly big game) populations, especially on reproduction areas as these areas are to be identified in the future. Work should be done on a case-by-case demonstrated need basis.	Decision is dropped as not being needed. This is BLM policy.
WL-1, #5 Do not allow any additional special land use permits, free use permits or road development in critical deer habitat areas.	Decision is brought forward with changes requiring environmental analysis and mitigation to offset impacts to critical deer habitat.
WL-1, #6 Complete an intensive habitat inventory and analysis for this wildlife opportunity area. Develop and implement a habitat management plan for this area, giving top priority to rare or endangered species, followed by big, small and non-game species.	Actions have been accomplished.
WL-1, #7 Increase forage for mule deer in the critical habitat identified on the overlay by using cattle as tools and initiating livestock grazing systems on the Cane Springs and Diamond Bar allotments.	Decision brought forward unchanged.
WL-1, #8 Improve mule deer forage by physical vegetative	Decision dropped.

(continued)

MFP Decisions	RMP Proposals
manipulation (two-way chaining and reseeding) of pinyon-juniper on 12,300 acres identified on the overlay. Legal descriptions of these tracts are tabulated in Table 18 of the Unit Resource Analysis.	
WL-1, #9 Improve water distribution for mule deer by making the waters shown on the overlay (listed in Unit Resource Analysis Table 17) available to wildlife yearlong.	Decision brought forward unchanged.
WL-1, #10 Evaluate competition between big game herbivores and livestock, including feral burros.	Decision brought forward unchanged.
WL-1, #11 Reserve adequate forage for wildlife in all allotment management plans.	Decision dropped as being not valid. Forage allocations were made in the Cerbat-Black Environmental Impact Statement. They are not made as part of the allotment management planning process.
WL-1, #12 Eliminate livestock competition with big game for forage by providing adequate forage in the livestock wildlife competition area shown on the overlay.	Decision brought forward with changes. Reduce ungulate competition by providing adequate forage for livestock and wildlife and, where designated, for wild horses.
WL-1, #13 Establish seasons of use for livestock which will be beneficial to wildlife, especially big game.	Decision brought forward unchanged.
WL-1, #14 Obtain legal access where needed on the roads shown on the overlay.	Decision brought forward unchanged.
WL-1, #15 Protect access on the above roads by 44 L.D. 513 where necessary.	Decision brought forward unchanged.
WL-1, #16 Restrict use of motorized vehicles to present washes and roads.	Actions addressed in the RMP off-highway vehicle designation.
WL-1, #17 Maintain a program to further identify and protect habitat used by endangered species. Allow no developments or habitat changes until a thorough inventory is made of a particular area.	Decision dropped. This is handled through the National Environmental Policy Act process.
WL-1, #18 Identify, through on-the-ground reconnaissance, specific sites on which water catchments could be built for small and non-game species, in the foothills area identified in the overlay as water deficient.	Actions have been accomplished.
WL-1, #19 Do not allow any range improvements or anything else which would alter or destroy pronghorn habitat without further on-the-ground reconnaissance and contact Arizona Game and Fish Department personnel.	Decision dropped. This is handled through the National Environmental Policy Act process.
WL-3, #1 Withdraw the critical bighorn sheep habitat on Wilson Ridge as a primitive area. Segregate the area against all forms of entry and disturbance, including special land use	Actions have been accomplished since this area is included in wilderness.

(continued)

MFP Decisions	RMP Proposals
permits, free use permits, rights-of-way, road developments, the mining and mineral leasing laws and R.S. 2477.	
WL-3, #2 Exclude livestock grazing from the area shown on the overlay (Wilson Ridge).	Decision brought forward and will be addressed through the National Environmental Policy Act process.
WL-3, #3 Eliminate feral burros from all bighorn sheep habitat in the planning unit adjoining the Lake Mead National Recreation Area.	Decision modified to read; "Eliminate wild burros from the Mount Wilson use area."
WL-3, #4 Maintain a program to further identify and protect habitat used by rare or endangered species. Allow no developments or changes of habitat until a thorough inventory of the area is made.	Decision brought forward and will be addressed through the National Environmental Policy Act process.
WL-3, #5 Allow predator control throughout the wildlife habitat area using the best legal methods to protect bighorn sheep populations.	Decision dropped as not being needed. This is BLM policy.
WL-3, #6 Allow no introduction of exotic (non-native) big game herbivores without a thorough analysis and evaluation of all consequences of, and alternatives to, the situation and concurrence on analysis by the Arizona Game and Fish Department.	Decision dropped as not being needed. This is BLM policy.
WL-3, #7 Complete an intensive habitat inventory and analysis for this wildlife opportunity/habitat area. Develop and implement a habitat management plan for this area, giving top priority to rare or endangered species and desert bighorn sheep.	Actions have been completed.
WL-3, #8 Restrict use of motorized vehicles to present washes and roads. Allow no new road development.	Actions addressed in the RMP off-highway vehicle designations.
WL-2, #1 Eliminate livestock grazing from the White Hills north of the Cerbat Mountains.	Decision dropped.
WL-2, #2 Do not dispose of any public lands in the critical mule deer area shown on the overlay.	Decision brought forward unchanged.
WL-2, #3 Acquire through private and state exchanges private holdings identified as critical deer habitat.	Decision brought forward unchanged.
WL-2, #4 Allow no introduction of exotic (non-native) big game herbivores without a thorough analysis and evaluation of all consequences of, and alternatives to, the situation and concurrence on analysis by the Arizona Game and Fish Department.	Decision dropped as not being needed. This is BLM policy.
WL-2, #5 Allow predator control throughout the area using the best legal methods to protect non-predatory (chiefly big game) populations, especially on reproduction areas as these areas are to be identified in the future. Work should be done on a case-by-case demonstrated need basis.	Decision dropped as not being needed. This is BLM policy.

