

Southwestern Region

Cibola National Forest

MB-R3-03-32

September 2021

Cibola National Forest Land Management Plan

Final Environmental Impact Statement

Volume 3: Appendices G through I

Bernalillo, Catron, Cibola, Lincoln, McKinley, Sandoval, Sierra, Socorro, Torrance, and Valencia Counties, New Mexico



In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (for example, Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at Filing a USDA Program Discrimination Complaint, https://www.ascr.usda.gov/filing-program-discrimination-complaint-usda-customer, and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

Accessibility: We make every effort to create documents that are accessible to individuals of all abilities; however, limitations with our word processing programs may prevent some parts of this document from being readable by computer-assisted reading devices. If you need assistance with this document, please contact the Cibola National Forest at (505) 346-3900.

Cover photo: The western front range of the Sandia Mountains within the Sandia Ranger District, which is located to the east of the City of Albuquerque jurisdictional boundary. Photo shows craggy cliffs atop sparsely vegetated rocky foothills. Credit: William Stone Photography.

Final Environmental Impact Statement for the Cibola National Forest Land Management Plan

Bernalillo, Catron, Cibola, Lincoln, McKinley, Sandoval, Sierra, Socorro, Torrance, and Valencia Counties, New Mexico

Lead Agency: USDA Forest Service

Cooperating Agencies: Acoma Pueblo, Bernalillo County, Bureau of Land Management,

Canon de Carnuel, Chilili Land Grant, Cibola County, City of Albuquerque, City of Gallup, City of Grants, Ciudad Soil and Water Conservation District, Claunch-Pinto Soil and Water Conservation District, Coronado Soil and Water Conservation District, East Torrance Soil and Water Conservation District. Edgewood Soil and Water Conservation District, Kirtland Air Force Base, Lava Soil and Water Conservation District, Lincoln County, Manzano Land Grant, McKinley County, McKinley Soil and Water Conservation District, National Park Service, New Mexico Department of Agriculture, New Mexico Department of Cultural Affairs-Historic Properties Division, New Mexico Department of Game and Fish, New Mexico Environment Department, New Mexico Land Grant Council, Pueblo de Cochiti, Pueblo of Isleta, Pueblo of San Felipe, Pueblo of Santa Ana, Salado Soil and Water Conservation District, San Antonio de Las Huertas Land Grant, Sandoval County Fire Department, Sierra County, Sierra Soil and Water Conservation District, Socorro County, Tajique Land Grant, Torrance County, Torreon Land Grant, Valencia Soil and Water Conservation District,

Village of Magdalena

Responsible Official: Steven Hattenbach, Forest Supervisor

Cibola National Forest and National Grasslands

2113 Osuna Rd NE Albuquerque, NM 87113

For Information Contact: Forest Planner

Cibola National Forest and National Grasslands

2113 Osuna Rd NE Albuquerque, NM 87113

(505) 346-3900

Contents of Volume 3

Appendix G: Response to Comments	1
Introduction	1
Content Analysis Process	1
General Planning Topics, Concern Statements and Responses	14
Alternative B	
Alternative C	14
Alternative D	15
Plan Revision and NEPA Review Process	16
Resource-Specific Topics, Concern Statements and Responses	24
Air Quality	
Climate Change	25
Continental Divide National Scenic Trail	27
Eligible Wild and Scenic Rivers	32
Fire and Fuels	36
Inventoried Roadless Areas	41
Management Areas	43
Mineral Resources	48
Range	50
Recreation	61
Roads and Travel Management	73
Socioeconomic	74
Species	
Traditional Communities and Uses	
Vegetation	97
Water	104
Wilderness Resources	
Appendix H: Crosswalk between the 1985 Land Management Plan and the Revis	
Management Plan	
Introduction	
How 1985 Plan Direction was Addressed	
Tables of Crosswalks Between 1985 Plan and Revised Plan	
All Management Areas	130
Management Area 1	
Management Area 2	
Management Area 3	
Management Area 4	
Management Area 5	
Management Area 7	
Management Area 8	
Management Area 9	
Management Area 10	
Management Area 11	
Management Area 12	
Management Area 13	
Management Area 14	
Management Area 15	
Management Area 16	
Management Area 17	
Management Area 18	
Appendix I: List of Maps for the Final Environmental Impact Statement	191

Contents of Volume 1: Chapters 1, 2, 3, and 4

- Chapter 1. Purpose of and Need for Action
- Chapter 2. Alternatives, Including the Preferred Alternative
- Chapter 3. Affected Environment and Environmental Consequences
- Chapter 4. Preparers, Consultation, and Coordination
- Distribution of the Environmental Impact Statement
- Glossary
- References
- Index

Contents of Volume 2: Appendices A through F

- Appendix A. Public Engagement and Coordination with Other Planning Efforts
- Appendix B. Description of the Analysis Process
- Appendix C. Wilderness Recommendation Process
- Appendix D. Documentation of the Wild and Scenic Rivers Eligibility Process
- Appendix E. Crosswalk for Terrestrial Wildlife Species
- Appendix F. Crosswalk for At-Risk Fish and Plant Species

Appendix G: Response to Comments

Introduction

This appendix describes the process used for content analysis of the comments received during the 90-day public comment period of August 9, 2019 to November 7, 2019. It includes public comments by individuals and organizations and Forest Service responses to the substantive comments received. A variety of methods were used to inform the public about the opportunity to comment on the draft environmental impact statement (EIS) and the draft land management plan (plan). These methods included emails to subscribers to the plan revision website, news releases, newsletters, media interviews, open houses, contacts with other Federal and local agencies, publication of the notice of availability in the Federal Register, legal notices in the newspaper of record (*Albuquerque Journal*), and postings on the Cibola National Forest website.

A total of 1,013 comment letters were received during the fall 2019 comment period, of which 897 were form letters, 106 were unique letters, and 10 were duplicates. Detailed comment letters were submitted by members of the public; grazing permittees; local, State, and Federal governmental agencies; 29 nongovernmental organizations, and two tribes. In this appendix, individual or representative comments are paraphrased or are quoted from directly.

Content Analysis Process

The content analysis of the comments was conducted by Forest Service Enterprise Program using Comment Analysis and Response Application (CARA). Each comment letter was assigned a number, and each unique comment within a letter was numbered sequentially. For example, the seventh coded comment from comment letter number 3 would be labeled as letter-comment number 3-7. Coded comments were assigned to one or more topic areas, and similar coded comments were grouped into concern statements. In some cases, where multiple coded comments expressed a similar idea, only a single representative coded comment may have been associated with a concern statement. Hence, not all coded comments are associated with a concern statement. The interdisciplinary planning team prepared responses for each concern statement based on its merits, regardless of the source or whether expressed by many or by one. Not all comments warranted a response (for example, general observations, out-of-scope of the plan revision, etc.). This appendix documents the Cibola National Forest's responses to substantive comments, which are addressed as prescribed in 40 CFR 1503.4 in the following ways:

- Modifying the proposed plan and alternatives
- Developing or analyzing alternatives not given detailed consideration in the draft EIS
- Supplementing, improving, or modifying the analysis that the draft EIS documented
- Making factual corrections
- Explaining why the comments need no further agency response.

The letters in response to the draft EIS were categorized based on the type of delivery method. Sixty-one letters were entered directly into CARA via the website portal by the commenters themselves; all other letters were entered into CARA by Cibola staff. Of the 1,013 letters received, the vast majority were sent via email (table 1), most were form letters (table 2), and 53 organizations commented (table 3).

Table 1. Delivery method of letters received during draft EIS comment period

Delivery method	Count
CARA website portal	61
Carrier: U.S. Postal Service, UPS, FedEx, etc.	32
Email	904
Personally delivered	16
Total	1013

Table 2. Types of letters received during draft EIS comment period

Letter Type	Count
Unique	106
Duplicate	10
Master Form*	8
Form Plus**	42
Form	847
Total	1013

^{*} Master form letters are letters determined to be representative of a set of form letters.

Table 3. List of responding organizations, name of author(s), and corresponding letter number

Organization Name	Primary Author	Secondary Author	Letter Number
Albuquerque Wildlife Federation	Kristina G. Fisher		443
American Rivers	Michael Fiebig		984
Audubon Society, Central New Mexico	Perrianne Houghton		956
Backcountry Horsemen, Northwest New Mexico Chapter	Oscar Simpson		443
Cañón de Carnué Land Grant-Merced	LM Garcia y Griego		451
Catron County	Bill Green		59
Center for Biological Diversity	Joe Trudeau		425
Cibola County	Kate Fletcher		1005
City of Grants	Laura Jaramillo		1005
Claunch-Pinto Soil and Water Conservation District	Dierdre Tarr		446
Continental Divide Trail Coalition	Amanda Wheelock		455
Great Old Broads for Wilderness, Rio Grande Valley Broadband	Susan Ostlie	Linda Star	425, 426, 443
Manzana Mountain Gun Club	Jim Greene		1003
McKinley County	Anthony Dimas, Jr.		1005

^{**} Form plus refers to form letters with one or more additional unique and substantive comments.

Organization Name	Primary Author	Secondary Author	Letter Number
McKinley Soil and Water Conservation District	Dudley Byerley		1005
Mount Taylor Landscape Collaborative	Larry Winn		1005
Mountainair Collaborative	Joseph Zebrowski		983
Native Plant Society of New Mexico	Thomas Stewart		444, 457
Native Plant Society of New Mexico Albuquerque Chapter	James McGrath		435, 963, 987
New Mexico Acequia Association	Paula Garcia		986
New Mexico Council of Outfitters and Guides	Kerrie Romero		445
New Mexico Department of Game and Fish	Matt Wunder, Ph.D.		958
New Mexico Horse Council	Oscar Simpson		425, 443
New Mexico Land Grant Consejo	Andrea Padilla		464
New Mexico Land Grant Council	Arturo Archuleta	Rebecca Skartwed	463, 466
New Mexico Off Highway Vehicle Alliance	Mark R. Werkmeister		978
New Mexico Renewable Energy Transmission Authority	Fernando Martinez		971
New Mexico Sportsmen	Oscar Simpson		425, 433
New Mexico Wild	Logan Glasenapp		425
New Mexico Wilderness Alliance	Logan Glasenapp		443, 965, 977
Pueblo of Acoma	Brian Vallo		453
Pueblo of San Felipe	James Candeleria	John Duran	447
Rocky Mountain Elk Foundation	Blake Henning		437
San Antonio de Las Huertas Land Grant	Phillip Clark	Rebecca Skartwed	429, 976
Santa Fe Forest Coalition	Sam Hitt		425
Sierra Club	Eric Huber		425
Sierra Club, Rio Grande Chapter	Teresa Seamster	Camilla Feibelman	443
Sierra County, Board of County Commissioners	Bruce Swingle		1002
Sierra SWCD	Travis Day		86
Socorro County Board of County Commissioners	Michael A. Hawkes		58
SunZia Southwest Transmission Project	Tom Wray		970
Tajique Land Grant	Andrew Gutierrez		467
The Nature Conservancy	Sarah Hurteau		458
The Pew Charitable Trusts	John Gilroy		448
The Wilderness Society	Josh Hicks		443
Town of Manzano Land Grant	Jason Quintana		470
Town of Tome Land Grant	Andrea Padilla		456, 468
Tri-State Generation and Transmission Association, Inc.	Barbara Walz		454
University of Arizona and University of New Mexico Laboratory of Tree-Ring Research	Thomas W. Swetnam		962

Organization Name	Primary Author	Secondary Author	Letter Number
U.S. Environmental Protection Agency	Arturo J. Blanco		1004
Western Watersheds Project	Cyndi Tuell		972
Wild Watershed	Sam Hitt		425
WildEarth Guardians	Adam Rissien		425, 443, 452

In addition to table 3, which only shows organization information, a summary of unique comment letters and representative form letters can be found in the project record, or on the Cibola plan revision website (http://www.fs.usda.gov/goto/cibola/plan) in a spreadsheet_titled "Public Comments on Draft Plan and Draft Environmental Impact Statement." The spreadsheet is too lengthy to include here. It contains author names and letter-comment numbers assigned to each letter.

Table 4 displays the letter-comment numbers addressed by each concern statement (and response). Table 4 also shows the topic area associated with each concern statement and its response.

Table 4. List of concern statements and associated letter-comments

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
2	Range	1006-1, 2, 3, 4
3	Wilderness Resources	1002-16, 17
4	Plan Revision and NEPA Review Process	443-3, 5; 960-1; 965-1, 12
5	Wilderness Resources	5-2; 443-14, 15, 16, 17, 18, 32; 449-4; 607-2; 790-1; 841-1; 965-2, 3, 6, 7, 8, 13, 14, 15, 16, 17, 18, 21, 22, 35; 985-3
6	Wilderness Resources	443-19, 21, 223, 224, 226; 457-4; 965-9, 10, 11
8	Wilderness Resources	77-1; 86-7, 8, 9; 350-1; 388-1; 410-1; 427-9; 433-4; 456-7; 466-98, 99, 100; 978-6
9	Plan Revision and NEPA Review Process	427-8, 10; 430-8, 41, 42; 443-37, 40, 361, 362, 364, 369; 450-2; 458-1, 2, 4, 5, 6; 466-95, 97, 101, 103; 958-34, 63, 64; 965-28; 1005-1, 2
11	Range	87-12, 13, 14, 15, 89-1, 462-5, 972-1, 2, 3, 4, 5, 6, 7, 8, 24, 30
12	Recreation	437-14, 31
13	Species	426-2, 3, 4, 5, 6, 7; 431-1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15; 438-1; 442-1, 2, 3, 4, 5, 6; 956-1, 2; 958-66, 67, 69
14	Plan Revision and NEPA Review Process	426-1, 54, 55; 443-2, 7, 30, 183; 961-2, 25
15	Fire and Fuels	471-2, 3; 955-2; 960-3, 4, 7; 966-2, 3; 980-1; 991-6, 7
16	Fire and Fuels	454; 471-1; 958-3, 4, 5, 65; 985-9
17	Air Quality	724-1, 939-42, 43, 44, 45
18	Recreation	437-11
19	Recreation	958-27
20	Species	445-1; 973-33
21	Wilderness Resources	530-1; 705-2
22	Alternative C	427-1; 443-28; 448-6; 874-1; 957-1; 978-3; 1005-5, 6
24	Alternative D	87-2; 426-16, 18, 57; 436-1; 443-34; 448-1; 457-5; 465-1; 460-4; 959-1; 961-11, 14, 34, 38; 978-8; 991-5; 992-2

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
26	Wilderness Resources	434-1, 2, 4, 5
27	Wilderness Resources	370-1; 173-1; 426-30, 29, 44; 443-36; 426-43; 447-9; 448-2; 449-1, 3; 460-1; 700-2; 808-1; 810-1; 837-1; 857-1, 2; 918-1; 961-8, 10, 16, 17, 18, 23, 24, 26, 31, 32; 985-1, 5, 7; 991-4; 992-1, 3, 5, 7
30	Recreation	462-6; 939-33; 983-4, 5, 6, 7, 8
32	Recreation	985-4
33	Recreation	1-1, 2; 437-12
34	Mineral Resources	85-1, 2
35	Species	452-1; 972-54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66; 991-9, 10
37	Wilderness Resources	991-3
38	Alternative B	459-2, 3, 426-3, 15
42	Fire and Fuels	432-5
43	Fire and Fuels	432-6; 449-2
44	Traditional Communities and Uses	447-7, 8; 450-3; 453-14, 15, 17, 26
47	Wilderness Resources	1005-3
49	Eligible Wild and Scenic Rivers	87-5, 426-42,58; 443-228, 229, 230;457-7, 10; 963-1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13
50	Management Areas	426-22, 26, 27, 32, 33, 34, 35, 48, 49, 50, 56; 443-222, 225; 961-6, 12, 13, 15, 30, 33; 983-1, 2, 3
51	Fire and Fuels	437-4, 23; 540-1; 466-28, 29, 30, 31,43
52	Vegetation	425-26; 460-2, 3; 939-34, 35, 36; 960-5; 443-274, 298, 299, 300, 301, 939-46
53	Recreation	433-1, 2, 3, 5
55	Wilderness Resources	37-1; 350-2; 437-30; 914-1; 915-2; 978-2, 4; 1001-1
56	Wilderness Resources	58-1, 2, 3, 4, 9, 10
61	Vegetation	466-1, 2, 3, 4, 5
62	Vegetation	466-6, 8, 9, 10, 11, 12, 13, 14, 15, 104, 105
63	Plan Revision and NEPA Review Process	59-1, 2; 443-1, 6, 29; 955-1; 960-6; 972-9, 10, 11, 15, 21; 978-56
64	Management Areas	90; 423

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
65	Water	466-16, 17, 18, 19, 20, 21
66	Water	466-24, 25
67	Species	466-26, 27
69	Range	446-1, 35, 36, 37, 40, 41, 42, 44, 45, 46
70	Traditional Communities and Uses	446-2; 466-48, 47, 49, 50, 51, 52, 53, 54, 55,56
71	Traditional Communities and Uses	453-22; 466-59, 60, 61, 63, 64, 79, 82, 88, 90, 93, 94
73	Management Areas	426-17, 24, 28, 37, 39; 457-6; 961-7, 19, 28; 983-10
74	Eligible Wild and Scenic Rivers	984-34,35,36,37,38, 73
75	Wilderness Resources	422-1, 2, 3; 429-6
76	Recreation	1003-4
77	Air Quality	1004- 2
78	Management Areas	87-4, 10; 426-60; 427-11; 443-11, 12, 13, 201, 202, 221; 448-4; 460-5; 961-1, 20, 21, 39; 965-23, 24, 25, 26, 27; 992-6
79	Mineral Resources	454-2, 3; 970-1, 2, 3, 4, 5, 6, 7, 8, 9; 971-1, 2, 3
80	Mineral Resources	427-7, 12; 446-3
84	Range	427-4, 429-2
86	Vegetation	427-6
87	Water	427-3; 453-16, 24, 25; 958-17, 18
88	Species	958-29, 30, 31, 32
89	Fire and Fuels	939-26, 27, 28, 29
90	Management Areas	87-1, 6; 607-1
92	Species	437-28; 457-13
94	Traditional Communities and Uses	453-8, 13, 19, 20, 21, 22
95	Range	86-2, 5; 437-7, 29
96	Vegetation	437-6, 15, 16, 17, 21; 443-194; 457-12, 15, 16; 958-7, 8, 9, 10, 12, 13, 14, 15, 16, 39, 72
100	Recreation	426-52; 457-1, 2, 3

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
102	Traditional Communities and Uses	429-7, 8
103	Wilderness Resources	426-51; 874-2; 961-3, 4; 987-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
104	Traditional Communities and Uses	447-1, 2, 10, 11
106	Wilderness Resources	443-20, 31, 38, 39; 965-19, 20; 978-38, 39, 40, 41, 42, 44
107	Management Areas	87-8, 9, 11
109	Recreation	973-1, 2, 3, 6, 12, 13, 14, 15, 18, 19
111	Plan Revision and NEPA Review Process	429-1; 437-8, 9, 13; 455-22, 28; 456-1, 3, 4, 5, 6; 958-68, 70; 973-4, 10, 16, 42
113	Wilderness Resources	87-3; 426-16, 19, 20, 21, 41; 443-8, 9, 10, 49; 981-1, 989-1, 992-4; 1007-1
115	Traditional Communities and Uses	429-4; 447-3, 6; 698-1
116	Species	437-1, 2, 3, 18, 19, 20, 22, 24, 26, 32, 34; 958-21, 33, 35, 45, 56
117	Range	456-2
119	Wilderness Resources	978-14, 15, 16, 17, 18, 19, 20, 21
121	Recreation	978-7, 10, 11, 12
122	Roads and Travel Management	86-4; 978-22, 23, 24, 25, 27, 30, 31, 32, 33, 34, 35, 36, 37
123	Climate Change	425-1, 4, 5, 13, 23, 24
126	Recreation	430-1, 2, 5, 6, 9
127	Water	426-10, 12
129	Plan Revision and NEPA Review Process	939-30, 31
130	Fire and Fuels	939- 4, 6, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 24, 37, 38, 39
131	Fire and Fuels	939-5, 7, 8, 40; 958-48, 49, 50, 51, 52, 958-3
133	Inventoried Roadless Areas	443-22, 23, 26, 27, 33, 43, 44, 45, 46, 47, 186, 187, 188, 189, 190, 191, 193, 195, 196, 197, 198, 199, 200, 215
134	Recreation	978-49, 51, 53, 54

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
135	Plan Revision and NEPA Review Process	429-5; 443-35; 986-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39
137	Eligible Wild and Scenic Rivers	87-7; 426-31, 45, 46, 47, 53; 460-6; 462-1, 2; 961-5, 9, 27, 29, 35; 983-13; 984-42, 43, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66
138	Vegetation	(452-3, 4, 5, 6, 7; 962-20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55)
143	Species	958-41, 42, 43, 44, 47
144	Mineral Resources	958-38, 57, 58, 59, 60, 61, 62, 73, 74
146	Species	958-37, 40
148	Plan Revision and NEPA Review Process	443-41, 48, 305; 446-5; 958-4, 65; 983-11, 14, 15
149	Traditional Communities and Uses	447-5; 453-1, 2, 4, 5, 6, 7, 9, 11, 12, 18
150	Eligible Wild and Scenic Rivers	965-30, 31, 32, 33, 984-2, 4, 7, 16, 19, 20, 29, 30, 31, 32, 67, 68, 72
153	Management Areas	443-203, 204, 205, 208, 212, 213, 216, 218, 219, 220
154	Roads and Travel Management	443-231, 232, 233, 234, 235
156	Recreation	443-24, 192, 207, 209, 210, 211, 214, 217, 236, 237, 238, 239, 240, 241, 242, 243, 244, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 302, 303, 304, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331; 939-47, 48; 958-1, 22; 978-43, 45, 46, 47, 48
157	Fire and Fuels	443-276, 278, 280, 281, 282, 283, 285, 286, 287
158	Vegetation	443-245, 246, 247, 248, 249, 250, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355; 939-41; 958-6; 972-18, 19, 20, 22, 23
159	Socioeconomic	443-367, 368, 370, 371, 372, 373
160	Traditional Communities and Uses	443-357, 358, 359, 360, 363
161	Plan Revision and NEPA Review Process	430-69, 70, 71, 72
162	Plan Revision and NEPA Review Process	958-11, 71; 983-9

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
163	Wilderness Resources	910-1; 913-1; 916-1; 924-1; 925-1; 928-2; 930-1; 931-1; 1010-1; 969-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21
164	Wilderness Resources	428-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95
165	Management Areas	426-36, 59; 961-36
166	Wilderness Resources	991-8
167	Traditional Communities and Uses	451-1, 2, 3, 4, 5
170	Vegetation	958-28
171	Vegetation	958-75
172	Traditional Communities and Uses	466-58, 62, 65
173	Traditional Communities and Uses	466-66, 67, 80, 81, 85
175	Range	466-68, 77, 87
176	Traditional Communities and Uses	466-89
177	Traditional Communities and Uses	466-69, 70
178	Traditional Communities and Uses	466-83
179	Traditional Communities and Uses	466-72, 83, 91
181	Traditional Communities and Uses	466-102
183	Fire and Fuels	453-31
186	Inventoried Roadless Areas	453-30, 1005-3
187	Water	453-28
188	Range	972-25, 26, 27, 28
190	Plan Revision and NEPA Review Process	978-26, 28, 29
192	Species	432-1
193	Vegetation	963-6

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
196	Range	991-11
197	Range	457-8, 9; 963-9
198	Water	88-1; 461-1; 991-1
199	Vegetation	432-2; 437-5
201	Species	958-46
202	Roads and Travel Management	430-11
203	Species	426-8; 432-3
204	Vegetation	432-4
205	Mineral Resources	426-9
206	Water	86-3; 450-1; 453-29; 466-22; 958-23
207	Water	426-11; 453-27; 958-20, 25, 26
208	Continental Divide National Scenic Trail	455-34, 35, 36, 37, 38, 39, 40, 41, 42, 43
209	Water	446-4; 466-23
210	Roads and Travel Management	437-33; 1003-2, 3
211	Continental Divide National Scenic Trail	430-19, 20, 21, 23, 25, 26, 27, 28, 31, 32, 50, 63, 64, 66; 455-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 24; 978-58, 60, 63
212	Continental Divide National Scenic Trail	430-36; 455-16, 29, 30, 31, 32
213	Continental Divide National Scenic Trail	430-10, 33, 34, 59, 60, 61, 62
214	Recreation	430-12, 13, 14
215	Continental Divide National Scenic Trail	430-15, 16, 17, 18, 53
217	Continental Divide National Scenic Trail	430-43, 47, 48, 49; 455-33
221	Socioeconomic	443-356, 374, 375, 376, 377; 973-34

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
222	Continental Divide National Scenic Trail	430-65, 67
223	Mineral Resources	447-4, 15; 453-32
224	Divide National Scenic Trail	430-52, 58, 68
226	Water	958-2
228	Eligible Wild and Scenic Rivers	984-3, 4, 17, 21, 22, 33, 69, 78
229	Eligible Wild and Scenic Rivers	984-6, 9, 10, 11, 13, 18, 23, 24, 25, 26, 27, 28, 39, 40, 41, 70, 71, 74
230	Eligible Wild and Scenic Rivers	984-14,15
231	Continental Divide National Scenic Trail	433
232	Continental Divide National Scenic Trail	455-26, 27
233	Continental Divide National Scenic Trail	430-45, 46
240	Water	958-19,24
241	Water	1004-1
243	Eligible Wild and Scenic Rivers	447-8
244	Eligible Wild and Scenic Rivers	422-1,3,5, 429-6
245	Range	87-12, 16, 462-4, 972-12, 16
247	Range	972-14
248	Range	958-54, 55
249	Range	86-6, 972-44
250	Range	427-4, 429-3
251	Recreation	973-5, 7, 8, 9
252	Recreation	973-24, 25, 26, 27, 28, 29, 30, 31, 32, 35, 36, 37, 38, 39, 40
253	Recreation	973-17, 18, 19, 20, 21, 22, 23

Concern Statement Number	Topic Area	Associated Letter-Comment Number(s)
254	Traditional Communities and Uses	453-3
255	Traditional Communities and Uses	453-10,11
256	Traditional Communities and Uses	466-69, 73, 75, 78
257	Traditional Communities and Uses	466-73; 75, 78
258	Fire and Fuels	443-288, 289, 290, 291, 292, 293, 294, 295, 296
259	Fire and Fuels	443-274, 275, 277, 279
260	Fire and Fuels	426-38; 440-2; 443-284, 285;1003-1
261	Water	986-18, 23, 24, 25,26, 29, 30, 31,32
262	Traditional Communities and Uses	986-11, 12, 13,14,15,34, 35, 36,37,38
263	Continental Divide National Scenic Trail	430-22
264	Continental Divide National Scenic Trail	430-24
265	Continental Divide National Scenic Trail	430-29
266	Continental Divide National Scenic Trail	430-30
267	Climate Change	425-7, 9, 11, 12, 16, 19, 22
268	Climate Change	425-14, 15, 17, 18
269	Climate Change	425-20, 21, 25
270	Species	437-10, 25; 958-36; 985-2, 6
271	Species	958-45
272	Inventoried Roadless Areas	443-184
273	Continental Divide National Scenic Trail	430-39

General Planning Topics, Concern Statements and Responses

Alternative B

Concern Statement 38:

General comments support alternative B with request for cultural protections, specifically in regard to the proposed Pueblo Migrations Management Area. (459-2, 3; 426-3,15)

Response

Whereas the Pueblo Migrations Management Area would provide some additional management focus for the National Register of Historic Places site Gallinas Springs Pueblo and the complex at Lion Mountain (which is eligible for listing), both sites would still be protected under the forestwide management direction within the Cultural and Historic Resources and Traditional Communities and Uses sections of the final land management plan. The forestwide Cultural and Historic Resources and Traditional Communities and Uses plan direction (as well as other applicable plan direction) applies to all action alternatives, B, C, and D. The rationale for not including the Pueblo Migrations Management Area in the preferred alternative C is that the Cibola finds the Cultural and Historic Resources and Traditional Communities and Uses plan direction will provide cultural protection and is similar to plan direction in the proposed Pueblo Migrations Management Area plan.

There are several Cultural and Historic Resources desired conditions that state aspirations for public education and understanding of cultural resources (FW-DC-CHR-6), the significance of scientific study and knowledge regarding past occupation (FW-DC-CHR-5), and traditional uses by descendent communities (FW-DC-FRT-4). The desired condition FW-DC-CHR-1 that cultural and historic resources are stable and not significantly impacted by natural processes and human activity. The management approach FW-MGAP-CHR-2 also states similar direction to develop appropriate measures for historic properties to prevent deterioration due to visitor use, vandalism, and looting with measures such as signing, fencing, administrative closure, patrols, interpretive signs, stabilization, or data recovery.

In terms of valuing site interpretation and public engagement in protecting archaeological sites, there are several management approaches in the land management plan "Cultural and Historic Resources" section that speak to this kind of strategy. The management approach FW-MGAP-CHR-1 describes how to work collaboratively to develop public participation and partnerships that allow the diversity of interests to work together on identifying, managing, preserving, protecting, and interpreting historic properties. Working with descendant community members in the resolution process and identification of specific mitigation measures is outlined in FW-MGAP-CHR-3. In addition to adhering to these aforementioned forestwide plan components in the "Cultural and Historic Resources" and "Traditional Communities and Uses" sections, site-specific projects for the Pueblo Migrations area could also tier to these plan direction strategies in order to achieve the stated request for cultural protections in this unique area of the forest.

Alternative C

Concern Statement 22:

Some commenters supported all or portions of alternative C. (427-1; 443-28; 448-6; 874-1; 957-1; 978-3; 1005-5, 6)

Response

Thank you for your comment. The Cibola plan revision team updated analyses, where appropriate, in response to comments on the preferred alternative from the fall 2019 formal comment period. The plan revision team believes that the analysis provided in support of the final plan (alternative C) does provide sufficient details to support the preferred option.

Alternative D

Concern Statement 24:

General comments that support alternative D wilderness. (87-2; 426-16, 18, 57; 436-1; 443-34; 448-1; 457-5; 465-1; 460-4; 959-1; 961-11, 14, 34, 38; 978-8; 991-5; 992-2)

Response

Although there is a large difference between the recommended wilderness acreages of alternative C and alternative D, the alternatives were developed to cover a full spectrum of management intensity based on the themes of each alternative. These themes ranged from a natural processes emphasis in alternative D which included 32 proposed recommended wilderness areas, to a human uses emphasis in alternative C which recommended less acreage than alternatives B and D. All of these alternatives are consistent with the purpose and need, laws and regulations, and are responsive to the revision topics. The plan revision team determined through analysis that the additional recommended wilderness areas in alternative D, beyond what are proposed in alternative C, would be difficult to financially implement on the ground under budget constraints and would make multi-use management difficult due to the existence of incompatible uses.

Concern Statement 113:

Comments in support of all wilderness recommendations (expansions) proposed in alternative D, and their inclusion in the final plan. (87-3; 426-16,19, 20, 21, 41; 443-8, 9, 10; 992-4; 1007-1)

Response

The Cibola National Forest manages four designated wilderness areas totaling 9 percent of the forest acreage (138,378 acres) and 13 inventoried roadless areas totaling 15 percent of the forest acreage (239,143 acres). During wilderness evaluation, the Cibola interdisciplinary team evaluated 26.6 percent of the forest acreage (430,269 acres). Under the preferred alternative C, the total proposed recommended wilderness acreage is 14,900 acres which would be a 10.76 percent increase over existing designated wilderness. Under the maximum recommended wilderness alternative D, the total proposed acreage is 203,117 acres which would be a 146 percent increase over existing designated wilderness.

After considering the analysis in alternatives A through D, and the alternatives considered but eliminated from detailed study, the deciding official believes a reasonable range of alternatives was carefully evaluated in compliance with National Environmental Policy Act regulations at 36 CFR 220.5(e), which states that "no specific number of alternatives is required or prescribed." Beyond this, all alternatives were developed to address:

- the purpose and need, as described in chapter 1, which includes the need for change,
- changes in socioeconomic or environmental conditions since the 1985 plan, and
- issues identified from comments received during public scoping of the revision effort and from comments received on initial plan components, alternative themes, and management areas.

In terms of recommended wilderness, there is no requirement for all lands included in the recommended wilderness inventory and subsequent evaluation to be carried forward in an alternative (FSH 1909.12, Ch 70, section 72). Although there is a large difference between the recommended wilderness acreages of alternative C and alternative D, the alternatives were developed to cover a full spectrum of management intensity based on the themes of each alternative. These themes ranged from a natural processes emphasis in alternative D which included 32 proposed recommended wilderness areas, to a human uses emphasis in alternative C which recommended less acreage than alternatives B and D. All of these alternatives are consistent with the purpose and need, laws and regulations, and are responsive to the revision topics. The Cibola determined through analysis that the additional recommended wilderness areas in alternative D, beyond what are proposed in alternative C, would be difficult to financially implement on the ground under budget constraints and would make multi-use management difficult due to the existence of incompatible uses.

Plan Revision and NEPA Review Process

Concern Statement 4:

Comments that indicate each national forest should stagger the publishing of their draft land management plans and draft environmental impact statements instead of a concurrent comment review period for the Cibola, Carson, and Santa Fe National Forests. (443-3, 5; 960-1; 965-1, 12)

Response

Whereas the Cibola, Carson, and Santa Fe National Forests understand the concern regarding the impact to an organization or individual over coinciding the 90-day public review and comment periods for the three forests, we need to balance such concerns with equivalent concerns regarding keeping the revision efforts for all three national forests moving forward efficiently in as timely a manner as possible, while continuing to achieve quality and full public engagement. There has already been extensive public engagement on the development of all three revised plans to date, and all three national forests had versions of their preliminary draft plans available on their websites prior to posting the draft versions in the summer of 2019. The Cibola posted a version of the draft plan and draft EIS in the fall of 2018, which contained much of the same material that was presented within the draft plan and draft EIS released for the 90-day public review and comment period on August 9, 2019. The three plans have been worked on with much cooperation among the three national forests to ensure consistency across the plans, and in fact the sections dealing with traditional communities and uses are 100 percent consistent in their approaches to these areas, which should have eased the review burden. In order to further aid the public's ability to review, all three national forests posted their draft plan and draft EIS versions to their planning websites in advance of the August 9, 2019 Federal Register notice. The Carson and Santa Fe National Forests posted their draft plan and draft EIS versions two months prior to the August 9, 2019 Federal Register notice that initiated the formal 90-day public comment period. The Cibola National Forest posted their draft plan and draft EIS on July 26, 2019, two weeks prior to August 9, 2019, so that the public could familiarize themselves with the documents before the start of the formal 90-day public comment period. These postings also included a summary document highlighting the key updates made to the draft plans that had previously been posted on each national forest's website, thus letting reviewers know where those key updates could be found. During the 90-day public review and comment period, each of the three national forests held public meetings and open houses to share information and solicit feedback on their draft plans and draft environmental impact statements. There was a joint public meeting held for all three forests on August 20, 2019 in Santa Fe, New Mexico to provide the public and organizations the opportunity to interface with staff from all three national forests and review material from all three forests' draft plans and draft EISs. The Cibola, Carson, and Santa Fe National Forests consider that ample

opportunities were provided for organizations and the general public to accomplish a quality review of the three sets of draft documents, while at the same time allowing the three forests to continue moving forward with their revision processes efficiently.

Concern Statement 9:

Some commenters identified editorial problems and technical inaccuracies or inconsistencies in the draft environmental impact statement and draft land management plan. (427-8, 10; 430-8, 41, 42; 443-37, 40, 361, 362, 364, 369; 450-2; 458-1, 2, 4, 5, 6; 466-95, 97, 101, 103; 958-34, 63, 64; 965-28; 1005-1, 2)

Response

The environmental impact statement has been updated in response to these comments. Either the suggested edit was made, or the environmental impact statement was updated in another manner to address the editorial problem or inconsistency. The document has been thoroughly reviewed and put in an approved format for publications of this nature. Measures and topics used to compare alternatives have been reviewed for consistency and relevance.

Concern Statement 14:

Comments request a blend of alternatives. (426-1, 54, 55; 443-2, 7, 30, 183; 961-2, 25)

Response

Thank you for your support of a blend of alternatives. The deciding official, who is the forest supervisor, carefully considered a range of recommended wilderness areas, as well as other allocations, to determine the mix of land and resource uses that would best meet public needs. The deciding official recognizes the advantages of blending certain elements of the different alternatives. In response to public comments, alternative C has been selected as the preferred alternative, and it includes components of alternatives A, B, and D.

The alternatives considered in the environmental impact statement were developed to address the significant issues raised regarding the proposed revised plan. The "Issues" section in chapter 1 of the environmental impact statement describes the issues that generated the alternatives.

Chapter 2 of the environmental impact statement describes the alternatives developed in response to these issues. This chapter discusses the four alternatives that are analyzed in detail in the environmental impact statement. It also discusses the four additional alternatives that were considered but dismissed from further evaluation in the environmental impact statement. Forest Service National Environmental Policy Act (NEPA) regulations at 36 CFR 220.5(e) state that "no specific number of alternatives is required or prescribed."

In addition to developing alternatives to the proposed revised plan, many suggestions for alternative management have been incorporated into the proposed revised plan over the course of this land management plan revision effort instead of developing a new alternative. The discussion on the alternatives in chapter 2 of the environmental impact statement provides information on how the proposed revised plan (alternative C) was developed iteratively in a collaborative manner to address the needs for change and comments from stakeholders. Furthermore, many adjustments to alternative C have been made in response to the comments received during the 90-day comment period on the draft environmental impact statement and proposed revised plan. These adjustments are also discussed in chapter 2 of the final environmental impact statement.

Some elements that are common to all of the alternatives were considered in detail. These elements are identified in the "Elements Common to All Alternatives" section in chapter 2 of the environmental impact statement. There are also measurable differences between the action alternatives in regard to plan components (desired conditions, objectives, standards, and guidelines), areas recommended as future wilderness, management areas, and suitability determinations on timber, recreation, and transportation. These differences include a range of environmental consequences. The tables at the end of chapter 2 of the environmental impact statement summarize the differences and similarities between the alternatives by comparing how the effects of each action alternative respond to the needs for change and issues identified in chapter 1.

Concern Statement 63:

Comments allege failure to comply with the National Environmental Policy Act (NEPA), specifically regarding range/grazing and climate change. (59-1, 2; 443-1, 6, 29; 955-1; 960-6; 972-9, 10, 11, 15, 21; 978-56)

Response

The Forest Service believes that the range of alternatives is adequate and expresses a full range of possible management emphases for the Cibola National Forest. We respectfully disagree with those commenters who do not feel the range is adequate, or who believe the process used to develop alternatives is flawed. Many of the suggested alternatives have already been analyzed in the draft EIS, and many of the suggestions for changes in alternatives are encompassed in one of the existing alternatives that were analyzed in the draft EIS.

NEPA requires that a broad range of reasonable alternatives be considered but does not mandate that any particular alternative be selected. An agency's discussion of alternatives must be bounded by some notion of feasibility. There is no requirement to consider alternatives that are impractical or infeasible. Guidance from the Council on Environmental Quality (46 Federal Regulation 18026 (1981)) and many courts have stated that the range of alternatives is bounded by the purpose of the proposed action. As one Judge noted, when the purpose of a proposed action is to accomplish one thing, it makes no sense to consider alternative ways of doing by which another thing may be accomplished. NEPA does not require agencies to consider alternatives that are inconsistent with the basic policy objectives for the management of the area. Nor is there any requirement in NEPA that an environmental impact statement discuss a minimum number of alternatives. The Forest Service is required to set forth only those alternatives necessary to make a reasoned choice.

Detailed analysis of potential negative impacts from grazing such as loss of species diversity, altered fire regime, invasive species, and/or degraded watersheds is conducted at the project (allotment management planning) level. As stated in the draft EIS ("Environmental Consequences" section under "Sustainable Rangelands and Livestock Grazing"):

The forest plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Because the forest plan does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions), there can be no direct effects. However, there may be implications, or long-term environmental consequences, of managing the national forests under this programmatic framework. This management action does not change any current activities for range management permitted under the current forest plan. Additional planning actions would be required to manipulate animal unit months, pasture and allotment boundaries, and the addition or removal of range improvements.

The draft EIS also states (under "Environmental Consequences Common to All Alternatives" in the "Sustainable Rangelands and Livestock Grazing" section) that livestock grazing would be managed in a manner that maintains satisfactory conditions which should provide for diverse native plant communities and that ongoing evaluations are being conducted to determine if actions relating to livestock grazing are maintaining or progressing toward desired conditions.

Climate change was considered during the development of plan components for ecological sustainability, ecosystem services, and multiple uses. Monitoring topics in Terrestrial Habitats, Wildlife Connectivity, and Forested Ecosystems VI measures all address potential impacts to the plan area related to climate change and other stressors.

Concern Statement 111:

Comments requesting collaboration with other organizations, agencies and public. (429-1; 437-8, 9, 13; 455-22, 28; 456-1, 3, 4, 5, 6; 958-68, 70; 973-4, 10, 16, 42)

Response

As stated in chapter 1 of the environmental impact statement, Cibola personnel have engaged the public frequently and innovatively throughout the planning process in accordance with the 2012 Planning Rule. This effort has included conventional public meetings, collaborative work sessions, information sharing via social media, and the development of self-convening groups organized around each of the four mountain ranger districts.

Members of the public have submitted comments at each major milestone in plan revision to date including the assessment, the notice of intent and the needs for change, and the preliminary draft plan.

During November 2012, Cibola staff held a total of six public meetings to announce the kickoff of land management plan revision activities and to seek comment and input on the assessment report. During May 2014, seven public meetings, two tribal meetings, and one technical meeting were held around the Cibola. At this time, key findings from the draft assessment report were presented and comments were requested. In February 2015, the needs-for-change statements were released and a notice of intent to prepare an environmental impact statement was published in the Federal Register.

Comments received were used to revise these materials, and a preliminary draft plan was released to the public in July 2016. Public meetings and an informal comment period were held in conjunction with the release of these draft materials. alternative B reflects the site-specific place-based managements areas presented within the preliminary draft plan. The public input collected from the preliminary draft plan helped Cibola personnel further refine the draft land management plan into the proposed action—alternative C.

Since the spring of 2015, Cibola staff have collaborated with other units of government as cooperating agencies. The National Environmental Policy Act allows a lead Federal agency, such as the Cibola National Forest, to invite other units of government to participate in the National Environmental Policy Act process (40 CFR section 1501.6; 1508.5). This formal relationship allows Cibola staff to request the participation of each agency early in the process and to use the environmental analyses and proposals of cooperating agencies to the extent possible. Forty-three cooperating agencies have signed a memorandum of understanding as units of government representing diverse interests and communities such as soil and water conservation districts, city and County governments, six of the 17 tribes with whom Cibola personnel formally consult on this plan revision effort, land grants, and State and Federal agencies.

In 2016, the Cibola personnel and cooperating agencies participated in the formation of a collaborative for each of the four mountain districts and a forestwide collaborative—the Cibola Shared Stewardship Collaborative. Cibola personnel joined with partners to kick off these formal collaboration teams consisting of members of the public and nonprofit and government entities. The purpose of the Cibola Shared Stewardship Collaborative is to provide input to the Cibola leadership team on the use and management of the Cibola's multiple resources.

In the fall of 2018, Cibola personnel released an updated version of the draft land management plan along with a previous version of this draft environmental impact statement on its website. Public open houses were held to collect input from the district collaboratives, the general public, and the cooperating agencies. Comments received from the cooperating agencies on the draft land management plan and the draft environmental impact statement were addressed and incorporated into this version of the draft environmental impact statement where feasible.

Concern Statement 129:

Comments indicate plan is not consistent with National Forest Management Act. (939-30, 31)

Response

The Cibola National Forest did consider the most accurate, reliable, and relevant scientific data or information available for the plan revision process as per the 2012 Planning Rule Part 219, Subpart A on the role of science in planning (36 CFR section 219.3). The Forest Service Handbook (FSH) 1909.12-Land Management Planning Handbook directives, effective January 30, 2015, lay out specialized guidance and instruction for implementing the 2012 Planning Rule and provide a framework for adaptive management. Within the zero code of the FSH 1909.12 (section 07.1), the use of best available scientific information is further defined and discussed. The Cibola used the definition of "available" taken directly from this section of the directives:

The rule does not require that planning develop additional scientific information, but that planning should be based on scientific information that is already available. New studies or the development of new information is not required for planning unless required by other laws or regulation. In the context of the best available scientific information, "available" means that the information currently exists in a form useful for the planning process without further data collection, modification, or validation. Analysis or interpretation of the best available scientific information may be needed to place it in the appropriate context for planning. (FSH 1909.12, zero code, section 07.1).

The Forest Service believes that the final plan is consistent with the National Forest Management Act, the 2012 Planning Rule, and the FSH 1909.12 Land Management Planning Handbook directives. Since the commenter does not mention specifically how the Cibola did "implement exclusion available relevant data or information," does not specify what portions of the plan were not well documented and does not include rationale or citations of relevant literature, it is difficult to address the alleged insufficiencies.

The final plan has identified long-term or overall desired conditions and provide general direction for achieving those desired conditions organized by resource, under two broad major categories: (1) ecological sustainability and diversity of plant and animal communities; and (2) social and economic sustainability and multiple uses. Within these categories, the final plan includes specific desired conditions pertaining to air quality, watershed condition, terrestrial ecosystems and vegetation, animal and plant species, invasive species, fire, sustainable recreation, scenery, timber and other forest products, rangeland livestock grazing, minerals and energy, and cultural resources (final plan, chapter 2, forestwide management direction and desired conditions). Also provided in the final plan are objectives, goals,

standards, and guidelines, which were designed to work together, in an integrated way to achieve or maintain desired conditions (final plan, chapter 2). All of these plan components work together as a whole to meet the requirements of the 2012 Planning Rule, the National Forest Management Act, and the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528-531).

Regarding best available scientific information that was used, the Assessment Report of Ecological, Social, Economic Conditions, Trends, and Risks to Sustainability (2015) speaks extensively to the methods and data used to set the stage for development of the plan. Additionally, appendix B of the environmental impact statement includes discussions of specific modeling and processes which were used in analyses; two examples follow.

Best available scientific information for socio-economic analysis

The input-output model, IMPLAN, used to develop the Social Economic Impact Analysis. IMPLAN is the best available scientific information used to estimate economic contributions and impacts for National Forest Planning and projects. IMPLAN is a secondary data, input-output modeling system. The system was first developed by the USDA-Forest Service in cooperation with the Federal Emergency Management Agency and the Bureau of Land Management during the late 1970s. The system includes both data and software. In 1987, data generation for IMPLAN was provided by the University of Minnesota. In 1993, the Minnesota IMPLAN Group, Inc was formed to privatize the development of IMPLAN data and software.

IMPLAN software is designed for a range of users from modeling novices to academic leaders. It has evolved over the years in response to both technology advances and user needs. Version 1 of the software was released in 1996, Version 2 in 1999, and Version 3 in 2009. The latest edition of the software provides advanced features for model customization and introduces multi-regional input-output capabilities.

IMPLAN datasets are prepared annually using the latest economic data that are publicly available. Unique datasets are available by county for the entire U.S., with data by zip codes available upon request. Data from a variety of Federal sources are reconciled to provide a consistent set of estimates that can be aggregated to state and national levels. Proprietary techniques are used to estimate data that cannot be disclosed because of Federal confidentiality requirements, allowing users to publish detailed study results. Proprietary estimates of trade flows for 546 industries between all U.S. counties are key to the creation of credible, local models.

IMPLAN has gone from a system employed by a few Federal agencies to one that is embraced by economists throughout the U.S. IMPLAN has been used by over 250 academic institutions across the country, including Yale, Stanford, Duke, University of Michigan, and University of California-Berkeley. Over 200 Federal, state, and local government agencies have used IMPLAN. By adding private firms and non-profit organizations, the IMPLAN client list exceeds 600. Hundreds of publications have referenced IMPLAN, ranging from peer-reviewed academic journals to local economic development newsletters. The Minnesota IMPLAN Group, Inc. hosts a conference for IMPLAN users every other year in conjunction with the annual conference for the Mid-Continent Regional Science Association.

Best available scientific information for vegetation analysis (extracted from EIS appendix B)

- Regionwide Forest Inventory and Analysis (https://www.fia.fs.fed.us/) plot data, sorted by vegetation type and site index (SI)
- Forest Vegetation Simulator (FVS) (https://www.fs.fed.us/fvs/) regionally calibrated

• Overall vegetation structure was analyzed using mapping and ecosystem modeling for current conditions and future (15, 100, and 1,000-year) trends for major Cibola vegetation types based on data sources of the Forest Service Southwestern Region and modeled using the Vegetation Dynamics Development Tool (VDDT) (ESSA 2006). VDDT software is a nonspatial model that allows the user to model vegetation change over time as a series of vegetation states that differ in size class, canopy cover, dominance type, and storiedness, and movement of vegetation among states (transitions) (ESSA 2006). These models summarize and synthesize the current state of scientific knowledge for vegetation dynamics. Model state descriptions, state-and-transition models (and their inputs), and output files, as well as Vegetation Dynamics Development Tool software and user guide, are on file at the Cibola National Forest Supervisor's Office.

Concern Statement 135:

Comments suggest plan modifications, additions and language edits. Comments regarding R.S. 2477 rights and others. Comments cite law violations and process failure. (429-5; 443-35; 986-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39)

Response

The Forest Service recognizes the assertion of rights but no change to plan language is suggested. Current plan language recognizes pre-existing valid rights. The descriptive language is only meant to provide a high-level summary, not to provide detailed explanation of the legal rights of acequias. A detailed description is beyond the scope of the planning process.

As explained in the regional foresters memorandum of July 2 2019, the existing guidance is intended to be a living document that will periodically be updated and refined to improve it.

