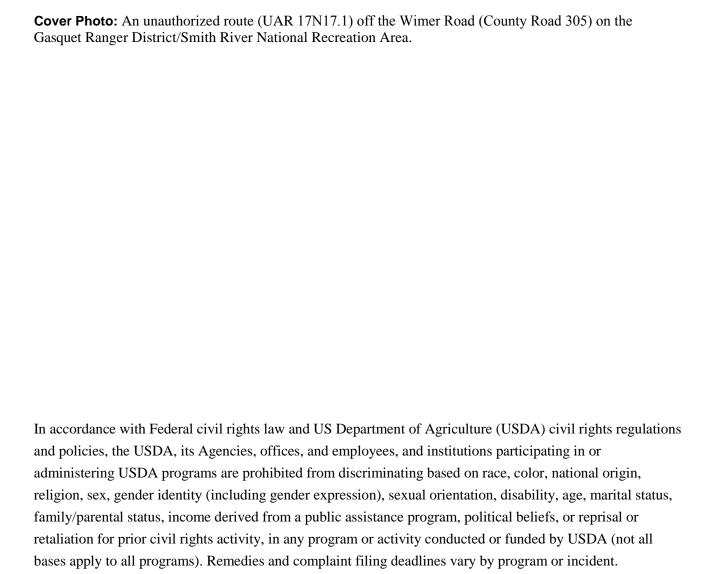


Final Environmental Impact Statement – Appendices







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Appendix A. Alternative Tables

Alternative 1

Table A-1. Alternative 1 - Existing National Forest Transportation System (NFTS).

	Alterna	tive 1 – Existing	National Forest Ti	ransportation System		
Road Number	d Number Total Miles Begin Mile Point End Mile Point Maintenance Level					
13N27	1.60	0.00	1.60	2 - HIGH-CLEARANCE VEHICLES		
13N35	6.15	0.25	6.40	2 - HIGH-CLEARANCE VEHICLES		
13N35A	0.55	0.00	0.55	2 - HIGH-CLEARANCE VEHICLES		
13N35B	0.63	0.00	0.63	2 - HIGH-CLEARANCE VEHICLES		
13N35D	0.16	0.00	0.16	2 - HIGH-CLEARANCE VEHICLES		
13N35E	0.27	0.00	0.27	2 - HIGH-CLEARANCE VEHICLES		
13N35F	0.42	0.00	0.42	2 - HIGH-CLEARANCE VEHICLES		
13N35G	0.39	0.00	0.39	2 - HIGH-CLEARANCE VEHICLES		
13N35J	0.25	0.00	0.25	2 - HIGH-CLEARANCE VEHICLES		
13N35K	0.28	0.00	0.28	2 - HIGH-CLEARANCE VEHICLES		
13N35L	0.11	0.00	0.11	2 - HIGH-CLEARANCE VEHICLES		
13N35M	0.07	0.00	0.07	2 - HIGH-CLEARANCE VEHICLES		
13N37	2.00	0.00	2.00	2 - HIGH-CLEARANCE VEHICLES		
13N37A	0.77	0.00	0.77	2 - HIGH-CLEARANCE VEHICLES		
13N37B	0.27	0.00	0.27	2 - HIGH-CLEARANCE VEHICLES		
14N01	4.61	9.60	14.21	3 - SUITABLE FOR PASSENGER CARS		
14N01D	1.80	0.00	1.80	2 - HIGH-CLEARANCE VEHICLES		
14N08	0.50	0.00	0.50	2 - HIGH-CLEARANCE VEHICLES		
14N08T	0.11	0.00	0.11	1 - BASIC CUSTODIAL CARE (CLOSED)		
14N15	0.50	0.00	0.50	2 - HIGH-CLEARANCE VEHICLES		
14N18	1.00	0.00	1.00	1 - BASIC CUSTODIAL CARE (CLOSED)		
14N29	1.60	0.00	1.60	2 - HIGH-CLEARANCE VEHICLES		
14N32	1.70	0.00	1.70	2 - HIGH-CLEARANCE VEHICLES		
14N33	1.78	0.00	1.78	2 - HIGH-CLEARANCE VEHICLES		
14N33A	0.22	0.00	0.22	1 - BASIC CUSTODIAL CARE (CLOSED)		
14N38	0.60	0.00	0.60	2 - HIGH-CLEARANCE VEHICLES		
14N39	1.90	0.00	1.90	2 - HIGH-CLEARANCE VEHICLES		
14N46	2.70	0.00	2.70	2 - HIGH-CLEARANCE VEHICLES		
14N46B	0.37	0.00	0.37	1 - BASIC CUSTODIAL CARE (CLOSED)		
15N01	18.30	0.00	18.30	5 - HIGH DEGREE OF USER COMFORT		
15N01A	1.59	0.00	1.59	2 - HIGH-CLEARANCE VEHICLES		
15N01B	0.57	0.00	0.57	2 - HIGH-CLEARANCE VEHICLES		
15N01P	0.79	0.00	0.79	1 - BASIC CUSTODIAL CARE (CLOSED)		
15N01Q	0.79	0.00	0.79	1 - BASIC CUSTODIAL CARE (CLOSED)		
15N01R	0.10	0.00	0.10	1 - BASIC CUSTODIAL CARE (CLOSED)		
15N01S	0.10	0.00	0.10	1 - BASIC CUSTODIAL CARE (CLOSED)		
15N01U	0.70	0.00	0.70	1 - BASIC CUSTODIAL CARE (CLOSED)		