(continued)

Appendix 30 (continued)

Cerbat Mountains
Wildlife

MFP Decisions	RMP Proposals
WL-2, #6 Do not allow any additional special land use permits, free use permits or road development in critical deer habitat areas.	Decision is brought forward with changes requiring environmental analysis and mitigation to offset impacts to critical deer habitat.
WL-2, #7 Maintain a program to further identify and protect habitat used by endangered species.	Decision dropped as not being needed. This is BLM policy.
WL-2, #8 Complete an intensive habitat inventory and analysis for this wildlife/opportunity area. Develop and implement a habitat management plan for this area, giving top priority to rare or endangered species, followed by big, small and non-game species.	Actions have been accomplished.
WL-2, #9 Evaluate competition between big game herbivores and livestock, including feral burros.	Decision brought forward unchanged.
WL-2, #10 Reserve adequate forage for wildlife in all allotment management plans.	Decision dropped as not being valid. Forage allocations were made in the Cerbat-Black Environmental Impact Statement. They are not made as part of the allotment management planning process.
WL-2, #11 Eliminate livestock competition with big game for forage by providing adequate forage in the livestock wildlife competition area shown on the overlay.	Decision brought forward with changes. Reduce ungulate competition by providing adequate forage for livestock and wildlife and, where designated, for wild horses.
WL-2, #12 Establish seasons of use (for livestock) which will be beneficial to wildlife, especially big game.	Decision brought forward unchanged.
WL-2, #13 Identify and obtain legal access where needed on the roads shown on the overlay.	Decision brought forward unchanged.
WL-2, #14 Protect access on the listed roads by 44 L.D. 513 where necessary.	Decision brought forward unchanged.
WL-2, #15 Restrict access of motorized vehicles to present washes and roads. Allow no new road development by any agency without a thorough environmental analysis and environmental impact statement, if required.	Actions addressed in the RMP off-highway vehicle designations and through the environmental review process.
WL-2, #16 Identify, through on-the-ground reconnaissance, specific sites on which water catchments could be built, primarily for small and non-game species, in the areas shown on the overlay.	Actions have been accomplished.
WL-4, #1 Acquire legal access as needed along the roads shown on the overlay.	Decision brought forward unchanged.
WL-4, #2 Protect access on the above roads by 44 L.D. 513 where necessary.	Decision brought forward unchanged.

(continued)

Appendix 30 (continued)

Cerbat Mountains
Wildlife

MFP Decisions	RMP Proposals
WL-4, #3 Allow no introduction of exotic (non-native) big game herbivores without a thorough analysis and evaluation of all consequences of, and alternatives to, the situation and concurrence on analysis by the Arizona Game and Fish Department.	Decision dropped as not being needed. This is BLM policy.
WL-4, #4 Allow predator control throughout the area using the best legal methods to protect non-predatory (chiefly big game) populations.	Decision dropped as not being needed. This is BLM policy.
WL-4, #5 Maintain a program to further identify and protect habitat used by endangered species. Allow no developments or changes of habitat until a thorough inventory is made of this area.	Decision dropped. This is handled through the National Environmental Policy Act process.
WL-4, #6 Evaluate competition between big game herbivores and livestock, including feral burros.	Decision brought forward unchanged.
WL-4, #7 Complete an intensive habitat inventory and analysis for this wildlife opportunity/habitat area. Develop and implement a habitat management plan for this area, giving top priority to rare or endangered species, followed by big, small and non-game species.	Actions have been accomplished.
WL-4, #8 Acquire non-federal holdings on identified critical wildlife habitat through private and state exchanges.	Decision brought forward unchanged.
WL-4, #9 Reserve adequate forage for wildlife in all allotment management plans.	Decision dropped as not being valid. Forage allocations were made in the Cerbat-Black Environmental Impact Statement. They are not made as part of the allotment management planning process.
WL-4, #10 Identify, through on-the-ground reconnaissance, specific sites on which water catchments could be built for small and non-game species in the foothills area identified in the overlay as water deficient.	Actions have been accomplished.

Hualapai/Aquarius

WL-1.1 Starting in FY 83 and to be completed by FY 87, provide wildlife safe access and year-round water availability to 205 livestock water facilities on public lands within the planning area. Modifications will include installation of bird ladders and animal ramps in all existing and future livestock water developments and neoprene covers in all open storage tanks. Fenced ground level waters will be constructed in conjunction with new livestock waters.	Decision brought forward with changes and modified to read: "All new water developments and those existing water developments identified as posing significant access and safety hazards to wildlife would be constructed and/or modified to provide safe access to wildlife. Modifications would include installation of bird ladders and animal ramps, and tanks would be covered to prevent drowning as determined to be appropriate. Separate fenced wildlife waters may be constructed in conjunction with new livestock waters, as deemed necessary by BLM resource specialists. Public waters important to wildlife would be made available year-round."