Concern Statement 148:

Some commenters requested new maps and reported technical inconsistencies. (443-41, 48, 305; 446-5; 958-4, 65; 983-11, 14, 15)

Response

The maps have been adjusted in response to these comments. The suggested modifications and creation of maps have been addressed.

Concern Statement 161:

Comments state Freedom of Information Act request for geospatial data dated September 8, 2019 was never received. Request datasets. (430-69, 70, 71, 72)

Response

Geospatial data was provided in October of 2019. The data can also be found on the Forest Service Region 3 website under "Land and Resource Management." (https://www.fs.usda.gov/detail/r3/landmanagement/gis/?cid=stelprdb5212078)

Concern Statement 162:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. (958-11, 71; 983-9)

Response

The Cibola National Forest agrees with the values expressed in these comments for coordinating with local governments and partners to accomplish forest management. As stated in chapter 1 of the revised land management plan (under "Plan Components"):

Plan components guide future project and activity decision making and include desired conditions, objectives, standards, guidelines, suitability of lands, and goals. Plan components should (1) provide a strategic and practical framework for managing the Cibola National Forest, (2) be applicable to the resources and issues of the Cibola, and (3) reflect the Cibola's distinctive roles and contributions. Plan components were developed collaboratively with input from a variety of cooperating agencies, external and internal stakeholders, and the general public.

The plan has forestwide plan components that further emphasize the value of partnerships. Forestwide Watershed Management Approach (FW-MGAP-WTR) 3 prescribes the following: "Work with local, State, and Tribal governments, land grants, and other stakeholders to identify watershed improvements and priorities for protection and management thereby increasing collaboration across boundaries." Forestwide Terrestrial Species and Habitat Management Approach (FW-MGAP-TRSP) 2 recommends that the forest: Work collaboratively with New Mexico Department of Game and Fish personnel to plan and implement projects that make progress towards the Cibola's desired conditions and help achieve conservation actions specified in the New Mexico State Wildlife Action Plan or equivalent." Furthermore, land management plan components for federally-recognized tribes and rural historic communities include several provisions for collaborative working relations.

Cibola National Forest is fully committed to working with our communities and collaborators in forest landscape and ecosystem management complements cross boundary efforts.

Concern Statement 190:

Technical edits to roads on map. (978-26, 28, 29)

Response

There is a large amount of information on the maps. The addition of all National Forest System roads resulted in a map that was unreadable. Using the Cibola's motor vehicle use map (MVUM) with the plan maps would provide the requested information. This information is also available in email format if requested.

Resource-Specific Topics, Concern Statements and Responses

Air Quality

Concern Statement 17:

The protection of the public's respiratory health, in accordance with the National Ambient Air Quality Standards must be a primary U.S. Forest Service. Cibola National Forest is obligated to independently ensure compliance with Federal, State, and local air quality standards. To this end, it is not enough to simply assert that an activity or use will comply with relevant Federal, State, and local air quality standards or regulations. Rather, Cibola must demonstrate via the use of Environmental Policy Act approved "Federal Reference or Equivalent Method air quality monitoring equipment and methodology," that management actions for implementation are consistent with maintaining air quality at levels meeting or exceeding such laws and regulations, while complying with National Forest Management Act role of science in planning. (724-1, 939-42, 43, 44, 45)

Response

The protection of public health is of the utmost importance. All projects implemented by the Forest will adhere to all State and Federal ambient air quality standards (FW-DC-AIR-1). The Forest Service complies with the New Mexico State Smoke Management Program, which is described in New Mexico Section 309(g) Regional Haze State Implementation Plan.

The land management plan includes components that tier to and require the Cibola National Forest to meet all State and Federal air quality regulations and legal requirements. The Forest Service does not have any control over the Federal reference monitoring. In addition, exceedances are not based upon short time periods, but rather a number of metrics are employed that use a 3-year average (https://www.epa.gov/criteria-air-pollutants/naaqs-table).

Concern Statement 77:

The EIS should include related criteria and hazardous air pollutants emissions and any impacts to air quality and visibility for any Class I Federal Areas identified in 40 CFR Part 81, Subpart D. (1004-2)

Response

By being compliant with the state Smoke Management Program, we avoid impacts to Class 1 areas (under the Regional Haze Rule). Updates to the Regional Haze Rule exclude impacts from smoke from wildland fires. We are compliant with the state Smoke Management Program via plan components; smoke monitoring is done at the project level and is outside of the scope of the planning process. Furthermore, air quality modeling of smoke depends on meteorological inputs from current forecasts (2 to 3 days in the future) to be most useful. Prospective modeling, as suggested, without current forecasts to predict smoke months or years in advance, is not a useful predictor of impacts from an individual burn.

Climate Change

Concern Statement 123:

Manage forests to serve as vast carbon sinks. The land management plan should acknowledge and optimize the climate value of national forests and maximize long-term carbon storage on public lands. Given that the adverse impacts of climate change on the forest are caused by excessive carbon emissions into the atmosphere, and that carbon sequestration can offset these emissions and hence reduce this cause, it follows that maximizing carbon sequestration promotes the overall ecosystem function over the long-term. (425-1, 4, 5, 13, 23, 24)

Response

In its ecological assessment, the Cibola has complied with agency directives regarding carbon by estimating carbon stocks (FSH 1909.12 chapter 10, 12.4). There are no regulatory requirements to evaluate carbon flux or to analyze and contrast future carbon among alternatives in an EIS. Nor are there agency directives for the management of carbon. Also, the science underpinning carbon management in fire-adapted ecosystems is inconsistent (Meigs and Campbell 2010, Campbell et al. 2012).

While the Cibola recognizes the vital role that forested lands play in carbon sequestration the final plan manages for overall ecosystem function which implies inherent levels of carbon sequestration and greenhouse gas emissions.

The basic approach involves managing C through managing the health and productivity of the Nation's forests. The approach focuses on managing risks to the health, productivity, and ability of the resource to provide the goods and services called for in management plans. Management actions have C outcomes and those are considered among the benefits being managed. Forest systems are dynamic and emit and capture C regardless of human intervention. The Forest Service C strategy is embedded in a larger adaptation strategy for managing the resource that considers multiple impacts of natural and anthropogenic stressors. (Birdsey et al. 2019, page 15)

We disagree that managing to maximize carbon sequestration promotes ecosystem function and management to maximize carbon sequestration over other ecosystem services is not a primary management focus in the plan. Janowiak and others (2014) briefly summarize how land management planning incorporates carbon sequestration, "The long-term capacity of forest ecosystems to capture and store carbon depends in large part on their health, productivity, resilience, and adaptive capacity."

Land management in a dynamic system considers cumulative effects across time, factoring in risk, severity, scale, and likely outcome of disturbances. For example, storing carbon in overly dense forests increases the risk of losing the carbon through fire and decomposition of fire-killed trees following large wildfires (Hurteau and Brooks 2011). Dense stands are less vigorous and more susceptible to insect attack ([Oliver] and Larson 1996). Land management programs that restore forests to healthy and productive conditions will help ensure the long-term maintenance and transformation of forest carbon stocks (Janowiak et al. 2014).

Concern Statement 267:

Facilitate carbon-rich ecosystems by increasing the number of trees. The assumption that mechanical thinning and treatment will avoid the carbon emissions associated with more frequent high-severity fires (see draft EIS at page 261) is flawed. Eliminate mechanical thinning because it causes a net loss of forest carbon storage and a net increase in carbon emissions. Thinning and logging can increase fire intensity rather than reduce it because timber production releases carbon in the harvest process, reduces the carbon storage capacity of the forest and reduces its potential for carbon sequestration, adds carbon to the atmosphere, and is not compatible with the objective of sustaining a healthy forest ecosystem. (425-7, 9, 11, 12, 16, 19, 22)

Response

We stand by the assumption that thinning and prescribed fire increase carbon sequestration over longer time frames and have added supporting documentation to the assumptions section of Environmental Consequences for Air Resources (final EIS, chapter 3). While mechanical thinning does result in a short-term loss of forest carbon emissions, over the long term (several decades to one century) forest restoration results in more total ecosystem carbon and lower wildfire emissions than a no harvest scenario (Hurteau 2017, McCauley et al. 2019). Carbon "losses caused by thinning and burning treatments are out-weighed by the [carbon] gains from decreased tree mortality rates and increased sequestration" (Hurteau et al. 2016).

More protective management, such a wilderness or inventoried roadless areas, often reflect a historical pattern of lower human use. That is, the same lack of access that makes areas good candidates for more protective designations has also discouraged past human use and management that have contributed to the current departed forest conditions and fire regimes in other places. There is a large body of evidence that thinning of frequent fire forests from which fire has historically been excluded is effective at reducing uncharacteristic fire effects.

Concern Statement 268:

It does not appear the Forest Service considered factors related to climate change and other stressors in developing this plan as required by the 2012 Planning Rule. Responsible officials must identify and evaluate a baseline assessment of carbon stocks, as a part of the assessment phase. Climate change must be considered when the responsible official is developing plan components for ecological sustainability. When providing for ecosystem services and multiple uses, the responsible official is required to consider climate change. Measurable changes to the plan area related to climate change and other stressors affecting the plan area must be monitored.(425-14, 15, 17, 18)

Response

A baseline assessment of carbon stocks was conducted during the assessment phase of plan revision and is documented on pages 177–182 of volume 1 of the assessment. With this analysis, the Cibola National Forest has complied with agency directives regarding carbon by estimating carbon stocks (FSH 1909.12 chapter 10, 12.4). There are no regulatory requirements to evaluate carbon flux or to analyze and contrast future carbon among alternatives in an environmental impact statement, nor are there agency directives for the management of carbon. Also, the science underpinning carbon management in fire-adapted ecosystems is inconsistent (for example, Meigs and Campbell 2010, Campbell et al. 2012).

Climate change was considered during the development of plan components for ecological sustainability, ecosystem services, and multiple uses. Components included in the final plan that address climate change are within chapter 2 "Vegetation" section: FW-DC-CC-1 and FW-MGAP-CC-1 through 4. Other

components throughout the plan that directly speak to climate change include FW-MGAP-WTR-4, FW-MGAP-TRSP- 3, FW-DC-TRSP- 11, FW-DC-FF- 7, and FW-MGAP-FF- 6.

Table 34 in chapter 5 of the plan includes monitoring questions and associated indicators to determine whether there are measurable changes on the plan area resulting from climate change and other stressors.

Concern Statement 269:

There is no comprehensive section concerning climate change in either the draft plan or draft EIS. The piecemeal approach to the issue of climate change makes it difficult to get a good sense of how the Cibola is planning to address climate change and how climate change is likely to impact the forest. It also makes it hard to determine what gaps exist in the Cibola climate-related management direction and environmental analysis. Include a section on climate change in the draft plan that describes climate change impacts on the forest, explain how the Cibola plans to address climate change (including climate mitigation, adaptation, and resilience), and cross-references all plan components that concern climate change. The Cibola should also include a comprehensive section on climate change in the final EIS. The analysis should describe current and expected climate impacts in the Cibola and explain how the various alternatives would address climate change. (425-20, 21, 25)

Response

Climate change is addressed in the final EIS and plan. One of the needs for change from the final EIS is, "There is a need for updated plan direction that addresses potential climate change effects on the Cibola, as well as a plan monitoring program that includes adaptive management." Also "Several key issues that have been addressed by the action alternatives but did not drive their development include climate change adaptations ... plan direction has also been revised to reflect these key concerns from public engagement." The final EIS includes analyses of climate change, where it is applicable, within each resource's environmental consequences section.

The final land management plan has incorporated climate change into the guidance for management of resources in chapter 2. It has pinpointed desired conditions and management approaches which specifically speak to climate change and increase the ecological resiliency of the Cibola National Forest to predicted changes in climate (including plan components FW-DC-CC-1, FW-MGAP-CC 1-4, FW-MGAP-WTR-4, FW-MGA-TSRP-4). Vegetation management practices in the final plan are capable of reducing drought stress and the risk of uncharacteristic fire, both of which are consequences of changing temperature and precipitation regimes combined with uncharacteristically dense and fuel-laden forests. Management practices are also designed to allow for the flexibility to address changing conditions over time. The final land management plan includes appendix E, Climate Change Vulnerability Analysis Synthesis. Triepke's methodology for defining vulnerability was used throughout analysis.

Continental Divide National Scenic Trail

Concern Statement 208:

The land management plan should have plan components to complete a unit plan for the Continental Divide National Scenic Trail. (455-34, 35, 36, 37, 38, 39, 40, 41, 42, 43)

Response

Land management plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and policies that provide direction for the Continental Divide National Scenic Trail. Forest Service Manual 2353.44b directs the Forest Service to complete a Continental Divide

National Scenic Trail Unit Plan for those segments of the trail that cross the Cibola National Forest. Since the unit plan is mentioned in the Forest Service Manual, this direction does not need to be repeated in the plan.

Concern Statement 211:

Commenters recommend additional plan components or modified language to desired conditions, objectives, standards, guidelines or management approaches in the Continental Divide National Scenic Trail section of the draft plan. Commenters recommend changes to desired recreation opportunity spectrum for the Continental Divide National Scenic Trail. (430-19, 20, 21, 23, 25, 26, 27, 28, 31, 32, 50, 63, 64, 66; 455-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 24; 978-58, 60, 63)

Response

Various Continental Divide National Scenic Trail (CDNST) plan component and other editorial suggestions were provided.

Component DA-STD-CDNST-4 was edited to say, "Motorized use shall not be authorized on the Continental Divide National Scenic Trail except on segments currently located on a road or trail designated for motorized use per the motor vehicle use map. No new motorized special use permits, or events shall be permitted on the Continental Divide National Scenic Trail."

Where plan components were not changed per the comment, the Forest determined that the retained plan components were sufficient to meet requirements under the 2012 Planning Rule and provide for the nature and purposes of the Continental Divide National Scenic Trail. DA-STD-CDNST 2 states we will comply with the most recent version of the Continental Divide National Scenic Trail Comprehensive Plan. This includes the nature and purpose stated within.

Concern Statement 212:

The land management plan should have more or revised plan components that address monitoring including establishing carrying capacity or more monitoring questions and indicators for the Continental Divide National Scenic Trail. (430-36; 455-16, 29, 30, 31, 32)

Response

The Cibola National Forest has monitoring questions for trails in chapter 5 of the land management plan. Elements of the Continental Divide National Scenic Trail Comprehensive Management Plan are monitored. There is no need to repeat this monitoring as a part of the plan. Additionally, the Forest Service must follow all laws, regulations, and policies that provide direction for the Continental Divide National Scenic Trail.

Concern Statement 213:

The Continental Divide National Scenic Trail (CDNST) corridor is unsuitable for timber production, as this use is incompatible with the nature and purpose of the trail. To reflect recreation opportunity spectrum principles, the CDNST corridor with an extent of one-half mile on each side should be identified unsuitable for timber production and timber harvest should only occur within the CDNST Management Area to protect CDNST values. (430-10, 33, 34, 59, 60, 61, 62)

Response

Components in the land management plan have been designed to protect the nature and purposes of the CDNST during future proposed site-specific management activities. In areas where the CDNST corridor

overlaps lands that are suitable for timber production and other areas where harvest is allowed, timber harvest activities would be constrained by the plan components for the CDNST. Site-specific actions along the CDNST, such as timber harvesting, will be analyzed through NEPA outside of the land management planning process.

Concern Statement 215:

The Continental Divide National Scenic Trail corridor for existing and high potential route segments should be a management area with supporting comprehensive plan components (430-15, 16, 17, 18, 53)

Response

The responsible official determined that appropriate protection and direction to provide for the nature and purposes of the Continental Divide National Scenic Trail can be provided through designated area plan components and the mapped trail corridor (see final plan, figure 13, in Appendix G: Map Packet). Therefore, specific management area direction is not included in the land management plan. Including direction or a mapped corridor for high potential route segments is beyond the scope of land management planning and occurs through site-specific management activities for the Continental Divide National Scenic Trail.

Concern Statement 222:

A revised plan must address the requirements of the National Trails System Act as implemented through the 2009 Continental Divide National Scenic Trail Comprehensive Plan, FSM 2353.4, FSH 1909.12 22.2 and 24.43, and direction in Federal Register Notice dated October 5, 2009 (74 FR 51116). In addition, the draft plan does not address the requirements of FSH 1909.12 22.2, 23.23a, and 23.23f. This inaction has resulted in a draft plan that does not meet the integration requirements of the National Forest Management Act (16 U.S.C. 1604(f)(1)). (430-65, 67)

Response

Land management plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and polices that provide direction for the Continental Divide National Scenic Trail. The National Trails System Act is discussed in chapter 3 and appendix D of the final plan.

Concern Statement 224:

Commenters are concerned that the Forest Service has failed to establish recreation opportunity spectrum desired conditions, standards, and guidelines protect the nature and purposes of the Continental Divide National Scenic Trail (CDNST), specifically in regards the following law, regulation, and policy: Comprehensive planning for the CDNST, the National Trails System Act, sections 5(f) and 7(c) direction as implemented through the CDNST Comprehensive Plan, Executive Order 13195, and directives. (430-52, 58, 68)

Response

Plan components were developed for all designated areas, including those that protect the nature and purposes of the National Scenic and Historic Trails. All action alternatives include plan components for the CDNST and establish a CDNST corridor that extends on-half mile either side of the CDNST. Plan components for the CDNST provide direction within this corridor. Please see the "Continental Divide National Scenic Trail" section in chapter 3 of the land management plan. The mapped trail corridor is displayed in the final plan, figure 13, in Appendix G: Map Packet. Analysis for the CDNST trail corridor is included in the final EIS. Plan direction is in addition to law, regulations, and policies. The Forest

Service must follow all laws, regulations, and polices that provide direction for the CDNST. All future site-specific project analysis will consider the CDNST trail and the CDNST corridor as displayed in the land management plan and will need to follow the associated plan components, and all laws, regulations, and policies for the CDNST.O. 13195: Federal agencies will, to the extent permitted by law and where practicable and in cooperation with Tribes, States, local governments, and interested citizen groups, protect, connect, promote, and assist trails of all types throughout the United States. This will be accomplished by: (b) Protecting the trail corridors associated with national scenic trails and the high priority potential sites and segments of national historic trails to the degrees necessary to ensure that the values for which each trail was established remain intact.

Concern Statement 231:

The draft EIS does not address the expected effects of resource management under each alternative on Continental Divide National Scenic Trail nature and purposes values as measured through the recreation opportunity spectrum planning framework, and must disclose effects on scenic integrity, recreation opportunity spectrum class conditions, and carrying capacities. (433)

Response

The final EIS speaks to impacts on the trail in several locations, but particularly in "Designated Areas," "Environmental Consequences Common to Action Alternatives, B, C, and D" section:

The three action alternatives define a one-half-mile corridor on either side of the Continental Divide National Scenic Trail and defines management direction to better protect and preserve hikers experience as well as the natural resources affected by the use of this special area. The established corridor under the action alternatives is wider than the current route. The effects from the purpose of this designated trail and buffer to conserve the natural, historic, and cultural resources along the trail corridor are benefits to water resources located adjacent to the corridor (such as increased infiltration, water retention, improved water quality) and benefits to historic and cultural resources (such as site protection, avoidance or mitigation). Updated plan direction for the Continental Divide National Scenic Trail under the action alternatives also guides the Cibola in relocation off roads within the life of the plan as close to the geographic Continental Divide as possible. This would potentially result in effects of less user conflicts and would bring the trail closer to guidance for national policy and management of the Continental Divide National Scenic Trail. Updated plan direction under action alternatives also provides alignment with best available science for scenery management using the Scenery Management System. This would result in direct scenery guidance for the Continental Divide National Scenic Trail which meets the intent of the designation of the trail as a national scenic trail.

While this trail must comply with its comprehensive plan, allowable activities must align with the original intent for the trail's national designation and current management direction possibly limiting recreation, administrative and natural resources management activities that could occur under the no-action alternative."

Plan components in chapter 3, "Continental Divide National Scenic Trail" section, have been specifically designed to protect the nature and purposes of the trail during future proposed site-specific management activities.

Concern Statement 232:

The EIS discussion fails to address the relocation of segments of the Continental Divide National Scenic Trail and/or construction of new segments within the life of the plan and reasonably foreseeable future actions on adjacent land management units, including the Rio Puerco and Socorro Field Offices of the Bureau of Land Management. (455-26, 27)

Response

Site-specific projects like relocation or reconstruction are not analyzed in the EIS or authorized under the land management plan; these are programmatic documents. In the future, when such projects are proposed, as per plan component DA-STD-CDNST-2, the management of the trail will comply with the most recent Continental Divide National Scenic Trail Comprehensive Plan. It is at that time that an environmental analysis would be completed to determine impacts of site-specific proposals.

Concern Statement 233:

Requesting more detailed maps for the public including a map depicting desired recreation opportunity spectrum class allocations for the Cibola National Forest. (430-45, 46)

Response

Maps have been updated and can be found the final plan, Appendix G: Map Packet.

Concern Statement 263:

Commenter requests that scenic integrity objectives are the desired conditions. (430-22)

Response

The suggested change has been made. FW-DC-SCE-2 states that "Scenic integrity objectives serve as the desired conditions for scenery (see final plan, Appendix G: Map Packet)."

Concern Statement 264:

Standard 4 in the Continental Divide National Scenic Trail section is not consistent with the National Trails System Act implement through the comprehensive plan and policy. (430-24)

Response

We developed plan components using the 2012 Planning Rule, the 2015 Planning Directives, and direction in response to the multi-regional guidance from the regional forester. All plan components are designed to protect the nature and purposes of the Continental Divide National Scenic Trail (CDNST). Land management plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and policies that provide direction for the Continental Divide National Scenic Trail. DA-STD-CDNST-2 states that management of the trail shall comply with policy set forth in the comprehensive plan. New motorized vehicle use by the general public will not be authorized on the Continental Divide National Scenic Trail (DA-STD-CDNST-4). In general, established motorized uses, both summer and winter, are allowed to continue, but new motorized uses will not be designated on the trail.

Concern Statement 265:

Management actions should be consistent with the recreation opportunity spectrum classes of the Continental Divide National Scenic Trail. (430-29)

Response

Desired recreation opportunity spectrum settings have been mapped, including the Continental Divide National Scenic Trail (CDNST) corridor, and can be found in the final plan, Appendix G: Map Packet. The maps show where the corridor crosses through different recreation opportunity spectrum settings. In all cases, the Continental Divide National Scenic Trail is routed through Primitive and Semi-Primitive Non-Motorized recreation opportunity spectrum classes when possible, as directed in DA-GDL-CDNST-7. Plan component is consistent with recommended direction in response to the multi-regional guidance from the regional forester.

Concern Statement 266:

Uses that could conflict with nature and purpose of the Continental Divide National Scenic Trail should be prohibited when it is determined that the use would interfere with the nature and purpose of the trail. (430-30)

Response

Activities that would substantially interfere with the purposes for which the trail was designated should be avoided to the extent practicable (16 U.S.C. 1246). Flexibility and adaptability are tenants of the 2012 Planning Rule. Thus, unless there is a specific need for the intent of a direction to be reached in a specific way, guidelines are the default type of management direction.

Concern Statement 273:

A better approach for all action alternatives is to require that any lease within the Continental Divide National Scenic Trail Management Area include a non-surface occupancy stipulation. (430-39)

Response

Plan component DA-STD-CDNST-1 states that there will be no surface occupancy for oil, gas, or geothermal energy leasing activities within the Continental Divide National Scenic Trail corridor, which is one-half mile on either side of the trail. The Cibola National Forest has undergone broad assessments and found that the Cibola does not host the geologic environment for these resources.

Eligible Wild and Scenic Rivers

Concern Statement 44:

American Indian cultures have viewed water as a centerpiece of their beliefs, ceremonies, and places. Wild and scenic river designation would hinder traditional uses and local cultural values. The plan should address the importance of water for cultural resources. (447-7, 8; 450-3; 453-14, 15, 17, 26)

Response

The importance of water-supported ecosystems (riparian areas) is identified in desired conditions for "Water Resources Features" (FW-DC-WRF-3 and FW-DC-WRF-7).

The wild and scenic river determination of eligibility has been made in part based on the value of traditional uses within the area and is intended to protect those values. These traditional uses include the gathering of wild plants, and the use of water for irrigation through a historic irrigation system (acequia). The determination of eligibility for wild and scenic river will not further limit traditional uses and will provide protection to resources currently associated with traditional uses.

The "Traditional Communities and Uses," "Federally Recognized Tribes" section of the plan recognizes the benefits of water to tribes as part of ecosystem services. The assessment of water resource features as cultural resources (including historic properties/traditional cultural properties, sacred sites, and other areas of tribal concern) is implied as part of the inventory, assessment, and planning processes. See "Federally Recognized Tribes" guideline FW-GDL-FRT-3; this section is a discussion of stream and spring function. While springs are important cultural resources for tribes, and provide important cultural ecosystem services, that fact is not germane to the discussion of stream and spring function here.

Concern Statement 49:

Comments specific to Big Water Canyon and Little Water Canyon should be managed as a site-specific management area or as a research natural area. (87-5;426-42,58; 443-228, 229, 230;457-7, 10; 963-1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 13,)

Response

Big Water Canyon also known as Water Canyon 1 and Little Water Canyon have been recommended for designation of eligible wild and scenic rivers and will receive land management protection. Rivers legislatively mandated for study (section 5(a) of the Wild and Scenic Rivers Act), and other rivers the Forest Service determines to be eligible or suitable for inclusion in the National Wild and Scenic Rivers System (section 5(d)(1) of the act), must have certain interim protection measures. These protection measures apply until a decision is made on the future use of the river and adjacent lands through an Act of Congress or a determination that the river is not suitable (FW-STD-WSR-3). Along with the interim protection measures provided in chapter 3, "Management Areas" section of the plan, additional statutory, regulatory, or policy requirements may apply if the study river is located within a wilderness area or other designated area (FSM 2354.42e), which is repeated in plan language, FW-DC-WSR-1: eligible wild and scenic rivers features will protected or enhanced until designated or released from consideration.

Concern Statement 74:

Small diversions and intermittent flows do not necessarily compromise a stream's free flowing condition or otherwise disqualify it from eligibility. (984-34,35,36,37,38, 73)

Response

Section 2(b) of the Wild and Scenic Act states that a river area is eligible to be included in the system is a free flowing stream and the related adjacent land area that possess one or more of the values referred to in section 16 of the act. In reading and applying the criteria for eligibility, the following points are relevant: the fact that a river segment may flow between large impoundments will not necessarily preclude its designation. Such segments may qualify if conditions within the segment meet the outstandingly remarkable value criteria.

Section 2(b) of the act identifies the type of classification of an eligible river or segment; wild, scenic, or recreational.

- (1) Wild river areas Those rivers are or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- (2) Scenic river areas Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but still accessible in places by roads.

(3) Recreations river areas – Those river or sections of rivers that are readily accessible by road or railroad, which may have some development along their shorelines, and that may have undergone some impoundments or diversion in the past.

It is true that diversions and intermittent flows do not disqualify the eligibility for a recreational river however, other criteria must still be met to be deemed eligible.

Concern Statement 137:

Comments supporting adding several eligible scenic rivers. Agua Remora, Rinconda, Tajique, Lobo, Las Huertas, West Red Canyon and Little Water Canyon. (87-7; 426-31, 45, 46, 47, 53; 460-6; 462-1, 2; 961-5, 9, 27, 29, 35; 983-13; 984-42, 43, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66)

Response

The Cibola interdisciplinary planning team systematically reviewed all 409 named free-flowing streams and compared them to the evaluation criteria to identify the presence of outstandingly remarkable values utilizing public comments received throughout the process. The interdisciplinary planning team applied the evaluation criteria to each stream along with the requirements from the Wild and Scenic Rivers Act. The review evaluation can be found on the Cibola plan revision website.

The seven streams that were found eligible will retain their eligible classification and will be protected sufficiently to maintain the free flow and outstandingly remarkable values. The land management plan provides for protection of eligible wild and scenic rivers: FW-STD-WSR-1 – The free flowing condition, classification, and outstandingly remarkable values for eligible wild and scenic river corridors shall be maintained when implementing projects; FW-STD-WSR-2 – When management activities are proposed that may compromise the outstandingly remarkable values, potential classification, or free-flowing character of an eligible wild and scenic river segment or corridor, a suitability study shall be completed for that eligible river segment prior to initiating activities; and where eligible wild and scenic river corridors occur within other management areas, the most restrictive management direction shall apply.

Concern Statement 150:

The absence of information suggests possible shortcomings, documentation or justification are requested for all evaluated streams including Lobo Canyon that was eligible in 1985. (965-30, 31, 32, 33; 984-2, 4, 7, 16, 19, 20, 29, 30, 31, 32, 67, 68, 72)

Response

The final EIS Appendix D: Documentation of the Wild and Scenic Rivers Eligibility Process, has been updated to reflect a link to the project website for original documentation of the 2015 wild and scenic river eligibility study by district. Each district spreadsheet includes information from the interdisciplinary planning team on all evaluated streams, including Lobo Canyon.

Concern Statement 228:

Neither the draft plan nor the draft EIS appears to provide information on comments received on the initial wild and scenic eligibility findings (published with preliminary draft plan in 2016), nor do those documents provide the Cibola National Forest's response to comments from that phase. (984-3, 4, 17, 21, 22, 33, 69, 78)

Response

The final EIS, appendix D, provides the following information:

The initial wild and scenic rivers eligibility findings were shared with the public with the preliminary draft plan release in summer 2016. At this time, the public had the opportunity to comment on the history of past wild and scenic rivers study processes on the Cibola National Forest, as well as the new evaluation study process, the region of comparison, eligibility criteria, and initial eligibility findings. No significant changes were made based on public comment as they were outside the scope of the 2012 Planning Rule on the wild and scenic river eligibility process. Minor adjustments were made in terms of clarifying the process conducted.

Concern Statement 229:

Commenters disagree with the wild and scenic river eligibility evaluation process and believe more streams (from 8 to all) should be eligible. When evaluating for eligibility the Forest Service should analyze climate change, ecological and hydrological health, adopt University of New Mexico's Natural Heritage New Mexico's evaluation process and information including instream flow rates and increase stream corridor dimension. (984-6, 9, 10, 11, 13, 18, 23, 24, 25, 26, 27, 28, 39, 40, 41, 70, 71, 74)

Response

Please see the response to concern statement 137. To be identified as outstandingly remarkable, a river-related value must be a unique, rare, or exemplary feature that is significant when compared with similar values from other rivers at a regional or national scale. Outstandingly remarkable values include scenic, recreation, geologic, fish and wildlife, historic, cultural, or other similar values. River values should meet at least one of the following criteria:

- 1. Be located in the river or on its immediate shorelands (within 0.25 mile on either side of the river).
- 2. Contribute substantially to the functioning of the river ecosystem, and/or
- 3. Owe their location or existence to the presence of the river.

Concern Statement 230:

The single composite map, provided in appendix D of the draft EIS, showing relative and very generalized locations of the rivers proposed for eligibility does not put the individual stream segments into immediate geographic context, nor does it present what would be helpful particulars, including physical features, segment termini, ownership boundaries, and existing land-management designations. No maps of any sort are provided for streams deemed ineligible. (984-14,15)

Response

All findings of eligible wild and scenic rivers can be found on the Cibola plan revision website: http://www.fs.usda.gov/goto/cibola/plan.

Concern Statement 243:

We oppose downgrading wild and scenic protections in the Carson National Forest. (447-8)

Response

This comment is not applicable to the Cibola National Forest and National Grasslands.

Concern Statement 244:

Comments indicate opposition to wild and scenic river designations due to negative impacts to recreation and traditional use including vandalism at Las Huertas community ditch and becoming designated as a wilderness area. (422-1,3,5, 429-6)

Response

The Cibola National Forest previously determined Las Huertas Creek to be eligible for designation as a wild and scenic river in 2002 under the same classification category (Recreational). In the past 18 years since the eligibility determination, the acequia within the area determined eligible has not been subject to vandalism by persons seeking to release water into the dry creek bed. The current eligibility determination does not significantly alter the terms of the 2002 determination. This wild and scenic river eligibility provides protection for the eligible segment of Las Huertas Creek. Law enforcement of site-specific unauthorized activities is outside of the programmatic nature of the land management plan.

The evaluation of watercourses as eligible for designation as wild and scenic rivers and the evaluation of areas as suitable for wilderness are separate processes and eligibility for the former does not confer eligibility for the latter. In the case of the Las Huertas Creek, the presence of features that limit its classification category to recreational (including roads and the acequia) preclude the area from being suitable for wilderness designation. For this reason, the Las Huertas Creek area eligible for wild and scenic river designation was not evaluated as potential wilderness at any stage of current land management plan development.

Fire and Fuels

Concern Statement 15:

Best available science does not show prescribed burns or thinning prevent larger scale fires. Commenters request a halt to prescribed burns and thinning until assessments can be made on the health, safety, economy, and future of New Mexico. (471-2, 3; 955-2; 960-3, 4, 7; 966-2, 3; 980-1; 991-6, 7)

Response

Adhering to title 36 section 219.3, best available science was utilized when creating the land management plan, wildfire hazard abatement is a major reason to use prescribed burning.

In the future wildfires are likely to be larger and more severe as a result of both climate change patters and a century of fire suppression (Westerling et al. 2006). It is imperative that management objectives focus on reducing fuel loading and restoring the natural fire regime. Mechanical treatments and prescribed fire have been successfully utilized at small scales to reduce fuel loads and the potential for crown fire in high risk areas (Allen at al. 2002). Fire alone is a viable tool for reducing crown fire potential (Hunter et al. 2011). If neither of these methods are used, large high-severity wildfire will likely continue to occur on the landscape, whereas if both methods are utilized appropriately wildfires may still occur but with likely reduced severity and size (Reinhardt et al. 2008). Thus, helping to create a mosaic on the landscape rather than a monoculture.

Concern Statement 16:

Commenters request the continued work with adjacent homeowners and communities to help protect their land as well as an overall quantification of wildland-urban interface areas to provide baseline data. Please describe the difference between "critical communication sites" and "high voltage transmission lines" as Santa Fe has done. (454; 471-1; 958-3, 4, 5, 65; 985-9)

Response

Cibola National Forest personnel will continue to work with adjacent homeowners and communities to help protect their land and continue to provide, when appropriate, the data including wildland-urban interface quantification.

The terms "critical communication sites" and "high voltages transmission lines" are in the final environmental impact statement and land management plan. While not specifically defined, a brief explanation is that critical communication sites refer to locations where radio relay antennae, cellphone towers, television transponders, and other types of communications infrastructure are located, typically on high points or peaks. High voltage transmission lines are linear features which are larger powerlines that and carry power over long distances between different electrical distribution hubs.

Concern Statement 42:

Comments concerned with prescribed fires as well as mechanical treatments and the effects to wildlife food sources. (432-5)

Response

Prescribed burning and mechanical fuel reduction are tools to help reduce fuel loading on the landscape and are often conducted under very different circumstances then wildfires, greatly reducing the severity on the landscape from future wildfires (Stephens and Moghaddas 2005). That reduction in severity and ability to create a mosaic on the landscape often depending on the species and location can improve resource availability. According to Russell et al. (1999) summarized in their literature review, which prescribed fire by creating a mosaic on the landscape promoted species diversity by maintaining a variety of different habitats for different types of reptiles and amphibians. An additional study found that certain species of ungulates prefer recent burned areas in terms of forage habitat vs. unburned areas and will preferentially seek it out (Sittler et al. 2014). This ability to create a habitat landscape mosaic using prescribed fire and mechanical thinning is far more beneficial then not conducting any treatments and having a high-severity wildfire burn through the area.

Concern Statement 43:

Commenter would like to know which woodlands will be target for restoration and is opposed to huge areas slotted into the restoration category which could cause disturbances. (432-6; 449-2)

Response

Changes to the land management plan include the addition of vegetation treatment objectives for Pinyon-Juniper Grass Woodland for reasons stated in the updated plan (departed structure and fire-regime, abundance on Cibola National Forest, etc.). While this is the only woodland with treatment objectives, this does not preclude treatment in other woodland types.

The restoration category is an emphasis, not an obligation for any specific action. Before any on-the-ground activity would occur, it would be analyzed at the project level and, as required by the plan, follow best management practices and move the affected vegetation type toward desired conditions.

Concern Statement 51:

Request more aggressive prescribed fires and thinning as studies show important habitat for elk and wildlife is often achieved following a disturbance of fire and mechanical thinning. (437-4, 23; 540-1; 466-28, 29, 30, 31,43)

Response

While it has true that prescribed burning and mechanical treatments can have beneficial effect on certain species of wildlife and plants. There is also a fine line and balance to look for in this regard, too much fire and mechanical thinning can for instance create homogenous ecosystem as well as introduce exotics and invasives potentially drastically changing the landscape. According to Griffis et al. 2001 stand replacing wildfire appears to substantially increase the diversity of exotic plants. However, no treatments lead to a buildup of fuels and greater increase in a catastrophic wildfire. One study found the fire line intensity and fire behavior was greatly reduced decreasing the amount of tree mortality when both in combination or separately prescribed burning and mechanical thinning treatments were applied compared to a wildfire (Stephens and Moghaddas 2005). Therefore, a balanced approach to create a mosaic on the landscape is needed including both types of treatments in a variety of different applications given the project area.

Concern Statement 89:

What is the detailed mitigation plan for areas of New Mexico that have been designated as "Mandatory Class 1 Federal Areas"? Additionally, what smoke model analysis has been utilized and performed to determine if Mandatory Class 1 Federal Areas will not be affected by the implementation of projects? Will the smoke model analysis be performed before and during implementation of restoration or maintenance fire prescriptions and wildland fire managed for resource objectives, and restoration or maintenance? Will the implementation of management prescriptions cease until the Mandatory Class I Federal Areas, White Mountain Wilderness and Bosque del Apache, are not being impacted? (939-26, 27, 28, 29)

Response

Projects that impact air quality, including those that have been designated as "Mandatory Class 1 Federal Areas," must follow National Guidelines (NWCG Smoke Management Guide for Prescribed Fires) as well as work with local (Bernalillo County) and state regulatory agencies (New Mexico Environment Department following New Mexico Smoke Management Program guidance) on mitigation requirements. There is no specific mitigation plan for this document but rather National and State requirements and guidelines, which will be followed. U.S. Forest Service projects are created with intent of keeping smoke and other air quality impacts outside of Mandatory Class 1 Federal Areas including White Mountain and Bosque del Apache Wilderness. However, there are instances where that does occur such as wildfires, which is the reason for use of prescribed burning and other types of treatments to reduce the likelihood that would occur. High-severity wildfires can put out more carbon for longer periods of time then prescribed fires (Dore et al. 2012). Several smoke models are, in consultation with National Weather Service, utilized including both HYSPILT and Blue Sky. Each of these models are conducted before and throughout the duration of the project, prior to the start of each operational shift.

Concern Statement 130:

Comments allege the plan does not comply with the Federal laws, regulations and standards. (939- 4, 6, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 24, 37, 38, 39)

Response

Analyses of effects found in the final EIS, chapter 3, consider how the alternatives would be in compliance with law, regulation, and policy. For example, the "Terrestrial, Aquatic, and Botanical Species" section speaks to the Endangered Species Act and how the Cibola follows required procedures on analysis of federally listed species. The associated biological assessment and biological opinion document that the requirements from the law were followed.

Similarly, the plan revision process followed other requirements for other laws, regulations, and policies. The documentation of these processes can be found in specialist reports in the projects record and in the final EIS chapter 3.

Concern Statement 131:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. (939-5, 7, 8, 40; 958-48, 49, 50, 51, 52, 958-3)

Response

Various fire and fuels plan components and other editorial suggestions were provided. Changes were made where appropriate. Please see the "Fire and Fuels" section in chapter 2 of the land management plan. Where plan components were not changed per the comment, the plan revision team determined that the retained plan components were sufficient to meet requirements under the 2012 Planning Rule, National Forest Management Act, Clean Air Act, and National Ambient Air Quality Standards.

Concern Statement 157:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches such as separating one plan component into two. (443-276, 278, 280, 281, 282, 283, 285, 286, 287)

Response

Your comments have been noted. Changes have not been made because the Forest Service determined that the retained plan components were sufficient to meet requirements under the 2012 Planning Rule, National Forest Management Act, Clean Air Act, and National Ambient Air Quality Standards.

Concern Statement 183:

"Fire and Post Fire Impacts" in the draft EIS fails to acknowledge that some cultural resources are a form of property. (453-31)

Response

Plan components related to traditional uses in the "Federally Recognized Tribes" section, FW-DC-FRT-1, 2, 3, 6 and FW-GDL-FRT-3, discuss the value and recognition of cultural resources. While this is not discussed again in the "Fire and Fuels" section, the plan is meant to be read in its entirety as it is an interdisciplinary approach. The environmental impact statement does comply with all applicable Federal laws, regulations, standards, and policies (please see appendix D in the land management plan).

Concern Statement 258:

We support the proposed guidelines for wildfires and request that they be retained in the final revised plan. We appreciate the ecological emphasis of these guidelines, including the focus on protecting wildlife (especially threatened and endangered species and their habitat), preventing the spread of parasites, disease, and invasive species, and the attention to post-fire restoration and recovery. (426-38; 440-2; 443-288, 289, 290, 291, 292, 293, 294, 295, 296; 1003-1)

Response

Thank you for your comment. Supported proposed plan components have been retained in the final revised plan. Desired conditions for fire will be observed.

Concern Statement 259:

The Cibola should establish a management area for the wildland-urban interface and adopt a three-zone approach to wildfire management. (443-274, 275, 277, 279)

Response

Providing more specific "targeted direction" could limit the treatment options and given how climate change will fully affect the current Cibola National Forest is unknown. Cibola staff used the climate change vulnerability assessment and other models that indicate the vegetation types that are moderately or highly vulnerable, but what that will actually look like in the future depends on a variety of criteria (draft EIS, page 45). It is essential to try and provide as many potential tools available to both current and future land managers therefore leaving this at a boarder scale and given unknown factors determining financial implications at this point would be unrealistic.

A three-zone approach is only considering certain factors (such as humans footprint on the landscape) and criteria, however, ecosystems are often more complicated. Vegetation is a huge driver of how fire burns across the landscape and therefore limiting treatments based on this zone approach drastically reduces potential tools for land managers, for instance a treatment on ponderosa pine forest will differ from pinyon-juniper woodland regardless if it is next to a community. Already the plan focuses more on this breakdown of vegetation in terms of fire adapted system. It is important to note in wildland-urban interface environments suppression is already the main tactic as well as to protect human life and property within these communities while still maintaining the flexibility of other treatments. But given that more encroachment is occurring across western forests and wildland-urban interface is becoming a larger factor, prescribed burning and or other land management tools maybe necessary near these communities to reduce the risk of cataphoric wildfires. This zone approach depending on how wildland-urban interface occurs within the lifetime of the plan could be drastically changed potentially limiting treatment options based on the different treatments within each of the tiers.

The plan provides management direction for wildland-urban interface within chapter 2, "Wildland-Urban Interface" section, which includes definitions as well as background, description, and desired conditions. In terms of the criteria provided in the comment, extreme fire behavior and conditions indicate that fires can spot long range or more than a half mile distance (Page et al. 2019). Based on that information, the buffer distance recommended would not be effective, depending on vegetation and fire behavior exhibited. If not effective, then tying the plan to this requirement would likely not result in the commenter's expected outcome. Additionally, tying the plan to a GIS layer when given the duration of the plan it unrealistic since technology changes and GIS layers are not always consistently updated, especially with the most current data regarding wildland-urban interface based on the rapid development. This could limit the options of the plan while not directly address the commenters concerns.

It is difficult to address these questions given all of the unknown factors at this time such as cost of supplies, economy, political, vegetation changes, etc. Without knowing these factors as well as the state of the vegetation during the lifetime of the plan, no concrete answers can be provided at this time. For example, knowing how frequently a treatment will be needed to protect wildland-urban interface, would depend heavily on what the landowner has done, the surrounding vegetation, the type of fire behavior attempting to protect the structures from, etc. In the case of cost of these treatments that will vary highly on current budgets, U.S. Forest Service priorities based on currently policy, politics, economy, cost of goods and supplies, etc. These are only a few unknown variables for the first two questions, there are likely numerous other unknown factors making even estimates difficult to predict and highly variable. The third question can be broken down into two parts: the first portion some answers can be provided however, the second portion also has lots of unknowns that make it difficult to answer how cost effective

are prevention methods are. It is important to note that prevention, education, placing fire restrictions based on weather and fuels data, and programs that encourage communities to reduce vegetation around structures are being done and important in helping to reduce likely hood of fires occurring within wildland-urban interface, thus answering first portion of the third question. But as to how cost effective those programs are is difficult to determine based on funding amounts, number of contacts, etc. Those these are great question would likely be easier to answer with project-specific NEPA rather than land management plan revision document.

Concern Statement 260:

The Cibola should specify areas that will be selected for prescribed burns, and include past wildfire history. Support for prescribed burns in the Zuni area and request to abide by the plan. (426-38; 440-2; 443-284, 285;1003-1)

Response

Thank you for your comment. The Cibola National Forest Service will abide by the plan.

The draft EIS contains information to address this concern and can be found in the vegetation and soil sections of the final EIS. Effects of vegetation management are expected to be concentrated in wildland-urban interface and restoration management areas, while effects of lack of vegetation management are expected to be concentrated in wilderness areas, conservation areas, and place-based management areas because: (1) while active vegetation management is less likely to occur in conservation management areas (alternative C) and recommended wilderness areas (alternatives B, C, D), these same areas would also be less likely to be treated under any alternative because they are generally remote and roadless, (2) objectives for place-based management areas (alternative B) do not specify any activity to occur; their desired conditions generally focus on maintaining their current characteristics, (3) under all alternatives, the wildland-urban interface is highly likely to be treated to protect resources both on, and adjacent to, the Cibola, and (4) while restoration management areas may be a focus of activity under alternative C, some of these same areas are also likely to be treated under any alternative because of the Cibola's focus on improving the condition of fire-adapted vegetation types.

Inventoried Roadless Areas

Concern Statement 133:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. (443-22, 23, 26, 27, 33, 43, 44, 45, 46, 47, 186, 187, 188, 189, 190, 191, 193, 195, 196, 197, 198, 199, 200, 215)

Response

Designated Roadless Areas may contain roads. The system roads may be maintained at the maintenance level authorized at the time of roadless area designation by Congress. There is no improvement of maintenance level or addition of new roads within a roadless area.

The regulatory requirements for these areas are national and preclude the need to designate a separate management area for this category. In regard to the request for creating a management area for all inventoried lands and/or an alternative that analyzes all inventoried areas that received a moderate, moderate plus, high, and high plus overall wilderness evaluation score, the Cibola followed the 2012 Planning Rule and directives on the recommended wilderness process. This process has a set of criteria that evaluates different components of an area to analyze if it should be recommended. Inventoried roadless areas on the Cibola are designated areas with stringent policy, laws, and regulations associated

with them. Establishing a management area for inventoried roadless areas would be redundant. The 2001 Roadless Area Conservation Rule (USDA Forest Service 2001b) protects the Cibola's roadless areas. Any action at the national level to change the national roadless rule's application to New Mexico national forests is outside the scope of land management plan revision.

In regard to the request to pull out the inventoried roadless areas as a separate chapter within the final EIS, the Cibola considers the analysis within the designated areas section of the EIS to be sufficient. The Cibola agrees that a map of the inventoried roadless areas located on the national forest would be helpful; two roadless-specific maps have been included as part of the final plan, Appendix G: Map Packet. The Cibola also agrees that a table in the final revised plan that specifically identifies each of the 13 inventoried roadless areas on the forest including the name, acreage, and ranger district would be helpful and has been added to the background and description for the "Inventoried Roadless Areas" section of the final plan (see chapter 3). We removed the word "plant" from the desired condition and changed to "invasive species."

The Roadless Rule identifies specific guidance and regulation for management of inventoried roadless areas, and the Forest Service has identified further guidance; those policies, regulations, and laws are sufficient and standards in the land management plan would be redundant.

See also response to concern statement 272.

Concern Statement 186:

Comment regarding a Mount Taylor polygon (ID D2_5K8) that is not roadless but has been wrongly considered to be roadless and is incompatible with recommended wilderness management. (1005-3)

Response

Inventoried roadless areas were officially identified with the publication of the 2001 Roadless Area Conservation Rule (USDA Forest Service 2001b). The planning process for this land management plan revision does not re-analyze the roadless areas; they were previously established through the rulemaking for the Roadless Rule and cannot be changed through plan revision.

It is a misconception that roadless areas cannot contain any roads; many inventoried roadless areas contain roads, both classified (system) roads and unclassified (non-system) roads. Unclassified roads could include authorized temporary roads. Roads may be maintained to the approved road management objective. (36 CFR 294.11-12) Unauthorized roads in a roadless area should generally be closed and rehabilitated.

Criteria and processes for roadless designation is different than for recommended wilderness. The Cibola followed defined procedures for recommended wilderness analysis as described in detail in the final EIS, volume 2, appendix C. The polygon in question was recommended for wilderness in alternative D, but was not included in the preferred alternative C.

Concern Statement 272:

Proposed management direction for inventoried roadless areas is insufficient to achieve desired conditions and protect the roadless values of these areas. The lack of enforceable management direction for inventoried roadless areas is concerning and must be addressed in the final plan. (443-184)

Response

Inventoried roadless areas on the Cibola are designated areas with stringent policy, laws, and regulations associated with them. The intent of the 2001 Roadless Area Conservation Rule (USDA Forest Service 2001b) is to provide lasting protection for the Cibola's roadless areas in the context of multiple-use management (see the land management plan, Appendix D: Relevant Laws, Regulations, and Policy). The Roadless Area Rule identifies specific guidance and regulation for management of inventoried roadless areas, and the Forest Service has identified further guidance; those policies, regulations, and laws are sufficient and standards in the land management plan would be redundant. However, the land management plan does contain desired conditions, guidelines, and management approaches in the "Scenic Resources," "Roads," and "Inventoried Roadless Areas," sections (FW-DC-SCE-3, FW-MGAP-RD-6, DA-DC-IRA-1 and 3, DA-GDL-IRA-1 and 2, DA-MGAP-IRA-1), which were developed in compliance with the Roadless Area Rule and direction relevant to roadless areas as per the Forest Service Land Management Planning Handbook 1909.12 (FSH 1909.12 chapter 10; chapter 20 section 24.44; chapter 60 section 61.11; and chapter 70). The combination of guidance in the Roadless Rule itself, Forest Service manuals, handbooks, and policies, and the additional guidance in the land management plan are sufficient to maintain and improve the nine roadless characteristics.