Alternative 1 – Existing National Forest Transportation System				
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level
15N02	10.39	0.00	10.39	2 - HIGH-CLEARANCE VEHICLES
15N11	2.70	0.00	2.70	2 - HIGH-CLEARANCE VEHICLES
15N11A	1.70	0.00	1.70	1 - BASIC CUSTODIAL CARE (CLOSED)
15N11B	1.39	0.00	1.39	1 - BASIC CUSTODIAL CARE (CLOSED)
15N13	3.80	0.00	3.80	2 - HIGH-CLEARANCE VEHICLES
15N33	0.90	0.00	0.90	1 - BASIC CUSTODIAL CARE (CLOSED)
15N34	2.12	0.00	2.12	2 - HIGH-CLEARANCE VEHICLES
15N34	0.03	2.12	2.15	2 - HIGH-CLEARANCE VEHICLES
15N35	2.24	0.00	2.24	2 - HIGH-CLEARANCE VEHICLES
15N35A	0.24	0.00	0.24	2 - HIGH-CLEARANCE VEHICLES
15N35B	0.57	0.00	0.57	1 - BASIC CUSTODIAL CARE (CLOSED)
15N35C	0.57	0.00	0.57	1 - BASIC CUSTODIAL CARE (CLOSED)
15N36	1.36	0.00	1.36	3 - SUITABLE FOR PASSENGER CARS
15N36C	0.55	0.00	0.55	1 - BASIC CUSTODIAL CARE (CLOSED)
15N36N	2.60	0.00	2.60	1 - BASIC CUSTODIAL CARE (CLOSED)
15N38	2.90	0.00	2.90	2 - HIGH-CLEARANCE VEHICLES
15N38A	0.49	0.00	0.49	2 - HIGH-CLEARANCE VEHICLES
15N39	2.05	0.00	2.05	3 - SUITABLE FOR PASSENGER CARS
15N39A	1.20	0.00	1.20	1 - BASIC CUSTODIAL CARE (CLOSED)
15N39B	0.50	0.00	0.50	1 - BASIC CUSTODIAL CARE (CLOSED)
15N42	1.06	0.00	1.06	2 - HIGH-CLEARANCE VEHICLES
15N42A	0.44	0.00	0.44	1 - BASIC CUSTODIAL CARE (CLOSED)
15N45	1.27	1.23	2.50	1 - BASIC CUSTODIAL CARE (CLOSED)
15N52	0.14	0.00	0.14	3 - SUITABLE FOR PASSENGER CARS
15N53	0.15	0.00	0.15	2 - HIGH-CLEARANCE VEHICLES
15N54	0.10	0.00	0.10	2 - HIGH-CLEARANCE VEHICLES
15N55	0.23	0.00	0.23	2 - HIGH-CLEARANCE VEHICLES
15N56	0.16	0.00	0.16	2 - HIGH-CLEARANCE VEHICLES
15N57	0.20	0.00	0.20	2 - HIGH-CLEARANCE VEHICLES
15N58	0.27	0.00	0.27	2 - HIGH-CLEARANCE VEHICLES
15N59	0.44	0.00	0.44	3 - SUITABLE FOR PASSENGER CARS
15N63	0.30	0.00	0.30	2 - HIGH-CLEARANCE VEHICLES
16N02	0.81	0.89	1.70	3 - SUITABLE FOR PASSENGER CARS
16N02	3.21	1.70	4.91	3 - SUITABLE FOR PASSENGER CARS
16N02	4.58	4.91	9.49	3 - SUITABLE FOR PASSENGER CARS
16N02	0.89	0.00	0.89	3 - SUITABLE FOR PASSENGER CARS
16N02	8.31	9.49	17.80	3 - SUITABLE FOR PASSENGER CARS
16N02	3.50	17.80	21.30	3 - SUITABLE FOR PASSENGER CARS
16N02A	0.60	0.00	0.60	2 - HIGH-CLEARANCE VEHICLES
16N02D	0.61	0.00	0.61	2 - HIGH-CLEARANCE VEHICLES
16N02E	0.40	0.00	0.40	2 - HIGH-CLEARANCE VEHICLES
16N02F	0.10	0.00	0.10	2 - HIGH-CLEARANCE VEHICLES
16N02G	0.70	0.00	0.70	2 - HIGH-CLEARANCE VEHICLES
16N02H	0.40	0.00	0.40	1 - BASIC CUSTODIAL CARE (CLOSED)