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MFP Decisions	RMP Proposals
WL-1.2 There is a need for additional wildlife water sources as indicated in the 1977 water inventory. These will enhance upland and small game numbers which will provide additional recreational hunting and sightseeing opportunities.	Decision brought forward unchanged.
WL-1.4 Design and conduct research studies on upland and small game populations and their habitat requirements by FY 87 subject to availability of personnel and funding. Initiate studies to determine the effects of cottontails and black-tailed jackrabbits on range condition and the breeding biology and habitat requirements of band-tailed pigeons in the Hualapai Mountains.	Decision brought forward with changes, dropping the 1987 date requirement and dropping item 1.
WL-2.1 Establish broadleaf tree reproduction and perpetuation via supplemental planting of seedlings in existing and potentially suitable riparian habitat by FY 84 subject to availability of personnel and funding.	Decision brought forward with changes, dropping the 1982 and 1984 date requirements. Actions have been partially accomplished through natural regeneration following proper livestock management and tree plantings.
Seedlings four to five years old will be planted in stands no less than 300 feet long and 100 feet wide. Stand density will range from 100 to 160 trees per acre with the densest stands nearest to the streambed. These stands will be fenced and maintained to allow seedling establishment and growth. Planted stands will be established in the following areas: T. 16.5 N., R. 10 W., sec. 30, NE1/4 on the west side of Francis Creek across from the canyon. T. 16.5 N., R. 10 W., sec. 33, SE1/4 on the north side of Francis Creek. T. 16 N., R. 10 W., sec. 1, SE1/4 on both sides of Francis Creek above the pump station access road crossing. Establish a study in 1982 to determine when trees are of sufficient height to allow removal of the protective fence and the possibility of allowing livestock grazing.	
WL-2.2 Develop herd area management plans for burros, allotment management plans for livestock and habitat management plans for wildlife in concert to resolve site-specific problems in cottonwood-willow, mixed broadleaf, oak-pine, mesquite bosque and mesquite-tamarisk standard habitat sites. The areas needing protection and protection methods will be decided upon as these plans are developed.	Decision brought forward with changes. As herd management area plans and habitat management plans have already been completed, the key activity planning efforts remaining to manage these important habitat areas are allotment management plans. The RMP will emphasize development of allotment management plans in important wildlife habitat areas.
WL-2.3 Protect the perennial and intermittent reaches of major drainages (Burro, Pine, Conger, Francis, Wilder, Knight, Trout, Sycamore, Walnut and Cottonwood creeks, Kaiser Springs, Blue Tank Wash and the Big Sandy, Santa Maria and Bill Williams rivers) -- 19,885 acres of public land. This is to be	Decision brought forward with changes, dropping the 1983 date reference and including all riparian areas outside the areas of critical environmental concern. Examples are Pine, Conger, Wilder, Knight, Sycamore and Walnut creeks, Kaiser Spring and Blue Tank Wash.

(continued)

MFP Decisions	RMP Proposals
accomplished by closely monitoring or not authorizing the following habitat-disturbing impacts on the above areas by 1983. 1. Building of structures 2. Land clearing activities 3. Mining 4. Off-highway vehicle use 5. Roadbuilding 6. Intense recreational use or development 7. Rights-of-way 8. Other human disturbances as found in subsequent inventories and environmental assessments of HMP development.	
WL-2.4 Initiate studies in 1983 to monitor and document floral and faunal changes in cottonwood-willow and mixed broadleaf riparian standard habitat sites within the planning area subject to availability of personnel and funding.	Decision brought forward with changes, dropping the 1983 date.
WL-2.5 Initiate instream flow studies in FY 83 to monitor Francis and Burro creeks and the Bill Williams and Santa Maria rivers subject to availability of personnel and funding.	Decision brought forward to involve the Big Sandy River and Sycamore and Wright creeks. All other streams are being or have been studied.
WL-3.1 Cooperate with the Arizona Game and Fish Department and the Army Corps of Engineers on the Ocotillo Wildlife Area to develop a HMP and manage the water in the Alamo Reservoir to maintain riparian habitat. The HMP will be developed in concert with AMPs and HAMPs based on the availability of personnel and funding.	Both the Hualapai and Aquarius habitat management plans include projects in this area. Decision is brought forward, dropping the need for further HMP development.
WL-3.2 Implement BLM Policy as outlined in IM AZ 80-142 regarding complete or partial fencing of earthen reservoirs for improved wildlife habitat.	Decision dropped as not being needed. This is BLM policy.
WL-3.3 Reduce livestock and burro grazing on the Burro Creek Allotment to bring grazing in line with current forage production. Develop a herd area management plan for burros and an allotment management plan for wildlife in concert, each of which will be designed to resolve site-specific problems within the Burro Creek Allotment.	Actions have been accomplished through proper livestock and wildlife habitat management. There are no burros on this allotment, so a herd management area plan is not necessary.
WL-3.4 By 1985, design and initiate studies to monitor waterfowl use, habitat requirements and response to management actions on perennial and intermittent drainages and large dirt tanks. Also monitor water quality and determine instream flow requirements of aquatic systems affecting public lands in the planning area.	Decision brought forward with changes to note that determination of instream flow requirements has been accomplished on several creeks and rivers within the resource area. The Big Sandy and Santa Maria rivers and Sycamore and Wright creeks still need instream flow determinations and subsequent filing for water rights. Monitor water quality and aquatic systems affecting public lands. Design and initiate studies to monitor waterfowl use, habitat requirements and response to management actions on large dirt tanks.

(continued)