Management Areas

Concern Statement 50:

Comments support special management designation and protections for Jumanos Pueblos, Cement Springs and Fort Wingate, Las Huertas, Tres Pistoles Sandia Wilderness Expansion Area 2, Datil Mountain Conservation Management Area and Bear Mountain Conservation Management Area management areas. (426-22, 26, 27, 32, 33, 34, 35, 48, 49, 50, 56; 443-222, 225; 961-6, 12, 13, 15, 30, 33; 983-1, 2, 3)

Response

Within the boundaries of any area addressed as a management area, direction provided specific to those areas takes precedence over forestwide direction. Where specific management area direction is silent but exists in forestwide plan components, the forestwide direction applies.

The Jumanos Pueblos Management Area would provide some additional management focus for the three important prehistoric pueblo villages. The Fort Wingate Management Area would provide some additional focus for the National Register of Historic Places listed Sheep Lab historic District. Similarly, the Cement Springs Civil War Historic Management Area provides some additional management focus for the two cultural components at the historic site. However, these three sites would still be protected under the forestwide management direction within the "Cultural and Historic Resources" and "Traditional Communities and Uses" sections of the final plan. This plan direction (as well as other applicable plan direction) applies to all action alternatives, B, C, and D. The rationale for not including these areas in the preferred alternative C is that the Cibola finds much of the proposed management area plan direction duplicates the "Cultural and Historic Resources" and "Traditional Communities and Uses" plan direction.

In terms of valuing site interpretation and public engagement in protecting archaeological sites, there are several management approaches in the final plan's "Cultural and Historic Resources" section that speak to this kind of strategy. The management approach FW-MGAP-CHR-1 describes how to work collaboratively to develop public participation and partnerships that allow the diversity of interests to work together on identifying, managing, preserving, protecting, and interpreting historic properties. In addition to adhering to the aforementioned plan components in the "Cultural and Historic Resources" and "Traditional Communities and Uses" sections, site-specific projects for the three cultural historic areas

could also tier to these plan direction strategies in order to achieve the stated request for cultural protections in these unique areas of the forest.

In response to the request to incorporate the Las Huertas Management Area into the preferred alternative C, the protection of cultural values, traditional uses, and water resources are addressed with forestwide management direction within the "Cultural and Historic Resources," "Traditional Communities and Uses," "Water Resources," sections and the "Eligible Wild and Scenic Rivers" management areas sections of the final land management plan. The rationale for not including this area in the preferred alternative C is that the Cibola finds that there is multiple existing and overlapping management direction that protects this unique area.

The Sandia Cave National Historic Landmark is a good example of overlapping management direction. It is listed on the National and New Mexico State Register of Historic Places, it is a designated traditional cultural property, and the area is also guided by separate designated significant cave management direction in the plan. Existing plan management direction provides for this significant cave and therefore does not warrant the need for additional management area direction.

The eligible wild and scenic forestwide management direction for the eligible reach of the Las Huertas Creek will ensure sufficient protection of the historic, cultural, and scenic outstandingly remarkable value for which this reach was deemed eligible. The outstandingly remarkable values, the free-flowing condition and the recreational classification of this area will be maintained and opportunities for enhancing the outstandingly remarkable values will be considered during project implementation.

The Tres Pistolas Sandia Wilderness Expansion Area 2 is proposed under alternative D and the Datil Mountain Conservation Management Area is proposed in alternative C. Whereas the Cibola is not proposing the Datil Mountains as recommended wilderness, it is proposing approximately 16 percent or 10,179 acres of the total Citizens Conservation Proposal proposed acreage in alternative C as a conservation management area. Within alternative D, there are two proposed recommended wilderness areas in the Datil Mountains (D3_5K10 and D3_5K11) and two proposed recommended wilderness areas in the Bear Mountains (D3_5k7 and D3_5k7d). The rationale for not including the Sandia Wilderness Expansion Area 2 into the preferred alternative is due to the identification of incompatible uses for managing for recommend wilderness during the recommended wilderness analysis step. Existing mountain biking uses occur in the adjacent City of Albuquerque open space and there are existing traditional uses occurring within the Caňón de Carnúe Land Grant-Merced adjacent to this area.

The Cibola received many comments advocating for adding more recommended wilderness, as in alternative D, and many comments advocating for no recommended wilderness, as in alternative A. We analyzed both scenarios within the range of recommended acreage proposed in the action alternatives. The draft record of decision explains how the forest supervisor considered public comments, wilderness characteristics, and other factors to determine which wilderness areas to recommend in alternative C. This rationale can be found in the "Preliminary Administrative Recommendations" section of the record of decision.

Concern Statement 64:

Comments from White Sands Missile Range. Comments request booster drop zones considered in the EIS and LRMP and with figures and attachments identifying location of the two drop zones on the Mount Tyler Ranger District and Magdalena Ranger District. (90; 423)

Response

Booster drop zones as they relate to the White Sands Missile Range are project-level issues that are analyzed in site-specific NEPA and are not components of the land management planning process. They are not approved in the land management plan but rely on project-level environmental analysis and decisionmaking outside of the land management plan revision process.

Concern Statement 73:

Comments supportive of restoration management areas. (426-17, 24, 28, 37, 39; 457-6; 961-7, 19, 28; 983-10)

Response

Thank you for your comment.

Concern Statement 78:

Comments support conservation management areas with requests to reinstate the recommended wilderness and conservation management area acreage from the previously published draft EIS. Comments request justification for this reduction. (87-4, 10; 426-60; 427-11; 443-11, 12, 13, 201, 202, 221; 448-4; 460-5; 961-1, 20, 21, 39; 965-23, 24, 25, 26, 27; 992-6)

Response

The conservation management area acreage shown in prepublication drafts provided to cooperating agencies was decreased from 174,619 acres to 36,547 acres between the August 2018 cooperating agency version of the draft EIS and the August 2019 publication of the draft EIS. Concern from cooperating agencies was expressed regarding the prior expansive scope of the conservation management areas and desire was expressed to both focus the management areas and reconsider some of these areas as recommended wilderness, Some of the acreage reduction was due to the same areas being added to recommended wilderness in alternative C and other areas removed from the proposed conservation management areas.

Areas that had previously been proposed as conservation management areas in alternative C as part of the August 2018 draft EIS version included approximately 174,620 acres across the four districts with approximately 159,632 acres proposed in the Magdalena district and approximately 14,988 acres proposed in the Mount Taylor district. The recommended wilderness areas in the final EIS within alternative C at 14,900 acres represent approximately 9 percent of the previously proposed conservation management areas.

The adjustment allowed the proposed conservation management areas to focus on large areas not contiguous to existing designated wilderness that have high value for primitive recreation. Conservation management areas are now limited to three areas on the forest in the preferred alternative: San Mateo (11,380 acres) and Datil (10,179 acres) on the Magdalena district and Guadalupe (14,988 acres) on the Mount Taylor district. The rationale for this reduction is due to the need for manageability of these areas as per the criteria in the final EIS, Appendix C. Wilderness Recommendation Process. The previous areas proposed in the August 2018 cooperating agency review version of the draft EIS were reviewed to ensure there were no conflicts with current or future uses, with an overall high or high plus wilderness characteristics finding, but were not proposed in alternative C because they were not contiguous to existing designated wilderness areas. The size threshold of 10,000 acres was determined to allow for manageability while still supplying a quality backcountry and primitive experience.

Concern Statement 90:

Lack of information on Little Water Canyon Management Area. (87-1, 6; 607-1)

Response

The Cibola has fulfilled the request for more information on the properly functioning condition of the Little Water Canyon Management Area for the associated Freedom of Information Act request dated October 2, 2019. Any Freedom of Information related topics must be brought up through that process.

Concern Statement 107:

Comments regarding botany protection in conservation management areas. Comment suggests a similar emphasis of monetary resources (as noted by draft EIS, page139) for labor including professional botanists to monitor/report vegetation especially in conservation management areas. (87-8, 9, 11)

Response

Within the boundaries of any area addressed as a management area, direction provided specific to those areas takes precedence over forestwide direction. Where specific management area direction is silent but exists in forestwide plan components, the forestwide direction applies.

Federally listed threatened plant species (Zuni fleabane) and the listed Species of Conservation Concern (Zuni milkvetch and Sivinski's fleabane) are protected under forestwide management direction within the Threatened and Endangered Species and Species of Conservation Concern (At-Risk Species) section of the land management plan. The forestwide at-risk species plan direction (as well as other applicable plan direction) applies to all action alternatives, B, C, and D. In particular, FW-DC-ARS-1, FW-DC-ARS-2, and FW-DC-ARS-4 establish the desired conditions for at-risk species to maintain their persistence or contribute to the recovery of that species within the plan area. As well, these plan components strive to improve ecological conditions for species of conservation concern and maintain or restore critical habitats. FW-GDL-ARS-7 provides direction as to species-specific mitigation and protective measures that should be incorporated into project design to ensure persistence of species. FW-GDL-ARS-8 guides future management to protect known populations of at-risk plan species from management activities that may degrade habitat conditions. Further, within the land management plan monitoring program (chapter 5 of the plan), several monitoring questions and associated indicators are included to monitor invasive species and vegetation desired conditions over the life of the plan (terrestrial and aquatic ecosystems and progress toward meeting the desired conditions).

Concern Statement 153:

Comments recommend additional or modified language, guidelines, standards, objectives or management approaches. (443-203, 204, 205, 208, 212, 213, 216, 218, 219, 220)

Response

The conservation management area (CMA) analysis in the environmental impact statement is sufficient to articulating the impacts of including these areas or not in the preferred alternative. The proposed conservation management area boundaries were delineated in the preferred alternative C by following the proposed recommended wilderness area boundaries for those same areas in alternative B. The rationale for using the recommended wilderness area boundaries from alternative B is that the wilderness characteristics identified during the evaluation step of the wilderness recommendation process are included within the proposed boundaries. These characteristics such as opportunities for solitude and primitive recreation are valued within the CMAs. The inclusion of the CMAs would be beneficial because

it would add areas identified for their wilderness characteristics in alternative B that were not included as recommended wilderness as per the analysis criteria for alternative C. The management tradeoffs associated with these areas is to allow for needed active management through use of prescribed fire and fuel breaks, while providing for high quality primitive recreation opportunities. In comparison to just having forestwide plan components apply to these unique areas, the addition of MA-MGAP-CONS-1 providing for fuel breaks and the MA-STD-CONS-1 prohibiting new roads or motorized trails breaks provide additional protection for the areas' primitive recreation opportunities.

The deciding official believes that the proposed management approaches MA-MGAP-CONS-1 and MA-MGAP-CONS-2 are necessary to include in the land management plan because there is a need to ensure treatments within these fuel break corridors to move the fire adapted vegetation types (ponderosa pine, mixed dry conifer, pinyon-juniper grass woodlands) towards desired conditions and reduce uncharacteristic wildfire risk. The focus of restoration in these areas would be on aspen regeneration through prescribed burning, mechanical thinning, and unplanned wildfire managed for resource benefit. These areas would be utilized as holding features during management of planned and unplanned ignitions, safe ingress and egress, and to create fuelwood opportunities for the public.

In regard to the proposed CMA plan direction, the Cibola finds that existing forestwide and CMA plan direction sufficiently address the commenter's request for additional standards. The Cibola has added a no surface occupancy stipulation that shall be applied to any new leases in the CMAs (MA-STD-CONS-2). Further, the first standard in the CMA (MA-STD-CONS-1) addresses the commenter's request for managing the area for non-motorized travel by prohibiting any new roads or motorized trails within the area in order to emphasize primitive recreation opportunities. Given the CMAs largely overlap with existing inventoried roadless areas, the more restrictive requirements as per the 2001 Roadless Area Conservation Rule (USDA Forest Service 2001b) apply within the designated roadless areas of the CMAs. The suggested standard to prohibit development of commercial infrastructure for renewable power generation is not feasible within the roadless area sections of the CMAs as that is permissible in compliance with the Roadless Area Conservation Rule. Outside of the designated roadless areas, the Renewable Energy forest wide plan direction applies to the remainder of the CMA as management relates to hosting or facilitating the development of renewable energy sources while minimizing adverse impacts to other resources (FW-DC-RE-1).

Concern Statement 165:

Comments request Guadalupe Management Area as recommended wilderness rather than a site-specific management area. (426-36, 59; 961-36)

Response

It is true that designated wilderness is a higher level of preservation than a management area designation. The Cibola has included the Guadalupe area as a recommended wilderness under alternative D with a total proposed acreage of 14,988 acres. However, the rationale for not including the Guadalupe area as a recommended wilderness in alternative C is due to the identification of existing uses incompatible for managing the area as recommended wilderness over the life of the plan. Existing projects for mechanical thinning and burning will occur within the western portion of the area which are not compatible for managing the area as recommended wilderness (or as designated wilderness if designated by Congress).

The Cibola received many comments advocating for adding more recommended wilderness, as in alternative D, and many comments advocating for no recommended wilderness, as in alternative A. We analyzed both scenarios within the range of recommended acreage proposed in the action alternatives. The draft record of decision explains how the forest supervisor considered public comments, wilderness

characteristics, and other factors to determine which wilderness areas to recommend in alternative C. This rationale can be found in the "Preliminary Administrative Recommendations" section of the record of decision.

Mineral Resources

Concern Statement 34:

Comments request clarification for variable impacts and sizes of locatable mining operations that may or may not require submission of a plan of operations and associated bonding. Comment requests addition of statement that clarifies when an operator needs to submit a notice of intent or a proposed plan of operations. (85-1, 2)

Response

Under the Mining Law of 1872, U.S. citizens are guaranteed the right to prospect and explore lands reserved from the public domain and open to mineral entry. All locatable mineral operations on National Forest System lands are subject to 36 CFR and section 228 Subpart A regulations. According to 36 CFR 228.4 and referenced in the draft land management plan (page 112), at a minimum, a notice of intent to operate is required from any person proposing to conduct operations which might cause significant disturbance of surface resources. Please also refer to forestwide standard FW-STD-LOC-01, that states that bonds will be collected for minerals operations requiring a plan of operation to insure appropriate closure for operations of all sizes. Please note that 43 CFR and section 3809 regulations are not applicable to National Forest System lands, but to public lands administered by the Department of Interior. The Forest Service does not have a 5-acres threshold for a notice of intent, contrary to the Bureau of Land Management's notice of intent application.

Concern Statement 79:

While the draft plan addresses transmission lines, the proposed desired conditions, standards, and guidelines contradict the feasibility of high voltage and large-scale lines. It is not possible to meet the desired conditions, standards, and guidelines for scenic integrity and inventoried roadless area when constructing transmission lines. Rather than create future amendments to the plan, energy companies are requesting exceptions and the location of potential energy corridors. (454-2, 3; 970-1, 2, 3, 4, 5, 6, 7, 8, 9; 971-1, 2, 3)

Response

Not all areas are appropriate locations for utility infrastructure. In some cases, resource concerns such as preservation and protection of scenic integrity, primitive recreation opportunities, and roadless characteristics are the predominant management emphasis.

Concern Statement 80:

Suggested edits to the "Renewable Energy" section of the plan, requesting standards that address power systems. (427-7, 12; 446-3)

Response

As a result of comments received, four new plan components have been written to address these concerns. A new standard 1 addresses vegetation management and the observed conflict with scenic resource related plan components (see FW-STD-SU-1). Standard 2 addresses issues associated with co-location compatibility (see FW-GDL-SU-1). Standard 5 clarifies the distinction between electric transmission and

distribution lines and that the intention of the plan component regarding burial was intended to apply only to electric distribution lines (see FW-GDL-SU-5).

Concern Statement 144:

The environmental impact statement should indicate if there are any differences in mining reclamation standards among the alternatives and when the reclamation site can be released, and the bond money returned. Suggestion to include certified weed free seeds. (958-38, 57, 58, 59, 60, 61, 62, 73, 74)

Response

The Cibola land management plan is programmatic direction for management of locatable mineral operations. Mineral administration is subject to Federal laws and Forest Service regulations. As stated in the plan, each operation has a reclamation component with associated bonding that is site-specific and tied to that single operation. The standards and guidelines were established to generally apply to all operations, but each project will have reclamation and bonding requirements specified in the plan of operations. The bond, administered according to 43 CFR section 228.13, is held until the reclamation work is completed by the operator upon compliance with 43 CFR section 228.8(g). It is the authorized officer's discretion of when the reclamation work is complete. The authorized officer will notify the operator that performance for the specific project under the bond has been completed.

The Forest Service only has authority to administer projects on National Forest System lands.

There are not differences in mining reclamation standards among the alternatives.

"Certified weed-free" seed will be included in the locatable standards and guidelines that reference revegetation activities.

Concern Statement 205:

Mineral and log landing sites should make do to avoid sensitive resources (for example, riparian areas, trails, roads, etc.). (426-9)

Response

Mining operations will be administered in accordance to 36 CFR section 228 regulations. All operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources. Each operation and its subsequent environmental analysis can produce site-specific modification and/or special mitigation measures to reduce impact to sensitive areas.

Concern Statement 223:

Historical impacts from mining to Native Americans need to be acknowledged and minerals are considered to have cultural value. (4 447-4, 15; 453-32)

Response

According to FW-GDL-FRT-02 and FW-GDL-FRT-03, tribal consultation should occur in the early stages of project planning and continue throughout the planning process, minerals projects will be managed under these guidelines. 453-2: Thank you for your comment. All locatable minerals are administered accordingly to 36 Code Federal Regulations (CFR) 228 Subpart A regulations to any individual, partnership, corporation, association, or other legal entity.

Range

Concern Statement 2:

Comments from attorney for landowner adjacent to the Cibola National Forest. Letter includes three attachments relevant to inholding and indicates there is a request to discuss the status of Tajique Creek as a wild and scenic river, as well as discuss road access. (1006-1, 2, 3, 4)

Response

These concerns focused on Tajique Creek wild and scenic river eligibility as proposed in the draft land management plan. Specifically, concerns were raised about the buffer associated with the wild and scenic river eligible reach. As part of the Assessment phase of the land management plan revision process, the Forest Service is required to conduct a comprehensive inventory and evaluation to determine which rivers on the national forest are eligible for inclusion in the National Wild and Scenic Rivers System. Based on this direction, the Cibola conducted a new eligibility study based on previous findings from the 2001 eligibility study. The new eligibility study conducted in 2016, all named rivers on the United States Geological Studies quadrangle map were identified and evaluated to determine if they possessed outstandingly remarkable values worthy of protection. The Cibola determined if these outstandingly remarkable values were unique, rare, or exemplary within the region of comparison (the state of New Mexico). Each river found to be eligible was assigned a preliminary classification, based on the condition and development level in and around the river at the time it was deemed eligible. There are three possible classifications of eligible river segments, based on the level of development and human use in the river and along its corridor: wild, scenic, or recreational. This evaluation resulted in identification of seven eligible wild and scenic rivers on the Cibola.

Tajique Canyon was deemed eligible for botanical, scenery, and recreation outstandingly remarkable values, with a recreational classification. Eligible wild and scenic rivers must be protected sufficiently to maintain the free flow and outstandingly remarkable value s unless a determination of ineligibility or non-suitability is made. A river determined through a suitability study to be not suitable shall no longer be considered eligible and interim protection measures will no longer apply. If an eligible river is determined to be suitable and is designated as a wild and scenic river, the designation would not affect existing water rights or the existing jurisdiction of states and the Federal Government as determined by established laws. The associated quarter mile buffer identified is to limit activities which may compromise these outstanding values. The segment immediately below the deeded property inholding is also within the Manzano Wilderness. A designated wilderness generally has more restrictions on activities than would be allowed under a wild and scenic river eligibility. This identified buffer would therefore not add additional limitations than what is currently in place within the boundaries of the existing Manzano Wilderness.

The commenter also expressed concern about the green tint coloration of the private land inholding within the Manzano Wilderness as depicted in the Cibola National Forest Draft Land Management Plan and Draft Environmental Impact Statement proposed alternative maps. For the final land management plan maps, solid fill colors were used to show existing and proposed management areas, including the existing wilderness. The wilderness data layer managed by the Washington office and regional office is corporate data, and therefore the Cibola does not have authority or the ability to make changes to these base layers. On other maps, such as the forest visitor map, which uses a gradient boundary and no fill color, the private land inholding is seen clearly. Cibola National Forest fully acknowledges the inholding within the Manzano Wilderness.

Concern Statement 11:

The forest lands do not have the capability to provide for forage for livestock. (87-12, 13, 14, 15, 89-1, 462-5, 972-1, 2, 3, 4, 5, 6, 7, 8, , 24, 30)

Response

The final rule sets the stage for a planning process that is responsive to the multiple use desires and needs of present and future generations of Americans. Rangeland ecosystems are part of many units, and the Multiple-Use Sustained-Yield Act specifically provides that range is one of the multiple uses for which the national forests are managed. The appropriate level of grazing on a unit or other direction regarding range use in the plan area is best determined in individual plans and at the site-specific level, so that direction is appropriate to the conditions in the plan area. The final planning rule states under 36 CFR 219.7(v):) Suitability of lands. Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands. The suitability of lands need not be identified for every use or activity. Suitability identifications may be made after consideration of historic uses and of issues that have arisen in the planning process. Every plan must identify those lands that are not suitable for timber production (section 219.11). As discussed in the prior section, livestock use is predicated under the adaptive management guidance and philosophy. Under current regulation suitable areas for grazing are required to undergo sitespecific analysis for ongoing authorization and or reauthorization of grazing activities (FSH 2209.13, chapter 90). In addition, "The Responsible Official must periodically review the NEPA-based disclosure and decision documents in light of the grazing activity and existing permit to insure the grazing activity (and associated grazing permit(s) AMP and AOI) are consistent with and within the bounds of the effects disclosed in the existing NEPA documentation. Such reviews should occur, at a minimum, prior to the reissuance of an expiring permit. These reviews should also occur whenever relevant new information or changed conditions warrant reconsideration of the current grazing authorization (FSH 2209.13, chapter 90, Region 3 supplement 2209.13-2016-1).

Concern Statement 69:

Suggested technical edits to multiple plan components within the "Sustainable Rangelands and Livestock Grazing" section pf the plan. (446-1, 35, 36, 37, 40, 41, 42, 44, 45, 46)

Response

Edits have been incorporated to the final land management plan; see the "Sustainable Rangelands and Livestock Grazing" section in chapter 2.

Concern Statement 84:

Current standards ignore the cultural, historic, economic, aspects of sheep and goat grazing. (427-4, 429-2)

Response

Currently the Cibola National Forest does not have any active sheep or goat livestock term grazing permits on the forest. FW-STD-GR-4 is intended to protect bighorn sheep from the potential disease transmission from domestic livestock, particularly domestic sheep to wild bighorn Sheep populations, only in those areas occupied by bighorn sheep.

Forest Service Handbook 2209.13 – Grazing Permit Administration Handbook; chapter 10 – Permits With Term Status; R3 SUPPLEMENT 2209.13-2015-1; section16.16 "Annual Changes in Grazing for Trial

Periods" allows for a temporary change in number, kind, class of livestock, grazing management, or season of use from that shown on the term permit may be approved by the authorized officer if determined to be consistent with the land management plan and if the changes are determined to benefit management of the rangeland resource. Within a one- or two-year trial period, an environmental analysis must be completed to determine the resource, and cultural feasibility of a permanent change.

Plan component FW-MGAP-GR-2 acknowledges the importance of livestock grazing as a traditional and cultural practice that helps support the socioeconomic well-being of individual families within local communities (land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing").

As noted in the introduction of the plan for the Cibola National Forest, "The land management plan guides the Cibola in fulfilling its stewardship responsibilities to best meet the current and future needs of the American people. This plan provides forest-specific guidance and information for project and activity decision making over the plan period, generally considered 10 to 15 years. It provides the overall long-term vision, strategy, and constraints that guide integrated resource management, provide for ecological sustainability, and contribute to social and economic sustainability on the Cibola and the broader landscape."

This language sets the tone for the application of management approaches as written in the land management plan. Present and future planning will be within the framework and components of the plan, which include management approaches FW-MGAP-GR 1 and 2. Additionally, two desired conditions specifically address the importance of land grants-*mercedes* communities and acequias that include: FW-DC-RHC-2, "The long history and ties of rural historic communities and traditional uses (such as livestock grazing, fuelwood gathering, acequias, and hunting) to National Forest System lands and resources is understood and appreciated"; and FW-DC-RHC-3, "Forest resources important for cultural and traditional needs (such as osha, piñon nuts, ocote (pitch wood), and micaceous clay), as well as for subsistence practices and economic support (such as livestock grazing, acequias, firewood, vigas, latillas, gravel, soils, and forest products), of rural historic communities are available and sustainable."

In addition, guideline FW-GDL-RHC-4 in the same section states: "Coordination with land grant and acequia governing bodies should occur at the early stages of planning and project design to include local perspectives, needs, concerns, and traditional knowledge." Management approach FW-MGAP-RHC-1, also in the same section, states: "Work with representatives of historic communities, governing bodies for land grants-*mercedes*, and acequia associations to understand their needs and build respectful, collaborative relationships; develop collaborative proposals and implement projects of mutual benefit across shared boundaries and with shared infrastructure (such as boundary fences and roads); develop ways of accomplishing mutually desired conditions and objectives; and collaborate in ecosystem restoration efforts."

The land management plan addresses the importance and the need to meet with land grants on a regular ongoing basis to address implementation and other aspects of the proposed plan.

Concern Statement 95:

Comments regarding managed grazing to improve forest health, riparian areas and wildlife habitat. (86-2, 5; 437-7, 29)

Response

As written, guideline 4 (land management plan, chapter 2, "Water Resources," "Water Resource Features" section) is to ensure the sustainability and recovery of wetland and riparian areas while acknowledging some level of livestock grazing in these sensitive areas.

In addition, the intent of desired condition 4 (land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section) is to ensure that livestock grazing is within the constraints of ecological capacity and does not interfere but is compatible and in some cases complimentary to ecological functions and processes.

Also, management approaches 1, 2 and 6 (land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section) are intended to ensure the continued coordination, cooperation, and collaboration with livestock permittees, and other stakeholders including the New Mexico Game and Fish and with the specific intent to address and work with issues with elk, deer and livestock interactions.

As described in the land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section, guideline 1 intent is to recognize that forage use should be based on current and desired ecological conditions, and that these evaluations should be considered annually, and or during permit renewals. In addition, management approach 4 is intended to implement adaptive management strategies that may include adjustment of stocking rates to promote ecosystem resiliency, sustainability, and species diversity based on changes in range conditions, climate, and other resource conditions.

Concern Statement 117:

Comment from the Town of Tome requesting first consideration for any permits or leases on the National Forest System lands in the Mountainair Ranger District for grazing as they had prior to Forest Service creation. (456-2)

Response

See response to concern statement 69.

Concern Statement 175:

Request for no net loss in grazing capacity for land grant communities. Argues that U.S. Forest Service has systematically been reducing dependence of land grant communities on resources historically dependent upon. Establish communal grazing permits for newly vacant allotments within historic or patented land grant boundaries. (466-68, 77, 87)

Response

The plan recognizes the importance of rural historic communities which includes the "land grants-mercedes and acequia (community ditch) associations. These communities are associated with corporate entities that predate the establishment of the national forests and are subdivisions of New Mexico State government or are recognized by the State of New Mexico. These entities for the most part was established prior to the acquisition of New Mexico by the United States" (land management plan, chapter 2, "Traditional Communities and Uses," "Rural Historic Communities" section).

The plan identifies specific desired conditions to ensure that these traditional uses are honored and recognized: "The uniqueness and values of rural historic communities and the traditional uses important for maintaining these cultures are recognized and valued as important"; "The long history and ties of rural historic communities and traditional uses (such as livestock grazing, fuelwood gathering, acequias, and hunting) to National Forest System lands and resources is understood and appreciated"; and "Forest resources important for cultural and traditional needs, as well as for subsistence practices and economic support (such as livestock grazing, acequias, and forest products) of rural historic communities are available and sustainable" (land management plan, chapter 2, "Traditional Communities and Uses," "Rural Historic Communities" section, desired conditions 1, 2, and 3)

In addition, the plan directs the Cibola National Forest to work with land grant communities: "Coordination with land grant and acequia governing bodies should occur at the early stages of planning and project design to include local perspectives, needs, concerns, and traditional knowledge" (land management plan, chapter 2, "Traditional Communities and Uses," "Rural Historic Communities" section, guideline 4), and further direct the Cibola to work with representatives of governing bodies of land grants: "Work with representatives of historic communities, governing bodies for land grants-mercedes, and acequia associations to understand their needs and build respectful, collaborative relationships; develop collaborative proposals and implement projects of mutual benefit across shared boundaries and with shared infrastructure (such as boundary fences and roads); develop ways of accomplishing mutually desired conditions and objectives; and collaborate in ecosystem restoration efforts" (land management plan, chapter 2, "Traditional Communities and Uses," "Rural Historic Communities" section, management approach 1).

It is also important to note that the plan specifically recognizes the need to consider new grazing authorizations to nearby land grant communities: "Historically closed allotments (such as those near the Cañón de Carnue and San Antonio de Las Huertas Land Grant communities on Sandia Ranger District and the Manzano, Torreón, Tajique, and Tomé Land Grant communities on the Mountainair Ranger District) should be considered for new grazing authorization for rural historic community grazing allotments" (land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section, guideline 8). The plan emphasizes the need to recognize the importance of livestock grazing to traditional communities and the need to work with all permit holders in achieving desired conditions and contributing to the socioeconomic well-being of local communities: "Cooperate, collaborate, and coordinate with permit holders to respond to changing resource conditions. Cooperation, collaboration, and coordination among Cibola managers and permit holders is key to improving rangeland and forest conditions for multiple uses, moving towards desired conditions, and contributing to the socioeconomic well-being of local communities. In addition, collaboration among stakeholders is important, including local communities; permit holders; and Federal, State, county, and local government entities" and "Acknowledge the importance of livestock grazing as a traditional and cultural practice that helps support the socioeconomic well-being of individual families within local communities" (land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section, management approaches 1 and 2).

Concern Statement 188:

The draft EIS fails to acknowledge potential negative impacts from grazing such as loss of species diversity, altered fire regime, invasive species, degraded watersheds (972-25, 26, 27, 28).

Response

Detailed analysis of potential negative impacts from grazing such as loss of species diversity, altered fire regime, invasive species, and/or degraded watersheds is conducted at the project (allotment management planning) level. As stated in the final EIS, chapter 2 (under "Environmental Consequences" in the "Sustainable Rangelands and Livestock Grazing" section:

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carry out any project or activity. Because the land management plan does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions), there can be no direct effects. However, there may be implications, or long-term environmental consequences, of managing the national forests under this programmatic framework. This management action does not change any current activities for range management permitted under the 1985 plan. Additional planning actions

would be required to manipulate animal unit months, pasture and allotment boundaries, and the addition or removal of range improvements.

The final EIS also states (under "Environmental Consequences Common to All Alternatives" in the "Sustainable Rangelands and Livestock Grazing" section) that livestock grazing would be managed in a manner that maintains satisfactory conditions which should provide for diverse native plant communities and that ongoing evaluations are being conducted to determine if actions relating to livestock grazing are maintaining or progressing toward desired conditions:

Livestock grazing under all alternatives would be managed with adaptive management to match livestock numbers with annual forage production. Cibola National Forest personnel would continue to manage grazing to maintain satisfactory range conditions which should provide for native plant communities that support diverse age classes of shrubs, and vigorous, diverse, self-sustaining understories of grasses and forbs relative to site potential, while providing forage for livestock and wildlife, "and, "Allotment rangeland evaluations are regularly being completed primarily in conjunction with grazing term permit renewals to determine if actions relating to livestock grazing are maintaining or progressing toward desired conditions and other relevant resource objectives.

As discussed in the final EIS, chapters 1 through 4, evaluation of effects from grazing under alternative C, the preferred alternative, indicate progress for key plan components towards desired conditions. The discussion of effects to riparian areas from grazing, in the "Water Resources" section under alternative C, the following is described:

Plan components for the range program have been improved. These plan components cover a broader range of potential effects from livestock use than that found in alternative A. These include incorporating adaptive management, sustainable water developments, and guidelines to directly protect riparian areas. There are also more wildlife plan components which address conditions in riparian, especially for high priority species. However, the focus in restoration areas will be watershed improvement projects. This could result in improvements, such as thinning and fencing, in up to 75 projects across almost 2,800 acres of riparian. In addition, objectives for the range program includes 15 to 20 range improvements each year which could include fencing to protect riparian areas and improve management flexibility. In addition to water developments that would allow water flows for riparian areas. These actions would lead to improved condition of riparian areas by allowing vegetative growth and attributes that lead to proper functioning condition. However, due to the complexity and extent of the riparian areas in the plan area, impacts related to livestock use in riparian areas are likely to continue in some riparian areas.

Effects to non-forest-dependent species indicate the same direction towards desired conditions, in the "Terrestrial, Aquatic, and Botanical Species" section of the final EIS, alternative C:

Livestock distribution would be substantially better under this alternative than the others, leading to increased plant cover and improved vegetation structure. This would lead to and improved foraging condition for small mammals and species that prey upon them. This would benefit grassland- and shrubland-dependent species like American peregrine falcon, burrowing owl, and Gunnison's prairie dog" as well as effects to non-forested vegetation habitat; "Livestock distribution would be substantially better under this alternative than the others, leading to increased plant cover for small mammals, and improved foraging condition and soils. This would benefit grassland- and shrubland-dependent species like American peregrine falcon, burrowing owl, Gunnison's prairie dog, and Bendire's thrasher.

Standard 1 in the final plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section states, "Livestock management shall be compatible with capacity and address ecological concerns (such as forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions, as determined by temporally and spatially appropriate data." This adaptive management trigger allows for response to unacceptable conditions that would address the specific resource concerns at the project level to attain desired conditions.

Guidelines in the land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section, focus on specific measures to minimize, reduce, and or eliminate grazing impacts to riparian areas within the planning area. These include guidelines FW-GDL-GR-2 through FW-GDL-GR-5 and are intended to ameliorate the effects of livestock grazing. As described in the plan: guideline 2 "Livestock grazing within riparian management zones should be managed to sustain proper stream channel morphology, floodplain function, and riparian vegetation desired conditions"; guideline 3 "New livestock troughs, tanks, and holding facilities should be located away from riparian management zones to protect riparian ecological resources and to minimize long-term detrimental impacts, unless necessary for resource enhancement or protection"; guideline 4 "New range infrastructure (such as troughs and tanks) should be designed to avoid long-term negative impacts to soil resources (like soil compaction and soil loss) to maintain hydrological function outside the structure's footprint"; and guideline 5 "Salting or mineral supplementation should not occur on or adjacent to areas that are especially sensitive to salt (such as at-risk plant species habitat, riparian areas, wetlands, or archeological sites) and where there is increased traffic from ungulates to protect these sites."

Concern Statement 196:

Fences are in disrepair and unlikely to benefit livestock. (991-11)

Response

As noted in the land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing," section: "Forage-producing National Forest System lands will be managed for livestock grazing and the allotment management plans will be prepared consistent with land management plans. Unless otherwise specified by the Chief of the Forest Service, all grazing and livestock use on National Forest System lands and on other lands under Forest Service control must be authorized by a grazing or livestock use permit."

The term grazing permit dictates the permitted number of cattle, season of use, and a number of other requires for authorized use, including maintenance of new and existing range improvements, including fences. In many cases fences fall into disrepair and may require reconstruction and or removal.

Normally within a ten-year cycle the term grazing permit is evaluated. In FSH 2209.13 – Grazing Permit Administration Handbook, chapter 90 – Rangeland Management Decisionmaking, Region 3 Supplement 2209.13-2016-1 in section 96 "Review of Existing Project-Level NEPA Based Decisions," the section 18 review process merely provides a means of determining if existing disclosure and decision documents remain valid in support of the ongoing activity of permitted livestock grazing. Under this process, an interdisciplinary team evaluates the results of monitoring and any other new information to determine if livestock grazing, as currently permitted and administered, is consistent with the scope and extent of effects disclosed under the most recent NEPA-based analysis and decision authorizing the grazing activity.

A component of this review would include the evaluation of existing range infrastructure including fences and needs to remove, repair, and or reconstruct [this] infrastructure.

Concern Statement 197:

Concern on the overall management of Little Water Canyon. (457-8, 9; 963-9)

Response

Guidelines in the land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section, focus on specific measures to minimize, reduce, and or eliminate grazing impacts to riparian areas within the planning area. These include guidelines FW-GDL-GR-2 through FW-GDL-GR-5 and are intended to ameliorate the effects of livestock grazing. As described in the plan: guideline 2 "Livestock grazing within riparian management zones should be managed to sustain proper stream channel morphology, floodplain function, and riparian vegetation desired conditions"; guideline 3 "New livestock troughs, tanks, and holding facilities should be located away from riparian management zones to protect riparian ecological resources and to minimize long-term detrimental impacts, unless necessary for resource enhancement or protection"; guideline 4 "New range infrastructure (such as troughs and tanks) should be designed to avoid long-term negative impacts to soil resources (like soil compaction and soil loss) to maintain hydrological function outside the structure's footprint"; and guideline 5 "Salting or mineral supplementation should not occur on or adjacent to areas that are especially sensitive to salt (such as at-risk plant species habitat, riparian areas, wetlands, or archeological sites) and where there is increased traffic from ungulates to protect these sites."

Concern Statement 245:

Animal unit months should be decreased or should remain at the current levels. (87-12, 16, 462-4, 972-12, 16)

Response

As noted in chapter 2 of the plan, "Sustainable Rangelands and Livestock Grazing" section, "Livestock management on National Forest System lands has shifted to an adaptive management philosophy that allows changes in livestock numbers or timing of use in response to changes in forage production, water availability, and precipitation patterns." This is codified under current Forest Service Handbook (FSH) Regulations under FSH 2209.13 – Grazing Permit Administration Handbook, chapter 90 – Rangeland Management Decisionmaking, which focuses on "NEPA-based decisions, and the implementation of those decisions regarding rangeland management and livestock grazing with an objective of achieving and maintaining desired rangeland conditions on National Forest System lands" (FSH 2209.13; chapter 90). Chapter 90 recognizes adjustments in stocking rates have been made for the needs of listed species under Endangered Species Act, and requirements for clean water and cultural artifacts, and is a dynamic process which is continually refined.

Furthermore, adaptive management is defined as "A system of management practices based on clearly identified intended outcomes and monitoring to determine if management actions are meeting those outcomes; and, if not, to facilitate management changes that will best ensure that those outcomes are met or re-evaluated. Adaptive management stems from the recognition that knowledge about natural resource systems is sometimes uncertain." (36 CFR 220.3) (FSH 2230.13 – Grazing Permit Administration Handbook, chapter 90 – Rangeland Management Decisionmaking).

Technically the potential exists to increase animal unit months under alternatives B and C; however, as noted in the EIS, this is a consideration for the opportunity to re-opening historically closed allotments specified as significant for traditional communal grazing uses. It is further clarified that this would only be considered under site-specific environmental analysis factoring other values, with the focus to identify desired conditions. Weighing in other resource values, animal unit months may decrease for all alternatives over time under adaptive management policies.

The land management plan outlines the intent of the adaptive management philosophy in chapter 2, "Sustainable Rangelands and Livestock Grazing" section, management approach 4: "Implement adaptive management strategies to manage livestock grazing in a manner that promotes ecosystem resiliency, sustainability, and species diversity based on changes in range conditions, climate, and other resource conditions. The adaptive management strategy is to provide more flexibility to grazing management while improving or maintaining the health of rangelands."

Concern Statement 246:

The Forest Service must apply the best available scientific information to determine which areas of the national forest are suitable for livestock grazing, and which are not. The draft plan and draft EIS are silent on this issue, as well as the capability of Forest Service lands to provide forage for livestock. This is one primary example of a clear and direct failure of the Forest Service to apply the best available scientific information that must be remedied before the release of a final decision.

Response

Livestock management on national forest lands has shifted to an adaptive management philosophy that allows timely changes to be quickly made in response to changing conditions involving changes in forage production, utilization levels, precipitation patterns, and water availability. Since 2006, the number of authorized livestock has averaged about 85 percent of the number permitted due to drought-related issues such as reduced forage production or lack of livestock water.

On a landscape scale, the current range conditions are considered to be satisfactory on the mountain districts, based on data collected for annual inventory and monitoring to comply with the 1985 Cibola land management plan monitoring requirements. A satisfactory rating is determined when the long-term trend in vegetation and soil conditions is meeting or moving toward the desired ecological condition. This is based on ecological similarity of vegetation and soil conditions to site potential.

The Cibola National Forest's annual monitoring data and reports show that livestock grazing is ecologically sustainable at current levels

(https://www.fs.usda.gov/detail/cibola/landmanagement/planning/?cid=FSEPRD660894). However, the Forest Service is continuing to identify and evaluate how evolving monitoring methods and using ecological, social, and economic indicators such as those suggested by Straube and Belton (2012), Beschta et al. (2012), and Belsky and Blumenthal (1997) might better inform the determination of whether ecological sustainability, social acceptance, and economic viability of livestock grazing on rangelands, ponderosa pine and mixed conifer forests of the Cibola is being met. (Cibola National Forest Mountain Ranger Districts Assessment Report – Volume II; pages 140-141).

Suitability for rangelands is not a requirement under the 2012 Planning Rule; however, suitability and capacity are determined at the project level (NEPA analysis under FSH 2209.13 Chapter 90) for individual grazing allotments within the framework of an Adaptive Management philosophy.

As defined under 36 CFR 220.3 Adaptive Management is "A system of management practices based on clearly identified intended outcomes and monitoring to determine if management actions are meeting those outcomes; and, if not, to facilitate management changes that will best ensure that those outcomes are met or re-evaluated. Adaptive management stems from the recognition that knowledge about natural resource systems is sometimes uncertain)."

As written in the plan in chapter 2, "Sustainable Rangelands and Livestock Grazing" section, "There is congressional mandate to allow grazing on suitable lands through the Multiple Use and Sustained Yield

Act of 1960, the Forest and Rangeland Renewable Resource Planning Act of 1974, the Federal Land Policy and Management Act of 1976, and the National Forest Management Act of 1976."

As stated by the Multiple Use and Sustained Yield Act of 1960, it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. It is further emphasized by the Forest and Rangeland Renewable Resource Planning Act of 1974, that to serve the national interest, the renewable resource program must be based on a comprehensive assessment of present and anticipated uses, demand for, and supply of renewable resources from the Nation's public and private forests and rangelands, through analysis of environmental and economic impacts, coordination of multiple use and sustained yield opportunities as provided in the Multiple-Use Sustained-Yield Act of 1960 (74 Stat. 215; 16 U.S.C. 528-531).

The Federal Land Policy and Management Act of 1976, the Secretary of Agriculture, with respect to lands within National Forests in the sixteen [P.L. 95-914, 1978] contiguous Western States, [permits and leases for domestic livestock grazing] shall be for a term of ten years subject to such terms and conditions the Secretary concerned deems appropriate and consistent with the governing law, including, but not limited to, the authority of the Secretary concerned to cancel, suspend, or modify a grazing permit or lease, in whole or in part, pursuant to the terms and conditions thereof, or to cancel or suspend a grazing permit or lease for any violation of a grazing regulation or of any term or condition of such grazing permit or lease.

Concern Statement 247:

The Forest Service should revise the animal unit months assumptions and analysis and provide the public with an opportunity to review and comment upon the new analysis. (972-14)

Response

As defined in Forest Service Handbook (FSH 2209.13, chapter 90, Region 3 supplement 2209.13-2016-1), an animal unit is considered to be one mature cow of about 1,000 pounds (450 kg), either dry or with calf up to 6 months age, or their equivalent, consuming about 26 pounds (12 kg) of forage per day on an oven-dry basis. An animal unit month (AUM) therefore, is the amount of oven-dry forage (forage demand) required by one animal unit for a standardized period of 30 animal unit days. Not synonymous with animal month. The term AUM is commonly used in three ways: (a) stocking rate, as in "X acres per AUM"; (b) forage allocations, as in "X AUMs in allotment A"; (c) utilization, as in "X AUMs taken from Unit B."

It is the policy for the Forest Service to (1) Issue grazing permits with term status for 10 complete grazing seasons unless, (a) The land is pending disposal (for example; a land exchange or townsite application is under consideration), (b) The land will be devoted to a public purpose that will preclude livestock grazing prior to the end of 10 years, (c) It is in the best interest of sound land management to specify a shorter term. Absence of an allotment management plan is not basis for a shorter-term period, (d) The range management objectives outlined in the Allotment Management plan on developing ranges in the East are accomplished in a shorter timeframe; (2) Issue a grazing permit with term status to the purchaser of permitted livestock and/or base property, provided the purchaser is qualified and the previous permittee has waived the original permit to the United States; and (3) Issue new permits with term status to previous holders at the end of each term permit period, provided they continue to meet eligibility and qualifications. Under current law, policy or regulation there is no provision to authorize the permanent retirement of grazing allotments that are voluntarily waived by the permittee with the exceptions outlined under provision (1).

As noted the 2016 Government Accounting Office Report on Unauthorized Grazing, "The frequency and extent of unauthorized grazing on Bureau of Land Management and U.S. Forest Service lands are largely

unknown because according to agency officials, the agencies prefer to handle most incidents informally (for example, with a telephone call) and do not record them" (GAO 2016).

Section 16.2 of the Forest Service Handbook 2209.13, chapter 10, Region 3 supplement 2209.13-2015-1 addresses this informal interaction:

A variety of circumstances beyond the control of grazing permittees and due to natural events or actions of third parties (such as gates left open, trees falling on fences, cut fences, and vandalized water developments) often occur. These events can influence the ability of permittees to fully comply with the terms and condition of their term grazing permits and annual operating instructions. Reasonable enforcement discretion must be utilized in determining to what extent these types of events actually constitute violations of term grazing permits that are appropriate for potential enforcement actions. In extreme situations these types of circumstances may seriously limit the feasibility of achieving proper management of the grazing activity and will need to be factored appropriately into decisions to authorized grazing either through issuance of the term grazing permit, or in the shorter term, through the annual operating instructions. Infrequent, minor, or first-time offenses can often be easily remedied informally by a telephone call or personal contact with the permittee. Such violations would not ordinarily justify issuance of a notice of non-compliance letter (section 16.2a), and subsequent permit suspension or cancellation action.

It is accurate that a majority of these informal interactions may not be documented; however, given the sheer volume of the authorized officer representative (district range conservationist) contact with livestock permittees, significant cases of non-compliance are normally the focus district range staff to achieve term grazing permit compliance.

Concern Statement 248:

The "Sustainable Rangelands and Livestock Grazing" section on the land management plan should discuss the following: relation between over-grazing and invasive species and grazing legality including grazing capacity. (958-54, 55)

Response

Chapter 2 of the land management plan, "Sustainable Rangelands and Livestock Grazing" section, identifies aspects to maintain and enhance native plant communities and assure that livestock grazing is compatible and within the capacity of ecological concerns. First and foremost, standard 1 in this section, clearly states that "Livestock management shall be compatible with capacity and address ecological concerns (such as forage, invasive plants, at-risk species, soils, riparian health, and water quality) that are departed from desired conditions"; and desired condition 5 also in this section emphases the importance of native plant communities; "Native plant communities support diverse age classes of shrubs, and vigorous, diverse, self-sustaining understories of grasses and forbs relative to site potential, while providing forage for livestock and wildlife."

Mechanisms for modifying stocking numbers to ensure sustainable rangelands and grazing capacity if changes in range condition occur within the term of the grazing permit authorization are guided by law, regulation and policy.

The land management plan clearly states: "Forage-producing National Forest System lands will be managed for livestock grazing and the allotment management plans will be prepared consistent with land management plans. Unless otherwise specified by the Chief of the Forest Service, all grazing and

livestock use on National Forest System lands and on other lands under Forest Service control must be authorized by a grazing or livestock use permit" (chapter 2, "Sustainable Rangelands and Livestock Grazing" section). Permitted livestock use is guided by both National and Regional policy outlined in Forest Service Manuals and Forest Service Handbooks, including the modification of livestock numbers to ensure sustainable rangelands.

Concern Statement 249:

New grazing infrastructure should be designed to meet its intended purpose while taking into consideration other objectives of the area. (86-6, 972-44)

Response

In the land management plan, chapter 2, "Sustainable Rangelands and Livestock Grazing" section, the intention of guideline 9 is to focus on scenic integrity objectives in regards to new grazing infrastructure. This coincides and is in alignment with "Scenic Resources" standard 1, "Scenery management, scenic character, and scenery values are integrated into the design, planning, and implementation of all resource management decisions." Therefore, scenic integrity is highlighted in grazing guideline 9 to be explicitly considered during new and existing project planning stage(s) of grazing infrastructure. Objectives related to other resource areas are considered during planning, design, and implementation stages of new and or existing grazing infrastructure.

Concern Statement 250:

Commenters suggest more form of collaboration in the forms of plan components and bi-annual meetings with the land grant Boards. (427-4, 429-3)

Response

The land management plan addresses the importance and the need to meet with land grants on a regular ongoing basis to address implementation and other aspects of the proposed plan. The concern that dialogue between New Mexico Game and Fish and U.S. Forest Service does not address concerns regarding other wildlife species, in particular gray wolf, is acknowledged. In chapter 2 of the plan, "Sustainable Rangelands and Livestock Grazing" section, management approach 6 was changed from "Facilitate dialogue between the New Mexico Department of Game and Fish personnel and permit holders about ungulates (elk, deer, and livestock) and the cumulative impacts on national forest resources" to "Facilitate dialogue between the New Mexico Department of Game and Fish personnel and permit holders about ungulates (elk, deer, and livestock) and other wildlife species; and the cumulative impacts on national forest resources."

Recreation

Concern Statement 12:

General comments that support motorized access for recreation itself and in support to hunting. (437-14, 31)

Response

Project-level NEPA would determine expansion of recreation opportunities at the user group level. For example, site-specific projects that could provide access to specific users such as anglers. Desired conditions within the general recreation section of the revised plan address provision of a variety of recreation opportunities and uses such as FW-DC-GREC-2: A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting,

fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values.

Concern Statement 18:

Comments request inclusion of inclusion of desired conditions, goals, and/or guidelines that provide seasonal protection (during critical times) for elk and other wildlife from impacts of recreation (via roads, trails, and associated motorized and non-motorized traffic). (437-11)

Response

Seasonal restrictions for wildlife needs would be addressed at the project-level analysis and decisionmaking process with an interdisciplinary team. The project-level scale is necessary for these sorts of mitigations and restrictions, as site-specificity is crucial to determine resource concerns. The land management plan revision scale is not site-specific, but rather forestwide. Resources are integrated in project-level planning (such as recreation and wildlife) and the following plan components address this: FW-STD-GREC-2. Recreation activities (such as rock climbing, dispersed camping, and other activities) should be managed to accommodate sustainable use levels within the capacities of other resource values, including the need to protect plants, animals (such as at-risk species), and other natural and cultural resources. FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values. FW-GDL-DISP-1. Trails should be designed, constructed, rerouted, decommissioned, or maintained using current best practices to promote sustainable design while providing desired recreation opportunities and protecting the values of other resources. FW-GDL-DISP-4. Existing trail segments found to adversely impact natural and cultural resources should be evaluated to address such impacts. Use alternative designs, reroutes, mitigations, or decommissioning of the trail to eliminate, minimize, or resolve adverse impacts.

Concern Statement 19:

Commenter suggested adding the following text—"avoiding development of new multi-use trails"—to FW-MGAP-WRF-15. (958-27)

Response

FW-GDL-WRF-8 addresses recreational trails and other uses in proximity to riparian areas. Guideline 8 states that in riparian management zones, recreation activities and other uses should occur at levels or scales that move toward desired conditions for water, soils, and vegetation. FW-GDL-WRF-5 says that new or redesigned recreation sites and trails near riparian areas should be designed to provide sustainable access to water to prevent erosion, trampling to protect associated values such as riparian habitat and clean water.

Concern Statement 30:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. Request to end campfires in attempt to mitigate human caused wildfires. Requesting more objectives; not enough to lead to ideal desired conditions. (462-6; 939-33; 983-4, 5, 6, 7, 8)

Response

Site-specific NEPA analysis, decision, and a potential resulting closure order would be needed to prohibit campfires within certain areas of the national forest; this is outside the scope of land management plan revision, which occurs at the forestwide scale. Site-specific NEPA analysis and decision would be needed for site-specific trail improvement projects. The dispersed recreation objective as described in the Cibola's draft plan has been edited in the Cibola's final plan, chapter 2, "Dispersed Recreation" section, to shorten the timeframe to 10 years (or 10 percent per year) for trail system evaluation instead of the 7 percent per year that was in the draft plan, which would have taken 14 years to accomplish. In terms of the request for addition of other objectives for the recreation resources as outlined in the plan, it is not required to have objectives for every resource area as per the 2012 Planning Directives.

As well, the Cibola developed this objective to ensure it would be attainable within the "fiscal capability of the unit," as determined through previous year budget analyses, as per the 1909.12 Land Management Plan Handbook 22.12, 5:

"Plan Objectives must be attainable within the fiscal capability of the unit, determined through a trend analysis of the recent past budget obligations for the unit (3 to 5 years); (Other plan content (such as potential management approaches, section 22.4 of this Handbook) may identify how the responsible official would respond to enhanced resources or other efficiencies that would facilitate attaining desired conditions (36 CFR 219.1(g))."

Allocated funding trends show a decrease in allocation for recreation from 2001 through 2015 as described within 'The Rising Costs of Wildfire Operations: Effects on the Forest Service Non-fire Work' (USDA Forest Service 2015h, p.6). For the Recreation, Heritage, and Wilderness program, these trends show a 15 percent reduction in funding and a 39 percent reduction of staffing that is non-fire related. There has been a 68 percent reduction in funding for facilities which includes funding for developed recreation capital improvement and maintenance. Anecdotal data indicates this trend has continued to decline.

Concern Statement 32:

Comments opposing addition of motorized access and suggest permanent retirement of roads when possible. (985-4)

Response

If a road is no longer needed, or not needed in the immediate future but needed for long term access (often for fire and/or timber), then it is slated for decommissioning if not needed, or reduced to a maintenance level 1 which puts it in storage until future needs. This is current policy and supports your statement. These are the kinds of site-specific decisions about the road system that have been made under previous Travel Management decisions. This land management plan is a programmatic document and does not make decisions regarding site-specific roads or change those previous decisions.

Concern Statement 33:

Trails and recreation facilities should meet the needs of users and public demand. (1-1, 2; 437-12)

Response

No recommended wilderness is proposed on the westside of the Sandia Mountains, adjacent to or near Ellena Gallegos Open Space, in any alternative. The only recommended wilderness on the Sandia Ranger District is shown in alternative D, on the south end of the mountains, north of I-40.

Project-level NEPA would determine expansion of recreation opportunities at the user group level, including new or expanded trail systems. Changes to the National Forest System Trails are addressed in project-level NEPA analysis and are outside the scope of land management plan revision. Plan components in the revised plan address provision of a variety of recreation opportunities and uses, including dispersed recreation along trails, such as: FW-DC-GREC-2. A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values. FW-DC-DISP-5. Trails vary in length and challenge and provide linkages to local neighborhoods, communities, and other public lands.

Concern Statement 53:

Comments supportive of more trails and single track access. (433-1, 2, 3, 5)

Response

Project-level NEPA would determine expansion of recreation opportunities at the user group level. Specifically, the Travel Management Rule requires each national forest or ranger district to designate those roads, trails, and areas open to motor vehicles. Designation includes class of vehicle and, if appropriate, time of year for motor vehicle use. A given route, for example, could be designated for use by motorcycles, all-terrain vehicles, or street-legal vehicles. Once designation is complete, the rule prohibits motor vehicle use off the designated system or inconsistent with the designations. Designation decisions are made locally, with public input and in coordination with state, local, and tribal governments. Designations are shown on a motor vehicle use map. Use inconsistent with the designations is prohibited. Changes to the motorized system are addressed in project-level Travel Management NEPA analysis and are outside the scope of land management plan revision. Plan components in the revised plan address provision of a variety of recreation opportunities and uses, including motorized recreation, such as: FW-DC-GREC-2. A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values, FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values.

Concern Statement 76:

Comments request consideration for potential location for shooting range. (1003-4)

Response

Development of new recreation sites, such as shooting ranges, would be addressed at the project-level analysis and decision-making process with an interdisciplinary team. The project-level scale is necessary for these sorts of projects, as site-specificity is crucial to determine resource concerns. The land management plan revision scale is not site specific, but rather forestwide. Project-level NEPA would

determine expansion of recreation opportunities at the user group level. Desired conditions within the general recreation section of the revised plan address provision of a variety of recreation opportunities and uses such as FW-DC-GREC-2: A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values.

Concern Statement 100:

Comments in support of a proposed perimeter bike trail. (426-52; 457-1, 2, 3)

Response

Project-level NEPA would determine expansion of recreation opportunities at the user group level such as the commenter's proposed Perimeter Trail. Site-specific projects are the appropriate scale for analyzing new recreation opportunities. Desired conditions within the general recreation section of the revised plan address provision of a variety of recreation opportunities and uses such as FW-DC-GREC-2: A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values. FW-DC-DISP-5. Trails vary in length and challenge and provide linkages to local neighborhoods, communities, and other public lands. FW-GDL-DISP-1. Trails should be designed, constructed, rerouted, decommissioned, or maintained using current best practices to promote sustainable design while providing desired recreation opportunities and protecting the values of other resources. FW-MGAP-DISP-8. Coordinate and communicate with local agencies and community organizations in planning trail system extensions, additions, or modifications.

Concern Statement 103:

Comments specific to Sandia Ranger District supporting wilderness expansion of this area and rationale. Comments state potential bike trails locations and suggestions to avoid user conflicts. (426-51; 874-2; 961-3, 4; 987-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

Response

Project-level NEPA would determine expansion of recreation opportunities at the user group level such as the commenter's proposed Perimeter Trail. Site-specific projects are the appropriate scale for analyzing new recreation opportunities. Desired conditions within the general recreation section of the revised plan address provision of a variety of recreation opportunities and uses such as FW-DC-GREC-2: A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values.

FW-DC-DISP-5. Trails vary in length and challenge and provide linkages to local neighborhoods, communities, and other public lands. FW-GDL-DISP-1. Trails should be designed, constructed, rerouted, decommissioned, or maintained using current best practices to promote sustainable design while providing desired recreation opportunities and protecting the values of other resources. FW-MGAP-DISP-8. Coordinate and communicate with local agencies and community organizations in planning trail system extensions, additions, or modifications.

Project-level NEPA would determine site-specific trail issues and recreation opportunities at the user group level. Site-specific projects are the appropriate scale for analyzing recreation opportunities and addressing any user conflicts or resource concerns. Plan components in the revised plan address provide for this: FW-DC-GREC-1. The Cibola provides a range of high-quality recreation settings for a variety of recreation opportunities and uses. FW-DC-GREC-2. A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. FW-DC-GREC-4. Conflicts among various recreation uses and other forest uses (such as grazing) are rare. There is minimal vandalism, theft, illegal activity, or resource damage on the national forest from recreation activities. FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values.

Concern Statement 109:

Each climbing area within the Cibola National Forest is unique, and site-specific considerations should determine the appropriate level of management. The land management plan should include plan components throughout that address and integrate sustainable recreation and conservation, including recreation designations, settings, opportunities, access, and scenic character. (973-1, 2, 3, 6, 12, 13, 14, 15, 18, 19)

Response

Forest closures occur at the site-specific scale and incorporate interdisciplinary resource concerns. Site specific considerations for recreation opportunities would be addressed at the project-level analysis and decision-making process with an interdisciplinary team. The project-level scale is necessary for these sorts of projects, as site-specificity is crucial to determine resource concerns. The land management plan revision scale is not site-specific, but rather forestwide.

Project-level NEPA would determine expansion of recreation opportunities at the user group level. Desired conditions within the general recreation section of the revised plan address provision of a variety of recreation opportunities and uses such as FW-DC-GREC-2: A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values.

Plan components in the revised plan address and integrate sustainable recreation, including recreation designations, settings, opportunities, access and scenic character, see FW-DC-GRECs, FW-STD-GREC, FW-GDL-GREC, FW-MGAP-GREC, FW-DC-DISP, FW-GDL-DISP, FW-GDL-DISP,

incorporate interdisciplinary resource concerns. Changes to developed recreation infrastructure occur through a project-level NEPA analysis and are outside the scope of land management plan revision. Desired conditions in revised plan provide for consideration of users: FW-DC-GREC-2. A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. See associated plan components: FW-DC-GREC-1. The Cibola provides a range of high-quality recreation settings for a variety of recreation opportunities and uses. FW-DC-GREC-2. A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. FW-DC-GREC-3. Sustainable recreation opportunities are adaptable to changing uses and trends, and are available commensurate with public interest, resource capacity, and other natural and cultural resources.

Concern Statement 121:

Comment states plan lacks consideration for motorized and mechanized recreation. New Mexico Off-Highway Vehicle Alliance requests at least one alternative that positively addresses an increase in motorized and mechanized recreations, adequately differentiates the alternatives in a NEPA compliant manner, and reissue the draft plan and draft EIS. (978-7, 10, 11, 12)

Response

Previous submissions from New Mexico Off Highway Vehicle Alliance to delineate management areas for motorized recreation were considered out of the scope of plan revision, not in accordance with the Travel Management Rule (2005), or with district-specific travel management decisions, and therefore were not incorporated into the draft or final plan. The plan does not make determinations on new motorized or non-motorized trail opportunities, this is dealt with at the site-specific project level with travel management. The final plan does identify how we address management of mechanized and motorized recreation including the following plan direction: Desired Conditions FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values, FW-DC-DISP-5. Trails vary in length and challenge and provide linkages to local neighborhoods, communities, and other public lands. Objectives FW-OBJ-DISP-1. During the life of the plan, evaluate and address up to 10 percent of forestwide trail system mileage for need, condition, use, relevance, and sustainability. Guidelines FW-GDL-DISP-1. Trails should be designed, constructed, rerouted, decommissioned, or maintained using current best practices to promote sustainable design while providing desired recreation opportunities and protecting the values of other resources.

Concern Statement 126:

The land management plan should modify plan components and describe how each recreation opportunity spectrum setting or class is defined by desired conditions and indicators. Recommend that the planning team reevaluate allocating Roaded Natural and Semi-Primitive Motorized settings for areas planned for timber production. (430-1, 2, 5, 6, 9)

Response

Accepted suggestion of changing "rehabilitated" to "decommissioned" in FW-STD-DISP-3 to meet intent of standard.

The Cibola has added the recreation opportunity spectrum definitions of settings and classes to the final land management plan's "Glossary" section. In response to the request to modify the dispersed recreation standard, FW-STD-DISP-2, to also describe that a temporary road may only be constructed for resource actions that benefit the Semi-Primitive Non-Motorized setting, the Cibola has to provide flexibility for emergency situations (for example, response to wildfire) Per this standard, exceptions will be determined at the project level. Suggested changes in the comments to FW-STD-DISP-2 were not included. This standard for recreation opportunity spectrum as currently written allows the forest to move towards desired conditions and mitigations will be included at the project level to alleviate effects to the desired recreation opportunity spectrum setting.

Recreation and scenery plan components in the land management plan have been determined through resource integration and public involvement to provide for recreation settings and scenery during future proposed site-specific management activities. In areas where moderate or high scenic integrity objectives overlap lands that are suitable for timber production and other areas where harvest is allowed, management activities would be constrained by the scenery plan components, scenic integrity objectives, and desired recreation opportunity spectrum classes to also provide for natural appearing scenery and the desired recreation opportunity setting over the long term as stated in the scenery section of the EIS. Sitespecific actions, such as timber harvesting, will be analyzed through NEPA outside of the land management planning process.

Concern Statement 134:

Comments assert that National Visitor Use Monitoring data is inadequate for monitoring. (978-49, 51, 53, 54)

Response

The National Visitor Use Monitoring (NVUM) data is intended to sample the spectrum of recreation uses and visitors on the Forest, from developed recreation site users to dispersed users (those on the trail). See explanations of diversity of sampling in the below excerpts from a 2002 publication Forest Service National Visitor Use Monitoring Process: Research Method Documentation: "In addition to total visitation estimates, to some extent the annual reports will provide a profile of visitors. Descriptions will be averages for the sampled population or percentage distributions across several categories. For example, sample averages for length of stay, number of annual visits to the forest, and party size will be available. Percentage distributions will include proportion of visitors that engaged in different recreation activities, proportion of visitors from various distance zones, and proportion of visitors who used designated wilderness areas" (English et al. 2002, page 2). Five strata are used to capture recreation visitation: dayuse developed sites such as picnic sites, interpretive sites, and developed trailheads; overnight developed sites for example, campgrounds; wilderness sites, often located at trailheads or other wilderness access points on the forest; general forest area, which captures national forest not included in the first three categories (National Forest System roads where visitors exit the forest, at trailheads): "These are the portals though which visitors engaging in dispersed activities such as hiking, hunting, and dispersed camping can access undeveloped areas" (English et al. 2002, page 3). On-forest viewing corridors: viewing scenery on USDA Forest Service lands from public roads, ferries, scenic trains, cruise ships, airplanes, trams, or other travel corridors is a popular recreation activity. The monitoring indicator in the final monitoring plan identifies visitor satisfaction surveys (including NVUM). The monitoring question about monitoring the status, trends, and conditions of visitor satisfaction on the Cibola used the NVUM

data to evaluate visitor use and satisfaction in the Cibola National Forest. This information will assist us to identify what resources are most used by the public and how satisfied the public is with those resources. This will help guide future management actions. The plan monitoring program is not intended to track specific conflicts between different user groups.

Concern Statement 156:

Inventoried roadless areas should be managed for semi-primitive nonmotorized and semi-primitive motorized recreation settings as defined in the recreation opportunity spectrum and should further elaborate on road density Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. (443-24, 192, 207, 209, 210, 211, 214, 217, 236, 237, 238, 239, 240, 241, 242, 243, 244, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 302, 303, 304, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331; 939-47, 48; 958-1, 22; 978-43, 45, 46, 47, 48)

Response

The land management plan is a programmatic approach to management of a national forest. The inclusion of the entire Cibola National Forest road system resulted in unreadable maps. The draft plan maps as presented in fall of 2019 included maintenance level 2 and 3 roads (with the exception of Sandia Ranger District, which also included maintenance level 4 roads) in an effort to provide locational information. Using both the motor vehicle use map and land management plan maps, all roads for public usage can be seen in respect to plan components. There is the option of requesting electronic versions of the above maps as well, to provide for overlay.

Roadless areas may include National Forest System roads. These roads may be maintained at the maintenance level at the time of roadless area designation by Congress. Addition of new roads or increase of road maintenance level is not allowed except in some exceptions requiring Forest Service Chief approval), but maintenance may be conducted on them within the constraints mentioned.

All National Forest System lands have been assigned a desired recreation opportunity spectrum setting through integrated resource management and public involvement. Designated motorized use by the public determined through travel planning decisions affects the desired recreation opportunity spectrum setting assigned to an area. Most of the inventoried roadless areas have desired recreation opportunity spectrum settings of primitive, semi-primitive non-motorized, and semi-primitive motorized. Semi-primitive settings have size criteria of 2,500 acres or more. There are some instances when roaded natural desired recreation opportunity spectrum is assigned to a portion of an inventoried roadless area. This occurs when motorized use by the public was designated within or near inventoried roadless areas on maintenance level 3 through 5 roads. This also occurs when motorized use by the public was designated on maintenance level 2 roads or motorized trails and the area is less than 2,500 acres. Due to the size, areas such as this cannot provide a semi-primitive setting and are assigned roaded natural settings. Plan components for inventoried roadless can be found in the Cibola revised plan. Inventoried roadless areas are also managed using relevant regulation and policy and overlapping designations such as critical habitat or management areas established in a land management plan. In cases where there may be inventoried roadless area identified as Roaded Natural, the most restrictive management direction applies.

Roads present within National Forest System lands may not be legal for traffic, as their status may be decommissioned, unauthorized or user created routes. Decommissioned roads are not legally usable, as they have been analyzed and decommissioned. User created routes/roads have been created by users, for their own access needs; these routes have not been analyzed for multiuse benefit or damage potential,

longevity/viability of route, or forest needs. Showing user created and/or decommissioned roads within the polygons is confusing, as they are not legal for vehicular passage and should not be used.

Road density has not been used in the Cibola land management plan due to the inherent flaws within this measurement that make it an ineffective measure or indicator. Examples of challenges to this indicator include but are not limit to the following. There is need for roads to connect, to allow for traffic flow within the landscape. Local spot analysis of road intersections results in a high road density number while the large-scale analysis may result in a much lesser density. There are topographical and other constraints (soil types, water drainages, critical habitat, etc.) to access that result in more road miles in one area than another. Vehicular access needs vary within the forest, from high need to none.

The land management plan is a program-based approach to how to manage the forest, all statements must be inclusive- not too prescriptive or specific as a wide range of actions or situations are addressed on a project-level basis. The individual projects will be analyzed at a level to provide a site and function specific approach that meets the plan. An example of this broad, inclusive approach is not citing specific documents or activities, such as best management practices, as they may be replaced with updated approaches and titles that will require future adherence and may conflict with current practices. Another example is how the functional definition/actions of legal access changes dependent upon the user (the individual accessing); the current phrasing covers all users.

Subpart A of the Travel Management Rule is a separate process from the land management plan. Implementation of Subpart A occurs on a project-level basis, with further analyses required. This provides for public input through the NEPA process when access to the national forest may change. Subpart A provides recommendations, not decisions.

While there must be specific elements within the plan (guideline, standards, etc.) they do not need to be present in every section of the plan.

Roadwork is planned and executed to minimize risk (caused by work and end product) and maximize benefit (cleaner water, reduction of sediment, safer traffic flow, etc.). Many factors included in road analysis (for roadwork, planning purposes, etc.) and the critical factors vary depending upon location, work needs, system needs, and legal requirements. These factors include but are not limited to ecological concerns, climate change, soils, water flow and watershed quality, fire access for both potential fires and project needs, and emergency access. The plan language is written to be inclusive of all potential benefits, risks, constraint, and opportunities.

Concern Statement 214:

Commenters recommend roaded modified recreation opportunity spectrum and low scenic integrity objective for areas planned for extensive vegetation management activities and road construction/reconstruction and questions regarding draft plan guideline FW-SCEN-G-4. (430-12, 13, 14)

Response

FW-GDL-SCE-3 includes that "Short- and long-term timeframes should be defined during site-specific project planning." The plan component recognizes that timeframes may vary depending on the proposed action and other site-specific aspects of the project. Recreation and scenery plan components in the land management plan have been determined through resource integration and public involvement to provide for recreation settings and scenery during future proposed site-specific management activities. In areas where moderate or high scenic integrity objectives overlap lands that are suitable for timber production and other areas where harvest is allowed, management activities would be constrained by the scenery plan

components, scenic integrity objectives, and desired recreation opportunity spectrum classes to also provide for natural appearing scenery and the desired recreation opportunity setting over the long term as stated in the scenery section of the EIS. Site-specific actions, such as timber harvesting, will be analyzed through NEPA outside of the land management planning process.

Concern Statement 217:

Commenters have recommended edits to the scenery analysis section in the draft EIS. (430-43, 47, 48, 49; 455-33)

Response

Existing conditions and trends for scenery are described in the scenery section of the EIS, in volume 2 of the assessment, and in the project record (references can be found in the scenery section of the EIS). Scenic integrity objectives and scenery plan components were determined through resource integration and public engagement. DA-GDL-CDNST-2 provides for high scenic integrity objective within the foreground of the Continental Divide National Scenic Trail. Land management plan direction is in addition to law, regulations, and policies. The Forest Service must follow all laws, regulations, and polices that provide direction for the scenic resources including Agricultural Handbook 701 (Landscape Aesthetics Handbook). Not all definitions or assumptions of the Landscape Aesthetics Handbook need to be repeated in the land management plan or EIS because the direction will be applied during site-specific NEPA for management activities.

Concern Statement 251:

Cibola National Forest should include climbing as a recreation opportunity in the land management plan and should include opportunities to improve or add recreation infrastructure under the action alternatives. (973-5, 7, 8, 9)

Response

FW-DC-GREC-2 has been modified to incorporate climbing as a recreation and tourism opportunity.

Changes to developed recreation infrastructure occur through a project-level NEPA analysis and are outside the scope of land management plan revision. Desired conditions in revised plan provide for consideration of users and infrastructure: FW-DC-GRECs 2. A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. FW-DC-DREC, FW-GDL-DREC, FW-MGAP-DREC 973-11 Cibola National Forest follows agency policy and guidance for climbing related activities. Commenter recommends this as a desired condition; covered in law, regulation, policy.

Concern Statement 252:

There is a lack of national-level Forest Service guidance on the use and placement of fixed anchors in wilderness. We recommend that the Cibola National Forest create a plan component that recognize rock climbing as a legitimate wilderness and non-wilderness activity, and the conditional use of fixed anchors as appropriate. The Cibola should prioritize collaborating with local governments and communities to develop and maintain sustainable multi-use areas. (973-24, 25, 26, 27, 28, 29, 30, 31, 32, 35, 36, 37, 38, 39, 40)

Response

The land management plan does not address site-specific management such as multi-use areas and areas appropriate/not appropriate for fixed anchors. Project-level NEPA would determine expansion of recreation opportunities at the user group level; for example, site-specific projects that could provide access to specific users such as climbers. Desired conditions within the general recreation section of the revised plan address provision of a variety of recreation opportunities and uses such as FW-DC-GREC-2: "A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, climbing, and motorized recreation) are available for a diverse group of users commensurate with mapped desired Recreation Opportunity Spectrum classes;" FW-DC-GREC-3 "Sustainable recreation opportunities are available commensurate with public interest, recreation resource capacity, and other natural and cultural resources;" and DA-DC-WILD-1: "Wilderness provides ecosystems services such as clean air and water, enhancing wildlife habitat, primitive recreation opportunities, and other values of wilderness character."

Concern Statement 253:

The draft EIS highlights potential conflicts between rock climbing and nesting raptor. Peregrine falcon nest sites can be managed to balance recreational and rock climbing access while protecting nesting activity. Further clarify future management of cliff habitat where rock climbing and nesting activities may overlap and utilize tailored buffer zones specific to the topography, viewshed and nest location. Language in the plan should be updated to separate climbing activities from caving and mine exploration to include prevent the spread of disease, rock climbers should not mix climbing and caving equipment. (973-17, 18, 19, 20, 21, 22, 23)

Response

Appropriate management activities to mitigate wildlife and recreation conflicts and needs would be addressed at the project-level analysis and decision-making process with an interdisciplinary team. The project-level scale is necessary for these sorts of mitigations and restrictions, as site-specificity is crucial to determine resource concerns. The land management plan revision scale is not site-specific, but rather forestwide. Resources are integrated in project-level planning (recreation and wildlife) and the following plan components address this: FW-GDL-GREC-2: "Recreation activities (such as rock climbing, dispersed camping, and other activities) should be managed to accommodate sustainable use levels within the capacities of other resource values, including the need to protect plants, animals (such as at-risk species), and other natural and cultural resources;" FW-STD-DISP-10: "Dispersed sites should be closed, rehabilitated, or otherwise mitigated when: site conditions are no longer consistent with the area's scenic integrity objective; there are social use conflicts; unacceptable environmental damage is occurring (for example, large areas of denuded vegetation, eroded streambanks, piles of campfire ash, or human waste impacting natural water features); or there is a combination of these things;" FW-GDL-TRSP-2: "Known active raptor nests, including those on cliff faces, should be protected from management activities and disturbance during the nesting season to maintain the persistence of or contribute to the recovery of at-risk species. Protection measures can include timing restrictions, adaptive percent utilizations, distance buffers, or other means of avoiding disturbance based on best available information and site-specific factors, such as topography, available habitat, and location."

Roads and Travel Management

Concern Statement 122:

Comments from New Mexico Off Highway Vehicle Alliance, which allege the draft plan and EIS maps mislead and misrepresent the suitability and impact of additional wilderness or recommended wilderness by not showing most of the roads currently available to the public in the area. Comment states the lack of adequate data violates the letter and intent of the NEPA process. (86-4; 978-22, 23, 24, 25, 27, 30, 31, 32, 33, 34, 35, 36, 37)

Response

The inclusion of the entire Cibola National Forest road system resulted in unreadable maps. The draft plan maps as presented in fall of 2019 included maintenance level 2 and 3 roads (with the exception of Sandia Ranger District, which also included maintenance level 4 roads) in an effort to provide locational information. Using both the motor vehicle use map and land management plan maps, all roads for public usage can be seen in respect to plan components. There is the option of requesting electronic versions of the above maps as well, to provide for overlay.

Roads present within potential areas may not be legal for traffic, as their status may be decommissioned, unauthorized or user created routes. Decommissioned roads are no longer usable, as they have been analyzed and decommissioned. User created routes/roads have not been created by users, for their own access needs; these have not been analyzed for multiuse benefit or damage potential, longevity/viability of route, or forest needs. Showing user created and/or decommissioned roads within the polygons is confusing, as they are not legal for vehicular passage and should not be used.

Concern Statement 154:

Comments allege Travel Management Rule violations. Comments make recommendations and request plan revision. (443-231, 232, 233, 234, 235)

Response

The land management plan is a programmatic approach to management of a national forest. The inclusion of the entire Cibola National Forest road system resulted in unreadable maps. The draft plan maps as presented in fall of 2019 included maintenance level 2 and 3 roads (with the exception of Sandia Ranger District, which also included maintenance level 4 roads) in an effort to provide locational information. Using both the motor vehicle use map and land management plan maps, all roads for public usage can be seen in respect to plan components. There is the option of requesting electronic versions of the above maps as well, to provide for overlay.

Subpart A of the Travel Management Rule is a separate process from the land management plan. Implementation of Subpart A occurs on a project-level basis, with further analyses required. This provides for public input through the NEPA process when access to the national forest may change. Subpart A provides recommendations, not decisions. Road density can be a misleading indicator; the choice was made not to use road density. If the density area is too small, an intersection of two roads will rate above desired density while ignoring the need for road connection. Topographical and other concerns, constraints, or needs are also ignored by this measure.

Concern Statement 202:

Use the term "scenic character" rather than "landscape character." (430-11)

Response

Comment noted and changed accordingly; "landscape character" has been changed to "scenic character" in the following scenery guidelines: FW-GDL-SCE-5, FW-GDL-SCE-6, and FW-GDL-SCE-8.

Concern Statement 210:

Maintain motorized access as well as request to re-assess maintenance levels. (437-33; 1003-2, 3)

Response

Road maintenance levels designations, and designations for which roads are open to the public are the kinds of site-specific decisions about the road system that have been previously made under Travel Management planning processes. This land management plan is a programmatic document and does not make decisions regarding site-specific roads and does not change those previous decisions.

Socioeconomic

Concern Statement 159:

Commenters would like more clarity on the justification or substantiation of some assumptions in the socioeconomic analysis. In addition, more information on the scientific basis of the data used for analysis is requested. (443-367, 368, 370, 371, 372, 373)

Response

The assumptions have been reworded or deleted to better reflect the way in which the analysis was completed and the methods which support the estimates.

A specific comment states that the final EIS should support the assumption that restoration actions will necessarily improve forest health and demonstrate why it is appropriate to use lands with a restoration emphasis as a proxy for non- market values rather than some other metric. Some of the value of forest management is not captured in market transactions. Nonmarket goods and services, such as clean air, scenic vistas, opportunities for spiritual renewal, have economic values that are not readily quantifiable in dollar values. No attempt has been made, within this planning process, to assign monetary values to nonmarket values because these values are difficult to quantify at this analysis level. While not quantified, relevant non-market values and ecosystem services are represented throughout most resource sections. For instance, the sections on forest vegetation, wildlife, lands with wilderness characteristics, and visual resources reveal important nonmarket values and ecosystem services of those resources, even though those sections do not use the language of nonmarket values used by economists. The Cibola National Forest considers nonmarket values in their many forms, as well as market values, throughout the planning process. The assumption statement for nonmarket values has been changed in the environmental impact statement to better capture the ways in which nonmarket values are assessed throughout the document.

A specific comment states that the economic analysis should not make assumptions about how wilderness designations are likely to affect the number of visits to the forest without supporting data. Land management plans do not affect visitation rates on the Cibola; however, new or altered management direction may influence the type of opportunities that are available to the public. These opportunities and the different experiences, values different public hold for these opportunities, and the trade off in wellbeing by different user groups are discussed throughout. For example, Wilderness offers many

potential benefits to recreation, one being the simple experience of solitude in nature. Potential effects associated with designated wilderness are differing type of management prescriptions on these acres of land as well as exclusion of motorized travel in these areas which may impact certain users. The assumption in the socioeconomic section has been simplified to be consistent with the assumption presented in the Recreation resource section, and therefore better reflects how it applies to the economic impact analysis.

A commenter is concerned the data used in the economic impact analysis is not based on the best available scientific information. The data used in the economic impact analysis was obtained from resource specialists and the methods for their estimation is presented in the respective resource sections. For example, the estimates of animal unit months used for the economic impact analysis are presented in the "Sustainable Rangelands and Livestock Grazing" section. This resource section clearly states their assumptions and methods for estimating animal unit months across alternatives. The final EIS has clarified where to find the methods that support the data used in the analysis.

A commenter is concerned that the assumption that restoration and conservation management areas decrease risk to cultural and ecological resources is not supported. This assumption has been deleted as it over-simplifies the actual analysis of risks to cultural and ecological resources. Conservation and restoration actions are expected to improve forest health as the purpose of these actions are movement towards desired conditions. However, there are inherent tradeoffs between restoration and conservation management and areas with limited or no active management. These tradeoffs are discussed in the analysis.

Concern Statement 221:

Commenters would like more clarity in how environmental justice communities are defined and considered in the environmental analysis and land management plan. In addition, more information on the scientific basis of the environmental justice analysis is requested. (443-356, 374, 375, 376, 377; 973-34)

Response

The Cibola National Forest planning process considers the needs of disadvantaged communities, including low-income and minority communities. The assessment process identified and engaged these communities and their associated values related to Cibola National Forests. The results of this engagement are documented in the *Assessment Report of Ecological, Social, Economic Conditions, Trends, and Risks to Sustainability, Cibola National Forest Mountain Ranger Districts; Volume II Socioeconomic Assessment.* Consideration of environmental justice communities is further described within the "Socioeconomic" section of the EIS under the "Environmental Justice" heading. The final EIS defines traditional communities in the "Traditional Communities" section as federally recognized tribes, rural historic communities, land grant-mercedes, and central New Mexico communities. While there is a high level of overlap between environmental justice communities and traditional communities, as described in the EIS, these communities are not the same. This language has been clarified in the final EIS to address environmental justice communities specifically. More information on the methods, theoretical basis, and literature used to support the analysis of environmental justice was added to the final EIS in the "Socioeconomic" section of chapter 3 and appendix B.

Species

Concern Statement 13:

Comments request consideration of additional species for species of conservation concern: pinyon jay, Virginia's warbler, flammulated owl, brown-capped rosy finch, and black rosy finch. Request for addition of pinyon jay due to rationale of potential impacts to pinyon juniper habitat from restoration treatments, lack of reliable data, and accusation of insufficient protection from course filter plan direction. Comments include several citations as well as literature cited to support the request. (426-2, 3, 4, 5, 6, 7; 431-1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15; 438-1; 442-1, 2, 3, 4, 5, 6; 956-1, 2; 958-66, 67, 69)

Response

Pinyon Jay_(*Gymnorhinus cyanocephalus*): The pinyon jay has a mutualistic relationship with the pinyon pine; the trees produce mast crops that make up a significant portion of the jays' diet, and the jays provide long-range dispersal of the tree's seeds by caching large quantities of the piñon seeds. Pinyon jays use a variety of habitat while foraging but are known to nest in pinyon-juniper and juniper savannah (Petersen et al. 2014).

The pinyon jay currently holds a Global Conservation Status of G3 (Vulnerable) and a State Conservation Status of S2/S3 (Imperiled/Vulnerable) (Hammerson 1996; Johnson 2017). Per the New Mexico State Wildlife Action Plan, the species is declining and vulnerable, and therefore listed as a Species of Greatest Conservation Need (NMDGF 2016). Pinyon-juniper habitats in the Southwest have been impacted by climate change, including widespread pinyon mortality and likely subsequent reduction in pinyon mast crops, which are linked to pinyon jay population viability. Models predict further impacts to these habitats, including loss and distributional shifts (Gaylord et al. 2013, Meddens et al. 2015). Breeding bird survey data have shown a decline of 3.69 percent per year from 1966 to 2015 and 2.67 percent per year from 2005 to 2015 (Pardieck et al. 2020).

Somershoe et al. (2020) provide the most comprehensive summary of information related to habitat management for pinyon jays. This research purports the largest threat to the species to be habitat alteration or loss, from both climate change and human action. There are also various information gaps and consequent research needs, including the effects of pinyon-juniper woodland management on habitat and ecosystem health.

Currently, the Cibola National Forest's management plan in pinyon-juniper habitats is focused on retaining uneven-aged stands of woodlands that are resistant to stand-replacing fire, insects and disease; prescribed fire and mechanical or hand thinning are the most common treatments to achieve this stand diversity. Short-term studies have shown a mixed response from pinyon jays to treatment in pinyon-juniper habitat; jays preferred treated areas to untreated areas on a landscape scale, but their local use and nesting in treated areas was observed to have decreased or was absent altogether (Magee 2019, Johnson et al. 2018). There have not been any long-term studies in treated areas (Johnson et al. 2018) to fully understand the effects of these habitat treatments on pinyon jays. Additional research efforts are currently ongoing.

Over 30 percent of the Cibola National Forest is comprised of pinyon-juniper vegetation types. Management guideline FW-GDL-PJO in the land management plan directs treatments occurring in an area with these vegetation types where identified pinyon-juniper obligate species are found to retain habitat characteristics that are beneficial to these species, even when the retention of these characteristics is in conflict with other activities.

The Cibola's 2015 assessment report of ecological, social, economic conditions, trends, and risks to sustainability addresses which species are were carried forward as species of conservation concern (SCC), and why some potential SCC were not carried forward. Specifically, regarding the pinyon jay, it states,

Eighteen of the 35 species identified as potential SCC were found to not be directly affected by management under the current forest plan and these were removed from further analysis. ... Species for which specific threats were not identified in the literature (Apache Beardtongue, Black-Throated Gray Warbler, Brown-Capped Rosy Finch, Horned Spurge, Lincoln's Sparrow, Perkysue, Pinyon Jay, San Mateo Penstemon, White Mountain Groundsel) were not considered either because they could not be tied to specific management actions. Several species (Black-Throated Gray Warbler, Pinyon Jay) have declines that have been associated with legacy management actions that are no longer practiced by the Cibola.

In summary, despite the acknowledged vulnerability of the pinyon jay from habitat loss in general, the causes of such habitat loss are either factors that are not relevant to the land management plan anymore or are already included in the plan such as the above-cited guideline and other guidance related to managing for climate change.

Brown-capped Rosy-Finch (*Leucosticte australis*) and Black Rosy-Finch (*Leucosticte atrata*): Brown-Capped Rosy Finches and Black Rosy-Finches are short-distance migrants found on the Sandia Ranger District of the Cibola National Forest in the winter, from November to as late as April (Cornell Lab of Ornithology, eBird). These species nest in alpine habitats above the tree line at higher latitudes and are not found to nest on the Cibola. Both species are considered Species of Greatest Conservation Need by the State of New Mexico, and the Brown-Capped Rosy Finch is also ranked as 'Critically Imperiled' by Natural Heritage New Mexico. The species' populations are in decline, but currently identified threats are restricted to climate change; threats to the species from forest management have not been identified. Both Rosy-Finches are found in grasslands during migration but are primarily associated with rocky slopes or cliffs and habitat edges where they are found foraging (BISON-M). Because they do not nest or breed on the Cibola, the habitat in which they are found is not subject to management activities, and because they are winter visitors on the Forest, it is unlikely that management activities will have an effect on the species' persistence on the Cibola National Forest, and they will not be further considered as species of conservation concern.

Flammulated Owl (Psiloscops flammeolus). The flammulated owl is an insectivorous, neotropical migrant species found in ponderosa pine and mixed-conifer habitats in New Mexico. The species has been found on the Mount Taylor, Magdalena, Mountainair and Sandia ranger districts during the breeding season and on the Mountainair Ranger District during the owl's migration to its wintering grounds in Mexico. Flammulated owls are small and cryptically colored, making their detection difficult during the day. However, these owls are often vocal at night and commonly detected during habitat surveys for Mexican spotted owls (Forest Service records, Mexican spotted owl Surveys 2018, 2019). The species is a habitat specialist and a secondary cavity nester that requires old-growth conifer stands and snags for nesting and roosting habitat (Cornell Lab of Ornithology, Merlin). Threats to the species include habitat loss in its wintering habitat in Mexico, declines in populations of primary-cavity nesters like woodpeckers, and forestry or timber management that allows for invasion by larger Accipiter predators and great horned owls; however, the flammulated owl does share habitat requirements that match the primary constituent elements of federally listed Mexican spotted owl habitat (Mexican Spotted Owl Revised Recovery Plan 2012 [U.S. Fish and Wildlife Service 2012b]). Because of the intersection of habitat used by the owl species, and therefore the overlap of habitat management practices (for example, retention of old growth and snags), it is probable that the proposed management for Mexican spotted owl

habitat will also benefit the flammulated owl. Because of this habitat management overlap, the flammulated owl will not be carried forward as a species of conservation concern.

Virginia's Warbler (*Leiothlypis virginiae*). The Virginia's warbler is a small, Neotropical migrant species of warbler. This species is considered a Species of Greatest Conservation Need and is ranked as "vulnerable" by the State of New Mexico. The Virginia's warbler is often found breeding in pinyon-juniper and transitional habitats in New Mexico where they construct nests on the ground in shrubby understory (BISON-M). Although they breed in pinyon-juniper, the Virginia's warbler is also commonly recorded in pine-oak and mixed conifer habitats (Cornell Lab of Ornithology, eBird). Identified threats to the species include habitat loss in their wintering grounds in Mexico, overgrazing by cattle in pinyon-juniper habitats, habitat loss due to human encroachment or climate change, and thinning or burning in pinyon-juniper vegetation types that favors even-aged stands or the removal of understory. Previous changes in forest management practices have resulted in an increased presence of these warblers (Pardieck et al. 2020), but other information about the trend of the species on the Cibola National Forest is unknown. Because of the large amount of pinyon-juniper vegetation types on the Cibola National Forest, because the population trend of the Virginia's warbler on the Cibola is not well known, and because the major management threats to the species are no longer a part of forest management activities, the Virginia's warbler will not be further considered as a species of conservation concern.

Concern Statement 20:

Commenters observed that the land management plan does not directly deal with outfitter and guide permits, and requested that when determining the need for future Use Capacity Analysis, consider that the take of wild game is already determined at a state level by the New Mexico Department of Game and Fish, therefore any moratorium on outfitting in the Cibola National Forest is unnecessary. (445-1; 973-33)

Response

This concern is addressed in FW-DC-SU-04 and FW-GDL-SU-04 of the land management plan. Beyond this, in a process separate from forest planning, the Cibola grants hunting and angling outfitting and guide permits in coordination with the New Mexico Department of Game and Fish.

Concern Statement 35:

Comments regarding protection for listed species including grazing permits and more specificity on wolves. (452-1; 972-54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66; 991-9, 10)

Response

These are site-specific management actions that would apply at the project level (for instance, grazing permit level) where applicable. They could also be identified in allotment management plans in cases where wolves may be present within allotments, which again is site-specific.

The Cibola, to date, has no identified wolf dens on the forest. Furthermore, the only wolves that occur on the forest are part of a non-essential experimental population.

Existing law, regulation, and policy regulations already account for non-use of grazing various reasons as does Forest Service policy through as described in current its Grazing Administration handbook regulation, which identifies provides for various tools for long term non-use that are suitable for specific conservation needs including those of endangered species such as the Mexican wolf. It would be redundant to repeat these provisions in the land use plan. Furthermore, Livestock non-use issues concerns

are dealt addressed with on a case-by-case basis at the site-specific level under the framework of existing NEPA that authorizes grazing

This section refers to broader-scale monitoring as it applies to land management plans. FSH 1909.12 Planning Rule Directives Chapter 30 Monitoring:

- (b) Broader-scale monitoring strategies.
 - (1) The regional forester shall develop a broader-scale monitoring strategy for plan monitoring questions that can best be answered at a geographic scale broader than one plan area.
 - (2) When developing a monitoring strategy, the regional forester shall coordinate with the relevant responsible officials, Forest Service State and Private Forestry and Research and Development, partners, and the public. Two or more regional foresters may jointly develop broader-scale monitoring strategies.
 - (3) Each regional forester shall ensure that the broader-scale monitoring strategy is within the financial and technical capabilities of the region and complements other ongoing monitoring efforts.
 - (4) Projects and activities may be carried out under plans developed, amended, or revised under this part before the regional forester has developed a broader-scale monitoring strategy. (36 CFR 219.12)

The purpose of the broader-scale monitoring strategy is to answer plan monitoring questions common to two or more administrative units that can best be answered at a geographic scale larger than one plan area. The regional forester is responsible for developing a broader-scale monitoring strategy. Two or more regional foresters may jointly develop a strategy to cover more than one region. The broader-scale monitoring strategy can be a simple set of questions and indicators or a more complex strategy with substrategies, with monitoring questions and indicators, and the areas to which they apply, that differ from each other. A substrategy may focus on monitoring questions and indicators for a specific resource, program, issue, geographical area, or other topic. Substrategies may vary substantially to reflect different levels of scope, scale, and extent. The Regional Forester may use existing monitoring programs at the National and Regional levels, such as national visitor use monitoring and forest inventory analysis, as broader-scale monitoring substrategies.

Identification, mapping, and management for Mexican spotted owl recovery habitat would occur at the site-specific project level. The need for pre- and post-project monitoring would be evaluated during project-level section 7 consultation with the U.S. Fish and Wildlife Service prior to implementation for any activities expected to affect the Mexican spotted owl or other listed species.

The National Environmental Policy Act (NEPA) requires Federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. This involves the consideration of the best available scientific information and public comment. For further information on U.S. Forest Service NEPA Procedures and Guidance, see https://www.fs.fed.us/emc/nepa/nepa_procedures/index.shtml.

Cumulative effects are evaluated by program area in the EIS and consider the management actions of other entities of a similar planning scope within a relevant spatial and temporal context. Cumulative effects to the Mexican spotted owl specifically are addressed in the Biological Assessment and consider future State or private activities.

- Mexican spotted owl: More overlap of Mexican spotted owl habitat with the Wilderness
 Recommendations in alternative D for the San Mateo Mountains. Choosing alternative D seems
 much more likely to result in this desired population of owls than choosing the preferred
 alternative. Same for wolves.
- Choosing alternative D over the preferred based on habitat overlap alone is insufficient justification and doesn't account for other factors, such as abilities the Forest Service would have to manage habitat under each alternative. More area managed as designated Wilderness would not equate to improved management of owl habitat. In fact, many of the tools used for owl habitat management would not be available or would be much more limited within wilderness.
- EIS must analyze the cumulative impacts of all management activities on Mexican spotted owl and
 include the results of any and all monitoring data collected as part of those activities, as required by
 the existing land management plan and Mexican spotted owl biological opinions. This includes preand post-project monitoring and population and habitat monitoring.
- Cumulative effects are discussed in the EIS and the biological assessment (Note: cumulative effects definitions differ for NEPA and Endangered Species Act).
- Mexican Wolf Livestock protection: Best practices for reducing negative wolf interactions with livestock must be required for all allotment management plans. Remove dead livestock carcasses to prevent attraction by wolves. Remove sick or injured livestock from allotments to prevent them from attracting wolves. Increase range riding to provide a more consistent human presence around cattle to reduce wolf-livestock interactions and depredation. Follow best management practices if an active wolf den is found within 1 mile of an allotment. Delay livestock turnout until July 1. Using alternate grazing units (preferably 3 miles from an active den site) is also an effective strategy if livestock can be held on the alternate unit until after July 1. Check livestock twice per day when cattle are in a unit with an active wolf den or rendezvous site.
- Mexican Wolf Wolf protection: Any wolf control action must be initiated by the U.S. Fish and Wildlife Service. There is nothing in your Grazing Permit, Allotment Management Plans, or in these Annual Operation Instructions that authorizes predator control. Any wolf sightings, wolf/livestock interaction, or evidence of depredation should be immediately reported to the U.S. Fish and Wildlife Service, the U.S. Forest Service. Avoid/delay allotment management activities (such as fence maintenance) near active wolf den sites between April 1 and July 1. Do not place salt or other livestock attractants within 3 miles of wolf den sites or rendezvous sites.

Concern Statement 67:

New Mexico Land Grant Council suggested edits to the draft plan, chapter 2, aquatic species and habitats. Request to uphold partnerships with land grants to provide local knowledge of aquatic habitats to resolve conflicts between native and nonnative fish species. Local knowledge should be used to identify streams that are best for native fish species. (466-26, 27)

Response

Suggested edits to plan component FW-MGAP-AQSP-1: "Work collaboratively with New Mexico Department of Game and Fish personnel to resolve conflicts that may exist between the management of nonnative sport fish and the persistence of native fish." As per Federal-State Cooperation for Soil Conservation Act of December 22, 1944 suggested edits would consist of the following: "Work collaboratively with New Mexico Department of Game and Fish personnel, government institutions (local, State, Federal), to resolve conflicts that may exist between the management of nonnative sport fish and the persistence of native fish."

The final plan language has been edited to include the following for FW-MGAP-AQSP-1: "Work collaboratively with New Mexico Department of Game and Fish to coordinate on management of sport and native fishes, including reintroductions, habitat improvements, control or eradication of nonnative species and the identification of refugia for native fish." The Cibola has included a statement in the background for the 'Species' section of the final plan that discusses how the forest will coordinate with local, state, federal, tribal, land grant communities, non-governmental organizations, and private landowners on species management. The New Mexico Department of Game and Fish is being called out specifically in FW-MGAP-AQSP-1 due to their commitment to conservation and protection of wildlife and fish within New Mexico.

Concern Statement 88:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches related to management of aquatic species and their habitats. (958-29, 30, 31, 32)

Response

In regard to the New Mexico Department of Game and Fish recommendation that the plan specifically reference, consider, and align with the department's fisheries management goals as defined in the 2016 Statewide Fisheries Management Plan (NMDGF 2016a), Cibola managers recognizes that forest personnel would collaborate with the New Mexico Department of Game and Fish on shared management goals where they pertain to native and non-native sportfish, fishes of conservation concern and aquatic invertebrates throughout New Mexico.