Appendix 30 (continued)
Hualapai/Aquarius
Wildlife

MFP Decisions	RMP Proposals
WL-3.5 Actively observe BLM policy of maintenance and retention of riparian habitat including vegetation, snags and dead bushes on all public lands in the planning area when making land use decisions and during fire suppression activities.	Decision dropped as not being needed. This is BLM policy.
WL-4.1 Maintain instream flows to support habitat to supply aquatic, terrestrial and threatened and endangered wildlife and dependent riparian vegetation on public lands in Burro Creek and the Big Sandy, Santa Maria and Bill Williams rivers through securing and protecting water rights for wildlife habitat by 1984.	Decision brought forward with changes, dropping the 1984 date requirement and adding Francis and Sycamore creeks.
WL-4.3 Initiate a study in 1981 to monitor and identify water pollution and sources in perennial drainages in the planning area (including radionuclides, heavy metals, bacterial contamination and other parameters). Adjust pollution sources to meet water quality standards set by the state and federal governments. Sources of possible contamination such as the Boriana, Cedar, Anderson and Cyprus-Bagdad mines must be studied and adjusted accordingly.	Decision brought forward, focusing on other potential sources of pollution and dropping the 1981 date requirement.
WL-4.4 On the public lands along the Santa Maria and Big Sandy rivers and Burro Creek, reduce livestock and burro grazing capacity to bring grazing in line with current forage production. Develop an HMAP for burros, AMPs for livestock and an HMP for wildlife in concert, each of which will be designed to resolve site-specific aquatic habitat problems.	Decision brought forward with changes. On public lands along the Santa Maria and Big Sandy rivers and Burro Creek, manage livestock, wild burros and wildlife to bring grazing in line with current forage production. Develop and implement allotment management plans for livestock, implement herd management area plans for wild burros and implement habitat management plans for wildlife. Each of these plans would be designed to resolve site-specific aquatic and riparian habitat problems. Ecological sites would be managed for the desired plant community which best meets the needs of the listed species.
WL-5.1 Improve range sites in pine-oak, mixed conifer, open chaparral, closed chaparral and pine-oak riparian by one condition class using livestock management with reduction to carrying capacity (or below) under AMPs to improve habitat conditions for zone-tailed hawks, goshawks, spotted owls, Gilbert's skinks, Gila monsters, Mexican voles, Sonoran mountain kingsnakes, peregrine falcons and sharp-shinned hawks by 1995.	Decision brought forward with changes, dropping the 1995 date requirement.
Initiate condition and trend studies to monitor the recommended improvement in range condition as AMPs are written and implemented.	
WL-5.2 Protect the important, crucial use, conflict or habitat improvement areas for the threatened, endangered, state-listed or sensitive species. This is to be accomplished by closely monitoring or not authorizing the following habitat-disturbing impacts on the above areas.	Decision brought forward unchanged.

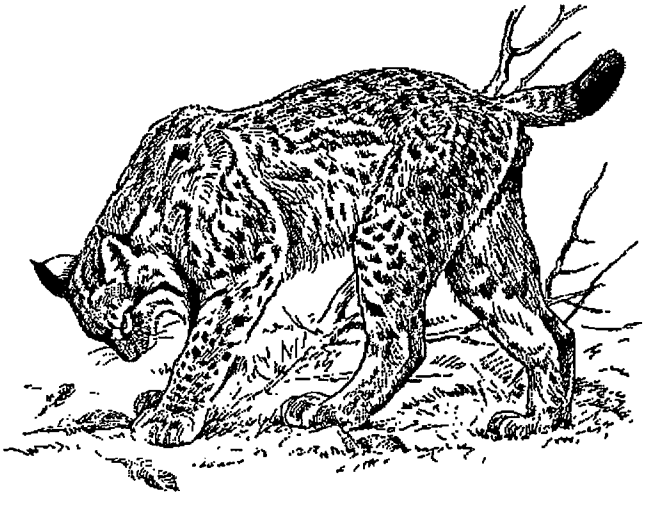
(continued)

MFP Decisions	RMP Proposals
1. Excess fencing 2. Land disposal 3. Land (vegetative) clearing or removal of downed wood or woodcutting of *Nolina bigelovii* 4. Building of structures 5. Mining 6. Off-highway vehicle use 7. Roadbuilding 8. Intensive recreational use or development 9. Limit utilization of key forage to no more than 60 percent 10. Livestock and burro grazing on bighorn lambing areas 11. Rights-of-way 12. Other impacts found in subsequent inventories, environmental assessments of HMP development.	
WL 5.3 A BLM realty specialist would work with the responsible companies to modify the single-pole, three-phase powerlines near Six-Mile Crossing (T. 14 N., R. 10 W., secs. 5 and 7) and Burro Creek Campground (T. 14 N., R. 11 W., sec. 19) to facilitate safe raptor use. Coordinate with the Fish and Wildlife Service, the Arizona Game and Fish Department and the Arizona State Land Department.	Actions have been accomplished.
WL-5.4 Establish broadleaf vegetation and ensure broadleaf reproduction in suitable riparian zones (including springs) to enhance habitat conditions for bald eagles, black-hawks, zone-tailed hawks, Sonoran mountain kingsnakes, Gila monsters and Gilbert's skinks by 1984. Guidelines for planting and fencing specific locations are presented in Step 4 of the Aquarius Unit Resource Analysis and WL-2.1. Moss Basin, Blue Tank Wash and other areas will be identified in the Hualapai and Aquarius HMPs.	Decision brought forward with changes, dropping the 1984 date requirement.
WL-5.5 Maximize herbaceous forage production on range sites within desert tortoise improvement and expansion areas as portrayed in the Hualapai and Aquarius Unit Resource Analysis by 1990 using the following methods. 1. Allow no utilization on key forage species in any pasture greater than 60 percent of the proper use in a season. 2. Develop AMPs to include reducing livestock to (or below) carrying capacity of the range, increasing herbaceous forage production and increasing range condition to "good."	Decision modified as follows: guidance from Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan and Arizona BLM's subsequent Implementation Strategy have been incorporated. The 1990 deadline was dropped.
WL-5.6 Increase vegetative structure in open and closed chaparral, ponderosa pine and pine-oak, standard habitat sites for goshawks, zone-tailed hawks, Gilbert's skink, sharp-shinned hawks and Mexican voles by:	Decision modified as follows: increase vegetative structure in open and closed chaparral, ponderosa pine and pine-oak, standard habitat sites for goshawks, zone-tailed hawks, Gilbert's skink, sharp-shinned hawks and Mexican voles by:

(continued)

MFP Decisions	RMP Proposals
1. Developing fire plans to encourage dense stands of conifers.	1. Developing fire plans to encourage dense stands of conifers.
2. Reducing levels of livestock grazing utilization.	2. Manage for proper livestock use.
3. Seeding perennial and annual grasses and planting native conifers after disturbance (rights-of-way, road building, fire).	3. Seeding perennial and annual grasses and planting native conifers after disturbance (rights-of-way, road building, fire).
4. Chaining and reseeding.	4. Accomplish items 1 through 3 through habitat management plans, allotment management plans and fire suppressions and prescribed fire plans.
This is to be developed under upcoming HMPs on lands to be described under HMPs.	
WL-5.7 In 1984, initiate a study of the habitat requirements and factors of the spotted bat, desert night lizard and peregrine falcon in the planning area so that their habitats may be protected and improved under upcoming HMPs by 1990 subject to availability of personnel and funding.	Decision brought forward with changes, dropping the 1984 and 1990 date requirements and the spotted bat and desert night lizard studies.
WL-5.8 Improve cover of perennial forbs and grasses 15 to 20 percent on public lands within the Burro Creek watershed above the Highway 93 bridge through the BLM's watershed program, reduction of grazing and other vegetative manipulation for the benefit of the northern goshawk, sharp-shinned hawk, zone-tailed hawk, black-hawk, bald eagle, peregrine falcon, desert tortoise, Gila monster, Gilbert's skink and desert night lizard by the year 2000.	Decision brought forward with the following changes, dropping the 1990 date reference. Identify, establish and/or maintain the potential natural plant communities within the Burro Creek watershed for the benefit of the northern goshawk, sharp-shinned hawk, zone-tailed hawk, black-hawk, bald eagle, peregrine falcon, desert tortoise, Gila monster, Gilbert's skink and desert night lizard.
Establish continuing vegetative studies to determine present habitat condition and monitor trend.	
WL-6.1 Analyze selected habitats to establish limiting factors to mountain quail introduction while evaluating the possible competition between them and Gambel's quail by FY 82.	Decision dropped as no longer being valid.
The on-site inspection and detailed evaluation of habitat by the Arizona Game and Fish Department is recommended during the analysis stage. Analyze mountain quail habitat parameters under the Hualapai HMP subject to availability of personnel and funding.	
WL-6.2 Analyze existing habitat for potential re-establishment of desert bighorn sheep into the Aquarius Planning Unit by 1985.	Decision brought forward with changes, adding the Hualapai Planning Unit and dropping the 1985 date requirement.
Within the Aquarius HMP, address whether bighorns will be re-established in the Aquarius Planning Unit based on the habitat analysis.	
WL-7.1 Develop cooperative HMPs on the Hualapai and Aquarius areas by FY 85 to install about 25 big game waters as	Actions have been accomplished.

(continued)

MFP Decisions	RMP Proposals
generally identified on Step 4 overlays. The exact location and schedule for construction of these proposed waters will be determined in the HMPs.	
WL-7.2 Implement BLM policy as outlined in IM AZ-80-142 regarding fencing of springs, riparian areas and dirt tanks.	Decision dropped as not being valid. This is BLM policy.
WL-7.3 Allocate forage and secure water for present numbers of big game animals based upon proper use tables and the 1979 forage inventory.	Decision brought forward with the followings: determine forage allocations for big game by integrated habitat monitoring and forage inventory to support a thriving natural ecological balance among all ungulates. Provide adequate water for wildlife.
WL-7.4 Begin a program of prescribed burning, reseeding and wildfire management to improve deer habitat in the open and closed chaparral standard habitat site for Aquarius and Hualapai planning units under the appropriate HMPs by FY 85.	Decision brought forward with changes, dropping item 6, making the rest period in item 7 flexible, modifying item 8 to allow only native species and by dropping the FY 85 date requirement.
Use the following guidelines when planning vegetation manipulation projects.	
1. Cleared areas should not make up over one-third of the habitat area. For every 100 acres cleared, 200 acres should be left untouched.	
2. Leave 1/4- to 1/2-mile buffer zones along roads and other recreation facilities.	
3. Leave felled trees in place and evenly distribute brush piles over the entire treatment area.	
4. Openings should be small and regular-shaped; 660 foot maximum width is optimum, but should not exceed 1,200 feet. Edges should be irregular to create maximum edge effect.	
5. Ridges should remain untreated and be at least 300 feet wide to provide effective cover.	
6. Treatment should be as thorough as possible to get maximum soil disturbance to provide a good seed bed and maximum kill of trees to lengthen useful life of treatment.	
7. A three-year rest will be required on all treatment areas to allow for seedling establishment. Utilization will not exceed 40 percent.	
8. A mixture of seed will be seeded with the purpose of supplying succulent forage over a long period. Species trial plots should be established to determine new species possibly adapted to the area. A diversity of species is needed.	

(continued)