Plan direction in the final plan addresses this request as reflected in the edited FW-MGAP-AQSP-1: Work collaboratively with New Mexico Department of Game and Fish to coordinate on management of sport and native fishes, including reintroductions, habitat improvements, control or eradication of nonnative species and the identification of refugia for native fish. The Cibola also included a statement in the "Terrestrial and Aquatic Species" section of the final plan that discusses how forest personnel will coordinate with the New Mexico Department of Game and Fish on fisheries management.

In regard to suggested edits to FW-GDL-AQSP-1 and FW-GDL-AQSP-2, the final plan contains plan direction in the Nonnative, Invasive Species section that address the need for best management practices, standard operating procedures, and maintenance of human made structures to protect and enhance aquatic habitat: FW-STD-NIS-1, FW-STD-NIS-2, FW-STD-NIS-3, FW-GDL-NIS-1 and FW-GDL-NIS-5. Site-specific best management practices are included in the project-level design features whereas the final plan provides a programmatic approach to land management. See response to concern statement 146 in regard to coordination on standard operating procedures for boats and watercraft.

Concern Statement 92:

Comments support non-native invasive species guidelines and request an emphasis on pretreatments for cheatgrass. (437-28; 457-13)

Response

The necessity of pre-treatment surveys for cheatgrass (Bromus tectorum) or other noxious weeds would be site-specific and based on the potential for project activities to affect/exacerbate any existing infestations.

Concern Statement 116:

Comments support plan components and encourage the inclusion of elk and elk habitat in planning efforts, coordination with state wildlife agencies, incorporate the Executive Order 13855, and include Rocky Mountain bighorn sheep to the list of wide-ranging mammals. (437-1, 2, 3, 18, 19, 20, 22, 24, 26, 32, 34; 958-21, 33, 35, 56)

Response

A desired condition in the plan states "There is a natural and nearly complete assemblage of native plants and animals, including important **game species**, which provides recreational opportunity and socioeconomic benefits to communities, distributed across the Cibola" (FW-DC-TRSP-2). This would include elk, therefore we ought not to call this species out individually.

The sentence referred to states "The spatially disjunct nature of the four districts influences movement patterns of wide-ranging mammals, <u>such as</u> elk, mule deer, black bear, wild turkey, cougar, and pronghorn." This statement is not meant to be all inclusive. The use of the term "such as" indicates merely a list of examples. That being said, the commenter is correct in that bighorn sheep is a "wide-ranging mammal."

Desired conditions from recreation is not resource specific, rather it is broader in nature to include effects from all program areas. Furthermore, terms listed in parentheses after "vital functions" are merely examples.

Design features to improve elk habitat and/or mitigation measures to prevent or minimize adverse effects to elk from recreation activities would be handled at the site-specific level. Fencing design standards would be applied at the site-specific project level and could include the New Mexico Department of Game and Fish wildlife-friendly fencing guidelines. The Forest Service coordinates and partners with state wildlife agencies on various wildlife and habitat management actions. However, the Forest Service does not automatically adopt State agency goals. These goals are that of another agency and subject to change. As stated in the response to comment 437-1, a desired condition has been written to address a natural assemblage of native species including game species, which are called out specifically. On site-specific project work involving elk, the Forest Service would utilize best available science and coordinate with the New Mexico Department of Game and Fish because elk is a state-managed species. Best available science could include the state wildlife plans or other relevant scientific documents.

Executive Order 13855 is a federal executive order, by which the Cibola is already required by law to abide. Repeating language from that order within the plan would be redundant. The Cibola does, in fact, perform active management on landscapes, as evident in numerous plan components.

Per Forest Service Manual 2670.12 – U.S. Department of Agricultural Directives, Departmental Regulation 9500-4 directs the Forest Service to "manage habitats for all existing native and desired nonnative plants, fish, and wildlife species in order to maintain at least viable populations of such species," and to "avoid actions which may cause a species to become threatened or endangered." Requesting of specific legal language is redundant to existing agency policy.

Concern Statement 143:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. Commenters recommend including the known presence of the Aplomado falcons and presence of nesting golden eagles and dates of closure in relation to, adopting New Mexico's 65 Species of Greatest Conservation Need. Management approach 8 should clarify if recreational shooting is included. (958-41, 42, 43, 44, 47)

Response

This comment is valid, as it is more accurate to say "the Aplomado falcon is not presently known to nest on the forest." The suggestion has been included.

The suggested level of detailed information does not belong in the "At-Risk Species" section of the plan. A summary of what is known about the bald eagle on the Cibola can be found in the environmental impact statement, volume 1. Golden eagles are listed among those species found throughout the Magdalena Ranger District (land management plan, chapter 1). No other detailed information is available for that species.

Rock climbing closures would be handled at the site-specific implementation level and based on sitespecific species and nesting information. That level of planning is not appropriate for land use plan level analysis or decision. Per the forestwide plan guideline, "Known active raptor nests, including those on cliff faces, should be protected from management activities and disturbance during the nesting season to maintain the persistence of or contribute to the recovery of at-risk species. Protection measures can include timing restrictions, adaptive percent utilizations, distance buffers, or other means of avoiding disturbance based on best available information and site-specific factors, such as topography, available habitat, and location." Management approach 8 is to "consider" restricting recreational shooting, which would be defined by the Forest Service at the time of implementation on a case-by-case basis. No proposals to restrict shooting at the mentioned places currently exist. The Forest Service is directed to cooperate with state agencies to inventory, protect, manage, and plan for threatened, endangered, proposed, and sensitive species, per FSM 2670. Our plan currently states we will "Work collaboratively with New Mexico Department of Game and Fish personnel to plan and implement projects that make progress towards the Cibola's desired conditions and help achieve conservation actions specified in the New Mexico State Wildlife Action Plan or equivalent." The Species of Greatest Conservation Need are therefore incorporated by reference through this management approach (FW-MGAP-TRSP). The Forest Service is not required to adopt any species list developed by the State of New Mexico, nor are we required to provide specific management direction for the Species of Greatest Conservation Need, and therefore there is no need to specifically call them out in the plan. Furthermore, the Species of Greatest Conservation Need list is subject to change with revisions of the State Wildlife Action Plan.

Concern Statement 146:

Comments pertain to best management practices for nonnative, invasive species and suggest that the land management plan should reference the New Mexico Department of Game and Fish Aquatic Invasive Species Program's and "Clean, Drain, and Dry" guidelines. (958-37, 40)

Response

Best management practices from our Forest Service manuals and handbooks are incorporated by reference in appendix D of the land management plan (relevant law, reg, and policy).

Management approach 5 for Nonnative, Invasive Species (FW-MGAP-NIS-5) states that the Forest Service would "Coordinate public education and outreach, and aquatic invasive species inspection and decontamination efforts, with ongoing state-level efforts." Since the Clean, Drain, and Dry guidelines are a state-level effort, they will be considered where appropriate, which is where boating occurs. The only boating waters on the Cibola mountain districts include McGaffey Lake, which is owned by the state, with the kiosk managed by the Forest Service. Therefore, in this case, the state guidance to prevent spread of aquatic invasive species via boat would be posted.

Concern Statement 192:

Comment pertaining to the multiple spellings of "pinyon" in the plan. (432-1)

Response

The commenter is correct. The bird and the tree are independent of each other and should each use the name most widely accepted by the respective scientific field.

The American Ornithologists' Union establishes the spelling conventions for avian common names. Where referenced in the plan, the species should be spelled pinyon jay.

Plant common names in the final plan (for example, pinyon pine) adhere to the USDA PLANTS Database (https://plants.sc.egov.usda.gov/java/).

Concern Statement 201:

Guideline 10 addresses management and maintenance of water resource features. A substantial proportion of these man-made drinkers were originally developed through the New Mexico Department of Game and Fish Habitat Stamp Program. Maintenance schedules should be established under the plan through programmatic work/maintenance plans for these Habitat Stamp Program features (958-46).

Response

The plan does not specifically mention the Habitat Stamp Program or these improvements. However, Habitat Stamp Program project maintenance is an annual activity. It is the responsibility of the Forest Service to develop a system for routinely and systematically inspecting and maintaining these projects. The Forest Service has already committed to this through their formal agreement to cooperate with the New Mexico Department of Game and Fish on the Habitat Stamp Program. It is possible, although unlikely, that in the future, the New Mexico Game Commission could decide not to renew the Habitat Stamp Program. It is also possible, although unlikely, that the Forest Service could decide not to participate. In either scenario, the infrastructure would remain on the national forest, and maintenance would be necessary to keep these improvements in functional condition. An additional management approach in the "Terrestrial Species" section is recommended (FW-MGAP-TRSP-5: Continue maintenance of existing wildlife habitat improvement infrastructure (for instance, water catchments, fences), including projects implemented in association with the New Mexico Habitat Stamp Program and others, and evaluate the efficacy of such projects. Apply adaptive management, which could include modification, replacement, or decommissioning where appropriate.

Concern Statement 203:

Request additions to focal species section of the monitoring plan for Grace's warbler and ashthroated flycatcher. (426-8; 432-3)

Response

Monitoring species population trends is not required per the 2012 Planning Rule. However, the Rule provides for flexibility in monitoring focal species and allows the use of existing or emerging approaches for monitoring the status of focal species. Methods can include measures of abundance, distribution, reproduction, presence/absence, area occupied, survival rates, or others. The objective is not to choose the monitoring technique that will provide the most information about the focal species, but to choose a monitoring technique(s) for the focal species that will provide useful information with regard to the purpose for which the species is being monitored. Per the current language in the plan, the

recommended focal species "can be monitored via a variety of methods, including, but not limited to, point counts, line transect, or breeding bird surveys." The monitoring questions are not plan components and therefore do not require a plan amendment and can be changed throughout the life of the plan by the process of adaptive management. If it is determined that abundance is the appropriate measure, it can certainly be considered.

Concern Statement 270:

Wildlife connectivity is increasingly threatened by habitat loss and degradation as well as development activities. Commenter recommends plan components that recognize the importance of big game migration corridors and include management direction for protecting corridors across national forest and neighboring lands.(437-10,25; 958-36; 985-2, 6)

Response

Rather than developing and mapping wildlife corridors within the Cibola revised plan, due to the fact that different species have different needs to facilitate their movement and that species migration corridors tend to shift over time, the Cibola has instead facilitated wildlife movement via plan components established within the revised plan. These components focus on two main aspects: 1) the restoration of ecological conditions that will facilitate habitat connectivity and wildlife movement, and 2) providing direction on infrastructure design that will not inhibit, but rather improve habitat connectivity and wildlife movement.

The plan components that facilitate habitat connectivity and wildlife movement are both forestwide in nature and are found within management areas that each national forest has established in order to provide some particular emphasis to a variety of resources, including wildlife. It is important to note that management areas are uniquely established by each national forest; they are not an administrative nor congressional designation; and, while they are mapped with distinct boundaries, they emphasize a variety of resources, and are not meant to be interpreted as wildlife corridors even in cases where wildlife is one of those emphasized resources and wildlife movement is facilitated.

The following are examples of forestwide wildlife plan components that facilitate habitat connectivity and wildlife movement:

- Habitat configuration, connectivity, and availability allow wildlife populations to adjust their movements in response to major disturbances (for example, climate change or uncharacteristic fire) and promote genetic flow between wildlife populations. These interconnected habitats allow seasonal migrations, breeding, dispersal, foraging, and other movement patterns to support life-history characteristics. Habitat loss and fragmentation is reduced, and permeability is enhanced through habitat linkages within and between the national forests and other public and privately conserved lands."
- To conserve wildlife and fish habitat connectivity, constructed features (for example, exclosures, wildlife drinkers, range improvements, fences, and culverts) should be maintained to support the purpose(s) for which they were built. Constructed features should be removed when no longer needed, to restore natural hydrologic function and maintain habitat connectivity.

Concern Statement 271:

Species guidelines should discuss measures that maintain and protect at-risk bat habitat from recreational and management activities and should address the threat of white-nose syndrome by including necessary protective measures to be implemented. (958-45)

Response

White-nose syndrome is addressed in the cave and invasive species sections. The desired condition FW-DC-CAVE-4 has been updated to read, "Caves provide habitat for species that require specialized conditions for roosting and overwintering, such as bats. Caves maintain moisture and temperature levels consistent with historic conditions." The desired condition "...They do not contain bat diseases, such as white-nose syndrome" was unrealistic because, if the *Pseudogymnoascus destructans* fungus, which causes white-nose syndrome, were to enter any Cibola caves and eventually lead to white-nose syndrome, there is no certainty the disease could be controlled much less eradicated from the ecosystem. Current science on the subject has yet to develop methods for doing so. The best current method for treatment is prevention. Furthermore, bats are known to carry other diseases such as rabies, which is also unrealistic to control or eradicate. The last sentence of this desired condition was removed.

The plan mentions in guideline FW-GDL-CAVE-2 that "Decontamination procedures should be followed to prevent the introduction of white-nose syndrome or other pathogens when entering caves." This ought to say "entering AND exiting" because we do not know whether *Pseudogymnoascus destructans* exists in our caves. This is also standard procedure on other jurisdictions managing caves that may or may not have *Pseudogymnoascus destructans*.

Traditional Communities and Uses

Concern Statement 44:

Comments indicate opposition to wild and scenic river designations due to negative impacts to recreation and traditional use. Language must be included in each of the plans to improve practices which will protect and foster healthy springs and resource waters, including for the cultural values they hold.(447-7, 450-3; 453-14, 15, 17, 26)

Response

The land management plan, "Traditional Communities and Uses," "Federally Recognized Tribes" section recognizes the benefits of water to tribes as part of ecosystem services. The importance of water-supported ecosystems (riparian areas) is identified in the "Water Resources Features" section, desired conditions (FW-DC-WRF-3). The assessment of water resource features as cultural resources (including historic properties and traditional cultural properties, sacred sites, and other areas of tribal concern) is implied as part of the inventory, assessment, and planning processes. See "Federally Recognized Tribes" section, guideline FW-GDL-FRT-3.

Concern Statement 70:

Suggested edits from New Mexico Land Grant Council for the draft land management plan, chapter 2, "Sustainable Forestry and Forest Products" section. Concern about lack of management approach for overstocked brush conditions in the Manzano and Galinas units that increase potential for brush fire. Concern about "where consistent with other resource needs" and "in balance with other resource needs and concerns" language in draft desired conditions. Concerned about the permitting requirement for certain culturally significant forest products; requested new standard to allow collection of culturally significant forest products without a permit. Concerns about fuelwood collection including new plan direction for making opportunities for collection by traditional and other local communities available, within a reasonable distance, and utilizing fuelwood partnership blocks such as the Carson National Forest. (446-2; 466-48, 47, 49, 50, 51, 52, 53, 54, 55,56)

Response

All vegetation management is geared toward approaching desired conditions, including the reduction of overstocked stands.

The balancing of multiple resource needs is mentioned throughout the plan in multiple sections and does not imply that any particular resources takes precedence over another resource. The stated concern that culturally significant products are subordinate to other resources is unfounded.

As suggested, FW-DC-FP-6 was re-worded to state, "Unauthorized collection (such as unpermitted removal or collection) of permitted forest products does not occur."

Concern Statement 71:

Suggested edits for the draft land management plan, "Traditional Communities and Uses" section. Recommend including the modification of signage to incorporate native language adding guidelines to analyze and mitigate adverse impacts to cultural resources and convey land for community and grants. Acoma's cultural resources are being treated as secondary class uses to accelerated restoration practices that are proposed solely to respond to and support expanded economic development of the forest resources above all other uses. The Cibola National Forest should recognize that they grew at the expense of land grant communities. (453-22; 466-59, 60, 61, 63, 64, 79, 82, 88, 90, 93, 94)

Response

Edits have been incorporated into the final land management plan, see "Traditional Communities and Uses" and "Rural Historic Communities" section. FW-MGAP-FRT-7 addresses the incorporation of native language into signs, interpretive materials, etc., a standard is not warranted here, as site-specific discretion is required when considering language choice for interpretive materials.

The acknowledgement that lands covered by claims rejected by the courts are incorporated into the Cibola is addressed by the updated language for the last paragraph of Rural Historic Communities introduction section, "The following plan components and management approaches apply to *all* rural historic communities, including land grants-mercedes, acequias, and other central New Mexico historic communities, when the term "rural historic community" is used [emphasis added]." No land grant common lands confirmed by Congress or the courts lie within the boundary of the Cibola National Forest (see response to concern statement 178). The Cibola does not have the authority to acquire lands outside of its boundary without an authorizing act of Congress.

Only one community land grant- mercedes within the plan area of influence lies within the boundary of the Cibola National Forest, Canon de Carnue. Due to the steepness of the terrain adjacent to the grant boundary or in its general vicinity little if any of this land would be suitable for the siting of the facilities suggested in these proposed guidelines.

Concern Statement 94:

Pueblo of Acoma is concerned that local communities between tribal and non-tribal communities may have different goals for the usage of forest resources. Concerned that forest resources are only for economic consumption, Acoma's cultural resources are being treated as secondary class. Pueblo of Acoma supports Alternative B. Alternative C will open more land than any other alternative for timber production, forest product development, and fuelwood and will threaten critical resources for the Pueblo of Acoma.

Guideline FW-GDL-SPC-1 should be revised to incorporate the use of traditional ecological knowledge for the identification and management of plant species as cultural resources in consultation with tribes (and other local communities).

The list of laws in the "Federally Recognized Tribes – Background" section is lacking mention of some equally important statutes.

Table 23 should indicate that Mount Taylor is listed on the New Mexico State Register of Cultural Properties. (453-8, 13, 19, 20, 21, 22)

Response

The discussions of economic importance and community uses of the Cibola in the "Needs for Change" and "Traditional Communities and Uses" sections are not intended to depict those as the only topics of importance to the diversity of communities in the plan area of influence. The discussions merely reflect that local uses need to be considered within resource area plan components. The diversity of community concerns, including among and between Native American and non-Native communities, are reflected in the bullet points listed in the "Multiple Uses and Human Influences" section under "Need for Changing the 1985 plan" in chapter 1 of the land management plan. The importance of Tribal uses is emphasized throughout the plan. Also see response to concern statement 255.

The "Plant Community Species Composition" section introduction states that plant communities may be considered significant because they are socially, culturally, or biologically important. Because this definition includes "culturally important," it is intended that identification will be made in consultation with tribes and other local communities.

This list of laws referenced by the commenter is not intended to reflect all laws relevant to Tribal concerns on the Cibola and is limited to those laws most germane to the plan components. A more complete list of relevant laws and executive orders is included in the land management plan appendix D, including those mentioned in the comment.

While the Cibola National Forest considers the listing of a property such as Mount Taylor on the New Mexico State Register of Cultural Properties when determining a property eligible or recommending listing on the National Register of Historic Properties, the listing on the state register has no relevance to federal decisions relative to its management (consideration of effects to a property from a federal undertaking emanate from its eligibility to or listing on the National Register of Historic Places). As such, state register listings are not included here. See also response to concern statement 254.

Concern Statement 102:

Comment expresses concern for protection of cultural and traditional uses with language edit suggestion to include "Tribal Harvesting" land grant communities. (429-7, 8)

Response

Comments appear to reference an earlier draft of the environmental impact statement, based on references to old page numbers and indicators and measures no longer being used. However, commenter misunderstands reference to "tribal harvesting." This reference specifically refers to collection of forest products by members of federally recognized tribes for traditional purposes under the authority granted in the 2008 Farm Bill (see implementing regulation 36CFR 223.15). Because it allows collection under an authority available only to members of federally recognized tribes, it is referred to separately, but does not preclude the collection of forest products by other members of the public, including members of rural historic communities, under other authorities, and collection of forest products by rural historic

communities under these other authorities is assumed and included in the analysis (see final EIS volume 1, Traditional Communities and Uses, "Assumptions for Analysis," bullet point 5).

Concern Statement 104:

General comments from the San Felipe Pueblo Department of Natural Resources recognizing and reiterating coordination and relationships regarding tribal processes. (447-1, 2, 10, 11)

Response

Thank you for your comment. Plan components that address the spirit of this comment include components in the "Federally Recognized Tribes" desired conditions and guidelines (FW-DC-FRT-1 2, 3, 4, 9, and 10); FW-GDL-FRT-2). Traditional ecological knowledge (and other traditional knowledge) derived from consultation with tribes is directed to be included in project designs and decisions (see FW-GDL-FRT-2). In Core Management Themes section, a sentence was incorporated into "Managing Holistically for Watershed and Ecosystem Health" that reflects the importance of traditional ecological knowledge, with linkage to "Respecting Cultural and Traditional Landscapes and Uses" themes. The term "traditional knowledge" was added to the Glossary with a definition that is inclusive of traditional ecological knowledge (see definition of "Native knowledge" in 2012 Planning Rule definitions, 36 CFR 219.19).

Concern Statement 115:

Comments requesting protection of cultural sites and continuation of collaboration between Forest Service, land grant members, and tribes. Request management and protection of Rancho de Osha in Sandia Mountain for land grant members. (429-4; 447-3, 6; 698-1)

Response

The protection of ancient sites ancestral to Pueblo people and other Native Americans is addressed in the land management plan, chapter 2, "Cultural and Historic Resources" section, standard FW-STD-CHR-1. The consideration of such sites in the planning process is addressed in FW-STD-CHR-2.

In the "Rural Historic Communities" section, guideline FW-FDL-RHC-4 addresses consultation with land grant governing bodies during project planning to identify specific concerns, such as the protection of historic properties like Rancho de Osha. Guideline FW-GDL-RHC-2 addresses the identification and assessment of potential project impacts to historic properties such as Rancho de Osha. Language in the "General Recreation" section of the plan has been modified to include the importance of cultural resources.

Plan language has been written to identify places of importance to federally recognized tribes to be inclusive of, but not limited to, historic properties (properties listed on or eligible to the National Register of Historic Places). In the "Federally Recognized Tribes" section, plan component FW-GDL-FRT-3 is written to state that planning and implementation activities should prevent or limit impacts to "places that the federally recognized tribes regard as sacred sites, traditional cultural properties, or as part of an important cultural landscape." In the "Cultural and Historic Resources" section, the resources considered are described as "the entire spectrum of resources...from artifacts to cultural landscapes. They can include, but are not limited to, [properties] eligible or listed on the National Register of Historic Places, or National Historic Landmarks."

Concern Statement 149:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. Request language that portrays the sensitivity of cultural resources to off-highway motorized vehicles. Request a code for and more cultural examples in the Mount Taylor Ranger District section. Request Water section contain more information on cultural resources. A bullet regarding religious and ceremonial uses should be added to incorporate cultural landscape values. (447-5; 453-1, 2, 4, 5, 6, 7, 9, 11, 12, 18)

Response

Suggested edits have been incorporated into the land management plan; please see chapter 1 and the "Traditional Communities and Uses" section in chapter 2.

Prior to the development of the draft land management plan, the Cibola National Forest limited travel by off-highway vehicles to a system of designated routes and corridors as directed by the Travel Management Rule (36CFR 212). The protection of cultural resources was considered in the designation of routes and corridors where travel by off-highway vehicles would be allowed.

This summary section is designed to orient the reader and cannot address all aspects of the district's cultural and ecological significance. Because place-based management areas are not included in the preferred alternative (alternative C), they are not included in the land management plan. Place-based management areas, including Mount Taylor, are included in alternative B in the EIS, along with their plan components, which are coded and listed in the management area descriptions. The code for the Mount Taylor Management Area is MTT.

While it is true that water sources are a cultural significant resource, it was not identified during the needs for change assessment in consultation with tribes and is not included here. The consideration of water resources as cultural resources of importance to tribes is addressed in modifications to plan components in the "Water Resources" section. The importance of water-supported ecosystems (riparian areas) is identified in desired conditions for water resources features (FW-DC-WRF-3) and plan components for federally recognized tribes.

The list of items in this bullet point should be considered exemplary rather than exclusive. The importance and value of landscapes to tribes is discussed in "Federally Recognized Tribes" section of the plan. In the "Cultural and Historic Uses" section of the plan, Mount Taylor is included as a significant cultural and historic resource of the forest.

Concern Statement 160:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. Consult with tribes to determine if any of the proposed management approaches for tribes should be changed to enforceable plan components. Management approaches are less likely to be enforced. Concerned with ecological efficiency for alternatives C and D, and lack of wilderness and science/reasoning. Also clarify who is considered a traditional community. (443-357, 358, 359, 360, 363)

Response

Government-to-government consultation with tribes was conducted alongside the solicitation of comments on the draft plan and draft EIS. One intent of early involvement of tribes in the project planning process, as addressed in Federally Recognized Tribes guideline FW-GDL-FRT-2, is to identify opportunities for shared stewardship. Shared stewardship opportunities arise from project- and

site-specific conditions which make the stipulation of shared stewardship in standards or guidelines inappropriate.

The Cibola's intent is to facilitate educational pursuits by rural historic communities rather than initiate those pursuits. As such, standards or guidelines to this effect are not appropriate.

Traditional communities are a core management theme that has been prevalent throughout the planning process and in the final plan and EIS. Addressing management of traditional uses is one of the needs for revising the land management plan.

Traditional communities are defined in the EIS volume 1, chapter 3:

A traditional community is a federally recognized tribe or a land-based rural community that has a long-standing history in and around the lands managed by the Cibola National Forest.

Also, the land management plan speaks about traditional communities in chapter 2, forestwide direction,

A traditional community refers to a land-based rural community that has a long-standing history in and around the Cibola National Forest. There are many communities within the plan area of influence. The Cibola is a community-based national forest and each of these communities is geographically and historically rooted to a particular landscape.... including federally recognized tribes and pueblos, Spanish and Mexican land grants-mercedes and acequia associations, grazing permittees, and other rural historic communities.

Concern Statement 167:

Comments from the Land Grant-Merced of the Pueblo del Canon de Carnue resolution: Canon de Carnue Land Grant-Merced Forest Revision Plan Resolution no. 2019-1103, opposing wilderness expansion and request consultation when expansions and status changes are contemplated. Comments request reopening of closed allotments, particularly those associated with the Canon de Carnue Land Grant. Comments request addition of a new management area – Canon de Carnue Management Area to address Carlito Springs for acequia and drinking water recharge. (451-1, 2, 3, 4, 5)

Response

Thank you for your comment. The input from Canon de Carnue Land Grant's governing body in future decision-making regarding recommendations for wilderness designation is addressed in Rural Historic Communities Guidelines FW-GDL-RHC-4.

Concern Statement 172:

Concern about restructuring Traditional Communities and Rural Historic Communities section so land grant and Acequias are given own section separate from Rural Historic Communities established after 1848. (466-58, 62, 65)

Response

The Treaty of Guadalupe Hidalgo does not obligate the Federal government to extend special rights or protections to land grant heirs separate from those enjoyed by all American citizens (GAO 2004). However, the status of land grant governing bodies and acequia associations as subdivisions of New Mexico state government with issues distinct from all members of rural historic communities requires plan components specific to those issues. Plan components specific land grant governing bodies and acequia associations in the Rural Historic Communities section are: Desired Condition FW-DC-RHC-5; Guidelines FW-GDL-RHC-3 and -4; and Management Approaches FW-MGAP-RHC-6, -12, and -13.

By the definition provided in Background and Description, Central New Mexico Historic Communities are those that predate the establishment of the Forest Reserves and National Forests that would come to make up the Cibola National Forest. While some of these communities were founded by persons from outside of New Mexico, others, such as Placita in the Magdalena District area of influence, and San Rafael in the Mount Taylor District area of influence, were founded by persons from other, older New Mexico communities (Robinson 1994:53-55; Wilson 1985:41-46). Descendants of New Mexico's pre-1848 citizens live in almost all Central New Mexico Historic Communities and are a majority or plurality in several. The Forest Service does not prejudice its recognition of community members' historic ties to the land based on their contemporary affiliation with a Spanish or Mexican era grant confirmed by Congress or the Federal courts or based on their race or national origin.

Concern Statement 173:

Collaborate with land grant communities and Acequias to ensure relationships and educational exchanges, and meetings to assess maintenance needs of shared infrastructure, to include land grant comm and acequias in project planning/design, and to assess resource needs of communities. (466-66, 67, 80, 81, 85)

Response

Collaboration is an approach for accomplishing the desired condition, and is addressed in Rural Historic Communities, Management Approaches FW-MGAP-RHC-4 and 6. Collaboration is a management approach. Collaboration associated with access is addressed in Rural Historic Communities, Management Approaches FW-MGAP-RHC-13 and -15.

As worded, the recommended Desired Condition is an approach for accomplishing the desired conditions. It is addressed by Rural Historic Communities, Management Approaches, FW-MGAP-RHC-1, -3, -11, and -14. Access issues are addressed in Sustainable Rangelands and Livestock Grazing, Guideline FW-GDL-GR-8 and Management Approach FW-MGAP-GR-1; and Rural Historic Communities, Guidelines FW-GDL-RHC-1 and -3, and Management Approaches FW-MGAP-RHC-13 and -15. The requirement to afford land grants- mercedes, acequia associations, livestock associations, and permittees the opportunity to participate in plan revision or amendment is already required by 36CFR 219.4(a)(1)(i), (iii), and (iv).

Concern Statement 176:

Provide local fuelwood opportunities (green, dead, and down) to meet fuelwood demands of land grant communities due to dependence land grant communities on this resource. Develop fuelwood permitting process for traditional use forest products. (466-89)

Response

The Forest Service does not prejudice its recognition of the need for the collection of traditionally used forest products by members of rural historic communities based on their contemporary affiliation with a Spanish or Mexican era grant confirmed by Congress or the Federal courts. In this guideline, the language referring to restrictions imposed by standards or guidelines required by other sections of the plan must be retained because those restrictions can exceed those imposed by existing law and regulation. The restrictions imposed by other plan components do not "trump" existing laws and regulations, as plan components that are inconsistent with existing laws and regulations are prohibited, 36CFR 219.1(f).

Concern Statement 177:

Request annual meeting with the Cibola National Forest to discuss the protection and identification of important spiritual resources and sites. Do not publicize to certain areas containing spiritual significance to the general public. (466-69, 70)

Response

The Cibola does not agree that annual meetings are necessary to achieve progress toward the desired conditions. Rural Historic Communities guideline FW-GDL-RHC-4 addresses coordination with governing bodies during project planning and design. Guideline FW-GDL-RHC-2 addresses the need to consider spiritually or culturally important places during project planning. The locations of spiritually or cultural important places that are historic properties, including traditional cultural properties are protected from public disclosure by the Federal government, 36CFR 296.18.

A standard that prohibits adverse impacts to places of religious significance or areas of traditional and cultural use would be in conflict with Federal law. The Cibola prioritizes the protection of places of significance to rural historic communities, including historic properties, as reflected in Rural Historic Communities, guideline FW-GDL-RHC-2, and Cultural and Historic Resources, standard FW-STD-CHR-1. However, there are cases where places cannot be protected when undertakings are required to proceed under federal law (for example, the 1872 Mining Law) or where the impact to a place or property is deemed by administrative decision to be less than the benefit provided by the undertaking. In these cases, if the place is a historic property (including a traditional cultural properties), the Cibola is required to work with governing bodies or representative organizations that identify as consulting parties in the resolution of adverse effects under 36CFR 800.6.

Concern Statement 178:

Land grant community are protected by international treaty law: manage for prior existing uses recognized under public laws, memorandums of understanding, or agreements established prior to Forest Service acquisition and management of former land grant common lands. (466-83)

Response

Not applicable. The Cibola National Forest does not contain any acquired former community grant common lands. While lands claimed as common lands by three land grants- mercedes—San Mateo Springs (Santiago Duran y Chaves), San Antonio de las Huertas, and Canon de Carnue—have been incorporated into the Cibola National Forest through proclamation, the claims by those land grants-mercedes were rejected by the federal courts and returned to the public domain prior to their incorporation into the Cibola National Forest (Bowden 1969: 1300-1310; 1578-1590; 1722-1727). The Cibola in two instances has acquired through purchase community grant lands. However, in neither of these cases did the land acquired include common lands. On the Mount Taylor District the San Mateo Springs Grant Tract 2 was acquired in 1949. This 75.84-acre tract, located in Section 19, T13N, R7W, N.M.P.M., is spatially separated from the larger San Mateo Springs Grant and was an individual allotment, not common lands (Bowden 1969: 1589-1590). On the Sandia District, 7,461.34 acres of the Elena Gallegos Grant were acquired in 1978. While the Elena Gallegos Grant was a community grant, the grant contained no common lands, as the entire grant had been divided into individual allotments prior to 1846 (Bowden 1969: 1675-1681).

While the Cibola includes lands claimed as land grant common lands but where such claims were rejected by the courts, there is no evidence that the rejection of claims were made for the purpose of incorporating those lands into the National Forest System. The President of the United States was authorized to create forest reserves from the public domain by the General Provision Act of 1891, but the reserves that would

make up the Cibola National Forest were designated 15 years later. The decision to confirm the San Mateo Spring Grant excluding the common lands between its current boundary and the boundary of the Bartolome Fernandez Land Grant was issued in 1895 (Bowden 1969:1588), but the Mount Taylor Forest Reserve that incorporated that land from the public domain was not proclaimed until 1906 (Baker et al. 1988:59). The decision to confirm the San Antonio de las Huertas Grant excluding the common lands encompassing the Sandia Mountains south of its boundary (the "Gallegos boundary") was made in 1899, while the Court of Private Land Claims denied Canon de Carnue Grant's claim to its common lands in 1894 (Bowden 1969:1309, 1727). The Manzano Forest Reserve, which incorporated both areas, was not proclaimed until 1906 (Baker et al. 1988:59).

Concern Statement 179:

Requesting standards for Rural Historic Communities. Assess maintenance needs of any shared infrastructure in coordination with land grant governing bodies. (466-72, 83, 91)

Response

No standards are included in this section because the Cibola did not identify any issues where mandatory constraints on project and activity decision-making were warranted relative to rural historic communities.

This is addressed by Rural Historic Communities Management Approaches FW-MGAP-RHC-1, 3, and 4. A guideline is not warranted here, as site-specific conditions should be considered to determine whether it is in the best interest of the Federal government and the government representatives of rural historic communities (land grant governing bodies, acequia associations, municipalities, counties) to enter into shared stewardship agreements for fences, roads, and other infrastructure that may service multiple jurisdictions.

Concern Statement 181:

Request list of "valid existing rights" to land grant communities bordering eligible wild and scenic river reaches. Ensure "valid existing rights" and wild and scenic river and wilderness criteria do not contradict. Concern about Las Huertas and Tajique eligible wild and scenic river reaches that potential designation would change the valid existing rights to the land and water land grant communities. (466-102)

Response

Because the areas recommended eligible as wild and scenic rivers, or recommended for designation as wilderness, do not fall within acquired land grant common lands, land grants do not have valid existing rights regarding these lands as conceived by the New Mexico Land Grant Association. Regardless, these areas have been identified as areas of traditional use by members of land grant communities. However, the wild and scenic river eligibility recommendations for Tajique Creek and Las Huertas Creek do not place additional restrictions on motorized access to these areas beyond those already in place under current Travel Management rules. Motorized travel is already prohibited under Travel Management rules in the area adjacent to Tajique Creek recommended for wilderness designation in alternatives B and D. Wild and scenic eligibility will not restrict standard channel stabilization methods during burned area emergency response such as the placement of straw bale barriers in side channels, or directional falling of trees. Very large permanent impoundments would be prohibited along Las Huertas Creek. Most of the reach of Tajique Creek above the land grant community is not wild and scenic river eligible and even large impoundments could be considered along this reach. However, burned area emergency response has moved away from channel treatments in favor landscape treatments, which have been found to be more effective at addressing flooding and erosion (Robichaud et al. 2014). Recommending Las Huertas as wild

and scenic river eligible would not further limit the ability to conduct landscape treatments of burned areas beyond restrictions already in place in Sandia Wilderness. Recommending areas adjacent to Tajique Creek as wilderness, however, could limit the landscape treatments that could be applied in those areas.

Concern Statement 186:

Mount Taylor region is absent from analysis of traditional cultural properties. Traditional cultural properties can also be a natural feature the Cibola has disregarded and created broad/false generalizations. The Cultural and Historic Resources section contains patently false generalizations without evidence, such as the statement: "Adverse effects from planned undertakings are very rare and will continue to be exceptional under all alternatives." The agency should provide information to support these claims, but better yet, remove such broad generalizations altogether." (453-30)

Response

The analysis of alternative B has been revised to include the Mount Taylor Management Area amongst the management areas included in the analysis.

A review of the Cibola National Forest records of Section 106 determinations of effects to historic properties including traditional cultural properties (TCPs) finds that since 2012, the Cibola has made no determination of adverse effects to historic properties relative to its undertakings, and that in all cases historic properties were avoided or otherwise protected during undertakings. Specifically, since 2008, at least 19 undertakings fully or partially within the Mount Taylor TCP have been approved for implementation with a Section 106 determination of no effect or no adverse effect to historic properties, including the TCP. The Section 106 processes for two undertakings within the Mount Taylor TCP, the proposed Roca Honda Mine and the proposed La Jara Mine, have not yet been completed but are anticipated to result in determinations of adverse effects to historic properties, including the Mount Taylor TCP and other historic properties. Once the Section 106 processes are completed for these two projects, these will be the only undertakings within the plan area where a finding of adverse effects to historic properties has been made since 2012. While all undertakings within the plan area since 2012 have had determinations of no effect or no adverse effect if implemented as planned, there have been instances where undertakings have been implemented out-of-compliance with the terms of their Section 106 clearances. In one case since 2012, an out-of-compliance undertaking within the plan area has resulted in damage to a historic property, in this case a TCP (not the Mount Taylor TCP). A law enforcement investigation under the Archeological Resources Protection Act was initiated as a result of the damage.

Concern Statement 254:

"Mount Taylor Ranger District""—Cibola National Forest's brief mention of Mount Taylor as being of special religious importance to several tribes and local communities should warrant citation or flagging for the reader that Mount Taylor is a traditional cultural property on the New Mexico Register of Cultural Properties and found eligible for the National Register of Historic Places. (453-3)

Response

The language of this summary section is intended to orient the reader to the general significance of Mount Taylor. In the final plan's "Cultural and Historic Resources" section introduction, table 23 "Type" column has been modified to reflect that those properties that are neither National Historic Landmarks, nor listed on the National Register of Historic Places, are significant cultural or historic resources and are eligible for listing on the National Register of Historic Places.

The importance of Mount Taylor is considered in a Management Area proposed for alternative B. See discussions in the final EIS, volume 1, Alternative Development Process, third paragraph, and Alternative B, Issue A: Support Cultural and Traditional Landscapes and Uses.

Concern Statement 255:

The first paragraph's statement about local communities' dependence does not include any discussion that tribal communities are also dependent on the Cibola National Forest's resources for uses that may not be economic. Terms like "cultural histories" as being the only recognizable value of Cibola's resources, other than economic production, as implied here, fails to recognize the continuing relationship tribes, like Acoma, maintain with the cultural landscapes within the Cibola National Forest and the ongoing usage of cultural resources therein. Highlighting the management of these resources of economic development and tourism signals to Acoma how the management of Acoma's cultural resources are less important. (453-10,11)

Response

We respectfully disagree with this assessment of the emphasis and tone of the section. The introductory paragraph of the Needs for Change, Multiple Uses and Human Influences section priorities cultural connections over economic values and recreation as evidences by the order of discussion. Although the bullet points are not listed in order of importance, the final plan re-arranges the order of the bullet points to reflect the priority of cultural values set in the introductory paragraph. Consultation with tribes regarding potential impacts from these and other undertakings is addressed in Federally Recognized Tribes, guidelines FW-GDL-FRT-2.

Concern Statement 256:

The Forest Service should meet annually with active land grants within or adjacent to the National Forest. (466-69, 73, 75, 78)

Response

The Cibola does not agree that annual meetings are necessary to achieve progress toward the desired conditions. Rural Historic Communities, Guideline FW-GDL-RHC-4 addresses the need to coordinate with governing bodies as part of project planning. The use of meetings to facilitate desired conditions is stipulated in Management Approaches FW-MGAP-RHC-3, and cooperation to accomplish shared stewardship and address issues of resource and access needs are addressed in FW-MGAP-RHC-1, 2, 13, and 14.

Concern Statement 257:

Request a new standard that requires input from land grant and acequia governing bodies for all projects, programs, and activities near land grant communities. Request a new standard, "when a shared infrastructure assessment determines a need for maintenance or improvement the Forest Service shall work collaboratively with the appropriate land grant governing body(ies) to address the need". (466-73; 75, 78)

Response

Not all projects are of a scale, scope, or nature that would warrant coordination with governing bodies in every instance of project planning. Coordination stipulated as a guideline to ensure that it is meaningful and that coordination efforts are focused on those undertakings of importance and concern to land grantsmercedes and acequia associations.

Not appropriate as a standard. Standards are mandatory constraints on project and activity decision-making (36CFR 219.7(e)(1)(iii)), and not all projects may warrant meetings with governing bodies; see response to comments 466-69 and 466-73.

Addressed by Rural Historic Communities Management Approaches FW-MGAP-RHC-1, -3, and -4. A standard is not warranted here, as it is not always in the best interest of the Federal government, or the government representatives of rural historic communities (land grant governing bodies, acequia associations, municipalities, counties), to collaborate to maintain fences, roads, and other infrastructure that may service multiple jurisdictions.

Concern Statement 262:

The final land management plan should prohibit the unilateral closing, decommissioning and/or gating of Forest Service roads within the Cibola National Forest without notice. Consistent with the plan's commitment to historic rural communities, used and needed roads and trails should remain open whether or not they qualify as R.S. 2477 roads. (986-11, 12, 13,14,15,34, 35, 36,37,38)

Response

Travel management is a separate process from forest planning and is handled under requirements of 36 Code of Federal Regulations, part 212. Acknowledgement and adjudication of potential R.S. 2477 claims is under the jurisdiction of Federal Court and outside the scope of the forest planning process. Claims for R.S. 2477 rights-of-way must be made by state and local governments and there is no known inventory of such claims or adjudications. Any decision to close or decommission roads would be made through the public participation processes for a change to the motor vehicle use map. The forest planning process does not change existing travel management decisions or motor vehicle use maps.

Vegetation

Concern Statement 52:

Comments regarding climate change and carbon management. (425-26; 443-274, 298, 299; 460-2, 3; 939-34, 35, 46, 36; 960-5)

Response

The Forest Service recognizes the vital role that forested lands play in carbon sequestration, and the final plan manages for overall ecosystem function which implies inherent levels of carbon sequestration and greenhouse gas emissions.

The basic approach involves managing carbon through managing the health and productivity of the Nation's forests. The approach focuses on managing risks to the health, productivity, and ability of the resource to provide the goods and services called for in management plans. Management actions have carbon outcomes and those are considered among the benefits being managed. Forest systems are dynamic and emit and capture carbon regardless of human intervention. The Forest Service carbon strategy is embedded in a larger adaptation strategy for managing the resource that considers multiple impacts of natural and anthropogenic stressors (Birdsey et al. 2019).

We disagree that managing to maximize carbon sequestration promotes ecosystem function and management to maximize carbon sequestration over other ecosystem services is not a primary management focus in the plan. Janowiak et al. (2017) briefly summarize how land management planning

incorporates carbon sequestration, "The long-term capacity of forest ecosystems to capture and store carbon depends in large part on their health, productivity, resilience, and adaptive capacity."

Land management in a dynamic system considers cumulative effects across time, factoring in risk, severity, scale, and likely outcome of disturbances. For example, storing carbon in overly dense forests increases the risk of losing the carbon through fire and decomposition of fire-killed trees following large wildfires (Hurteau and Brooks 2011). Dense stands are less vigorous and more susceptible to insect attack (Oliver and Larson 1996). Land management programs that restore forests to healthy and productive conditions will help ensure the long-term maintenance and transformation of forest carbon stocks (Janowiak et al. 2014).

We stand by the assumption that thinning and prescribed fire increase carbon sequestration in the long term. While mechanical thinning does result in a short-term loss of forest carbon emissions, over the long term (several decades to one century) forest restoration results in more total ecosystem carbon and lower wildfire emissions than a no-harvest scenario (Hurteau 2017, McCauley et al. 2019). Carbon "losses caused by thinning and burning treatments are out-weighed by the carbon gains from decreased tree mortality rates and increased sequestration" (Hurteau et al. 2016). "When considering the increased probability of large wildfires (Westerling et al. 2006), the potential for further climate-driven increases in the area burned by wildfire (Westerling et al. 2011), the carbon cycle and human health impacts of fire emissions (Hurteau et al. 2014a, 2014b), and the costs associated with wildfire (Wu et al. 2011), it is clear that there are ecological, economic, and ecosystem service benefits to restoring forest structure and fire as a natural process in dry forest systems" (Hurteau et al. 2016).

Concern Statement 61:

New Mexico Land Grant Council suggested edits for the draft land management plan, chapter 2, plant community species composition. Need to protect and preserve culturally significant vegetation species and timber for traditional uses. FW-MGAP-SPC-2 – add "and permanence" to the end of the sentence; FW-MGAP-SPC-3 – include "when appropriate." (466-1, 2, 3, 4, 5)

Response

Plan components address the stated concerns with equivalent language in "Vegetation," "Sustainable Forestry and Forest Products," and "Traditional Communities and Uses" sections.

Concern Statement 62:

New Mexico Land Grant Council suggested edits for the draft land management plan, chapter 2, all vegetation types. Suggested plan direction related to ecosystem resilience and adaptivity to disturbances, importance of maintaining native plant communities(such as oshá, poleo, and orégano del campo), and importance of forest vegetation in providing resources to traditional use activities for tribal and land grant communities. (466-6, 8, 9, 10, 11, 12, 13, 14, 15, 104, 105)

Response

Plan components address the stated concerns with equivalent language in "Vegetation," "Water Resources," "Sustainable Forestry and Forest Products," "Terrestrial, Aquatic, and Botanical Species," and "Traditional Communities and Uses" sections.

Concern Statement 86:

Comment recommend modified language to the desired condition regarding theft of forest products. (427-6)

Response

Changed wording of FW-DC-FP-6 to "Unauthorized collection (for example, unpermitted removal or collection) of permitted forest products does not occur."

Concern Statement 96:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches (437-6, 15, 16, 17, 21; 443-194; 457-12, 15, 16; 958-7, 8, 9, 10, 12, 13, 14, 15, 16, 39, 72)

Response

Stated concerns (including, species composition, wildlife habitat, plan components, management approaches) are appropriately and adequately addressed in the plan. Other concerns (such as support for alternative C) have been noted.

Concern Statement 138:

Comments opposing the use of ecological response units and potential natural vegetation for seral stage analysis; terrestrial ecological unit is not grounded in best available science. Ecological response units and potential natural vegetation should be replaced with a natural range of variation concept. (452-3, 4, 5, 6, 7; 962-20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55)

Response

Ecological Response Unit Mapping – What it is and What it Is Not

Ecological response units (ERUs) are a landscape mapping system for organizing planning, analysis, monitoring, and research of some ecological features. Like other landscape mapping, ERUs are constructs of spatial data and of map categories (for example, Ponderosa Pine Forest). ERUs account for current ecological understanding of the Southwest in their underlying 1) classification concepts and 2) map data, both of which represent best available science, periodically updated with new mapping and references on vegetation, disturbance, and environment.

ERUs are not the natural range of variation, seral state proportions, vegetative structural stage, vegetation states, or management targets, even though ERUs are useful in organizing this type of information to understand past (areas of similar natural range of variation), current, and future conditions.

The ERU concept represents both site potential and disturbance regime (Wahlberg et al. in draft), similar to other landscape mapping (Barrett et al. 2010, Comer et al. 2003). For example, two sites with similar site potential but different disturbance regimes would be classified and mapped as different ERUs. Site potential, or potential natural vegetation, remains a valuable concept for understanding basic land capability (Somodi et al. 2012). Historic potential natural vegetation concepts of climax vegetation (Tuxen 1956) are not reflected in Forest Service desired conditions, and have long been dismissed as management targets in favor of an understanding of the dynamics, diversity (seral states), and potential services of a given vegetation type as noted in both the 2012 Planning Rule (CFR 219.19) and agency directives (FSH 1909.12). The Southwestern Region's own ecosystem models show multiple succession pathways possible for a given ERU in addition to classic succession sequences (Weisz et al. 2009, Weisz et al. 2010, Weisz and Vandendriesche 2013).

ERU Mapping and Changing Climate

The Forest Service acknowledges that seasonal change, warming, and increased aridity (IPCC 2014) will affect both site potential and disturbance regime, and that ERUs form a reasonable baseline from which to assess past variation (natural range of variation; FSH 1909.12), the future range of variation (Somodi et al. 2012), and to consider adaptation options. The Forest Service and partners have developed vulnerability assessments (Hand et al. 2018), tools to address changing climate and fire regimes (Bagne et al. 2012, Friggens et al. 2019), and are developing a climate adaptation strategy. The Southwestern Region also understands that shifts in site potential by a changing climate may already be ongoing and should be addressed in an adaptation strategy (Muldavin and Triepke 2019, Triepke et al. 2019).

Terrestrial Ecological Unit Inventory

In the Southwestern Region, Terrestrial Ecological Unit Inventory (TEUI) mapping underpins ERU mapping both spatially (map line work) and thematically (technical grouping of TEUI units similar in site potential and disturbance history). TEUI mapping is developed from field plots, field surveys, and photo interpretation (Winthers et al. 2005, USDA Forest Service 1986), reflecting more census than sample, updated with new information, and clearly the best available science for ecological mapping on National Forest System lands. Nevertheless, other landscape mapping has been considered in the Southwestern Region, including Ecological Systems and LANDFIRE Biophysical Settings (Comer et al. 2003, Barrett et al. 2010), but deferred in favor of a TEUI-derived mapping based on a data quality comparison among available map sources and an independent sample of Forest Inventory and Analysis plots.