MFP Decisions	RMP Proposals
WL-7.5 Build and monitor six 100-acre exclosures for study of cattle, burro, deer and antelope utilization versus habitat condition in saguaro-paloverde juniper-mixed shrub, open and closed chaparral and high and low elevation grassland standard habitat sites in deer and antelope range. Locations will be developed where conflicts are presently severe. Exclosures must be on range sites most typical of the habitat and constructed by FY 87.	Decision brought forward with changes, dropping the 1987 date requirement.
WL-7.6 Protect the lambing, fawning and important or crucial use areas (161,860 acres) of big game species in the planning area by closely monitoring or not authorizing the following habitat disturbance impacts on the above areas by FY 82. 1. Excess fencing 2. Land disposal or trading 3. Building of structures 4. Land (vegetative) clearing or removal of downed wood 5. Mining 6. Off-highway vehicle use 7. Roadbuilding 8. Intense recreation use or development 9. In pronghorn, bighorn and elk areas, limit utilization of key perennial grasses and annual forbs to no more than 60 percent 10. In deer and bighorn areas, limit utilization of key shrub species to no more than 60 percent 11. Livestock and burro grazing on bighorn lambing areas 12. Rights-of-way 13. Other impacts as found in subsequent inventories, environmental assessments or HMP development	Decision brought forward with changes, dropping the FY 82 date requirement.
WL-7.7 Use livestock and burro management as a tool to improve big game habitat from the present poor to fair range condition to good to excellent range condition on the following allotments by the year 2000. Also, establish studies to determine exact condition and monitor trend.	Decision has been modified to read: "Identify, establish and/or maintain the potential natural plant communities in big game habitat. Integrated monitoring of habitat would be used to measure progress. Drop the FY 2000 date requirement."

	Allotment	
1.	Gray Wash	0038
2.	Greenwood Peak	0040
3.	Burro Creek Ranch	0014
4.	Yellow Pine	0078
5.	Lines	0110
6.	Hualapai	0047
7.	Bateman Spring	0006
8.	Walnut Creek	0073
9.	Chicken Spring	0021
10.	Arrastra Mountain	0002
11.	Black Mesa	0009

(continued)

MFP Decisions	RMP Proposals
WL-7.8 Cooperatively develop HMPs with the Arizona Game and Fish Department to address the following. The exact location of the studies and period of time will be identified in the HMPs.	Decision has been incorporated in the Bill Williams-Crossman Peak Habitat Management Plan.
1. Study the water needs of Mexican pronghorn in the southern half of the Hualapai Planning Unit.	
2. Study predation and fawn survival of pronghorn in relation to forb production, fence impediments and grass utilization.	
WL-7.9 Modify all fences in mule deer range and antelope range on public lands to meet BLM standards (Manual 1737) as reconstructed or during major maintenance.	Decision brought forward unchanged.
WL-7.10 Keep gravity-fed troughs and water storage tanks filled year-round for use by waterfowl and other wildlife even if livestock are removed.	Decision brought forward unchanged.
WL-8.1 Construct 22 100-acre exclosures in representative range sites in all standard habitat sites in the planning area by FY 86 subject to availability of personnel and funding.	Decision brought forward with changes, dropping the FY 86 requirement.
WL-8.2 Initiate studies (subject to availability of personnel and funding) to determine habitat relationship characteristics on the following animals whose populations may be decreasing in response to or causing habitat degradation. These studies may be developed jointly with the Arizona Game and Fish Department.	Decision brought forward with changes, dropping item 1.
1. Mountain lion kitten rearing areas 2. Furbearers 3. Bobcats 4. Black bear 5. Gray fox 6. Cattle/burro/cottontail and jackrabbit 7. Bat roosting sites 8. Beaver 9. Kit fox	
WL-8.3 Minimize resource uses and activities which would further deteriorate ponderosa pine, mixed broadleaf, cottonwood-willow, mesquite bosque and mesquite-tamarisk standard habitat sites in the planning area. Relative values of these habitats are found in Table .36B2 in Step 1 of each unit resource analysis. This recommendation includes full mitigation of and alternative site selection of the following possible activities.	Decision brought forward unchanged.

(continued)

Appendix 30 (continued)
Hualapai/Aquarius
Wildlife

MFP Decisions	RMP Proposals
1. Land disposal 2. Vegetation removal (including woodcutting) 3. Roadbuilding 4. Construction of communication sites and other structures 5. Reduction of instream flows 6. Construction of powerlines, gaslines, waterlines 7. Increase of burro or livestock use 8. Materials removal 9. Increases in forage plant utilization in any grazing pasture greater than 60 percent 10. Intense recreational use 11. Water pollution	
WL-8.4 In preparing HMPs and other activity plans, design a system of rangeland/habitat management allowing for a mosaic of habitat patterns (increasing habitat "edge") with juxtaposition of a variety of range site condition classes in each standard habitat site in a preferred mix of 20 percent Fair, 50 percent Good and 30 percent Excellent by 1999 (922,000).	Decision has been modified to read: "Identify, establish and/or maintain the potential natural plant communities, allowing for a mosaic of habitat patterns. Drop the fiscal year 1999 date requirement."
WL-9.1 Initiate studies necessary to identify and thereby resolve conflicts with desert bighorn sheep by FY 82 (in the Aubrey Peak area).	Decision brought forward with changes, dropping the fiscal year 82 date requirement.
WL-9.4 Manage the public lands in the Burro Creek Riparian Management Area under multiple use concepts with a primary objective being to enhance the condition and quality of the unique natural ecosystems in the area. Develop a management plan to provide guidance for resource uses in the area by March 31, 1983.	The Burro Creek Riparian Management Area Plan has been completed. Actions have been accomplished.
WL-10.1 Accept the revised Multiple-Use Recommendations with the following modifications.	
1. Develop a riparian management plan, fully coordinating it with the owners of 23,800 acres of adjacent or intermingled non-federal lands. Cooperative agreement should be sought in order to secure mutual objectives consistent with the purposes of the riparian management plan. Where necessary in order to provide the required special management, and when it is in the public interest to do so, acquire portions of the 23,800 acres through purchase, exchange or donation.	Actions partially completed. The Burro Creek Riparian Management Plan has been completed. Further acquisitions are necessary.
2. Acquire surface and subsurface rights on 26,240 acres of non-public lands in big game habitat for elk, bighorn sheep, pronghorn antelope and waterfowl as identified in the Hualapai and Aquarius Step 4 Tables by FY 88.	Actions partially completed and the remainder of the decision brought forward by dropping the FY 88 date requirement.