Existing Vegetation Mapping

The national forests of the Southwestern Region already use existing ("actual") vegetation mapping to assess current vegetation structure, composition, and connectivity. We find no research to support using existing vegetation mapping to determine natural range of variation, let alone dismiss the wealth of research that was applied to characterize natural range of variation. Existing vegetation mapping is thematically coarser than Ohmann and Gregory (2002) but without the accuracy issues that imputation-only approaches present at mid scales. The Forest Service developed mid-scale mapping of plant communities with methods and tooling specific to Southwest vegetation and data (Mellin et al. 2008), now being revised with new imagery and technology by Oregon State University (Henderson et al. 2019). Also, using an existing vegetation map (snapshot) as an ecosystem stratification, let alone to determine natural range of variation, is problematic given 1) how existing vegetation conditions can change with each event (fire, beetle outbreak, regeneration harvest) and given 2) how generic existing vegetation can be across ecosystem types or even life zones; for example, Douglas-fir cover types can occur in dry- and wet-mixed conifer types as well as spruce-fir forest.

Woody Encroachment into Grasslands

The uncharacteristically high levels of woody encroachment or ingrowth into grasslands, and in frequent-fire ecosystems in general, on contemporary landscapes is well established in the scientific literature as are the impacts to grassland function, plant and animal diversity, and ecological processes (Archer et al. 2017). The issue of grassland loss and degradation, by woody encroachment and other factors, and the departure from natural range of variation is a clear issue identified by all national forests of the Southwestern Region and fellow land agencies (Fletcher and Robbie 2004, Schussman and Gori 2004, Yanoff et al. 2008). The national forests have established the historic location and current condition using TEUI soil attributes (distribution of mollisols) and various data sources including rangeland monitoring, existing vegetation mapping (Mellin et al. 2008), and prior assessments (The Nature Conservancy 2006). Identifying ecosystem departure and developing plan components (including desired conditions) are separate processes. Approaches used by the national forests for ecological assessment, identifying need-for-change in policy, and for developing desired conditions for grassland ERUs are consistent with the

2012 Planning Rule and agency directives in the application of best available science and in the way that current condition is compared to an ecological reference model such as natural range of variation (CFR 219.19, FSH 1909.12 chapter 10) to assess integrity and inform the development of plan components. National forests of the Southwestern Region have also provided language in revised and draft plans to consider climate change effects at implementation (project level) and whether natural range of variation and restoration are still appropriate given the climate vulnerability and stressors of a particular area. The Southwestern Region is also developing post-revision guidance for climate adaptation. Where site specific conditions differ from the ERU mapping or where there are dissimilar inclusions, desired conditions applied can differ from those of the indicated ERU.

Ecosystem Modeling

National forests of the Southwestern Region have generated ecosystem models for each ERU, not to forecast conditions, but for purposes of approximating trends in key ecological indicators such as seral state diversity, consistent with agency planning directives (FSH 1909.12 chapter 10, 12.14c). For effects analysis, the national forests provided additional modeling for purposes of contrasting management alternatives in their ability to achieve desired conditions, according to different levels of mechanical treatment, prescribed burning, managed fire, and other active and passive management. Ecosystem models were developed with variables configured (parameterized) based on quantitative inputs for succession and growth, disturbance frequency and severity (fire, insects, and disease), and for frequency and effect of local management activities including fire management (Weisz et al. 2009, Weisz et al. 2010, Weisz and Vandendriesche 2013). Forest Vegetation Simulator (FVS) models were developed to address all possible vegetation states that can occur along with the probability of transition among states, with FVS outputs resulting in multiple succession pathways in addition to classic succession sequences. Effects of stand-level disturbance and climate are inherent to FVS and the Forest Inventory and Analysis sample data used to train FVS runs. Existing vegetation mapping was used to characterize the initial vegetation conditions for ecosystem modeling.

The individual ecosystem model states were based on 1) existing vegetation technical guide diameter and cover breaks (Brohman and Bryant 2005), characteristic structure conditions (for example, woodland models typically would not require separate 20 inches plus diameter states), and on management conventions (for example, the need for multi-aged states). As described in the ecological assessments, forested communities are assigned to states based on the size class of greatest abundance (basal area, canopy cover) regardless of overall size class diversity. As such, the density of smaller diameter trees in a given plant community is often greater than the indicated size class, particularly in fire-adapted forests and woodlands. Vegetation states for some forest models are necessarily stratified by one, two, and three-plus tree cohorts. While the vegetative structural stage categories were considered for defining vegetation states within ecosystem models, vegetative structural stage is not consistent with more recent technical guidance (Brohman and Bryant 2005), is calibrated only to forest life zones, and is tooled mostly for even-aged infrequent-fire forests.

Ecosystem models were also used to determine natural range of variation for seral state diversity based on characteristic diameter growth, insect and disease occurrence, and the historic fire regime including human influence (LANDFIRE 2010, The Nature Conservancy 2006). natural range of variation was used to inform desired conditions but is not a management target in and of itself. Also, we find no research to support using imputation mapping of current conditions to determine natural range of variation, let alone dismiss the wealth of research that was applied to characterize natural range of variation. Seral state percentages for the reference condition represent the approximate mid-point of the range of desired conditions described at the landscape scale and are used primarily to compute overall system departure and are not intended as a target or prescription.

A stable geographic distribution of ERUs was assumed in the current suite of ecosystem models given the focus on restoration and other immediate management concerns of the recent planning cycle. Though site potential patterns are still largely intact, the Forest Service is considering modifications for the next generation of ecosystem models to integrate climate forcing. The current generation of models facilitate some novel states including the transition of fire-adapted forests into long-term uncharacteristic grass and shrub conditions following high-severity fire (as with many post-fire plant communities of the Cerro Grande and Los Coches fires). The current ecosystem models are appropriate for purposes of approximating trends in key ecological indicators consistent with agency directives for ecological assessment (FSH 1909.12 chapter 10), and for contrasting management alternatives in an effects analysis.

Carbon

In their ecological assessments, the national forests of the Southwestern Region have complied with agency directives regarding carbon by estimating carbon stocks (FSH 1909.12 Ch. 10, 12.4). There are no regulatory requirements to evaluate carbon flux or to analyze and contrast future carbon among alternatives in an environmental impact statement. Nor are there agency directives for the management of carbon. Also, the science underpinning carbon management in fire-adapted ecosystems is inconsistent (Meigs and Campbell 2010, Campbell et al. 2012).

Follow-Up

The Southwestern Region is more interested in creative coordination and conversing with potential partners on ways to improve the Southwestern Region's analysis framework. The region is also interested in knowing about research that may have been overlooked regarding landscape mapping and the components and processes that have been analyzed.

Concern Statement 158:

Comments (largely concerned with climate change) recommend additional or modified language, guidelines, standards, objectives, or management approaches. (443-245, 246, 247, 248, 249, 250, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355; 939-41; 958-6; 972-18, 19, 20, 22, 23)

Response

Climate change was considered during the development of plan components for ecological sustainability, ecosystem services, and multiple uses. Changing climate is identified as a foundational plan concept that "sets the tone for the plan throughout" and is "important to consider during implementation" (final plan, chapter 1, "Plan Concepts" section). Monitoring topics in several sections of the final plan Monitoring and Evaluation chapter 5 address potential impacts to the plan area related to climate change and other stressors. These include the entire "Climate Change and Other Stressors" monitoring section, monitoring FW-DC-PJ-01 in table 31, and FW-DC-GR-03 in table 35. An additional question has been added to table 29 to annually monitor seasonal temperature and precipitation trends.

The effects of climate change on natural resource management are best considered during the plan-to-project analysis. Climate change considerations are integrated with the development of objectives. Management proposals and associated design criteria may enhance the resilience or adaptive capacity of resources to the potential impacts of climate change. For example, projects designed to restore the health, resilience, and productivity of ecosystems may also improve the capability of the landscape to withstand climate change stresses. It is also important to consider whether climate change may affect the ability to reach a desired condition. Adaptive management strategies allow for uncertainties in environmental conditions resulting from climate change (USDA Forest Service 2010a).

Concern Statement 170:

The soils section should include further guidance for mechanized equipment. Recommend adding a guideline stating that work will be temporarily halted when ruts of six inches or greater in depth occur from trucks and equipment on saturated soil. (958-28)

Response

The stated concern is adequately addressed in the plan's desired conditions, standards, and guidelines, including but not limited to FW-DC-SOIL 1, FW-STD-SOIL 1-3, FW-GDL-SOIL 1, 2, 13, 15, 17, FW-GDL-SOIL 2.

Concern Statement 171:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches concerning timber production. For example, "The EIS and Plan should include language that strongly encourages the application of local data and analyses to determine prescriptions and quantities of timber harvested on the Forest, rather than having timber harvests externally determined by national-level directives, which may not be based on local forest conditions and sustainability." (958-75)

Response

Timber harvest and the sustained yield limit are Cibola-specific and not dependent on "national-level directives." See final EIS, volume 2, appendix B, "Timber Suitability Analysis" section for a description of how timber suitability and sustained-yield limits are determined. A reading of this section will clarify that these determinations are specific to each local national forest, for example:

"Suitability is the appropriateness of applying certain resource management practices to a particular area of land in consideration of the relevant social, economic, and ecological factors. Suitability is determined based on compatibility with desired conditions and objectives in the plan area."

"The sustained yield limit is the amount of timber, meeting applicable utilization standards, which can be removed from a national forest annually in perpetuity on a sustained-yield basis"

Concern Statement 193:

Request for botanist on each ranger district. (963-6)

Response

This request is outside the scope of the plan revision process. Hiring of personnel on each ranger district is a separate process that is responsive to agency targets, budget constraints, and leadership decisions.

Concern Statement 199:

Important standard references for all U.S. vegetation types, such as the National Vegetation Classification, and references specific to pinyon-juniper (Romme et al. 2009), are not referenced. Documents that provide the basis of vegetation descriptions and desired conditions should be better cited in the text and ideally, links to these documents should be provided.(432-2; 437-5)

Response

In the plan, a footnote was added containing references to publications used for development of vegetation desired conditions.

Concern Statement 204:

Suggested plan edit to pinyon-juniper woodland persistent landscape-scale desired condition for 6 snags per acre versus 5 snags per acre. (432-4)

Response

The desired conditions developed for the forested vegetation types were based on a broad range of scientific publications covering topics including wildlife and forest ecology, restoration principles, economics, and ecosystem services. These desired conditions are well-supported by broad-based peer-reviewed science; they are similar to reference conditions and fall within the historical range of variability of pre-European settlement southwestern forests prior to the interruption of natural disturbance regimes, tree harvests, and livestock grazing. The desired conditions are designed to: (a) promote native plants and animals, forage production, wood products, visual quality, trophic interactions, and ecosystem functionality (b) restore or maintain old-growth and hydrological function (c) reduce fire hazards and improve flexibility for appropriate fire management response (d) increase resilience to insects, diseases, and climate change, and (e) to facilitate ecological adaptation of ecosystems to future threats to biodiversity.

Water

Concern Statement 65:

New Mexico Land Grant Council suggested edits for the draft land management plan, chapter 2, water resource. Request for addition of acequias to list of water resources and water resource features, select desired conditions. Land grant community members have used common waters for traditional use purposes pre-dating establishment of the U.S. Forest Service. Concern about drilling wells on National Forest System lands due to potentially compromising downstream users. (466-16, 17, 18, 19, 20, 21)

Response

Acequias are an important water use and ecosystem service of healthy watersheds. Their presence and cultural importance are discussed in the Traditional Communities and Uses section. The aspect of water supply which supports acequias is part of the watershed and water resources sections. Protection of the headwaters that provide water for acequias is present in many proposed plan components. Water resource features and watersheds have desired conditions to ensure that these features are properly functioning with the attributes that are in satisfactory condition. Plan components are directed at improving, restoring, and maintain these features to ensure that the condition of watersheds and their components are contributing to high quality waters. Applicable suggestions have been addressed and modified in the plan; however, nonapplicable suggestions have not been adopted due to a sufficient plan direction in Water resource and traditional.

Concern Statement 66:

New Mexico Land Grant Council suggested edits for the draft land management plan, chapter 2, soils. Request for plan direction related to use of soils by traditional communities for traditional wares and building materials. (466-24, 25)

Response

Desired conditions for "Federally Recognized Tribes" (FW-DC-FRT-3) and "Rural Historic Communities" (FW-DC-RHC-3) discuss micaceous clay as an important resource for cultural and traditional needs. The use of soil and rocks for building materials is also listed as a traditional use in the narrative of the "Traditional Communities and Uses" section. While this is not discussed again in the "Water Resources" section, the plan is meant to be read in its entirety as it is an interdisciplinary approach.

Concern Statement 87:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. Suggestions for a new objective requesting water sources be protected. (427-3; 453-16, 24, 25; 958-17, 18)

Response

The land management plan was modified where suggestions were applicable. A new objective was not included in the plan as there are multiple objectives, standards, and guidelines that adhere to the protection of water (FW-OBJ-WRF-1; FW-STD-WRF-1, 2; FW-GDL-WRF-1, 6, 8).

Concern Statement 127:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches including using the verbiage "healthy" to describe water, soils, and vegetation. Commenter request additional language for objectives to discuss sensitive riparian management. (426-10, 12)

Response

Verbiage was adopted to the plan; however, modification to objective was not. Riparian and water features will be protected as portrayed in FW-OBJ-WRF-1 and FW-MGAP-WRF-6,9,13.

Concern Statement 187:

The draft EIS suggests there is little difference between alternatives in terms of effects to water resources. There is no support to suggest any similarity to "presence of wildlife," recreation, or nominal special uses. (453-28)

Response

The "Effects Common to all Water Resources" section of the EIS explains why there is little difference between alternatives. This is not the same thing as no effects from the activities—just that the effects are similar across alternatives.

Concern Statement 198:

Water on Cibola National Forest has decreased in the past 60 years. Please protect the rivers from diversions and damming and continue to utilize motorized equipment for riparian restoration. (88-1; 461-1; 991-1)

Response

Diversions are addressed in FW-GDL-WRF-9, which states if any new diversions are to happen it will be located to minimize impacts to water dependent ecosystems, including stream flows, consistent with special use process, existing water rights, approved permits, and declarations. To protect riparian

management zones, the use of motorized equipment should be avoided except when there is a designated stream crossing, when short term uses are required to improve resource conditions and maintain infrastructure, or where valid existing rights occur (FW-GDL-WRF-1).

Concern Statement 206:

Groundwater concerns including the process of where to drill, potential subsidence, and water quality for downstream users. (86-3; 450-1; 453-29; 466-22; 958-23)

Response

FW-GDL-WRF-7 states when a new or existing groundwater wells require replacement through new well drilling, these wells should be relocated far enough away from groundwater-dependent resources and riparian management zones to mitigate impacts. This is meant to ensure that groundwater withdrawals do not impact groundwater-dependent resources. If existing locations are not impacting groundwater dependent ecosystems then, the well can remain in the current location.

Concern Statement 207:

How can the Forest Service ensure water quality while livestock are allowed to graze on riparian and wetlands? (426-11; 453-27; 958-20, 25, 26)

Response

There is a plethora of plan components that pertain to the protection of water resources in relation to grazing. Livestock management must be compatible with capacity and address ecological concerns (FW-STD-GR-1). Forage use will be based on current and desired ecological conditions (FW-GDL-GR-1). New livestock troughs, tanks, and holding facilities should be located away from riparian management zones to protect riparian ecological resources and to minimize long term detrimental impacts, unless necessary for resource enhancement or protection (FW-GDL-GR-3). Salting or mineral supplementation should not occur on or adjacent to areas that are especially sensitive to salt (such as at-risk plant species habitat, riparian areas, wetlands, or archeological sites) and where there is increased traffic from ungulates to protect these sites (FW-GDL-GR). Within riparian management zones, recreation activities; permitted uses; structural developments such as livestock water gaps, pipelines, or other infrastructure; and management activities should occur at levels or scales that move toward desired conditions for healthy water, soils, and vegetation (FW-GDL-WRF-8).

Concern Statement 209:

Remove FW-MGAP-WRF-3 – "Use groundwater wells to replace surface water sources to prepare for drought and climate change conditions." (446-4; 466-23)

Response

Due to increased drought, there will not be surface waters to support current uses of livestock watering across the plan area. Groundwater use within the plan area is largely for drinking water for livestock and in localized areas, for public water supplies. As springs and surface water supplies become scarce, livestock become more dependent on groundwater wells for a consistent and reliable water source. Ranchers and local communities depend on this use within the plan area to sustain their livestock herds. The amount of water used is minimal and occurs in intermittent intervals, rather than being pumped at large rates for long periods of time.

Concern Statement 226:

Comments recommend additional or modified language, guidelines, standards, objectives, or management approaches. (958-2)

Response

The typographic error referred to in the comment has been modified and is now reflected in the plan.

Concern Statement 240:

Riparian buffer zone should be increased from 100 feet to 150 feet and should include minimum buffer for project equipment. (958-19,24)

Response

The 2012 Planning Rule dictates 100 feet of buffer. The water resource feature standard that is referenced as a concern (FW-STD-WRF-1) allows for additional width when site-specific conditions indicate that a larger management zone is needed. This zone is not fixed and is prescribed during project-level activities.

A particular distance is not specified by the mentioned guideline FW-GDL-WRF-14, but the intent of the guideline is to protect soil and water quality. Specific best management practices to address the appropriate distances will be prescribed at the project level during project planning and implementation, dependent on site conditions. Management approach FW-MGAP-WRF-1 describes types of best management practices that would be implemented at project level.

Concern Statement 241:

Requested section 404 permits be discussed in final environmental impact statement. (1004-1)

Response

A change has not been made, section 404 permits are site specific and related to project implementation.

Concern Statement 261:

The Forest Service should inventory all ore-wilderness rights, including acequia easement rights, and should indicate that these rights are not subject to wilderness restrictions. In recommended wilderness managements areas, acequias' rights and activities should not be curtailed. (986-18, 23, 24, 25,26, 29, 30, 31,32)

Response

The plan discusses these uses in multiple areas such as rural historic communities and the distinctive roles and contributions of the plan area.

Inventory of privately claimed rights is not a component of the forest planning process or congressional wilderness designation. Treatment of pre-existing valid rights is already provided for under the Wilderness Act, specific wilderness laws, and agency regulations

Treatment of pre-existing valid rights is already provided for under the Wilderness Act, Wild and Scenic Rivers Act, specific designation laws, and agency regulations. Those laws are not restated here and apply already. The land management plan cannot deviate or change these already existing laws.

Wilderness Resources

Concern Statement 3:

Comments from Sierra County Board of County Commissions, Resolution No 108-027. Supporting Cibola Forest Plan Alternative "C," opposing the designation of additional wilderness within Sierra County. The County is concerned about its citizens and local economy that will be affected by the revised plan. In particular, the Sierra County Commission is concerned that the potential designation of additional wilderness will jeopardize economic activities for the County and impede access. Commenter cites various laws. Comments include support of alternative C and non-support of additional recommended wilderness. Commenter cites study conducted by Ruzitis and Johnson (2006) that determined wilderness compromises access to resources for extractive economic activities. Sierra County Commission states that the areas considered for wilderness contain roads, special event sites, prospecting claims, outdoor recreation, fuelwood and timber, and are locations used by hunters and outfitters adjacent to traveled roads and state highways. (1002-16, 17)

Response

The forest planning process can only recommend lands be designated as wilderness and only Congress can designate wilderness. The recommended wilderness areas proposed in the Cibola's EIS are only recommendations to Congress and are not designated wilderness. The academic paper titled *The Impact of Wilderness and Other Wildlands on Local Economies and Regional Development Trends* (Rudzitis and Johnson 2000) does identify potential impacts from wilderness designation including a decline in employment within traditional extractive industries such as forestry, mining, and agriculture. However, this academic paper also identifies that there is a restructuring of the economy in and around wilderness in the American West that has experienced unprecedented economic growth (Rudzitis and Johnson 2000, page 18). Further, this study indicates that "wilderness designation plays a substantial role in attracting new migrants to a place or region...bring incomes and create new non-resource related jobs...partially explains why previous estimates of large employment declines from decreased timber harvests, the implementation of protective strategies and the protection of endangered species have largely proven to be wrong" (Rudzitis and Johnson 2000, page 25).

The Cibola developed analysis criteria to use in analyzing whether or not to include an area as recommended wilderness in one or more proposed alternatives. The distinction for areas recommended in alternative C is that they must be contiguous to an existing designated wilderness area and have no conflict with restoration or conservation management areas. The criteria used for potential recommended wilderness areas in alternatives B and C includes the following: High wilderness characteristics were identified across all evaluation criteria: high degree of apparent naturalness, high primitive recreation opportunities or ample opportunities for solitude, and a lack of developments such as roads, buildings, and other facilities; High manageability as recommended wilderness, including ease of boundary management, lack of private land inholdings, lack of current activities or issues that would make managing the area as recommended wilderness difficult, or a combination of these things; nonconforming uses are removed from the area.

In the final EIS volume 2, Appendix C. Wilderness Recommendation Process, the Cibola identifies existing uses incompatible with managing for recommended wilderness such as the following: legally established rights or uses (active mining claims, grazing allotments requiring mechanized maintenance), mechanized and motorized maintenance for active mining claims, motorized and mechanized uses for mineral prospecting, extent of cherry stemmed roads, and current and ongoing Collaborative Forest Landscape Restoration Program project activities requiring mechanized uses. These types of

nonconforming uses were removed from the recommended wilderness areas in alternatives B and C. The proposed areas recommended in alternative D do contain some of these nonconforming uses that are analyzed within the final EIS designated areas section.

Concern Statement 5:

Comments indicate that the Forest Service failed to consider the Citizens Conservation Proposal in its entirety. The proposal merits careful consideration in the plan revision process and should have been considered in detail. The Cibola should include the citizens' proposal in its entirety, including the Sandia Outdoor Education and Natural Area, in at least one alternative (ideally the preferred alternative) in the environmental impact statement. The proposal suggested a nearly 300,000-acre expansion of the wilderness areas within the Cibola National Forest, but less than ten percent of that acreage is included in the Cibola's preferred alternative plan. (5-2; 443-14, 15, 16, 17, 18, 32; 449-4; 607-2; 790-1; 841-1; 965-2, 3, 6, 7, 8, 13, 14, 15, 16, 17, 18, 21, 22, 35; 985-3)

Response

The Cibola interdisciplinary planning team evaluated the Citizen's Conservation Proposal (CCP) in its entirety during both Phase 1 and Phase 2 of the wilderness evaluation process. Using GIS data provided by the Wilderness Society, a Cibola resources specialist was able to overlay the proposed recommended areas in the CCP with the Forest Service GIS data during the evaluation processes. The CCP field data information along with the information for how an area possesses wilderness character as per chapter 70 of the planning directives were reviewed for each polygon during evaluation (see Cibola plan revision website or the project record for Phase 2 Evaluation matrix forms). This information, along with Forest Service field knowledge of the areas, informed each criterion rating for apparent naturalness, solitude or primitive recreation, and manageability.

In the final EIS volume 2, Appendix C. Wilderness Recommendation Process, the Cibola identifies existing uses incompatible with managing for recommended wilderness such as the following: legally established rights or uses (active mining claims, grazing allotments requiring mechanized maintenance), mechanized and motorized maintenance for active mining claims, motorized and mechanized uses for mineral prospecting, extent of cherry stemmed roads, and current and ongoing Collaborative Forest Landscape Restoration Program project activities requiring mechanized uses. These types of nonconforming uses were removed from the recommended wilderness areas in alternatives B and C. The proposed areas recommended in alternative D do contain some of these nonconforming uses that are analyzed within the final EIS designated areas section.

In terms of the comments that areas proposed in the CCP should have been analyzed in at least one alternative, the draft EIS, Appendix C. Wilderness Recommendation Process did include a summary of wilderness analysis area descriptions that included portions of the CCP proposed areas. However, it is noted that the EIS did not explicitly list the portions as they related to the CCP, so the EIS has been revised to reflect how portions of the CCP were incorporated into each of the action alternatives (see chapter 2, "Alternatives Considered but not Analyzed in Detail" section). Rationale as to why the full extent of the CCP proposed area (or portions thereof) were not included in the alternatives has also been updated in the EIS (see chapter 2, "Alternatives Considered but not Analyzed in Detail" section) and is presented below. See revised content below for extent and description of portions of CCP proposed areas that have been recommended within the action alternatives B, C, and D.

The portions of the CCP total proposed acreage not recommended in one of the action alternatives were removed because there were incompatible uses with managing for recommended wilderness identified

within those specific areas. In terms of portions of the CCP total proposed acreage not proposed within an action alternative, the Cibola planning team reviewed Phase 2 Evaluation matrix forms including the existing uses identified as incompatible with managing an area for recommended wilderness within the following polygons: Panther Canyon, Magdalena Mountains (D3_5K2, D3_5K3, and D3_LANG), Datil Mountains (D3_5K10 and D3_5K11), Scott Mesa (D3_5K7d), and Guadalupe (D2_ADJ3).

Apache Kid Expansion: total CCP proposed acreage is 71,735 acres

Alternative B and alternative C: The Cibola is recommending approximately 32 percent or 22,945 acres of the total CCP proposed acreage in alternatives B and C within the following areas: Apache Kid Wilderness Expansion 1 (11,328 acres), Apache Kid Wilderness Expansion 2 (5,497 acres), Apache Kid Wilderness Expansion 3 (2,595 acres), and Apache Kid Wilderness Expansion 5 (3,525 acres).

Alternative D: The Cibola is recommending approximately 114 percent or 82,189 acres of the total CCP proposed acreage in alternative D within the following areas: Apache Kid Wilderness Expansion 1 (32,819 acres), Apache Kid Wilderness Expansion 2 (22,244 acres), Apache Kid Wilderness Expansion 3 (4,214 acres), Apache Kid Wilderness Expansion 4 (3,654 acres), Apache Kid Wilderness Expansion 5 (12,878 acres), and Apache Kid Wilderness Expansion 6 (181 acres).

Withington Expansion: total CCP proposed acreage 9,925 acres

Alternative B: The Cibola is recommending approximately 35 percent or 3,567 acres of the total CCP proposed acreage in alternative B within the Withington Wilderness Expansion 6 area.

Alternative D: The Cibola is recommending approximately 101 percent or 10,052 acres of the total CCP proposed acreage in alternative D within the following areas: Withington Wilderness Expansion 1 (20 acres), Withington Wilderness Expansion 2 (5 acres), Withington Wilderness Expansion 3 (55 acres), Withington Wilderness Expansion 5 (48 acres), Withington Wilderness Expansion 5 (48 acres), Withington Wilderness Expansion 7 (81 acres).

Panther Canyon: total CCP proposed acreage 9,925 acres

Alternative B: The Cibola is recommending approximately 38 percent or 11,164 acres of the total CCP proposed acreage in alternative B within the Panther Canyon Recommended Wilderness area.

Alternative C: Whereas the Cibola is not proposing this area as recommended wilderness, it is proposing approximately 38 percent or 11,164 acres of the total CCP proposed acreage in alternative C as a conservation management area.

Alternative D: The Cibola is recommending approximately 95 percent or 27,598 acres of the total CCP proposed acreage in alternative D within the Panther Canyon Recommended Wilderness area.

Magdalena Mountains: total proposed CCP acreage 49,175 acres

Alternative B: The Cibola is recommending approximately 6 percent or 3,057 acres of the total CCP proposed acreage in alternative B within the Magdalena Mountains 1 Recommended Wilderness Area.

Alternative D: The Cibola is recommending approximately 13 percent or 6,394 acres of the total CCP proposed acreage in alternative D within the following areas: Magdalena Mountains 1 Recommended Wilderness Area (4,742) and the Magdalena Mountains 2 Recommended Wilderness Area (1,652).

The total acreage evaluated from Phase 3 Inventory for D3_5K2 (Magdalena Mountains 1) was 4,742 acres. The existing uses found incompatible with managing the area as recommended wilderness included a concentration and evidence of human activity such as above-ground pipeline and developed wells requiring motorized maintenance, and mechanized mountain biking occurring on system trails (Mesa

Trail, Six Mile, South Canyon, Hope Canyon 25/25A, and North Baldy trail). Due to the presence and extent of incompatible uses occurring within scattered areas of D3_5K2, the interior portion of the area was found to contain the highest wilderness characteristics, void of constructed features and system trails.

The total acreage evaluated from Phase 3 Inventory for D3_5K3 (Magdalena Mountains 2) was 7,315 acres. The existing uses found incompatible with managing the area as recommended wilderness included mechanized and motorized maintenance for active mining claims in the northern and central portions of the area, and motorized and mechanized uses for established mineral prospecting along the western edge. Other uses identified included mechanized and prescribed burn restoration treatments, abandoned mine structures from six closed mining claims (northern and southern portions), and mechanized range maintenance. Due to the presence and extent of incompatible uses occurring within the majority of D3_5K3, the southwestern portion of the area was found to contain the highest wilderness characteristics.

The total acreage evaluated from Phase 3 Inventory for D3_LANG (Langmuir Research Site) was 33,483 acres. The primary existing uses found incompatible with managing the area as recommended wilderness is due to the congressional designation of the Langmuir Research Site as outlined in Public Law 96-550 Title 2 and Public Law 96-209. The Public Law 96-550 passed by Congress on December 19, 1980 authorizes activities incompatible with managing the area as recommended wilderness such as permitting scientific research equipment and structures, rocket landings, and motorized uses for scientific activities. Due to the presence and extent of these congressionally designated uses occurring within the congressional boundary of the Langmuir Research Site, the entirety of the inventoried area was found to be incompatible with managing as recommended wilderness.

Datil Mountains: total proposed CCP acreage 61,123 acres

Alternative B: The Cibola is recommending approximately 16 percent or 10,179 acres of the total CCP proposed acreage in alternative B within the Datil Mountains Recommended Wilderness Area.

Alternative C: Whereas the Cibola is not proposing this area as recommended wilderness, it is proposing approximately 16 percent or 10,179 acres of the total CCP proposed acreage in alternative C as a conservation management area.

Alternative D: The Cibola is recommending approximately 53 percent or 32,402 acres of the total CCP proposed acreage in alternative D within the Datil Mountains Recommended Wilderness Area (14,052 acres) and the Datil Mountains 1 Recommended Wilderness Area (18,350 acres).

The total acreage evaluated from Phase 3 Inventory for D3_5K10 (Datil Mountains Wilderness) was 14,052 acres. The existing uses found incompatible with managing the area as recommended wilderness included the presence of decommissioned and unauthorized routes along the margins that detract from apparent naturalness in those areas. Adjacent land ownership was also considered in evaluating manageability of this area as it borders private land on the southeastern, eastern, and northeastern portions. Due to many of the current uses in D3_5K10 being compatible with managing the area as recommended wilderness, the entirety of the inventoried area is recommended in alternative D.

The total acreage evaluated from Phase 3 Inventory for D3_5K11 (Datil Mountains Wilderness 1) was 36,541 acres. The existing uses found incompatible with managing the area as recommended wilderness included a concentration and evidence of human activity such as 49 decommissioned routes in the southern and central portions, mechanized and motorized range maintenance for above-ground pipeline, tanks, and fences. Other incompatible uses included a restricted military zone located in the central portion for a booster rocket launch from Fort Wingate to White Sands. Manageability evaluation considered access to multiple private lands on the northeastern, western, and southeastern borders. The extent and potential of uranium mineral resources that occur in the area would be in direct conflict in

managing for wilderness characteristics. Due to the presence and extent of incompatible uses occurring within scattered areas of D3_5K11, the central portion of the area was found to contain the highest wilderness characteristics where terrain is more mountainous than the flat and open terrain without any screening in the northern and southern sections.

Scott Mesa: total proposed CCP acreage 48,296 acres

Alternative B: The Cibola is recommending approximately 4 percent or 2,323 acres of the total CCP proposed acreage in alternative B within the Bear Mountains 3 Recommended Wilderness Area.

Alternative D: The Cibola is recommending approximately 6 percent or 3,154 acres of the total CCP proposed acreage in alternative D within the Bear Mountains 3 Recommended Wilderness Area. The Cibola is also recommending the Bear Mountains 1 Recommended Wilderness Area (1,713 acres) and the Bear Mountains 2 Recommended Wilderness Area (2,307 acres) in alternative D.

Guadalupe: total proposed CCP acreage 19,305 acres

Alternative B: Whereas the Cibola is not proposing this area as recommended wilderness, it is proposing approximately 77 percent or 14,988 acres of the total CCP proposed acreage in alternative B as a site-specific management area.

Alternative C: Whereas the Cibola is not proposing this area as recommended wilderness, it is proposing approximately 77 percent or 14,988 acres of the total CCP proposed acreage in alternative C as a conservation management area.

Alternative D: The Cibola is recommending approximately 77 percent or 14,988 acres of the total CCP proposed acreage in alternative D within the Guadalupe Recommended Wilderness Area.

The total acreage evaluated from Phase 3 Inventory for D2_ADJ3 (Guadalupe) was 19,496 acres. The existing uses found incompatible with managing the area as recommended wilderness included on the western edge an analysis currently underway for habitat restoration (Black Mesa project) which will be mostly hand thinning and broadcast burns. Approximately 15,000 acres are under study for a combination of mechanical thinning and burning within the area west of the canyon rim.

Sandia Mountains Outdoor Education and Natural Area (see response to concern statement 6).

In response to providing concrete examples showing how the proposed CCP areas "does not fit the criteria outlined in the analysis process," please refer to the "Analysis Criteria" section within the final EIS, volume 2, appendix C. The Cibola developed analysis criteria to use in analyzing whether or not to include an area as recommended wilderness in one or more proposed alternatives. The distinction for areas recommended in alternative C is that they must be contiguous to an existing designated wilderness area and have no conflict with restoration or conservation management areas. The criteria used for potential recommended wilderness areas in alternatives B and C includes the following:

- High wilderness characteristics were identified across all evaluation criteria: high degree of apparent naturalness, high primitive recreation opportunities or ample opportunities for solitude, and a lack of developments such as roads, buildings, and other facilities.
- High manageability as recommended wilderness, including ease of boundary management, lack of
 private land inholdings, lack of current activities or issues that would make managing the area as
 recommended wilderness difficult, or a combination of these things.
- Nonconforming uses are removed from the area.

Given the aforementioned edits and updates within the range of alternatives analyzed in the EIS, the Cibola does not consider it necessary to publish a supplemental draft EIS.

Concern Statement 6:

Assertion that the Cibola did not consider the Citizens Conservation Proposal for the Sandia Outdoor Education and Natural Area and did not provide adequate rationale why the management area was removed from the preferred alternative as it was previously included in the preliminary draft plan published in 2016. Comments state establishment of a management area could help the Forest Service leverage resources to address management needs within the Ranger District, strengthen community connections, and enhance opportunities for youth and underserved populations to learn about and access the forest. The draft EISs explanation as to why this area was not included in any of the alternatives because "the intent and purpose behind this type of area is already addressed in forestwide plan components" is inadequate, disappointing, and lacks justification. The Cibola should specifically identify which plan components achieve the intent and purpose of the area. (443-19, 21, 223, 224, 226; 457-4; 965-9, 10, 11)

Response

The plan components that achieve the intent and purpose of the proposed Sandia Outdoor Education and Natural Area are as follows within the Recreation, Traditional Communities and Uses, Sustainable Forestry and Forest Products sections of the land management plan. The general, developed, and dispersed recreation sections all include references to plan direction that provides for opportunities for the local community to learn about and access the forest in addition to building partnerships in shared stewardship (FW-DC-GREC-4, FW-DC-GREC-5, FW-MGAP-GREC-1, FW-MGAP-GREC-2, FW-MGAP-DREC-7, FW-MGAP-DISP-1, and FW-MGAP-DISP-5). The Federally recognized tribes and rural historic communities sections of the plan both include provisions for coordinating with tribal and rural historic communities to educate tribal and traditional youth in culture, history, land stewardship, and outdoor activities (FW-DC-FRT-7, FW-MGAP-FRT-4, FW-DC-RHC-6, and FW-MGAP-RHC-2). Within the forestry and forest products section of the land management plan, the management strategy over the life of the plan is to promote integrated ecological and social-economic goals of harvesting forest products using mechanisms such as collaborative forest restoration projects, Tribal Forest Protection Act, youth programs, and stewardship contracting authorities to support a sustainable and appropriately scaled forest products industry (FW-MGAP-FP-1). Further, one of the management approaches for the proposed Restoration Management Areas in alternative C considers the collaboration with organizations to promote training and education of youth in natural resource management (MA-MGAP-REST-3). Due to this plan direction, the Cibola considers the need for a Sandia Outdoor Education and Natural Area to be duplicate of the forestwide management direction that addresses the purpose and intent of such an area.

Concern Statement 8:

Some commenters opposed all or some of the recommended wilderness areas included in alternative C. Some commenters suggested that additional recommended wilderness areas not be included in alternative C be considered. (77-1; 86-7, 8, 9; 350-1; 388-1; 410-1; 427-9; 433-4; 456-7; 466-98, 99, 100; 978-6)

Response

The Cibola carefully considered existing uses and excluded areas with conflict that included any uses incompatible for managing that area as recommended wilderness (final EIS, appendix C, "Analysis Criteria" section). The Cibola has also responded to further input received on the draft environmental impact statement to ensure recommended wilderness would not conflict with current economic uses (see

response to concern statement 163). In order to further inform the Cibola's recommended wilderness in the preferred alternative, the interdisciplinary team invites commenters to specifically identify any site-specific conflicts with managing the recommended wilderness area in alternative C.

Concern Statement 21:

Comment suggesting wilderness expansion for Pecos and Cruces Basin Wilderness Areas. (530-1; 705-2)

Response

Out of scope. These areas are located within the jurisdiction of the Santa Fe National Forest.

Concern Statement 26:

The proposed recommended wilderness will limit or eliminate mineral exploration in areas with unknown mineralization. (434-1, 2, 4, 5)

Response

Development of mining claims (hard rock mining) within a recommended wilderness area are still subject to valid existing rights. Proposing recommended wilderness does not withdraw an area from entry and location under the mining laws.

Concern Statement 27:

Comments reflect general support for expanding wilderness. Some comments cite specific areas for addition/expansion. (370-1; 173-1; 426-30, 29, 44; 443-36; 426-43; 447-9; 448-2; 449-1, 3; 460-1; 700-2; 808-1; 810-1; 837-1; 857-1, 2; 918-1; 961-8, 10, 16, 17, 18, 23, 24, 26, 31, 32; 985-1, 5, 7; 991-4; 992-1, 3, 5, 7)

Response

As part of revising the Cibola land management plan, we identified and evaluated lands that may be suitable for inclusion in the National Wilderness Preservation System. This is a requirement of the 2012 Planning Rule (36 CFR 219.7(c)(2)(v)). Alternative C, the preferred alternative, does include some of these areas from the commenters for wilderness recommendation. The final plan recommends areas; however, only Congress has the authority to designate wilderness.

An analysis of the effects of recommended wilderness, including trade-offs of uses and activities, can be found in final environmental impact statement, chapter 3, Designated Areas.

See also the response to concern statement 5 for a summary of areas proposed by alternative within the Mount Taylor, Magdalena, and Mountainair districts that includes commenter requests for the Withington expansion areas, the Datil Mountains, Scott Mesa, Panther Canyon, the Hogback and the Gallinas.

Concern Statement 37:

Comment indicates that, because of topography, wilderness boundary signage is not necessary. (991-3)

Response

The commenter presents relevant information about the proposed areas in the San Mateo Mountains in terms of steep and rough terrain. Without more site-specific information as to which recommended wilderness area this comment pertains to within the Withington Wilderness Expansions, Panther Canyon,

or the Apache Kid Wilderness Expansions, it is difficult to ascertain whether there would be a high or low likelihood of new roads being built in an area. Signage is part of boundary management for designated wilderness but is not identified within the plan as crucial for protection of wilderness values. Rather, the desired conditions, standards, guidelines, and management approaches as discussed within the Designated Wilderness and Recommended Wilderness sections of the final plan (Chapter 3. Management Areas and Designated Areas) are crucial to the protection of wilderness characteristics and values.

Concern Statement 47:

Comment regarding a Mount Taylor polygon that is not roadless has been wrongly considered to be roadless and is incompatible with recommended wilderness management. (1005-3)

Response

See response to concern statement 186, in the "Inventoried Roadless Areas" section above.

Concern Statement 55:

The land management plan should protect large blocks of intact and undeveloped land without recommending it for wilderness designation. Increasing wilderness acres as proposed in alternative C could have a significant adverse impact on those who enjoy motorized recreation, bicycling, hunting, geo-caching and other legal responsible uses. (37-1; 350-2; 437-30; 914-1; 915-2; 978-2, 4; 1001-1)

Response

Areas that will be managed as recommended wilderness are not designated except by an act of Congress. None of the areas chosen to be managed for recommended wilderness will change public access or recreation in those areas, as these uses were considered during the recommended wilderness process.

Recommended wilderness will not negatively impact public access because areas with publicly accessible roads were eliminated from consideration as recommended wilderness during the first inventory step of the recommended wilderness process. During the analysis step, recommended areas in the selected alternative had no untenable tradeoffs identified (for example, major non-conforming uses, high need for restoration treatments). Non-conforming uses would include existing uses such as popular areas for mountain biking, motorized access for range management or traditional and cultural practices, motorized trails, roads regularly used for administrative needs, recurring competitive events or lands special use permits that would require construction or mechanized transport/motorized equipment to maintain. Restoration treatments would require motorized equipment to rehabilitate the affected area to desired conditions for vegetation.

Concern Statement 56:

Comments from Socorro County Board of County Commissioners, Resolution No. 2019-56 – Supporting Cibola Forest Plan Alternative C, Opposing the Designation of Additional Wilderness within Socorro County and Opposing the Designation of Wild And Scenic Rivers (58-1, 2, 3, 4, 9, 10)

Response

See response to concern statement 3 in regard to the commenter's opposition to the recommended wilderness areas within Socorro County as represented in the range of alternatives.

Eligible wild and scenic rivers must be protected sufficiently to maintain the free flow and outstandingly remarkable values unless a determination of ineligibility or nonsuitability is made. A river determined through a suitability study to be not suitable shall no longer be considered eligible and interim protection measures will no longer apply. If an eligible river is determined to be suitable and is designated as a wild and scenic river, the designation would not affect existing water rights, or the existing jurisdiction of states and the Federal Government as determined by established laws. There are no designated wild, scenic, or recreational rivers on the Cibola. There are seven eligible wild and scenic river reaches identified in the final plan and final EIS.

The plan direction for management of eligible wild and scenic rivers follows interim management direction found in Forest Service Handbook 1909.12 chapter 80, section 84 which outlines management direction by classification for different resources including transportation system, recreational developments, and motorized travel. Classification takes into account existing motorized uses. Specifically, it states that for rivers classified as "wild," motorized travel on land or water may be permitted but is generally not compatible with this classification. Where motorized travel options are deemed to be necessary, such uses should be carefully defined and impacts mitigated. For rivers that are classified as "scenic" and "recreational," motorized travel on land or water may be permitted, prohibited, or restricted to protect the river values (final EIS, volume 2, appendix D). At the site scale, if an existing motorized use is not affecting the identified river values, it is not likely that use would be restricted due to the presence of an eligible wild and scenic river. If, at the site-scale, a use is determined to be affecting wild and scenic river values, then a decision will be made on how to resolve the issue on a case-by-case basis.

Concern Statement 75:

Community worried that the designation of Las Huertas as a Recreation River will lead to vandalism and designation of wilderness. Previous submission requested protection of Las Huertas community ditch and the watershed. (422-1, 2, 3; 429-6)

Response

The Cibola National Forest previously determined Las Huertas Creek to be eligible for designation as a wild and scenic river in 2002 under the same classification category (recreational). In the past 18 years since the eligibility determination, the acequia within the area determined eligible has not been subject to vandalism by persons seeking to release water into the dry creek bed. The current eligibility determination does not significantly alter the terms of the 2002 determination. Law enforcement of site-specific unauthorized activities is outside of the programmatic nature of the land management plan.

The evaluation of watercourses as eligible for designation as wild and scenic rivers and the evaluation of areas as suitable for wilderness are separate processes and eligibility for the former does not confer eligibility for the latter. In the case of the Las Huertas Creek, the presence of features that limit its classification category to recreational (including roads and the acequia) preclude the area from being suitable for wilderness designation. For this reason, the Las Huertas Creek area eligible for wild and scenic river designation was not evaluated as potential wilderness at any stage of current plan development.

Concern Statement 103:

Comments specific to Sandia Ranger District supporting wilderness expansion of this area and rationale. Comments state potential bike trails locations and suggestions to avoid user conflicts. (426-51; 874-2; 961-3, 4; 987-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

Response

Project-level NEPA would determine expansion of recreation opportunities at the user group level such as the commenter's proposed Perimeter Trail. Site-specific projects are the appropriate scale for analyzing new recreation opportunities. Desired conditions within the general recreation section of the revised plan address provision of a variety of recreation opportunities and uses such as FW-DC-GREC-2: A variety of developed and dispersed recreation and tourism opportunities (for example, camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, and motorized recreation) are available for a diverse group of users. Recreation opportunities are commensurate with recreation settings and other resource values. FW-DC-DISP-3. The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources. FW-DC-DISP-4. The trail system accommodates sustainable use levels and public interests within the capacities of other resource values. 5. Trails vary in length and challenge and provide linkages to local neighborhoods, communities, and other public lands. Project-level NEPA would determine site-specific trail issues and recreation opportunities at the user group level. Site-specific projects are the appropriate scale for analyzing recreation opportunities and addressing any user conflicts or resource concerns. Plan components provide for of a variety of recreation opportunities and uses, as summarized below.

FW-DC-GREC-1 states, "A variety of developed and dispersed recreation and tourism opportunities (such as camping, picnicking, hiking, mountain biking, hunting, fishing, wildlife viewing, equestrian use, driving for pleasure, climbing, and motorized recreation) are available for a diverse group of users commensurate with mapped desired recreation opportunity spectrum classes."

FW-DC-GREC-2 states, "Sustainable recreation opportunities are available commensurate with public interest, recreation resource capacity, and other natural and cultural resources."

FW-DC-GREC-3 states, "Conflicts among various recreation uses and other forest uses (such as grazing) are rare. There is minimal vandalism, theft, illegal activity, or resource damage on the national forest from recreation activities."

FW-DC-DISP-3 states, "The systems of motorized and nonmotorized trails provide a variety of opportunities and settings for visitors to explore the national forest. The trail system is sustainable and enhances the recreation opportunity, while minimizing user conflict and damage to the Cibola's natural and cultural resources."

FW-DC-DISP-4 states, "The trail system accommodates sustainable use levels and public interests within the capacities of other resource values."

FW-DC-DISP-5 states, "Trails vary in length and challenge and provide linkages to local neighborhoods, communities, and other public lands."

FW-GDL-DISP-1 states, "Trails should be designed, constructed, rerouted, decommissioned, or maintained using current best practices to promote sustainable design while providing desired recreation opportunities and protecting the values of other resources."

FW-MGAP-DISP-8 states, "Coordinate and communicate with local agencies and community organizations in planning trail system extensions, additions, or modifications."

Concern Statement 106:

Comments indicate recommended wilderness process failure. (443-20, 31, 38, 39; 965-19, 20; 978-38, 39, 40, 41, 42, 44)

Response

The Cibola National Forest manages four designated wilderness areas totaling 9 percent of the forest acreage (138,378 acres) and 13 inventoried roadless areas totaling 15 percent of the forest acreage (239,143 acres). During wilderness evaluation, the Cibola interdisciplinary planning team evaluated 26.6 percent of the forest acreage (430,269 acres). Under the preferred alternative C, the total proposed recommended wilderness acreage is 14,900 acres which would be a 10.76 percent increase over existing designated wilderness. Under the maximum recommended wilderness alternative D, the total proposed acreage is 203,117 acres which would be a 146 percent increase over existing designated wilderness. After considering the analysis in alternatives A through D, and the alternatives considered but eliminated from detailed study, the deciding official believes a reasonable range of alternatives was carefully evaluated in compliance with NEPA. NEPA regulations at 36 CFR 220.5(e) state that "no specific number of alternatives is required or prescribed." Beyond this, all alternatives were developed to address:

- the purpose and need, as described in chapter 1, which includes the need for change,
- changes in socioeconomic or environmental conditions since the 1985 plan, and
- issues identified from comments received during public scoping of the revision effort and from comments received on initial plan components, alternative themes, and management areas.

In terms of recommended wilderness, there is no requirement for all lands included in the recommended wilderness inventory and subsequent evaluation to be carried forward in an alternative (FSH 1909.12, Ch 70, section 72). Wilderness acreage greater than that described in alternative D was determined to not meet the purpose and need of the plan, and thus these alternatives, while considered, were not analyzed in detail (see final EIS, volume 1, chapter 2, "Alternatives Considered but not Analyzed in Detail" section). Although there is a large difference between the recommended wilderness acreages of alternative C and alternative D, the alternatives were developed to cover a full spectrum of management intensity based on the themes of each alternative. These themes ranged from a natural processes emphasis in alternative D which included 32 proposed recommended wilderness areas, to a human uses emphasis in alternative C which recommended less acreage than alternatives B and D. All of these alternatives are consistent with the purpose and need, laws and regulations, and are responsive to the revision topics.

Concern Statement 113:

Comments supportive of all wilderness recommendations and expansions in alternative D included in final plan. (87-3; 426-19, 20, 21, 41; 443-8, 9, 10, 49; 981-1, 989-1, 992-4; 1007-1)

Response

Thank you for your comments. See response to concern statement 106.

Concern Statement 119:

Comments from the New Mexico Off Highway Vehicle Alliance that allege the 2012 Planning Rule violate the Wilderness Act. The organization also alleges that the Wilderness Inventory violates Public Law 96-550. Request is reissuance of documents. (978-14, 15, 16, 17, 18, 19, 20, 21)

Response

The New Mexico Wilderness Act of 1980 (Public Law 96-550) at Section 104 was developed in context of the on-going events related to the Roadless Area Review and Evaluation of 1979 (RARE II). This was a nationwide effort that made recommendations by States, for potential wilderness recommendations. The RARE II process was the subject of judicial reviews that eventually led to the overturning of the environmental impact statement for RARE II in 1980. This was followed by over 30 state-by-state Forest Service wilderness statues between 1980-1990 that provided release language for RARE II areas (See Congressional Research Service, R41610, April 17, 2014). Section 104(c) is specifically related to the release of this type of "roadless" area from pending judicial requirements for re-evaluation. Although these 'released' areas were released for purposes of multiple use, this release does not prevent re-evaluation of these areas at a later date as indicated in other sections of the law.