(continued)

Appendix 30 (continued)
Cerbat
Wild Horse and Burro

MFP Decision	RMP Proposal
The unit resource analysis addressed the horse herd area. It was never addressed in the MFP, but was slated to be addressed in the first MFP update. Reservation of forage to support 14 horses was accepted in the grazing EIS.	The decision was brought forward with changes. Those changes include increased forage reservation to support a herd of 90 wild horses and expand the wild horse area to reflect the actual use patterns.

Black Mountains

Forage was reserved to support 400 burros.	The decision was brought forward unchanged.
Designate and manage a wild burro sanctuary in the Black Mountains Planning Unit.	Decision carried forward with changes. A wild burro range would be identified in the southern portion of the Black Mountains Herd Management Area.
Remove wild burros from area RMB-1. Manage the area without wild horses and burros. Reduce the burro population to 200 animals. Develop waters to improve burro distribution. Close the area to grazing by domestic horses and burros. Retain all public lands within the habitat area. Retain rights-of-way, acquire additional rights-of-way and develop a memorandum of understanding with the National Park Service at Lake Mead and the U.S. Fish and Wildlife Service to ensure continued access to water.	Decision brought forward with changes. Area RM13-1 corresponds with Area B in the Resource Management Plan proposed action (see Map 10). Wild burros would first be removed from areas outside the herd management area, then as problem animals from Area B within the herd management area. Area B has become largely private lands with increasing subdivisions and human development. The refining of forage allocation and stratification of habitat would define burro management areas, allow for adjustments in the wild burro population, removal of problem animals, removal from problem areas and removal on an equitable level in transition/joint use areas. This would be in line with the management framework plan decision.
Reduce livestock grazing and reserve 2,400 animal unit months of forage for 200 burros.	Decision brought forward with changes. A total of 12,000 animal unit months of forage would be reserved for ungulates including burros, desert bighorn sheep, livestock and deer in the Black Mountains. Forage would be allocated at 30 percent for burros, 30 percent for desert bighorn sheep, 30 percent for livestock and 10 percent for deer in areas of shared habitat.

Hualapai/Aquarius

The MFP recommendations for maintaining a wild burro herd in the Big Sandy Herd Management Area were brought forward through the grazing environmental impact statement. Habitat and forage was reserved for 139 wild burros.	The decision was brought forward unchanged.
RM-3.1 Initiate studies of wild burros to determine numbers, sex and age ratios, distribution, daily and seasonal movements, food habits and other information necessary for herd management. The studies should include, but not be limited to, fecal studies, temporary exclosures, permanent utilization transects, trend studies, complete records of animals captured during reduction programs, burro inventories and animal observations.	Decision carried forward with changes. The BLM would initiate studies to identify the ecological niche currently being occupied by wild burros to determine social behavioral traits, genetic viability and habitat use patterns including crucial habitat components. Integrated habitat monitoring would be used to determine the forage allocations necessary to support a herd in thriving natural ecological balance.

(continued)

Appendix 30 (continued)
Hualapai/Aquarius
Wild Horse and Burro

MFP Decision	RMP Proposal
RM-3.2 Coordinate with the Lower Gila Resource Area on the management of burros in the Alamo Lake Herd Area.	Decision brought forward unchanged.
RM-3.3 Combine the six herd areas identified in the unit resource analysis into two herd areas.	Actions have been completed.
RM-3.4 Reserve forage for 652 burros per year pending removal of excess animals. Increase the forage allocation by 17 percent annually beginning with the year 1980. Allocate a minimum of 3.92 acre-feet of water available for use by burros each year. This allocation should also be increased by 17 percent annually. If burro numbers are not reduced by the time grazing decisions are issued, downward adjustments may be necessary to prevent over commitment of the forage resource.	Since implementation of the management framework plan decision, the wild burro population has been adjusted downward through the management prescriptions set forth in the Big Sandy Herd Management Area Plan. The wild burro population would continue to be adjusted within an ecological balance based on vegetative monitoring studies through multiple use grazing decisions addressing use by all ungulates.
RM-3.5 Designate herd unit 1A as the Sycamore Creek herd unit. To facilitate management, acquire private and state lands within the herd unit by October 1, 1990. Develop a herd management area plan in coordination with the allotment management plan and habitat management plans for the area. These plans will be designed to resolve site-specific problems. Manage the herd unit for 48 burros.	Decision brought forward with changes. Coordinate and revise the herd management area plan, allotment management plans and habitat management plans to identify and resolve habitat use conflicts among ungulates in the Big Sandy Herd Management Area. (The Big Sandy Herd Management Area includes the Sycamore Creek, Burro Creek and the Big Sandy herd use areas). The unit would not be managed for 48 burros. The management area would be managed to support a genetically viable population defined as a minimum of 50 effective breeding animals. Integrated habitat monitoring would be developed to determine forage allocations necessary to support a thriving natural ecological balance among all ungulates using the Big Sandy Herd Management Area. Population adjustments would be based on analysis of integrated monitoring data and resource objectives and in consultation with other government agencies and interested publics.
RM-3.6 Designate herd unit 1B as the Burro Creek herd unit. To facilitate management acquire private and state lands within the herd management area plan in coordination with the allotment management plan and habitat management plans for the area. These plans will be designed to resolve site-specific problems. Manage the herd unit for 22 burros. Remove all burros from the riparian zone for seven to ten years to improve riparian habitat. Manage the remainder of the herd in areas away from the creek and its immediate habitat.	Decision brought forward with changes. Coordinate and revise the herd management area plan, allotment management plans and habitat management plans to identify and resolve habitat use conflicts among ungulates in the Big Sandy Herd Management Area. (The Big Sandy Herd Management Area includes the Sycamore Creek, Burro Creek and the Big Sandy herd use areas). The unit would not be managed for 22 burros. The management area would be managed to support a genetically viable population defined as a minimum of 50 effective breeding animals. Integrated habitat monitoring would be developed to determine forage allocations necessary to support a thriving natural ecological balance among all ungulates using the Big Sandy Herd Management Area. Population adjustments would be based on analysis of integrated monitoring data and resource objectives and in consultation with other government agencies and interested publics. Riparian habitat objectives and management prescriptions would be developed in new resource activity plans and revisions of existing plans.