The New Mexico Wilderness Act of 1980 (Public Law 96-550) at Section 104(b)(2) specifically states, "...the Department of Agriculture shall not be required to review the wilderness option prior to revision on the initial plans, and in no case prior to the date established by law for completion of the initial planning cycle. This was explained during the introduction of the New Mexico Wilderness Act. See 96 Cong. Rec. pp. 30566 to 30568 and 31135 to 31138. This Congressional Record explains the language of the P.L. 96-550 Section 104(b)(2) and the expectation for re-evaluation in the next generation of forest planning.

Federal law requires the Forest Service to continue to periodically revise land management plans and in doing so to re-evaluate wilderness resources during plan revision efforts. See 16 U.S.C. 1604(d)(2) and f(5); 36 CFR 219. The land management plans in New Mexico are well over the 10 to15 year revision cycle described in the National Forest Management Act and any wilderness evaluation would be covered by the requirements for plan revisions. USDA's regulations and directives implementing the National Forest Management Act requires wilderness evaluation in plan adoption and revision. These regulations are described in the 2012 National Forest System Land Management Planning Rule and the manual and handbook issued in 2014. In the planning rule, Section 219,7 (c)(v) states that revisions shall "Identify and evaluate lands that may be suitable for inclusion the National Wilderness Preservation System and determine whether to recommend any such lands for wilderness designation." Forest Service Manual 1923 and Forest Service Handbook 1909.12 chapter 70 provide the direction for how this inventory and evaluation should be accomplished.

Based on the New Mexico Wilderness Act of 1980 (Public Law 96-550), Section 104(b) (2), Federal law requirements that wilderness be reviewed during land management plan revisions and the published requirements in U.S. Forest Service rule, manual, and handbook for how wilderness evaluation is to be accomplished, the on-going revision efforts and evaluation of wilderness potential are in full compliance with applicable law and policy.

Concern Statement 163:

Ramifications of wilderness recommendations would impact permittees on the Magdalena Ranger District by restricting active management of the Cibola National Forest and impacting local economic contributions. (910-1; 913-1; 916-1; 924-1; 925-1; 928-2; 930-1; 931-1; 1010-1; 969-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)

Response

The forest planning process can only recommend lands be designated as wilderness and only Congress can designate wilderness. The responsible official has identified alternative C modified as the preferred alternative, and it recommends 14,900 acres of recommended wilderness including four areas totaling

14,536 acres within the Magdalena district. All of these recommended wilderness areas have wilderness characteristics as described in appendix C of this EIS. The Cibola's wilderness evaluation and analysis process is consistent with the 2012 Planning Rule, chapter 70 of the planning directives, and regional guidance as the environmental impact statement considered a reasonable range of alternatives. The wilderness evaluation process as outlined in chapter 70 of the 2012 Planning Rule, tiers from wilderness characteristics as defined within the Wilderness Act.

The responsible official carefully considered a range of recommended wilderness areas, as well as other management allocations, to determine the mix of land and resource uses that would best meet public needs and provide for active management. Economic contributions from grazing are still available given the modified boundaries of the recommended wilderness areas. Boundaries for areas proposed in the San Mateo Mountains in the Magdalena District have been adjusted to remove conflicting uses such as motorized and mechanized range activities and improvements (see final EIS, appendix C, "Analysis Criteria" section). The modified boundaries follow practical on-the-ground topographical features to maximize manageability.

In 1980, the Congressional Grazing Guidelines clarified, "the general rule of thumb on grazing management in wilderness should be that activities or facilities established prior to the date of an area's designation as wilderness should be allowed to remain in place and may be replaced when necessary for the permittee to properly administer the grazing program." (H.R. 101-405 appendix A). Potential wilderness designation by Congress of those areas recommended under the final revised plan would therefore not be expected to restrict current permitted grazing levels differently than under the current land management plan. Allotment grazing levels and the commitment of forage resources to grazing would continue to be assessed and determined at the project (allotment) level during site-specific National Environmental Policy Act analysis. Wilderness designation could prohibit access by motorized vehicle and use of mechanized equipment for maintenance of stock water developments, salt placement and potentially restrict installation of new range improvements (for instance water troughs) unless approved following a minimum requirements decision.

In response to site-specific comments received on the recommended wilderness area within the San Mateo Mountains in the Magdalena District, Apache Kid Wilderness Expansion 3 (D3 ADJ8e), the Cibola interdisciplinary planning team reviewed the comments and Phase 2 evaluation findings for this area and modified the boundaries to exclude nonconforming uses and to follow natural features where feasible. Manageability of boundary adjustments were considered in order to follow natural terrain such as high points, ridgelines, and canyons. The northern boundary was adjusted south of the road in Springtime Canyon, in order to provide access to private property and to stay south of private inholdings. The eastern boundary was adjusted west of Indian Creek Trail 48 due to public comments received about a national endurance ride and equestrian race competition that follows this trail with approximately over 70 equestrian users at one time. The southern boundary was moved north of a deep arroyo running east and west in Section 33 in order to provide a more manageable boundary. The southern boundary follows steeper slopes of the ridgeline to provide a manageable boundary from drainages that can be accessed by National Forest System Road 225, taking in Indian Peak in section 32 and tying into the existing wilderness prior to a drainage in section 31 to allow for manageability. Cowboy Camp was excluded due to public comments received about man-made structures in the area including frequent motorized maintenance required for the above ground pipeline that follows a two-track road. In response to public comment requests to remove this area from consideration for wilderness recommendation, the Cibola interdisciplinary planning team believes the modified boundaries as suggested have removed significantly noticeable improvements and addresses potential manageability concerns. The modifications have resulted in a decrease of 1,119 acres for Apache Kid Wilderness Expansion 3 with a total adjusted recommended acreage of 1,476 acres.

In response to site-specific comments received on the recommended wilderness area within the San Mateo Mountains in the Magdalena District, Apache Kid Wilderness Expansion 2 (D3_ADJ8b), the Cibola interdisciplinary team reviewed the comments and Phase 2 evaluation findings for this area and modified the boundaries to exclude nonconforming uses and to follow natural features where feasible. Manageability of boundary adjustments were considered in order to follow natural terrain such as high points, ridgelines, and canyons. The western boundary remains as existing wilderness.

For the northeastern boundary, Forest Service Trail 28 was followed into section 5 and then followed the drainage north. The gap fences from Black Mountain to the wilderness boundary would likely be maintained on horseback since the area is so rugged and difficult to access via motorized routes. Including these updates for the northern area the addition is approximately 900 acres.

For the southern boundary there are air-dropped improvements that were originally flown in which would have no existing or future conflict with maintenance because of lack of access. Did not include the Panther Mountain trick tank due to comments about frequent motorized access to the tank and pipeline. Followed the natural ridge down into Cold Springs Canyon. The Cibola interdisciplinary team considered the private parcel located to the northeast less than a mile from the proposed boundary. Including these updates for the southern area, the addition is approximately 625 acres.

Total with these updates for Apache Kid Wilderness Expansion 2 (D3_ADJ8.b) is 4,711 acres.

In response to the site-specific comments received on the Apache Kid Wilderness Expansion 5 area (D3_ADJ8c), the Cibola interdisciplinary team reviewed the comments and Phase 2 evaluation findings for this area and modified the boundaries to exclude nonconforming uses and to follow natural features where feasible. Manageability of boundary adjustments were considered in order to follow natural terrain such as high points, ridgelines, and canyons. The eastern boundary remains as existing wilderness. The Cibola interdisciplinary planning team agreed with commenters that the southern boundary should be modified further north to follow the contour of Mayerick Canyon to Kelly Canyon. The suggested southern boundary creates a defensible boundary to prevent intrusion as the previous boundary as drawn in fall 2019 poses manageability issues from off-road use on National Forest System Road 140 within flat terrain and in canyon bottoms. The northern boundary was modified to exclude the large pit tank commenters identified in that area. Sediment needs to be cleaned out from this pit tank with motorized equipment (such as a dozer) depending on the amount of sedimentation that occurs. The western boundary was modified to follow Kelly Canyon up the finger of the slope in Section 1 going through a saddle in the northern portion of Section 1. Fence line in section 1 and 12 will be a boundary. This western boundary stays on the ridgeline in Section 36 and 31 and ties back into Sal peak in Section 31 and with existing wilderness. Total reduction with these updates for the Apache Kid Wilderness Expansion 5 area (D3 ADJ8c) is a total of 1,553 acres.

In response to the site-specific comments received on the Apache Kid Wilderness Expansion 1 area (D3_ADJ8), the Cibola interdisciplinary team reviewed the comments and Phase 2 evaluation findings for this area and modified the boundaries to exclude nonconforming uses and to follow natural features where feasible. Manageability of boundary adjustments were considered in order to follow natural terrain such as high points, ridgelines, and canyons. The northern boundary was adjusted south of West Red and East Red Canyon. South of National Forest System Road 476 where it ends at Toolbox Spring, north of Allen Spring and East Red Canyon, was removed due to mechanized and motorized range improvement maintenance at Allen Spring, Bear Spring, Toolbox Spring, and Narrow Spring. For the western boundary it was adjusted to follow the elevation mark to prevent potential intrusion into the area. The southern boundary follows a ridgeline to remove a pit tank requiring mechanized and motorized maintenance (occasional dozer use and motorized access route for routine checks). The eastern boundary was adjusted

to follow the drainage in Section 36 just east of Hidden Spring Canyon tying into existing wilderness. The southwestern border in Section 19 stays just above the tributary fingers of Sim Yaten Canyon for manageability tying back into existing wilderness. Total reduction with these updates for the Apache Kid Wilderness Expansion 1 area (D3 ADJ8) is a total of 6,796 acres.

After considering the analysis in alternatives A through D, and the alternatives considered but eliminated from detailed study, the deciding official believes a reasonable range of alternatives was carefully evaluated in compliance with NEPA. NEPA regulations at 36 CFR 220.5(e) state that "no specific number of alternatives is required or prescribed." Beyond this, all alternatives were developed to address:

- the purpose and need, as described in chapter 1, which includes the need for change,
- changes in socioeconomic or environmental conditions since the 1985 plan, and
- issues identified from comments received during public scoping of the revision effort and from comments received on initial plan components, alternative themes, and management areas.

The alternatives were developed to cover a full spectrum of management intensity based on the themes of each alternative. These themes ranged from a natural processes emphasis in alternative D which included 32 proposed recommended wilderness areas, to a human uses emphasis in alternative C which recommended less acreage than alternatives B and D, and no recommended wilderness areas in alternative A. All of these alternatives are consistent with the purpose and need, laws and regulations, and are responsive to the revision topics.

Concern Statement 164:

Author submits comments regarding recommended wilderness process failure to consider Bear Mountain as a recommended wilderness. Author states previous comment submissions were not considered. Author states personal field work contradicts Forest Service field work therefore process failure. Please see comment letter for figures, polygons, images, tables and footnotes. (428-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95)

Response

See response to concern statement 5 in terms of areas proposed as recommended wilderness within the Bear Mountains in the commenter's August 2016 submittal that are consistent with the Citizens Conservation Proposal (CCP) for Scott Mesa. The CCP proposed a total acreage of 48,296 acres in the Bear Mountains, referred to as Scott Mesa. The Cibola is recommending approximately 4 percent or 2,323 acres of the total CCP proposed acreage in Alternative B within the Bear Mountains 3 Recommended Wilderness Area. The Cibola is recommending approximately 6 percent or 3,154 acres of the total CCP proposed acreage in Alternative D within the Bear Mountains 3 Recommended Wilderness Area. The Cibola is also recommending the Bear Mountains 1 Recommended Wilderness Area (1,713 acres) and the Bear Mountains 2 Recommended Wilderness Area (2,307 acres) in alternative D.

The Cibola evaluated and considered the commenter's previous comment submissions including the following public comments received:

 November 19, 2014, Comments on Forest Service Bears Inventory Phase 1, Magdalena Ranger District Bear Mountains and Environs (refer to Cibola administrative project record PR#1222)

- September 23, 2015, Comments on Phase 2 of the Cibola National Forest "Potential Wilderness Inventory and Evaluation Process," Bear Mountains, Magdalena Ranger District (refer to Cibola administrative project record PR#1223)
- August 30, 2016, Comments on Phase 3 of the Cibola National Forest "Potential Wilderness Inventory and Evaluation Process," Bear Mountains, Magdalena Ranger District (refer to Cibola administrative project record PR#659 and PR#660)
- November 2, 2019, Comments on August 2019 Cibola National Forest Draft Plan and Draft Environmental Impact Statement, Bear Mountains, Magdalena Ranger District refer to Cibola administrative project record PR#1166)

The 2016 comments on Phase 3 inventory and evaluation (including maps, figures, and photo points) were previously reviewed by the Cibola interdisciplinary planning team in its entirety during Phase 2 of the wilderness evaluation process. Using this field data provided by the commenter, Cibola staff reviewed the proposed findings with Forest Service GIS data during the evaluation processes. The commenter's field data information, along with the information for how an area possesses wilderness character as per chapter 70 of the planning directives, were reviewed for each polygon during Phase 2 evaluation (see Cibola plan revision website or the project record for Phase 2 evaluation matrix forms). This information, along with Ciboa's staff field knowledge of the areas, informed each criterion rating for apparent naturalness, solitude or primitive recreation, and manageability.

This careful evaluation included the commenter's proposal for wilderness designation of an area in the heart of the Bear Mountains. The Phase 2 evaluation interdisciplinary team included district staff who had sufficient knowledge of conditions on the ground including the Magdalena District Ranger, the District Range Management Specialist, the District Deputy Forest Management Officer, and a District fire staff. The commenter's allegation that the Cibola interdisciplinary team made no attempt to evaluate the provided field work or correct basic problems identified in the August 2016 submission is incorrect. The Cibola interdisciplinary team did make the following changes to the Bear Mountain polygons during Phase 3 evaluation based on the commenter's August 2016 information provided:

- Polygon D3_5K5: Criterion 1c, changed rating for apparent naturalness from low to moderate based on review of commenter's information and likelihood that some user-created roads have been washed out and others remain apparent in this area.
- Polygon D3_5K6:
 - Criterion 1a, changed rating for plant and animal composition from low to moderate based on review of commenter's documented presence of nonnative species not being dominant in a majority of the area.
 - Criterion 2a, changed rating for solitude from low to moderate based on review of commenter's information.
- Polygon D3_5K6.b: Criterion 2a, changed rating for solitude from low to moderate based on review of commenter's information.
- Polygon D3_5K7: Criterion 2a, changed rating for solitude from moderate to high based on review of commenter's information.
- Polygon D3_5K7.b:
 - Criterion 2a, changed rating for solitude from moderate to high based on review of commenter's information.

• Criterion 5a, changed rating for management from low to moderate based on review of commenter's information.

Polygon D3_5K7.c:

- Criterion 1c, changed rating for apparent naturalness from low to moderate based on review of commenter's information and that unnoticeable human activity detracts from apparent naturalness in some areas.
- Criterion 2a, changed rating for solitude from low to moderate based on review of commenter's information.

• Polygon D3_5K7.d:

- Criterion 1b, changed rating for extent area appears to reflect ecological conditions normally associated with the area without human intervention from moderate to high based on review of commenter's information.
- Criterion 2a, changed rating for solitude from moderate to high based on review of commenter's information.
- Criterion 5a, changed rating for management from low to moderate based on review of commenter's information and that management to preserve is possible in some areas, not scattered areas.
- Polygon D3_5K7.e: Criterion 2a, changed rating for solitude from low to moderate based on review of commenter's information.

• Polygon D3_5K7.f:

- Criterion 2a, changed rating for solitude from moderate to high based on review of commenter's information.
- Criterion 5a, changed rating for management from low to moderate based on review of commenter's information.

Polygon D3_8:

- Criterion 2a, changed rating for solitude from low to moderate based on review of commenter's information.
- Criterion 5a, changed rating for management from low to moderate based on review of commenter's information.

Polygon D3_ADJ9 and D3_ADJ10:

- Criterion 1b, changed rating for extent area appears to reflect ecological conditions normally
 associated with the area without human intervention from moderate to high based on review of
 commenter's information and that fuelwood cutting occur along road prism.
- Criterion 1c, changed rating for apparent naturalness from moderate to high based on review of commenter's information and that there are no roads and human impacts present.

Due to these aforementioned changes made to wilderness evaluation criteria based on the commenter's August 2016 submission, the Cibola interdisciplinary team moved Bear Mountains D3_5K7.b (Bear Mountains 1), D3_5K7 (Bear Mountains 2), and D3_5K7.d (Bear Mountains 3) forward to analysis within the range of alternatives based on the analysis criteria (see final EIS volume 2, appendix C, "Analysis Criteria" section).

In regard to the commenter's contention that the Cibola chose to evaluate multiple small and illogically shaped polygons, modifications were made based on public comment and some of the areas were added back into the Phase 1 inventory based on commenter's submissions.

The Cibola signed the final Military Training Exercises Environmental Assessment Decision Notice and Finding of No Significant Action on November 12, 2020. This final decision authorizes a new permit renewal to the United States Air Force for continuing military training activities located in the area of the commenter's proposal. These activities include an increase in some training maximum student loads and number of classes per year and the addition of three new Helicopter Landing Zones within the Magdalena Ranger District in the Bear Mountains and north of the town of Magdalena (refer to Cibola administrative project record PR#1226 EA Errata). These military training activities are located within the two polygons D3_5K5 and D3_5K6 that were evaluated during Phase 1 and Phase 2 evaluation. The commenter contends that the Cibola exaggerated military training impacts as a whole in the ability to manage the area as wilderness during Phase 1 and Phase 2 evaluation. The Cibola analyzed the management impacts of military training exercises on wilderness character and the existing inventoried roadless area characteristics in the separate environmental review conducted for the Military Training Exercises Environmental Analysis (EA), and incorporates the final EA findings by reference (see PR#1225 for the May 2020 Military Training Exercises EA, PR#1226 for the EA Errata, and PR#1224 for the Military Training Exercises Decision Notice and Finding of No Significant Action). The Cibola finds that the military training exercises as a whole do have an impact on wilderness characteristics within polygons D3 5K5 and D3 5K6 and due to these impacts, these areas received low overall final findings from Phase 2 evaluation and were not carried forward for further analysis.

The commenter contends that the Cibola failed to provide a range of reasonable alts to maximize wilderness characteristics. Within the Forest Service's National Environmental Policy Act compliance regulation language at 36CFR (220.5(e)), it states "The environmental impact statement shall document the examination of reasonable alternatives to the proposed action. An alternative should meet the purpose and need, and address one or more significant issues related to the proposed action. Since an alternative may be developed to address more than one significant issue, no specific number of alternatives is required or prescribed." Within the Cibola's final environmental impact statement, a no action, and three action alternatives were analyzed in detail as well as additional alternatives were considered but eliminated from detailed study. The proposed action circulated for scoping was adjusted based on public feedback. Further, the National Environmental Policy Act compliance regulations at 36 CFR 220.5(e) state "The responsible official may modify the proposed action and alternative(s) under consideration prior to issuing a draft environmental impact statement. In such cases, the responsible official may consider the incremental changes as alternatives considered. The documentation of these incremental changes to a proposed action or alternatives shall be included or incorporated by reference in accord with 40 CFR 1502.21." As the final environmental impact statement discussed four alternatives that address public input and the issues identified (see final EIS, volume 1, chapter 1, "Issues that Served as the Basis for Alternative Development"), the final environmental impact statement complies with National Environmental Policy Act requirements for a full range of alternatives.

The purpose and need for the revised plan was developed based on the Cibola's 2015 Assessment and resulting purpose and needs for change. Public comment was sought and considered in the development of the final purpose and needs for change resulting in the development of the purpose and need for the final environmental impact statement (see final EIS, volume 1, chapter 1, "Purpose and Needs for Change").

There will not be a supplemental draft EIS that would address the commenter's request to include a proposal for wilderness as the "Heart of the Bears" alternative. Next steps in the Cibola land management plan revision process include the publication of final documents and the initiation of an objection filing period.

Concern Statement 166:

Comments concerned with proposed over flights by military aircraft on the integrity of the San Mateo mountain wild community. Supportive of designating as much wilderness as possible. (991-8)

Response

Out of scope as military aircraft overflights are not addressed by land management plan revision. Aerial overflights, which don't utilize National Forest System Lands, are not authorized by permit from the Forest Service, and may be regulated by other authorities such as the Federal Aviation Administration.

Appendix H: Crosswalk between the 1985 Land Management Plan and the Revised Land Management Plan

Introduction

The purpose of the crosswalk is to demonstrate how some of the direction in the 1985 Cibola National Forest Land Management Plan (1985 plan), as amended, was incorporated into the more strategic direction included in the Cibola National Forest's preferred alternative (alternative C). The following tables are not an exhaustive account of all direction in the 1985 plan. Rather, this appendix focuses on the 1985 plan direction in which partners, stakeholders, and commenters have expressed interest, such as direction for vegetation management and Mexican spotted owl habitat. Prescriptive measures from the 1985 plan are not included in the tables below.

The tables in this appendix follow the plan direction as it appears in the 1985 plan. The tables begin with forestwide management direction and continue through management area direction. The tables address groups of 1985 plan direction by resource or management area.

From left to right, the tables list the page number in the 1985 plan where that direction is located, the full text of the 1985 plan direction, and the related components and management approaches from alternative C within the revised land management plan. Rather than including the full plan component text from the revised land management plan, this appendix uses the short code for related components. Abbreviations are used in each code to identify: (1) if a plan decision applies forestwide (FW) or within a particular management (MA) area; (2) type of plan decision (for instance, a desired condition (DC), objective (OBJ), standard (STD), or guideline (GDL)); (3) the abbreviated applicable resource area (for example, Air, Soil, etc.). The last part of each code is a number. For example, FW-DC-VEG-1, points to forestwide direction (FW) of a desired conditions (DC) in the "Vegetation" section (VEG), and specifically to component number 1 in that section. Another example is the code MA-GDL-REST-1, 2, and 3, which refers to the plan section on "Management Areas" (MA), guidelines (GDL) for restoration (REST), numbers 1, 2 and 3 in that section.

How 1985 Plan Direction was Addressed

The 1985 plan direction has been addressed in a number of ways during this land management plan revision effort. In some cases, the 1985 plan directions were wholly carried over into the revised plan. In many cases, the purpose or focus of the 1985 direction was retained in a variety of other ways in the revised plan. In a few cases, the 1985 plan direction was not carried forward into the revised plan. The following sections describe these various situations in greater detail and explain how the information in the tables will be linked to those situations.

1985 Plan Direction Carried Forward

Direction from the 1985 plan was carried forward into the revised plan in a number of ways. Much of the direction from the 1985 plan is reflected in components (desired conditions, objectives, standards, guideline, suitability determinations) and management approaches of the revised plan. Other direction was not carried forward. Each of these situations is described below.

A great deal of the direction in the 1985 plan has been carried forward into the revised plan. However, there is not always a one-to-one relationship between direction in the 1985 plan and components and management approaches in the revised plan. The revised plan is strategic in nature, so the specific focus or intent of some 1985 plan components did not always fit this strategic approach. Accordingly, many of the prescriptive standards and guidelines in the 1985 plan were reframed as desired conditions or guidelines in the revised plan. For example, a 1985 plan component pertained to the management of rangelands at specific intensity levels and period levels per management area. The revised plan takes a less prescriptive and more strategic approach by requiring the removal, improvement, or reconstruction of at least 15 to 20 improvements annually that are no longer necessary or in poor conditions or to move towards desired conditions (FW-OBJ-GR-1). The crosswalk may point to numerous 1985 plan components. Some of those components may be duplicated over various management areas. Some of those components will apply to the resource addressed by the 1985 plan direction. Other components may address the activity. Actions under the revised plan will need to consider all of this direction and lay out a course that is consistent with all the components. That may result in an action that is exactly, or very similar to, the action that would have been required under the 1985 plan, or something entirely different as long as it is consistent with the revised plan's components.

Some 1985 plan direction has been addressed through the revised plan's suitability determinations for timber production. The revised plan includes timber suitability determinations in chapter 4; they are considered plan decisions. When the context of the 1985 plan implicates a suitability determination for this program, consult chapter 4 (suitability of lands) in the revised plan for information on the suitability determinations. For example, 1985 direction that indicates timber production is closed in a particular management area is not reflected in the revised plan's components for that management area. Instead, that closure is acknowledged in chapter 4, suitability of lands, of the revised plan.

The 1985 plan direction includes references to other sources of information, authorities such as laws, regulations, policies and other decisions and direction that the Cibola is already obligated to follow. The revised plan does not repeat these authorities for several reasons. The forest is already required to follow applicable laws, regulations, policies, or other decisions or direction; referencing these authorities or actions required by these authorities does not change the forest's obligation. However, if these authorities are rescinded or the actions they require are changed in the future, the Cibola would still be required to follow the outdated direction if they are referenced in its plan components. For these reasons, authorities such as laws, regulations, policies and other decisions and direction are not repeated in the revised plan. Instead, these kinds of authorities were brought forward into appendix D (relevant laws, regulations and policy) of the revised plan. The list included in appendix D is not intended to be exclusive; it is simply a helpful list of some of the other documents that provide information useful to management of the Cibola National Forest. Accordingly, some of the authorities mentioned in the 1985 plan may not be listed in appendix D of the revised plan.

1985 Plan Direction Not Carried Forward

As noted above, much of the direction from the 1985 plan has been carried forward into the revised plan or accounted for in another way. However, there were situations where the 1985 plan direction conflicted with the overall approach of the revised plan. These situations involve the 1985 plan direction to undertake site-specific projects or to conduct certain actions within a timeframe which has long since expired. For example, the 1985 plan includes direction to take particular action to build or change certain recreational trails on the forest. These specific decisions were not carried forward into the revised plan. The revised plan does not make any site-specific decisions; those are made at the project level based on site-specific information. Instead, the revised plan provides strategic guidance on what to consider when making a decision about a recreational trail. The forest can still pursue the building or changing the trail mentioned in the 1985 plan, but that decision would be made at the project level based on site-specific information.

The 1985 plan was also management area specific. While the old management areas are addressed in the tables below, please note that where the revised plan components are forestwide, they apply across the Cibola National Forest. These types of direction are not tracked in the tables below.

In numerous situations, the 1985 plan included direction to prepare other plans for the management of resources on the forest. The 1985 plan also includes numerous references to conduct evaluations of certain areas or activities. Since other necessary plans are required by law, regulation, and policy, the revised plan components do not include direction to prepare additional plans for the management of resources. Some of this type of former direction may have been carried forward as management approaches, but most of it is not.

Tables of Crosswalks Between 1985 Plan and Revised Plan

All Management Areas

Range

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
56	Develop and maintain a mechanism for sustained communication with the State, interested groups and affected communities for development and review of implementation schedules.	FW-MGAP-GR-1, FW-MGAP-GR-6
56	Utilization level of available forage production may vary by soil type, season of use, and type of management being applied.	FW-DC-GR-3, FW-MGAP-GR-4

Recreation

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
58	Acceptable variations in recreation opportunity spectrum classifications from the acreages presented in the standards and guidelines for specific management areas are as follows: Primitive: No change Semi-primitive, Nonmotorized: ±15% Semi-primitive, Motorized: ±15%, Roaded Natural: ±15%, Rural: ±15% Where road construction would result in a loss of semi-primitive nonmotorized acreage, action will be taken to close the road and restore its surface at completion of the project when possible.	FW-STD-GREC-1, FW-DC-DISP-3, FW-STD-DISP-1, 2, 3, 4, 5, 6
59	Develop audio visual program(s), brochures, environmental education field investigation, and news articles which address the various recreation problems and their solutions. Forest employees will be available to make presentation to various organizations.	FW-MGAP-GREC-1, 2 FW-MGAP-DISP-4
59	Semi-primitive nonmotorized areas shall be managed for dispersed recreation opportunities.	FW-DC-DISP-3, FW-STD-DISP-1, 2, 3, 4, 5, 6

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
59	Complete Recreation Opportunity Guide for Forest and update every 5 years. Include in Recreation and Opportunity Guides the identification and mapping of Recreation Opportunity Spectrum classification of land in the Cibola Forest.	FW-GDL-GREC-1
59	Review effects of road closures on recreation opportunity spectrum and wilderness opportunity spectrum class acreages every three years and adjust acreages as affected by closures.	FW-STD-GREC-1, FW-STD-DISP-1, 2
60	Roads and trails open to motor vehicle	FW-DC-GREC-2
61	Permit gathering of dead and down firewood for recreation use while camping or picnicking.	MA-MGAP-CONS-3, FW-GDL-PJO-1, FW-DC-TRSP-4
61	Use Forest Service staff and Adopt-A-trail volunteers for trail maintenance.	FW-MGAP-GREC-1
61-3	The Forest will comply with the National Historic Preservation Act (NHPA) and with Executive Order 11593 and will undertake active management which recognizes cultural resources as equal in importance to other multiple uses. Cultural resources will be managed in coordination with the State Historic Preservation Plan (SHPP) and planning activities of the State Archeologist, and in accordance with the negotiated settlement to the Save the Jemez et al. /State of New Mexico vs. Forest Service litigation.	FW-GDL-RD-7

Grazing Management

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
64	Maximum clearcut will be 40 acres.	FW-OBJ-GR-1

Old Growth

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
67-1	Submit burning plans to the State in compliance with air quality regulations. Conduct all burning projects when weather conditions minimize smoke impacts on air quality. Use prescribed fire to support resource management objectives.	FW-DC-AIR-1, FW-STD-FF-2
67-1	Strengthen efforts to reduce the number of man-caused wildfires through news releases, contact with Forest visitors, and contacts with various organizations.	FW-MGAP-FF-1, FW-MGAP-FF-2, FW-MGAP-FF-3, FW-MGAP-FF-7
67-1	Increase public awareness of the need to use fire as a management tool. Accomplish through news releases, brochures, audio visual programs and Forest speaker's bureau.	FW-MGAP-FF-1, FW-MGAP-FF-2, FW-MGAP-FF-3, FW-MGAP-FF-7

Insect and Disease Control

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
67-1	Monitor and report insect and disease conditions on a continuing basis and initiate appropriate control methods in early stages of potential outbreaks when it is determined that allowing the condition to follow its natural course will result in unacceptable resource loss.	FW-DC-ID-1
67-1	When pesticides are used for pest control, project plans will contain appropriate and necessary monitoring procedures and mitigation measures.	FW-DC-ID-1, FW-MGAP-ID-1

Watershed

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
68	Riparian areas should be managed toward meeting the following standards: a. Aquatic Resource: Shade. Maintain or provide shading over perennial and intermittent water surfaces that is at least 80 percent of natural levels. Bank Cover. Maintain or provide natural bank protection to at least 80 percent of natural levels. Give emphasis to the protection of stream bank stability provided by woody plant roots, particularly on outside bends of stream channel meanders. Streambed Sedimentation. Composition of sand, silt, and clays within streambeds should not exceed 20 percent of natural levels.	FW-DC-WRF-1
	 b. Vegetation Resource (where site is capable of supporting woody plants): provide 60 percent of woody plant composition in three or more riparian species or as appropriate for the site. Plant Structure. Maintain or provide at least three age classes of riparian woody plants with at least 10 percent of the woody plant cover in the sprout seedling and sapling stages and 10 percent in the mature and over mature. Crown Cover. Maintain or provide crown cover of both trees and shrubs that is at least 60 percent of natural levels considering unit reaches of about 2 miles in length. Ground Cover. Maintain or provide ground cover and litter as appropriate for site and overstory conditions. Update water uses inventory. Maintain and protect existing water rights and file for additional water rights necessary to provide for all Forest water use needs. Promote the conservation and efficient use of water at all Forest water developments. 	
68-2	Develop a variety of public information tools, such as audio-visual program(s), brochures, environmental education field investigations, etc., which address the importance of protecting watershed conditions.	FW-MGAP-WTR-3, FW-MGAP-WRF-3
68-2	Forest employees will be available to make presentations to various organizations.	FW-MGAP-WTR-3, FW-MGAP-WRF-3

Wildlife

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
68-3	Manage for indicator species where key vegetation occurs.	FW-DC-TRSP-3, FW-DC-TRSP-10, FW-DC-TRSP-11
68-3	Consult annually with State wildlife management agencies on hunting regulations and recommendations.	FW-MGAP-TRSP-2, FW-DC-TRSP-4
68-3	Fence new spring developments where needed to enhance cover for wildlife.	FW-GDL-AQSP-4, FW-GDL-TRSP-3, FW-STD-GR-2
69	Conduct special wildlife habitat studies for specific species, 32 studies/decade. Initial studies will concentrate on habitat requirements for Federally and State listed flora and fauna. After these species are completed, data will be compiled for lesser known nongame species on the Forest and National Grasslands.	DA-MGAP-WILD-6
69	Develop a variety of public information tools, such as audio-visual program(s), brochures, environmental education field investigations, etc., which address the importance of protecting watershed conditions.	FW-MGAP-WTR-3
69	Forest employees will be available to make presentations to various organizations.	FW-MGAP-WTR-3, FW-MGAP-WRF-3
69	Manage wildlife habitat to increase populations for sightseeing values and population level goals contained in the New Mexico Wildlife Comprehensive Plan.	FW-DC-TRSP-1, FW-DC-TRSP-3, FW-DC-TRSP-4
69	Those areas where existing big game native wildlife species are present will be managed as such. Exotic species will not be introduced. Efforts will be made to eliminate exotics from National Forest lands consistent with State Game and Fish agencies policies.	FW-DC-TRSP-6, FW-MGAP-TRSP-2

Threatened, Endangered, and Sensitive Species

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
69	Manage threatened and endangered species habitat to achieve delisting consistent with recovery plans and goals established by the U.S. Fish and Wildlife Service. Manage sensitive species habitat to maintain population viability within the National Forest.	FW-DC-ARS-1, FW-DC-ARS-2
70	Habitat management for Federally listed species will take precedence over unlisted species. Habitat management for endangered species will take precedence over threatened species. Habitat management for sensitive species will take precedence over non-sensitive species.	FW-DC-ARS-4, FW-DC-ARS-5, FW-GDL-ARS-1, FW-GDL-ARS-2
70	All vegetation manipulations will be coordinated with threatened and endangered species requirements.	FW-GDL-ARS-7, FW-GDL-ARS-9
70	Consult and cooperate with all Federal and State Natural Heritage Programs and Native American programs, such as the Navajo Heritage Program, to achieve management objectives identified in these programs.	FW-MGAP-ARS-1, FW-MGAP-4
70	Studies by appropriate, qualified personnel will be conducted to ascertain suitability of reintroduction of endangered, threatened, proposed, and state listed native species to suitable habitat where not presently occupied.	FW-MGAP-3
70	Consult with appropriate agencies and specialists on all proposed activities, modifications, and other commitments of lands within known habitats of peregrine, bald eagle, Zuni bluehead sucker, and threatened, endangered or sensitive plants, and historical range of black footed ferrets.	FW-MGAP-ARS-1, FW-MGAP-ARS-3, FW-MGAP-ARS-4, FW-MGAP-ARS-6
70	When management practices are proposed in listed or proposed species habitats, evaluate the need for consultation or conference with Fish and Wildlife Service and appropriate State Agency.	FW-GDL-ARS-1, FW-MGAP-ARS-4
70	Forage improvement activities and population control projects will not be permitted on areas where prairie dog towns larger than 15 acres without prior evaluation by the Forest Wildlife Biologist to protect potential black footed ferret habitat.	FW-MGAP-ARS-6

Peregrine Falcon

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
70	Activities likely to cause disturbance will be prohibited in the vicinity of essential peregrine falcon nesting habitat between March 15 and August 1. Should peregrines remain strongly attached to nest sites after August 15, this period may be extended; or should peregrines disperse earlier than August 15, this period may be shortened. Seasonal restrictions may apply unless the forest wildlife biologist determines that the breeding pair is unproductive by June 1. Restrictions for sites determined to be unoccupied by June 1 will then be rescinded. Activities likely to cause disturbance may include but are not linked to human disturbance within 3/4 miles, vehicular traffic, within 1 mile, heavy motorized equipment within 2 miles and helicopter flights within 2 miles of an occupied eyrie.	FW-GDL-TRSP-2
71	Continue to identify existing and potential habitat for peregrine falcons, as outlined in the Species Recovery Plan. Monitor management practices within occupied and potential peregrine falcon habitat and evaluate impacts. All reasonable efforts will be taken during the detection, fire suppression or other emergency activities such as search and rescue operations from March 15 through August 15 to protect peregrine nesting sites, consistent with policies regarding jeopardy to human life and property and confidentiality of nest sites.	FW-DC-TRSP-1, FW-DC-TRSP-8, FW-DC-TRSP-10, FW-MGAP-TRSP-1

Mexican Spotted Owl

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
71	Provide three levels of habitat management - protected, restricted, and other forest and woodland types to achieve a diversity of habitat conditions across the landscape. Protected areas include delineated protected activity centers; mixed conifer and pine-oak forests with slopes greater than 40 percent where timber harvest has not occurred in the last 20 years; and reserved lands which include wilderness, research natural areas, wild and scenic rivers, and congressionally recognized wilderness study areas. Restricted areas include all mixed-conifer, pins-oak, and riparian forests outside of protected areas. Other forest and woodland types include all ponderosa pine, spruce-fir, woodland, and aspen forests outside protected and restricted areas. Survey ail potential spotted owl areas including protected, restricted, and other forest and woodland types within an analysis area plus the area ½ mile beyond the perimeter of the proposed treatment area. Establish a protected activity center at all Mexican spotted owl sites located during surveys and all management territories established since 1989. Allow no timber harvest except for fuelwood and fire risk abatement in established protected activity centers. For protected activity centers destroyed by fire, windstorm, or other natural disaster, salvage timber harvest or declassification may be allowed after evaluation on a case-by-case basis in consultation with U.S. Fish and Wildlife Service. Allow no timber harvest except for firs risk abatement in mixed conifer and pine oak forests on slopes greater than 40 percent where timber harvest has not occurred in the last 20 years. Limit human activity in protected activity centers during the breeding season.	FW-DC-TRSP-1, FW-DC-TRSP-8, FW-DC-TRSP-10, FW-MGAP-TRSP-1

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
71	Protected Activity Centers. Delineate an area of not less than 600 acres around the activity center using boundaries of known habitat polygons and/or topographic features. Written justification for boundary delineation should be provided. The Protected Activity Canter boundary should enclose the best possible owl habitat configured in as compact a unit as, possible, with the nest or activity center located near the center. The activity center is defined as the nest site. In the absence of a known nest, the activity center should be defined as a roost grove commonly used during breeding. In the absence of a known nest or roost, the activity center should be defined as the best nest/roost habitat. Protected Activity Center boundaries should not overlap. Submit protected activity center maps and descriptions to the recovery unit working group for comment as soon as possible after completion of surveys. Road or trail building in protected activity canters should be avoided but may be permitted on a case-by- case basis for pressing management reasons. Generally, allow continuation of the level of recreation activities that was occurring prior to listing. Require bird guides to apply for and obtain a special use permit. A condition of the permit shall be that they obtain a sub-permit under the U.S. Fish and Wildlife Service Master endangered species permit. The permit should stipulate the sites, dates, number of visits and maximum group size permissible. Harvest fuel wood when it can be done in such a way the effects on the owl are minimized. Manage within the following limitations to minimize effects on the owl. Retain key forest species such as oak. Retain key forest species such as oak.	FW-DC-TRSP-1, FW-DC-TRSP-8, FW-DC-TRSP-10, FW-MGAP-TRSP-1
71-1	Treat fuel accumulations to abate fire risk. • Select for treatment 10 percent of the protected activity centers where nest sites are known in each recovery unit having high fire risk conditions. Also select another 10 percent of the protected activity centers where nest sites are known as a paired sample to serve as control areas. • Designate a 100 acre "no treatment" area around the known nest site of each selected protected activity center. Habitat in the no treatment area should be as similar as possible in structure and composition as that found in the activity center.	FW-OBJ-FF-1

Northern Goshawk Habitats

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
71-5	Applicability: The northern goshawk standards and guidelines apply to the forest and woodland communities described below that are outside of Mexican spotted owl protected and restricted areas. Within Mexican spotted owl protected and restricted areas, the Mexican spotted owl standards and guidelines take precedence over the northern goshawk standards and guidelines. One of the other set of standards and guidelines apply to all forest and woodland communities but the Mexican spotted owl standards always take precedence in areas of overlap. Standards Survey the management analysis area prior to habitat modifying activities including a ½ mile beyond the boundary. Establish and delineate on a map, a post-fledging family area that includes six nesting areas per pair of nesting goshawks for known nest sites, old nest sites, areas where historical data indicates goshawks have nested there in the past, and where goshawks have been repeatedly sighted over a two year or greater time period but no nest sites have been located. Manage for uneven-age stand conditions for live trees and retain live reserve trees, snags, downed logs, and woody debris levels throughout woodland, ponderosa pine, mixed conifer and spruce-fir forest cover types. Manage for old age trees such that as much old forest structure as possible is sustained over time across the landscape. Sustain a mosaic of vegetation densities (overstory and understory), age classes and species composition across the landscape. Provide foods and cover for goshawk prey. Limit human activity in nesting areas during the breeding season. Manage the ground surface layer to maintain satisfactory soil conditions for instance, to minimize soil compaction; and to maintain hydrologic and nutrient cycles. When activities conducted in conformance with these standards and guidelines may conflict with other established recovery plans or conservation agreements; consult with U.S. Fish and Wildlife Service to resolve the conflict.	FW-GDL-TRSP-2
71-6	Guidelines: Emphasize maintenance and restoration of healthy riparian ecosystems through conformance with land management plan riparian standards and guidelines. Management strategies should restore degraded riparian areas to good condition as soon as possible. Damage to riparian vegetation, stream banks, and channels should be prevented. Refer to USDA Forest Service General Technical Report RM-217 entitled "Management Recommendations for the Northern Goshawk in the Southwestern United States" for scientific information on goshawk ecology and management which provide the basis for the management guidelines. Supplemental information on goshawk ecology and management may be found in "The Northern Goshawk: Ecology and Management" published by the Cooper Ornithological Society as Studies in Avian Biology No. 16 In woodland forest cover types, use empirical data to determine desired habitat conditions.	