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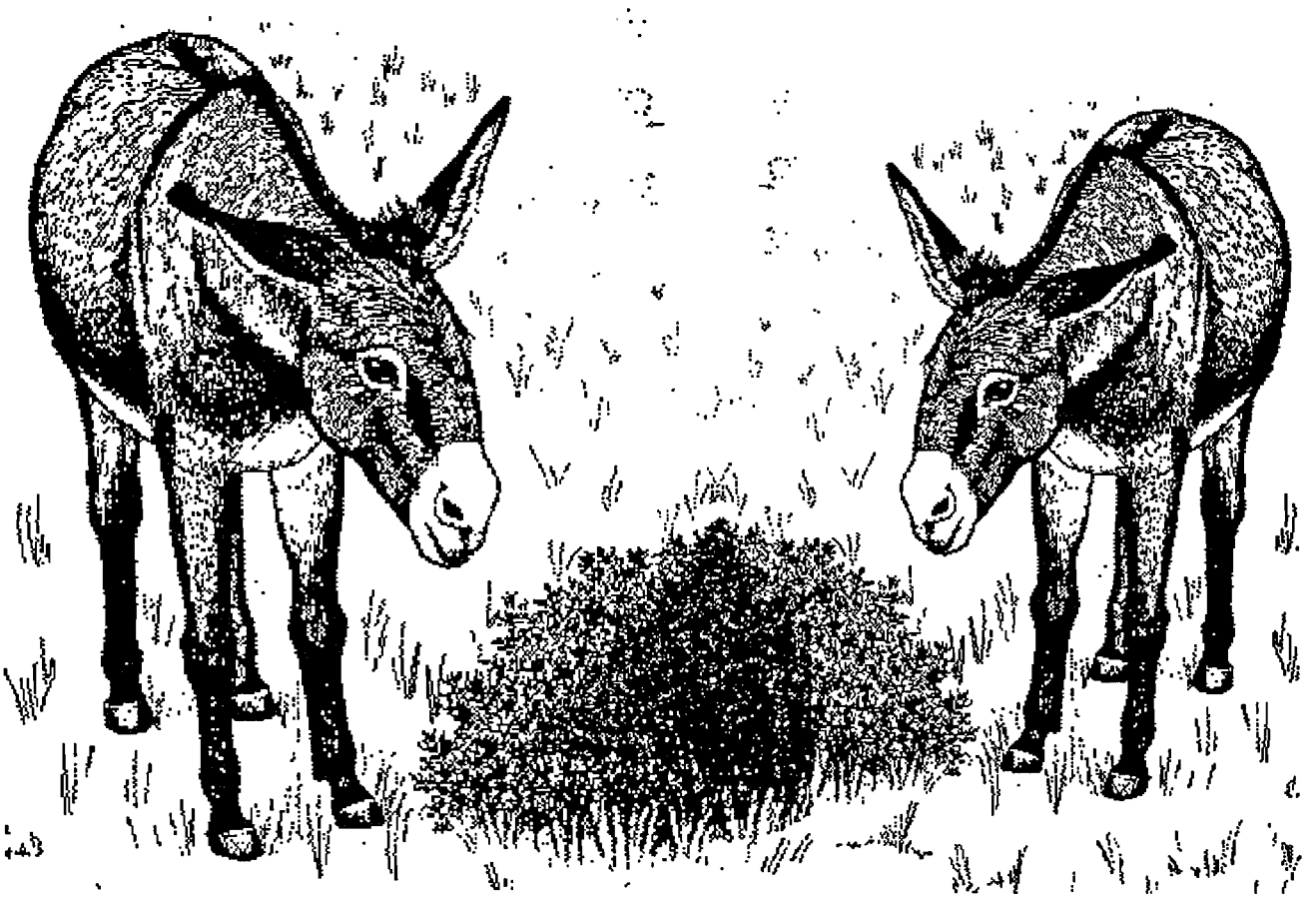
MFP Decision	RMP Proposal
RM-3.7 Designate herd unit 2 as the Big Sandy herd unit. Remove burros from the Gibson, Groom Peak and portions of the Greenwood Peak Community grazing allotments to protect burros from harassment and/or death. Manage the herd unit for 54 burros. Develop a herd management area plan in coordination with allotment management plans and the habitat management plan for the area. These plans will be designed to resolve site-specific problems.	Decision brought forward with changes. Coordinate and revise the herd management area plan, allotment management plans and habitat management plans to identify and resolve use conflicts among ungulates in the Big Sandy Herd Management Area. (The Big Sandy Herd Management Area includes the Sycamore Creek, Burro Creek and the Big Sandy Herd use areas). The unit would not be managed for 54 burros. The management area would be managed to support a genetically viable population defined as a minimum of 50 effective breeding animals. Integrated habitat monitoring would be developed to determine forage allocations necessary to support a thriving natural ecological balance among all ungulates in the Big Sandy Herd Management Area. Population adjustments would be based on analysis of integrated monitoring data and resource objectives and in consultation with other government agencies and interested publics.
RM-3.8 Exclude all grazing by domestic horses and burros from all wild and free-roaming horse and burro herd areas.	Decision brought forward unchanged.