Plants

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
71-9	Monitor management practices within occupied and potential habitat of plants listed as threatened, endangered or on the Regional Forester's Sensitive Plant List. Manage sensitive species to sustain viability and prevent the need for listing as threatened or endangered. Habitat locations will remain confidential to prevent unauthorized removal of specimens. Recovery activities will be pursued where pertinent. If proposed for listing, monitor actions to determine effect of management practices on habitat and the need for a Conference with U.S. Fish and Wildlife Service. Monitor status of federal listings. If elevated to threatened or endangered status, determine if consultation with U.S. Fish and Wildlife Service is required.	FW-STD-NIS-1

Lands and Minerals

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
74	Administer and process oil and gas cases, per FSM 2822.41, Region 3 Supplement 6, dated August 1983.	Cibola National Forest does not host the geologic environment for oil and gas resources.
75	Mining operations shall be conducted so as to minimize adverse environmental impacts. Operations will be controlled by means of Forest Service approval of Plans of Operations and by periodic inspections of the operation.	FW-DC-LOC-1, FW-STD-LOC-2, FW-GDL-LOC-5, FW-GDL-LOC-7 FW-GDL-LOC-3, FW-GDL-LOC-12
75	Identify occupancy trespass and resolve sensitive cases of those causing resource damage.	FW-GDL-LOC-8, FW-GDL-LOC-9, FW-GDL-LOC-12

Land Management Planning

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
78	Develop, maintain and monitor a land management plan. To facilitate plan implementation and communications with Native American Indian and Spanish Land Grant communities the Forest Service will hold preliminary meetings with Pueblos, including but not limited to Acoma, Laguna, Islets, Zuni, and Sandia; Jicarilla Apache Tribe; Navajo Ranchers Association, Eastern Land District Boards, Navajo Heritage Program, Eastern Chapter. Managers; Navajo Medicine Men's Association; and with land grants, including but not limited to San Mateo, Cebolleta, Tajique, Torreon, Manzano and Chilili will be held followed by issue sessions. Prior to issue sessions, community contacts will be asked to submit to the Forest Service a list of appropriate information needed to participate effectively in the issue session. The Forest Service realizes that this information, many times, is technical, therefore, adequate time is needed between information dissemination and the actual issue session for community people to understand and use the data.	FW-GDL-FRT-2, FW-MGAP-FRT-1, FW-MGAP-FRT-2, FW-MGAP-RHC-2

Wild, Scenic, and Recreation Eligible River Areas

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
80-1	River corridors identified in the National River inventory or otherwise identified for study, will be protected in the following ways: • Manage wild and scenic river study areas to protect existing characteristics through the study period and until designated or released from consideration. [FSM 2354.21] • Rivers identified for study are managed to maintain their outstanding values. [FSM 1924.03] • To the extent the Forest Service is authorized under law, control stream impoundments and diversions. The tree flowing characteristics of the identified river cannot be modified. [FSH 1909.12, 8.12] • Outstandingly remarkable values of the identified river area must be protected and, to the extent practicable, enhanced. [FSH 1909.12, 8.12] • Management and development of the identified river and its corridor cannot be modified to the degree that eligibility or classification would be affected (for instance, classification cannot be changed from wild to scenic or scenic to recreational). [FSH 1909.12, 8.12] • The protection requirements will continue until a decision is made as to the future use of the river and adjacent lands. [FSH 1909.12, 8.12] • Congressionally authorized rivers will be protected, as specified in Section 12(a) of the Wild and Scenic Rivers Act, until action is taken by the Congress. [FSH 1909.12, 8.12] • The standards/guidelines in Management Area 18 – Wild, Scenic and Recreation Rivers also govern interim management of study rivers. [FSH 1909.12, 8.2]	MA-DC-WSR-1, MA-DC-WSR-2, MA-GDL-WSR-3
80-2	Timber Production: Cutting of trees will not be permitted except when needed in association with a primitive recreation experience (such as clearing for trails and protection of users) or to protect the environment (such as control of fire). Timber outside the boundary but within the visual corridors, will be managed and harvested in a manner to provide special emphasis to visual, quality.	MA-GDL-WSR-1, MA-GDL-WSR-2, MA-GDL-WSR-3

Scenic Rivers

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
80-2	Timber Production: A wide range of silvicultural practices could be allowed provided that such practices are carried on in such a way that there is not substantial adverse effect on the river and its immediate environment. The river area should be maintained in its near natural environment. Timber outside the boundary but within the visual scene area should be managed and harvested in a manner which provides special emphasis on visual quality.	MA-STD-WSR-1
80-2	Water Supply: All water supply dams and major diversions are prohibited.	MA-STD-WSR-4
80-2	Hydroelectric Power: No development of hydroelectric power facilities would be allowed.	MA-STD-WSR-4
80-2	Flood Control: Flood control dams and levees would be prohibited.	MA-STD-WSR-4
80-2	Mining: Subject to regulations at 36 CFR 228 that the Secretaries of Agriculture and the Interior may prescribe to protect the values of rivers included in the National System, new mining claims and mineral leases could be allowed and existing operations allowed to continue. However, mineral activity must be conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.	MA-STD-WSR-4
80-2	Road Construction: Roads may occasionally bridge the river area and short stretches of conspicuous or longer stretches of inconspicuous and well-screened roads or screened railroads could be allowed. Consideration will be given to the type of use for which roads are constructed and the type of use that will occur in the river area.	MA-STD-WSR-4, MA-GDL-WSR-3
80-2	Agriculture: A wider range of agricultural uses is permitted to the extent currently practiced. Row crops are not considered as an intrusion of the "largely primitive" nature of scenic corridors as long as there is not a substantial adverse effect on the natural-like appearance of the river area.	MA-STD-WSR-4
80-2	Recreation Development: Larger scale public use facilities, such as moderate size campgrounds, public information centers, and administrative headquarters are allowed if such structures are screened from the river. Modest and unobtrusive marinas also can be allowed.	MA-STD-WSR-4

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
80-2	Structures: Any concentrations of habitations are limited to relatively short reaches of the river corridor. New structures that would have a direct and adverse effect on river values would not be allowed.	MA-STD-WSR-4
80-2	Utilities: This is the same as for wild river classifications.	MA-STD-WSR-4
80-2	Motorized Travel: Motorized travel on land or water may be permitted, prohibited or restricted to protect the river values.	MA-GDL-WSR-1

Recreational Rivers

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
80-2	Timber Production: Timber harvesting would be allowed under standard restrictions to protect the immediate river environment, water quality, scenic, fish and wildlife, and other values.	MA-STD-WSR-1
80-2	Water Supply: Existing low dams, diversion works, rip rap and other minor structures are allowed provide the waterway remains generally natural in appearance.	MA-STD-WSR-4
80-2	New structures are prohibited.	MA-STD-WSR-4
80-2	Hydroelectric Power: No development of hydroelectric power facilities is allowed.	MA-STD-WSR-4
80-2	Flood Control: Existing flood control works may be maintained. New structures are prohibited.	MA-STD-WSR-4
80-2	Mining: Subject to regulations (36 CFR 228) that the Secretaries of Agriculture and the Interior may prescribe to protect values of rivers included in the National System, new mining claims and mineral leases are allowed, and existing operations are allowed to continue. Mineral activity must be conducted in manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.	MA-STD-WSR-4
80-2	Road Construction: Paralleling roads or railroads could be constructed on one or both riverbanks. There can be several bridge crossings and numerous river access points.	MA-STD-WSR-4, MA-GDL-WSR-3

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
80-2	Agriculture: Lands may be managed for a full range of agricultural uses, to the extent currently practiced.	MA-STD-WSR-4
80-2	Recreation Development: Campgrounds and picnic areas may be established in close proximity to the river. However, recreational classification does not require extensive recreation development.	MA-STD-WSR-4
80-2	Structures: Small communities as well as dispersed or cluster residential developments are allowed. New structures are allowed for both habitation and for intensive recreation use.	MA-STD-WSR-4
80-3	Utilities: This is the same as for wild and scenic river classifications.	MA-STD-WSR-4
80-3	Motorized Travel: Motorized travel on land or water may be permitted, prohibited or restricted. Controls will usually be similar to surrounding lands and waters.	MA-GDL-WSR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
81	Manage for a visual quality objective of preservation.	FW-DC-SCE-1
81	Coordinate with Albuquerque Academy to meet intent of 270-acre scenic easement for Bear Canyon tract in Elena Gallegos Grant.	FW-MGAP-GREC-1
81	Coordinate trail and trailhead construction. Provide for user contacts, education and capacity management techniques through annual implementation plans.	FW-MGAP-GREC-2
81	Maintain area closed to off-road vehicle use as required by wilderness designation.	FW-STD-RECW-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
81	Install new portal signs at all major trailheads to provide better use distribution and direct users seeking greater solitude to less visited wilderness areas. Manage for the following maximum group size and acres by wilderness opportunity spectrum classification: 10 PAOT-Semi-primitive (28,650 acres) 25 PAOT-Transition (8,582 acres)	FW-MGAP-GREC-2, FW-MGAP-GREC-4, FW-MGAP-GREC-5
81	Manage use at capacity by wilderness opportunity spectrum classification. Use visitor contacts and self-registration techniques. Establish permit system or other mechanism to relieve over utilized conditions in Sandia Mountain Wilderness during Period 1.	FW-DC-GREC-3
82	Emphasize low-impact no-trace use of wilderness through the volunteer Wilderness Information Specialist Program, information service brochures and media.	DC-MGAP-CDNST-1, FW-MGAP-DISP-6
82	Annually post wilderness boundary at major entry points and problem areas where motor vehicle entry occurs.	DA-MGAP-RNA-2

Protection

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
83	For fire suppression, restrict use of helicopters and portable power tools to standards in Forest Service Manual 2326.11. Restrict use of bulldozers to extreme conditions and only upon approval of the regional forester or his designated acting.	FW-MGAP-FF-13, DA-GDL-WILD-7

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
83	Define the appropriate role that fire should have in each wilderness to meet wilderness objectives. Planned and unplanned ignitions may be used to achieve desired wilderness fire objectives.	FW-DC-FF-2

Insect and Disease Control

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
83	Monitor and report insect and disease conditions on a continuous basis. Integrated pest management of epidemic populations will only be recommended if a thorough analysis shows that wilderness values are directly threatened or if resource values adjacent to wilderness will be severely impacted.	FW-DC-ID-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
83	Close designated areas to public entry to protect threatened and endangered species during key use period (March 15 through August 15).	FW-GDL-ARS-4
83	In cooperation with New Mexico Department of Game and Fish, analyze habitat requirements necessary to stabilize and allow successful reintroduction of Rocky Mountain bighorn sheep on Sandia Mountain, per goals established in the Terrestrial Operation Plan.	FW-DC-ARS-2

Management Area 2

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
84	Allow rock climbing to occur in Cedro Canyon except in those areas marked closed to protect heritage resources.	FW-GDL-GREC-2
86	Manage developed sites at design capacity. Provide Full Service Management at developed sites during the major season (May 15 through September 14 or longer if that season is extended). Provide at least Reduced Service Management at developed sites during other seasons.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
87	Provide and maintain Interpretive Service signs and printed material.	FW-MGAP-GREC-2
87	Renovate Four Seasons Visitor Center exhibits and interpretive signs on the following sites/trails: Summit Nature Trail, Crest Nature Trail, Cienega Nature Trail, and Sandia Cave Documentary Site.	FW-DC-DREC-3, FW-GDL-DREC-2, FW-DC-DISP-4, FW-OBJ-DISP-1
87	Manage winter season use to facilitate snow removal operations and provide safe access for dispersed recreation.	FW-DC-GREC-2, FW-GDL-DISP-1
88	Manage Sandia Crest Scenic Byway corridor to provide for its scenic qualities and interpretive opportunities.	FW-DC-SCE-1, FW-DC-SCE-3
88	Develop vistas at selected locations along the Sandia Crest Scenic Byway. Enhance viewing opportunities by selective removal of vegetation while maintaining the visual integrity of the foreground.	FW-DC-SCE-1, FW-DC-SCE-3
88	Coordinate with hang gliding users and other affected users and activities for operation and maintenance of 1. Sandia Crest electronic site launch area 2. Launch site north of upper tram terminal 3. Addition of a landing site near Simms Park in cooperation with the City of Albuquerque	FW-DCL-GREC-2, FW-MGAP-GREC-1

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
88	Objectives of timber harvesting will be for wildlife habitat improvement, fuels reduction, and visual resource enhancement, with secondary benefits of providing firewood to the Albuquerque Metropolitan area. To the extent possible harvesting will be accomplished through personal use cutting. The following standards and guidelines only apply to acres identified as suitable for timber production.	FW-DC-FP-1, FW-DC-FP-4
88	Plan, prepare, and offer timber sales in accordance with silvicultural prescription after environmental analysis.	FW-DC-FP-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
89	Leave existing snags and create additional, if needed, to average three snags/acre. Within two chains of water, leave or create an average of five snags/acre. Snags will be created by girdling damaged, poorly formed, cull or dying trees.	FW-MGAP-VEG-1, FW-DC-SFF-2, FW-DC-SFF-3
89	Apply uneven age management where appropriate to achieve site-specific resource needs.	FW-MGAP-VEG-2

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
90	Protect Public and private facilities to prevent loss.	FW-STD-FF-1,
90	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-DC-FF-7
90	Fuels reduction treatments in the urban interface zone are a high priority and will be accomplished on an on-going basis.	FW-DC-WUI-1, FW-DC-WUI-2, FW-DC-WUI-3

Insect and Disease Control

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
90	Habitat requirements for threatened endangered, and sensitive (TES) species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions. Special attention will be given to removal of mistletoe infected trees during intermediate and regeneration harvests.	FW-DC-FF-2
91	Control of potential problems will be achieved through silvicultural treatments if possible.	FW-DC-ID-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
91	Direct suppression, using insecticides, will be carried out during outbreaks when it is necessary to prevent or minimize stand damages. Suppression will receive priority consideration in areas where harvesting has or will be focused or accelerated.	FW-DC-ID-1, FW-MGAP-ID-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
92	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and insure diversity for the management indicator species and major game species.	FW-DC-TRSP-8, FW-DC-TRSP-11
93	Maintain all water facilities annually.	FW-MGAP-WTR-4
93	Cooperate with New Mexico Game and Fish in stabilizing the Rocky Mountain bighorn sheep populations to the goals established in the New Mexico Game and Fish Department Comprehensive Plan.	FW-MGAP-TRS-2

Transportation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
94	Maintain roads to Level 3, 4, and 5 in developed recreation sites.	FW-DC-RD-1
94	Manage an average road density of 1.5 miles of road per square mile.	FW-OBJ-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
95	Construction, replacement and maintenance of structural range improvements will be to standards identified in the Region 3 Range Structural Handbook. These will be directed toward improvements that correct management problems. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plan. Maintenance will continue until replacement is scheduled. Improvements should, to the extent possible, blend into the wilderness character.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
96	Manage for visual quality objective of preservation.	FW-DC-SCE-1
96	Coordinate trails and trailheads. Provide for fire management, user contacts and education and capacity management techniques. Manage these activities through annual implementation plan.	FW-STD-GREC-1
97	Provide visitor contact and Forest Service presence during peak use periods. Publish map for Manzano Mountain Wilderness by March 1987. Complete Forest preparation work for Mount Withington and Apache Kid Wilderness maps in 1987.	FW-MGAP-DREC-2
97	Emphasize low-impact no-trace use of wilderness through the volunteer wilderness information specialist program, information service brochures, and media.	DA-STD-WID-2
97	Annually post wilderness boundary at major entry points and problem areas where motor vehicle entry occurs or can occur.	FW-MGAP-LND-1, DA-MGAP-RNA-2

Protection

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
98	Restrict use of bulldozers to extreme conditions and only upon approval of the Regional Forester or his designating acting.	FW-GDL-SU-4
98	Restrict use of helicopters and portable power tools to standards established according to FSM 2236.11.	FW-GDL-SU-4

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
98	Define the appropriate role that fire should have in each wilderness to meet wilderness objectives. Planned and unplanned ignitions may be used to achieve desired wilderness fire objectives.	DA-GDL-WIILD-7

Insect and Disease Controls

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
98	Monitor and report insect and disease conditions on a continuous basis. Integrated pest management of epidemic populations will only be implemented if a thorough analysis shows that wilderness values adjacent to wilderness will be severely impacted.	FW-DC-IS-1

Lands and Minerals

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
98	Oil and gas leasing is prohibited within the designated wilderness.	MA-STD-RECW-2

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
98	Cooperate with New Mexico Game and Fish in stabilizing the Rocky Mountain Bighorn sheep population to goals established in the New Mexico Game and Fish Department Comprehensive Plan. Bighorn sheep occur only in portions of analysis area located in Manzano Mountains.	FW-MGAP-TRSP-2

Management Area 4

Range

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
100	Construction and replacement of structural range improvements will be at standards identified in the Range Structural Handbook. These will be directed toward improvements that improve condition in the management area. Replacement of structural improvements are planned on a recurring basis of 20 to 30 years for water and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plan. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Component	Related Components in Revised Plan
101	Manage developed sites at design capacity.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
102	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and insure diversity for management indicator species and major game species.	FW-DC-TRSP-8, FW-DC-TRSP-11
103	Maintain fencing, plantings, openings, and wood duck boxes annually. Maintain existing structural and nonstructural habitat improvements annually.	FW-GDL-AQSP-4
103	Monitor management practices within occupied and potential bald eagle habitat and evaluate impacts.	FW-GDL-TRSP-2

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
103	Monitor watershed improvements where necessary repair or protect structures.	FW-MGAP-WTR-2
103	Road management will be applied to obliterate poorly located or constructed roadways to improve watershed condition and reduce soil loss. Management will take the form of standard roadway obliteration. Roads will be obliterated at the following rates in period 1: 50.8 miles of local roads.	FW-OBJ-RD-1, FW-GDL-RD-2

Lands and Minerals

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
103	Review all conveyance documents and take necessary action to protect the Government's interest in cases involving mineral reversionary clauses.	FW-DC-LOC-1, FW-GDL-SAL-1

Stipulations for Oil and Gas Leasing

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
104	Controlled Surface Use. A closed loop drilling system will be used for all oil and gas drilling. No open pits will be allowed.	Cibola National Forest does not host the geologic environment for oil and gas resources.
104	No Surface Occupancy. Within the boundaries of heritage resource sites that have been listed on or determined eligible for inclusion on the National Register of Historic Places, or whose eligibility remains undetermined. Minimum distance for surface occupancy will vary depending on the nature and setting of the site and will be determined during site-specific analysis.	Cibola National Forest does not host the geologic environment for oil and gas resources.
104	No Surface Occupancy. Within 300 feet of riparian areas or wetlands as determined by Grassland staff, and/or by on-site inspection by the Grassland Authorized Officer, and/or where the Forest's Terrestrial Ecosystem Survey and vegetation data indicates riparian or wetland conditions (hydrology, hydrophytic plants, hydric soil), including active floodplains.	Cibola National Forest does not host the geologic environment for oil and gas resources.
104	No Surface Occupancy. Developed campgrounds, picnic grounds, recreational loading/unloading ramps, recreational buildings, shelters, and all other developed recreational facilities and interpretive sites.	Cibola National Forest does not host the geologic environment for oil and gas resources.

Transportation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
105	Maintain roads to Levels 3, 4, and 5 on administrative and developed recreation sites through agreement with county.	FW-DC-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
106	Construction and replacement of structural range improvements will be standards identified in the Range Structural Handbook. These will be directed toward improvements that improve condition class through management. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plan. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
107	Maintain developed sites at design capacity.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
108	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat and ensure diversity for the management indicator species and major game species.	FW-DC-TRSP-8, FW-DC-TRSP-11
108	Reconstruct waters and fencing every 40 years.	FW-GDL-AQSP-4
108	Maintain waters and fencing annually.	FW-GDL-AQSP-4

Lands and Minerals - Oil and Gas Stipulations

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
108	Controlled Surface Use. A closed loop drilling system will be used for all oil and gas drilling. No open pits will be allowed.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108	No Surface Occupancy. Within the boundaries of heritage resource sites that have been listed on or determined eligible for inclusion on the National Register of Historic Places, or whose eligibility remains undetermined. Minimum distance for surface occupancy will vary depending on the nature and setting of the site and will be determined during site-specific analysis.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108	No Surface Occupancy. Within 300 feet of riparian areas or wetlands as determined by Grassland staff, and/or by on-site inspection by the Grassland Authorized Officer, and/or where the Forest's Terrestrial Ecosystem Survey and vegetation data indicates riparian or wetland conditions (hydrology, hydrophytic plants, hydric soil), including active floodplains.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	No Surface Occupancy. Developed campgrounds, picnic grounds, recreational loading/unloading ramps, recreational buildings, shelters, and all other developed recreational facilities and interpretive sites.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	No Surface Occupancy of slopes over 40%. An exception, modification or waiver may be granted if on-site inspection shows that unstable or steep slopes do not exist on a specific site, or if the operator can demonstrate in a SUPO that adverse effects can be minimized and activities safely conducted without loss of long-term site productivity. No Surface Occupancy Mills Canyon of the Canadian River.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	No Surface Occupancy within 500 feet of the canyon rims along a 17-mile segment of the Canadian River and its major side canyons.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	No Surface Occupancy within 500 feet from the centerline of the Santa Fe Trail where it traverses East Kiowa. Distance will be determined during site-specific analysis.	Cibola National Forest does not host the geologic environment for oil and gas resources.

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
108-1	No Surface Occupancy of Mills Orchard and Ranch Site, a historic property on the New Mexico State Register of Cultural Properties, and Trujillo Homestead, a historic property eligible for listing on the National Register of Historic Places. No Surface Occupancy Playa lakes as determined by Grassland staff, and /or by on-site inspection by the Grassland Authorized Officer.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	No Surface Occupancy of prairie dog towns as already delineated by Grassland and/or by on-site inspection by the Grassland Authorized Officer during site-specific analysis.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	Timing Limitation on drilling operations and construction activities on ferruginous and Swainson's hawks, and burrowing owls: March 1 to June 30 within 0.5 mile of any suitable nesting sites; and/or April 1 to August 31 within 0.5 mile of any active nest.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	No Surface Occupancy within 0.25 mile of the Wanette cemetery in Management Unit K-54.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-1	No Surface Occupancy on the Clayton livestock research center in Management Unit K-41, within the administrative area or the cultivated area under irrigation.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-2	No Surface Occupancy of the Rocky Mountain Research Station Kiowa Long Term Experimental Fire Research Site in Management Unit K-46 within Section 2 of Township 26 North, Range 36 East.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-2	Review all conveyance documents and take necessary action to protect the Government's interest in cases involving mineral reversionary clauses.	Cibola National Forest does not host the geologic environment for oil and gas resources.
108-2	The Long Range Aid to Navigation (LORANC) antenna site near Boise City, Oklahoma is designated as an exclusive communication site for use by the U.S. Coast Guard.	Cibola National Forest does not host the geologic environment for oil and gas resources.

Transportation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
108-2	Maintain roads to Levels 3, 4, and 5 in developed recreation sites except for East Mills Canyon Road which will be maintained at Level 2.	FW-DC-RD-1

Management Area 7

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
110	Full capacity rangelands in unsatisfactory condition will be treated through development of improved allotment management plans. The treatment identified will include but may not be limited to: 1. structural range improvements, and 2. correction of stocking problems which includes improved management and reductions in permitted used if necessary.	FW-OBJ-GR-1
110	Construction and replacement of structural range improvements will be to standards identified in the Region 3 Range Structural Handbook. They will be directed to correcting management problems. Replacement of structural improvements are planned on a recurring basis of 20 to 30 years for waters and 40 years for fences.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
111	Dispersed recreation will be featured, especially hiking.	FW-DC-GREC-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
111	At the Langmuir Research Site manage principal facility for partial retention with allowances for structures required for research purposes. Paint buildings with colors specified by Forest Landscape Architect, except where specified colors are required for scientific purposes. Remove temporary installations by the season following termination of use.	FW-GDL-SU-6
111	Maintain the entire Langmuir Research Area, 30,606 acres, closed to off-road vehicle use. The area is closed to motor vehicle use off designated roads. Use positive signing and regulatory techniques. Identify time periods and locations where public use will be restricted because of research activities. Publicize restrictions annually, May through August. The following standards and guidelines only apply to acres identified as suitable for timber production.	DA-MGAP-LANG-1

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
112	Plan, prepare and offer timber sales in accordance with silvicultural prescriptions and environmental analyses. Minimum harvest volume will be 800 board feet per acre.	FW-DC-FP-1, FW-OBJ-FP-1
112	On all of the areas scheduled for treatment, leave existing snags with an objective of two snags/acre average and sufficient live culls for replacement with a minimum 12 inches d.b.h. and 15 feet height. No recruitment of snags.	FW-GDL-VEG-2
112	Apply uneven age management where appropriate to achieve site-specific resource needs.	FW-MGAP-VEG-2

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
113	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
113	Control all fires to prevent loss of research facilities.	FW-DC-FF-4
113	Habitat requirements for threatened, endangered, and sensitive (TES) species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease consideration in the final stand prescriptions to maintain stand vigor and composition in resistant conditions. Special attention will be given to removal of mistletoe infected trees during intermediate and regeneration harvests.	FW-DC-FF-2

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
115	Road management will be applied to obliterate poorly located or constructed roadways to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration.	FW-OBJ-RD-1

Transportation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
115	Manage the road system for an average road density of 0.3 miles of road per square mile. Road density will increase temporarily to 2 to 3 miles per square mile in active timber harvest areas.	FW-DC-RD-1

Land Management Planning

1985 Plan	1985 Plan	Related Components in
Page Number	Plan Component	Revised Plan
116	Consult with special interest groups in managing Langmuir Research Site to achieve research objectives.	DA-MGAP-LANG-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
118	Full capacity rangelands in unsatisfactory condition will be treated through development of improved allotment management plans. The treatment identified will include but may not be limited to: 1. structural range improvements, and 2. correction of stocking problems which includes improved management and reductions in permitted used if necessary.	FW-OBJ-GR-1
118	Construction and replacement of structural range improvements will be to standards identified in the Region 3 Range Structural Handbook and will be directed toward improvements that keep vegetation condition class in the management area from declining. Replacement of structural improvements is planned on waters and 40 years of fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plans. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
119	Manage existing developed sites at design capacity.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6
119	Provide a host at all fee campgrounds.	FW-MGAP-DREC-2
120	Operate developed sites at full service level commensurate with design and recreation opportunity spectrum classes.	FW-GDL-DREC-2
120-1	Compatibility with other resource activities	FW-DC-FRT-3

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
121	Plan, prepare, and offer timber sales in accordance with silvicultural prescriptions and environmental analyses. Minimum harvest volume will be 300 to 500 board feet per acre.	FW-DC-FP-1, FW-OBJ-FP-1
121	Snag Management Leave all existing snags intact within the constraints of safety. Snags are defined as standing dead trees with a minimum 12 inches d.b.h. and 15 feet height. On critical areas (as determined by the staff biologist) recruit snags as needed to bring densities up to the following minimum standards. Snags will be recruited as needed from the ranks of damaged, poor form, cull, or dying trees with emphasis given to establishing scattered clumps of snags as opposed to a uniform distribution. Within 4 chains of water, manage for a minimum of 5 snags per acre. Within 2 chains of meadow areas, manage for a minimum of 3 snags per acre. On the balance of the area, manage for a minimum of 2 snags per acre average. On all areas have a minimum ratio 2:1 (cull: snags) for replacement with a minimum 15 inches d.b.h. and 20 feet height.	FW-GDL-VEG-5
121	Turkey Habitat: Protect known and potential turkey roost tree groups with an objective of 2 groups per section in summer range and 4 groups per section in winter range. Roost trees are usually open crowned with large horizontal branches and are 18+ inches d.b.h., 50+ feet tall, and within a half mile of water. Roost tree groups are composed of 8 or more trees with a central or primary roost tree usually evident. Protect and emphasize turkey winter habitat in areas within 40 chains of pine stringers. Pine stringers are defined as non-contiguous linear communities of predominantly ponderosa pine that extend into pinyon/juniper woodlands. Provide a minimum of 10 acres of nesting habitat within ½ mile of water. This may be accomplished through thicket protection, retention of and/or creation of down woody material for example, slash pilling, and protection of known nesting areas. Consider slope, canopy, distribution and distance to water in selection of treatment areas.	FW-DC-TRSP-9
121	Peregrine Falcon Habitat: In Peregrine Falcon Habitat areas, restrict activities in nesting areas April 15 to July 1. Prohibit activities which disturb needing birds between March 15 and August 15. If birds arrive in their territories before March 1S suspend disturbing activities immediately. Extend the period if the birdie are strongly attached to the nest site after August 15. Take all reasonable precautions, consistent with policies regarding jeopardy to human life and property, during fire suppression, search and rescue, or other emergency operations from March 15 through August 15 to protect peregrine nesting sites and their confidentiality.	FW-DC-TRSP-9

Raptor Habitat

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
121-9	Prohibit road construction in roost areas and buffer zones. Retain raptor nest tree-groups and a non-activity buffer around raptor nest sites.	FW-GDL-ARS-3, FW-GDL-ARS-4
121-10	Apply primarily uneven-aged management. Where even-aged management is applied, a shelterwood system will be used in accordance with the following guidelines: 1. Precommercial thin stands by age 20 to appropriate growing stock levels. 2. Intermediate commercial harvests at 20 year intervals to control for appropriate growing stock level. 3. First preparatory cut 20 years before rotation age. Remove 50 percent of overstory volume. 4. Seed cut at rotation age. Remove 65 percent of remaining volume. 5. Final removal of all remaining overstory before regeneration reaches age 20. Plant if natural regeneration is inadequate for acceptable stocking. Site preparation, if needed, by discing. Apply uneven age management where appropriate to achieve site-specific resource needs.	FW-MGAP-VEG-2

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
123	Control fire to prevent loss of public and private facilities.	FW-DC-FF-4
123	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Insect and Disease Control

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
123	Habitat requirements for threatened, endangered, and sensitive (TES) species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions. Special attention will be given to removal of mistletoe infected trees during intermediate and regeneration harvests.	FW-GDL-ID-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
124	When pesticides are used for pest control, project plans will contain appropriate and necessary procedures and mitigation measures.	FW-DC-ID-1, FW-MGAP-ID-1
124	Monitor and report insect and disease conditions on a continuing basis and initiate appropriate control methods in early stages of potential outbreaks.	FW-DC-IS-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
124	Road management will be applied to obliterate poorly located and poorly constructed roadways. This treatment is being applied to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration and use of gates for seasonal and temporary closures.	FW-OBJ-RD-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
124	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and ensure diversity for management indicator species and major game species on the Zuni Mountain portion of the Mount Taylor Ranger District.	FW-DC-TRSP-8, FW-DC-TRSP-11

Transportation and Travel

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
125	Maintain roads to Levels 3, 4, and 5 in developed recreation sites.	FW-DC-RD-1
125	Manage the following average road densities: 1.3 miles of road per square mile, 0.9 miles of road per square mile. Road densities will temporarily increase to 2 to 3 miles per square mile in active timber harvest areas.	FW-DC-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
127	Unsatisfactory rangelands will be treated through development of improved allotment management plans. The treatment identified will include but may not be limited to 1) structural range improvements, and 2) correction of stocking problems, which includes reduction in permitted use where necessary.	FW-OBJ-GR-1
128	Construction of new and replacement of structural Range improvements will be to standards identified in the Region 3 Range Structural Handbook. They will be directed toward improvements that correct management and stocking problems. Replacement of structural improvement are planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual permittee instructions. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
129	Use Forest Service personnel and Adopt-A trail volunteers for trail maintenance.	FW-MGAP-GREC-1

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
129	Plan, prepare, and offer timber sales in accordance with silvicultural prescriptions and environmental analyses.	FW-DC-FP-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
129	Silvicultural prescriptions will be primarily uneven-aged management. Where even-aged management is prescribed, a shelterwood regeneration system will be used in accordance with the following guidelines: Precommercial thinning of young stands may be considered if needed to reduce insect attack susceptibility. Commercially thin stands at age 60 and 80 to control growing stock level. Preparatory cut at age 100 to remove 30 percent of basal area. Seed cut at age 110 to remove 50 percent of remaining basal area. Final removal of remaining overstory before regeneration reaches age 20. Plant if natural regeneration is inadequate for acceptable stocking. Silvicultural examinations may indicate that the above ages and percentages need to be modified. If windthrow risk is above average, clearcut at age 120 and reforest by planting. Apply uneven age management where appropriate to achieve site-specific resource needs.	FW-MGAP-VEG-2

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
130	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
130	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Insect and Disease Control

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
130	Habitat requirements for threatened, endangered, and sensitive species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions. Special attention will be given to removal of mistletoe infected trees during intermediate and regeneration harvests.	FW-GDL-ID-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
131	Road management will be applied to obliterate poorly located or constructed roadways to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration.	FW-OBJ-RD-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
132	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and ensure diversity for the following management indicator species and major game species: red-breasted nuthatch, elk, mule deer	FW-DC-TRSP-8, FW-DC-TRSP-11
132	Reconstruct the water in 40 years.	FW-GDL-AQSP-1
132	Maintain all water developments annually.	FW-GDL-AQSP-1

Transportation and Travel

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
132	Manage the average road densities indicated below 1.6 miles of road per square mile, 0.3 mile of road per square mile, Road density will temporarily increase to 2 to 3 miles per square mile in active timber harvest areas.	FW-DC-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
133	Full capacity rangelands in unsatisfactory condition will be treated through improved allotment management plans. The treatment identified will include but may not be limited to 1. structural range improvements, and 2. correction of stocking problems, which includes reduction in permitted use where necessary.	FW-OBJ-GR-1
133	Construction of new and replacement of structural range improvements will be to standards identified in the Region 3 Range Structural Handbook. These will be directed toward improvements that correct management problems. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters, and 40 years for fences.	FW-OBJ-GR-1
133	Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plan. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
135	Silvicultural prescriptions will be primarily uneven-aged management. Where even-aged management is prescribed, a shelterwood regeneration system will be used in accordance with the following guidelines: 1. Precommercial thinning of young stands may be considered if needed to reduce insect attack susceptibility. 2. Intermediate commercial harvests at 20 year intervals to control for appropriate growing stock level. 3. First preparatory cut 20 years before rotation age. Remove 50 percent of overstory volume. 4. Seed cut at rotation age. Remove 65 percent of remaining volume. Site preparation, if needed, by discing. 5. Final removal of all remaining overstory before regeneration reaches age 20. Plant if natural regeneration is inadequate for acceptable stocking. Silvicultural examinations may indicate that the above ages and percentages need to be modified.	FW-MGAP-VEG-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
135	Plan, prepare, and offer timber sales in accordance with silvicultural prescriptions and environmental analyses. Minimum harvest volume will be 300 to 500 board feet per acre. Consider yarding of unmerchantable material on all sales.	FW-DC-FP-2

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
137	Control fire to prevent loss of public and private facilities.	FW-DC-FF-4
137	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Insect and Disease Control

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
137	Habitat requirements for threatened, endangered, and sensitive (TES) species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions.	FW-GDL-ID-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
139	Road management will be applied to obliterate poorly located or constructed roadways to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration.	FW-OBJ-RD-1

Transportation and Travel

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
139	Manage an average road density of 0.5 miles of road per square mile. Density in active timber harvest areas will be temporarily increased to 2 to 3 miles per square mile.	FW-OBJ-RD-1

Management Area 11

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
142	Full capacity rangelands in unsatisfactory condition will be treated through development of improved allotment management plans. The treatment identified will include but may not be limited to 1) structural range improvements, and 2) correction of stocking problems, which includes reduction in permitted use where necessary.	FW-OBJ-GR-1
142	Construction and replacement of structural range improvements will be to standards identified in the Region 3 Range Structural Handbook. These will be directed toward improvements that correct management problems. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters and 40 years for fences.	FW-OBJ-GR-1
142	Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plan. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
143	Manage developed sites at design capacity. Provide at least Region 3 Reduced Service Management at all sites during all sessions when sites are open.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
143-2	Plan, prepare, and offer timber sales in accordance with silvicultural prescriptions and environmental analyses. Minimum harvest volume will be 800 board feet per acre on slopes less than 40 percent and 3,000 board feet per acre on slopes over 40 percent.	FW-DC-FP-2
144	Silvicultural prescriptions will be primarily uneven-aged management. Where even-aged management is prescribed, a shelterwood regeneration system will be used in accordance with the following guidelines: 1. Precommercially thin stands by age 20 to appropriate growing stock levels 2. Intermediate commercial harvests at 20 year intervals to control for appropriate growing stock level. 3. First preparatory cut 20 years before rotation age. Remove 50 percent of overstory volume 4. Seed cut at rotation age. Remove 65 percent of remaining volume. Site preparation, if needed by discing 5. Final removal of all remaining overstory before regeneration reaches age 20. Plant if natural regeneration in inadequate for acceptable stocking. Silvicultural examinations may indicate that the above ages and percentages need to be modified. Apply uneven age management where appropriate to achieve	FW-MGAP-VEG-2

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
146	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
146	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Insect and Disease Control

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
146	Habitant requirement for threatened endangered and sensitive (TES) species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions.	FW-GDL-ID-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
147	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and insure diversity for the management indicator species and major game species.	FW-DC-TRSP-8, FW-DC-TRSP-11
147	Reconstruct waters every 40 years.	FW-GDL-AQSP-1
147	Maintain waters annually.	FW-GDL-AQSP-1
147	Cooperate with New Mexico Game and Fish in stabilizing the Rock Mountain bighorn sheep population to goals established in the New Mexico Game and Fish Department Comprehensive Plan. Bighorn sheep occur only in portions of analysis areas located in the Manzano Mountains.	FW-MGAP-TRSP-1

Transportation and Travel

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
147	Maintain roads to Levels 3, 4, and 5 in developed recreation sites.	FW-OBJ-RD-1
147	Manage the following average road densities: 1.9 miles of road per square mile, 1.2 miles of road per square mile,	FW-OBJ-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
150	Full capacity rangelands in unsatisfactory condition will be treated through development of improved allotment management plans. The treatment identified will include but may not be limited to 1. Structural range improvements, and 2. correction of stocking problems, which includes reduction in permitted use where necessary.	FW-OBJ-GR-1
150	Construction and replacement of structural range improvements will be to standards identified in the Region 3 Range Structural Handbook. These will be directed toward improvements that correct management problems. Replacements are planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plan. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
151	Manage developed sites at design capacity.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
152	Plan, prepare and offer timber sales in accordance with silvicultural prescriptions and environmental analyses. Minimum harvest volume will be 800 board feet per acre on slopes less than 40 percent. Consider yarding of unmerchantable material on all sales.	FW-DC-FP-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
152	Silvicultural prescriptions will be primarily uneven-aged management. Where even-aged management is prescribed, a shelterwood regeneration system will be used in accordance with the following guidelines: 1. Pre-commercially thinning of young stands may be considered if needed to reduce insect susceptibility.2. Intermediate commercial harvests at 20 year intervals to control for appropriate growing stock level. 3. First preparatory cut 20 years before rotation age. Remove 50 percent of overstory volume.,4. Seed cut at rotation age. Remove 65 percent of remaining volume. Site preparation, if needed by discing. 5. Final removal of all remaining overstory before regeneration reaches age 20. Plant if natural regeneration is inadequate for acceptable stocking. Silvicultural examinations may indicate that the above ages and percentages need to be modified. Apply uneven age management where appropriate to achieve site-specific resource needs.	FW-MGAP-VEG-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
154	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
154	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Insect and Disease Control

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
155	Habitat requirements for threatened, endangered and sensitive (TES) species will take precedence over insect and disease control. Where there are no conflicts with TES species habitat requirements, all silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions.	FW-DC-FP-2

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
155	Road management will be applied to obliterate poorly located or constructed roadways to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration.	FW-OBJ-RD-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
156	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and insure diversity for management indicator species and major game species.	FW-DC-TRSP-8, FW-DC-TRSP-11
156	Reconstruct waters every 40 years.	FW-GDL-AQSP-1
156	Maintain water developments annually.	FW-GDL-AQSP-1
156	Cooperate with New Mexico Game and Fish in stabilizing the Rocky Mountain bighorn sheep population to goals established in New Mexico Game and Fish Department Comprehensive Plan. Bighorn sheep occur only in portions of analysis area located in the Manzano Mountains.	FW-MGAP-AQSP-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
156	Maintain roads to Level 3, 4, and 5 in Travel developed recreation sites.	FW-OBJ-RD-1
156	Manage the average road densities indicated below: 1.7 miles of roads per square mile, 1.2 miles of roads per square mile	FW-OBJ-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
158	Construction of new and replacement of structural range improvements will be to standards identified in the Range structural Handbook. They will be directed toward improvements that correct management problems. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plans. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
159	Manage sites to design capacity.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
160	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
160	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
160	Road management will be applied to obliterate poorly located or constructed roadways to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration.	FW-OBJ-RD-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
161	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and insure diversity for the following management indicator species and major game species: mule deer, elk, Merriam's turkey,	FW-DC-TRSP-8, FW-DC-TRSP-11
161	Reconstruct waters and fencing every 40 years.	FW-GDL-AQSP-1
161	Utilize prescribed fire as a tool to maintain productivity of mountain shrub, Gambel oak, and other shrub vegetation associations.	FW-DC-WUI-4
161	Maintain all water developments and fences annually.	FW-GDL-AQSP-1
161	Cooperate with New Mexico Game and Fish in stabilizing the Rock Mountain bighorn sheep population to goals established in New Mexico Game and Fish Department Comprehensive Plan. Bighorn sheep only occur in portions of analysis area located in the Manzano Mountains.	FW-MGAP-AQSP-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
161	Manage an average road density of 0.14 miles of road per square mile.	FW-OBJ-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
164	Full capacity rangelands in unsatisfactory conditions will be treated through development of allotment management plans that intensity livestock management. The treatment identified will include, but not be limited to 1. structural range improvements, 2. non-structural range improvements, and 3. correction of stocking problems, which includes reduction in permitted use where necessary.	FW-OBJ-GR-1
165-1	Construction of new and replacement of structural range improvements will be to standards identified in the Range Structural Handbook. They will be directed toward improvements that correct management problems. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plans. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
168	Manage existing sites to design capacity	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6
168	Provide a host at all fee campgrounds	FW-MGAP-DREC-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
169	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
169	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
170	The use of direct investment and management changes will be used in watershed projects. Direct watershed treatments will be applied on lands suitable for revegetation with slopes less than 40 percent where current range condition is poor or very poor. This treatment is being applied to improve watershed condition and reduce soil loss. It may consist of water spreading, shaping, and/or seeding and will conform to accepted methods.	FW-MGAP-WTR-1, FW-MGAP-WTR-2, FW-MGAP-WTR-4

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
170	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and ensure diversity for the following management indicator species and major game species on the Zuni Mountain portion of the Mount Taylor Ranger District: house wren, Merriam's turkey, mule deer, plain titmouse. On the balance of the Mount Taylor District construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and ensure diversity for the following management indicator species and major game species: house wren, Merriam's turkey, mule deer, elk, plain titmouse.	FW-DC-TRSP-8, FW-DC-TRSP-11
171	Maintain all water developments annually.	FW-GDL-AQSP-1
171	Opening creation, planting, interseeding and fencing.	FW-GDL-AQSP-4

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
172	Streams have the potential to provide habitat for Zuni Bluehead sucker (for example, Tampico Draw, Dean Creek, Grasshopper Creek and others) may also be fenced to restore riparian vegetation and perennial water. Fencing will be built in accordance with standards established in the range handbook. Fencing will be coordinated with watershed and range riparian restoration work. Fence three acres with wildlife funds and 70 acres with range and watershed funds. Work will be completed within first three years following plan implementation.	FW-DC-TRSP-1, FW-GDL-AQSP-4
172	Maintain fencing annually.	FW-GDL-AQSP-1
172	Actions identified in the Zuni Bluehead Sucker Habitat Management Plan will be carried out. The Zuni Bluehead Sucker Habitat Management Plan will be updated by 1985 to incorporate new knowledge regarding the species and its habitat.	FW-DC-TRSP-3
172	Determine limiting factors of Zuni Bluehead Sucker habitat and prescribe actions to reduce their effects.	FW-DC-TRSP-4
172	Assist New Mexico Department of Game and Fish in carrying out transplant operations to establish or supplement Zuni Bluehead Sucker populations.	FW-MGAP-TRSP-2

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
172	Maintain roads to levels 3, 4, and 5 in developed recreation sites.	FW-OBJ-RD-1
173	Manage the road system for average road densities indicated below: 0.5 miles of road per square mile, 1.3 miles of road per square mile, 0.3 miles of road per square mile.	FW-OBJ-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
175	Full capacity rangelands in unsatisfactory conditions will be treated through development of allotment management plans that intensify livestock management. The treatment identified will include, but not be limited to 1. structural range improvements, 2. non-structural range improvements, and 3. correction of stocking problems, which includes reduction in permitted use where necessary.	FW-OBJ-GR-1
175	Construction of new and replacement of structural range improvements will be to standards identified in the Region 3 Range Structural Handbook. They will be directed toward improvements that correct management problems. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plans. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
177	Manage developed sites to design capacity.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
178	Free use firewood will be restricted to dead and down material is designated areas and will be administered through a permit system. In those areas that are harvested for firewood for wildlife benefit, leave the following in the openings: 1) Cavity excavated trees 2) Large open crowned cone bearing pinyon 3) Alligator juniper 4) Shrubs 5) Oak.	FW-DC-FP-5

Fire Management

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
179	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
179	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
180	Road management will be applied to obliterate poorly located or poorly constructed roadways. This treatment is being applied to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration and use of gates for seasonal and temporary closure.	FW-OBJ-RD-1

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
180	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and ensure diversity for the following management indicator species and major game species: plain titmouse, house wren, elk, mule deer, Merriam's turkey	FW-DC-TRSP-8, FW-DC-TRSP-11
180	Reconstruct water developments every 40 years.	FW-GDL-AQSP-1
180	Maintain all water developments annually.	FW-GDL-AQSP-1
180	Opening creation, planting/interseeding and fencing	FW-GDL-AQSP-4
181	Maintain fencing and seeded/planted opening annually.	FW-GDL-AQSP-1
181	Cooperate with New Mexico Game and Fish in stabilizing the Rocky Mountain bighorn sheep population to the goals established in the New Mexico Game and Fish Department Comprehensive Plan. Bighorn sheep occur only in portions of analysis areas located in the Manzano Mountains.	FW-MGAP-AQSP-1

1985 Plan	1985 Plan	Related Components in
Page Number	Plan Component	Revised Plan
181	Manage the average road densities indicated below: 1.9 miles of road per square mile, 1.0 miles of road per square mile	FW-OBJ-RD-1

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
183	Full capacity rangelands in unsatisfactory conditions will be treated through development of improved allotment management plans that intensity livestock management. The treatment identified will include but may not be limited to 1. structural range improvements, 2. non-structural range improvements, and 3. correction of stocking problems, which includes reduction in permitted use where necessary.	FW-OBJ-GR-1
183	Construction of new and replacement of structural range improvements will be to standards identified in the R-3 Range Structural Handbook. They will be directed toward improvements that correct management problems. Replacement of structural improvements is planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual operating plans. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

Recreation

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
188	Manage developed sites to design capacity.	FW-MGAP-GREC-7, FW-MGAP-DREC-5, FW-GDL-DISP-5, FW-GDL-DISP-6
188	Free use firewood will be restricted to dead and down material in designated areas and will be administered through a permit system.	FW-DC-FP

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
189	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
189	Utilize prescribed fire to achieve resource objectives. Manage fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
189	The use of direct investment and management changes will be used in watershed projects. Direct watershed treatments will be applied on lands suitable for revegetation having slopes less than 40 percent where current range condition is poor or very poor. This treatment is applied to improve watershed condition and reduce soil loss. It may consist of water spreading, shaping, and/or seeding, and will conform to accepted methods. Indirect methods will also be applied to watersheds to improve effective ground cover. These may consist of controlling impacts through management by allocating grazing capacity to only moderately high or high condition range.	FW-MGAP-WTR-1, FW-MGAP-WTR-2, FW-MGAP-WTR-4

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
191	Construct/reconstruct structural and nonstructural wildlife habitat improvements to provide habitat enhancement and ensure diversity for the following management indicator species and major game species: plains titmouse, pygmy nuthatch, Merriam's turkey, house wren, mule deer, elk.	FW-DC-TRSP-8, FW-DC-TRSP-11

Transportation and Travel

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
192	Maintain roads to Levels 3, 4, and 5 in developed sites.	FW-OBJ-RD-1
192	Manage the average road densities indicated below: 0.3 mile of road per square mile, 1.0 mile of road per square mile, 1.4 miles of road per square mile, 1.0 mile of road per square mile, 1.0 mile of road per square mile, 1.3 miles of road per square mile	FW-OBJ-RD-1

Management Area 17

Wildlife

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
193	Coordinate Forest Service wildlife habitat improvements with U.S. Air Force and Sandia Laboratories. Conduct upland habitat treatments along and adjacent to Forest Road 530 inside the withdrawal. Restore meadows in Madera Canyon where tree encroachment is occurring and create openings where meadows historically existed.	FW-MGAP-TRSP-2, DA-MGAP-LANG-1

Timber

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
194	Objectives of timber harvesting will be for wildlife habitat improvement, fuels reduction, and visual resource enhancement, with secondary benefits of providing firewood to the Albuquerque metropolitan area. All harvesting will be done by Forest Service, Department of Energy, or Department of Defense crews or their contractors, and will be coordinated with Department of Energy and Department of Defense.	FW-DC-FP-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
194	Cooperate with Department of Energy and Department of Defense to implement vegetation thinning and prescribed burning activities to improve forest health and decrease threat of wildfires.	FW-MGAP-FF-3

Transportation and Travel

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
194	Coordinate Forest Service road development and maintenance with U.S. Air Force and Sandia Laboratories. Travel Coordinate with Department of Energy and Department of Defense to close and/or abandon those roads that are no longer necessary to carry out their respective missions. Coordinate with Department of Energy and Department of Defense to rehabilitate those roads that are contributing to soil loss and sedimentation but are still necessary to carry out their missions. Rehabilitate those portions of Madera Canyon Road that are contributing to sedimentation and close to all vehicular access.	FW-MGAP-RD-1, FW-DC-RD-1, FW-OBJ-RD-1

Management Area 18

Range

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
196	Full capacity rangelands in unsatisfactory condition will be treated through development of improved allotment management plans. The treatment identified will include but may not be limited to 1) structural range improvement development; and 2) correction of stocking problems which includes removal of livestock where necessary.	FW-OBJ-GR-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
196	Construction on new and replacement of structural range improvements will be to standards identified in the R-3 Range Structural Handbook. These will be directed toward improvements that improve livestock management in the management area by correcting management and stocking problems. Replacement of structural improvements are planned on a recurring basis of 20 to 30 years for waters and 40 years for fences. Maintenance of structural improvements will be scheduled on a planned basis that is defined in the allotment management plan or annual permittee instructions. Maintenance will continue until replacement is scheduled.	FW-OBJ-GR-1

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
197	Control fires to prevent loss of public and private facilities.	FW-DC-FF-4
197	Utilize prescribed fire to achieve resource objectives. Manage fire to fire to maintain soil tolerance levels.	FW-OBJ-FF-1

Watershed

1985 Plan Page Number	1985 Plan Plan Component	Related Components in Revised Plan
197	Road management will be applied to obliterate poorly located or constructed roadways to improve watershed condition and reduce soil loss. Management will take the form of standard roadway prescriptions for obliteration.	FW-OBJ-RD-1

Final Environ	mental Impact Stateme	ent	

Appendix I: List of Maps for the Final Environmental Impact Statement

This appendix provides a list of the maps used for analyzing the alternatives. Printed maps are located in a separate packet for viewing. The maps can also be viewed at the <u>Cibola plan revision website</u> at http://www.fs.usda.gov/goto/cibola/plan.

Maps are displayed in the following order: management areas and wilderness; recreation opportunity spectrum setting; scenic integrity objectives; and lands suitable for timber production.

Management Areas and Wilderness, by District and Alternative

- 1. Existing Management Areas and Wilderness, Mount Taylor Ranger District Alternative A
- 2. Proposed Management Areas and Recommended Wilderness, Mount Taylor Ranger District Alternative B
- 3. Proposed Management Areas and Recommended Wilderness, Mount Taylor Ranger District Alternative C
- 4. Proposed Management Areas and Recommended Wilderness, Mount Taylor Ranger District Alternative D
- 5. Existing Management Areas and Wilderness, Magdalena Ranger District Alternative A
- 6. Proposed Management Areas and Recommended Wilderness, Magdalena Ranger District Alternative B
- 7. Proposed Management Areas and Recommended Wilderness, Magdalena Ranger District Alternative C
- 8. Proposed Management Areas and Recommended Wilderness, Magdalena Ranger District Alternative D
- 9. Existing Management Areas and Wilderness, Mountainair Ranger District Alternative A
- 10. Proposed Management Areas and Recommended Wilderness, Mountainair Ranger District Alternative B
- 11. Proposed Management Areas and Recommended Wilderness, Mountainair Ranger District Alternative C
- 12. Proposed Management Areas and Recommended Wilderness, Mountainair Ranger District Alternative D
- 13. Existing Management Areas and Wilderness, Sandia Ranger District Alternative A
- 14. Proposed Management Areas and Recommended Wilderness, Sandia Ranger District Alternative B
- 15. Proposed Management Areas and Recommended Wilderness, Sandia Ranger District Alternative C
- 16. Proposed Management Areas and Recommended Wilderness, Sandia Ranger District- Alternative D

Recreation Opportunity Spectrum Setting, by District and Alternative

- 17. Existing Recreation Opportunity Spectrum Setting, Mount Taylor Ranger District Alternative A
- 18. Desired Recreation Opportunity Spectrum Setting, Mount Taylor Ranger District Alternative B
- 19. Desired Recreation Opportunity Spectrum Setting, Mount Taylor Ranger District Alternative C
- 20. Desired Recreation Opportunity Spectrum Setting, Mount Taylor Ranger District Alternative D
- 21. Existing Recreation Opportunity Spectrum Setting, Magdalena Ranger District Alternative A
- 22. Desired Recreation Opportunity Spectrum Setting, Magdalena Ranger District Alternative B
- 23. Desired Recreation Opportunity Spectrum Setting, Magdalena Ranger District Alternative C

- 24. Desired Recreation Opportunity Spectrum Setting, Magdalena Ranger District Alternative D
- 25. Existing Recreation Opportunity Spectrum Setting, Mountainair Ranger District Alternative A
- 26. Desired Recreation Opportunity Spectrum Setting, Mountainair Ranger District Alternative B
- 27. Desired Recreation Opportunity Spectrum Setting, Mountainair Ranger District Alternative C
- 28. Desired Recreation Opportunity Spectrum Setting, Mountainair Ranger District Alternative D
- 29. Existing Recreation Opportunity Spectrum Setting, Sandia Ranger District Alternative A
- 30. Desired Recreation Opportunity Spectrum Setting, Sandia Ranger District Alternative B
- 31. Desired Recreation Opportunity Spectrum Setting, Sandia Ranger District Alternative C
- 32. Desired Recreation Opportunity Spectrum Setting, Sandia Ranger District Alternative D

Scenic Integrity Objectives, by District and Alternative

- 33. Existing Visual Quality Objective/Scenic Integrity Level, Mount Taylor Ranger District Alternative A
- 34. Desired Scenic Integrity Objectives, Mount Taylor Ranger District Alternative B
- 35. Desired Scenic Integrity Objectives, Mount Taylor Ranger District Alternative C
- 36. Desired Scenic Integrity Objectives, Mount Taylor Ranger District Alternative D
- 37. Existing Visual Quality Objective/Scenic Integrity Level, Magdalena Ranger District Alternative A
- 38. Desired Scenic Integrity Objectives, Magdalena Ranger District Alternative B
- 39. Desired Scenic Integrity Objectives, Magdalena Ranger District Alternative C
- 40. Desired Scenic Integrity Objectives, Magdalena Ranger District Alternative D
- 41. Existing Visual Quality Objective/Scenic Integrity Level, Mountainair Ranger District Alternative A
- 42. Desired Scenic Integrity Objectives, Mountainair Ranger District Alternative B
- 43. Desired Scenic Integrity Objectives, Mountainair Ranger District Alternative C
- 44. Desired Scenic Integrity Objectives, Mountainair Ranger District Alternative D
- 45. Existing Visual Quality Objective/Scenic Integrity Level, Sandia Ranger District Alternative A
- 46. Desired Scenic Integrity Objectives, Sandia Ranger District Alternative B
- 47. Desired Scenic Integrity Objectives, Sandia Ranger District Alternative C
- 48. Desired Scenic Integrity Objectives, Sandia Ranger District Alternative D

Lands Suitable for Timber Production, by Alternative

- 49. Lands Suitable for Timber Production Alternative A
- 50. Lands Suitable for Timber Production Alternative B
- 51. Lands Suitable for Timber Production Alternative C
- 52. Lands Suitable for Timber Production Alternative D