	Alternative 1 – Existing National Forest Transportation System				
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level	
16N02L	1.70	0.00	1.70	2 - HIGH-CLEARANCE VEHICLES	
16N02P	0.40	0.00	0.40	2 - HIGH-CLEARANCE VEHICLES	
16N02S	1.20	0.00	1.20	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N02T	0.50	0.00	0.50	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N03	14.43	0.00	14.43	2 - HIGH-CLEARANCE VEHICLES	
16N03A	0.06	0.00	0.06	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N03B	0.80	0.00	0.80	2 - HIGH-CLEARANCE VEHICLES	
16N03D	1.40	0.00	1.40	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N03F	0.70	0.00	0.70	2 - HIGH-CLEARANCE VEHICLES	
16N03G	0.08	0.00	0.08	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N03H	0.30	0.00	0.30	2 - HIGH-CLEARANCE VEHICLES	
16N03K	1.50	0.00	1.50	2 - HIGH-CLEARANCE VEHICLES	
16N03L	0.20	0.00	0.20	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N04	0.19	0.00	0.19	4 - MODERATE DEGREE OF USER COMFORT	
16N04A	0.05	0.00	0.05	4 - MODERATE DEGREE OF USER COMFORT	
16N09	0.58	0.00	0.58	2 - HIGH-CLEARANCE VEHICLES	
16N15	0.80	0.00	0.80	2 - HIGH-CLEARANCE VEHICLES	
16N15A	0.17	0.00	0.17	2 - HIGH-CLEARANCE VEHICLES	
16N16	2.10	0.00	2.10	2 - HIGH-CLEARANCE VEHICLES	
16N18	4.12	0.00	4.12	2 - HIGH-CLEARANCE VEHICLES	
16N18	4.88	4.12	9.00	2 - HIGH-CLEARANCE VEHICLES	
16N18A	2.30	0.00	2.30	2 - HIGH-CLEARANCE VEHICLES	
16N18B	0.50	0.00	0.50	2 - HIGH-CLEARANCE VEHICLES	
16N18C	0.39	0.00	0.39	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N18E	0.96	0.00	0.96	2 - HIGH-CLEARANCE VEHICLES	
16N18G	0.80	0.00	0.80	2 - HIGH-CLEARANCE VEHICLES	
16N18K	1.10	0.00	1.10	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N19	2.70	0.00	2.70	2 - HIGH-CLEARANCE VEHICLES	
16N19	4.10	2.70	6.80	2 - HIGH-CLEARANCE VEHICLES	
16N19	1.48	6.80	8.28	2 - HIGH-CLEARANCE VEHICLES	
16N19	0.00	8.28	0.00	2 - HIGH-CLEARANCE VEHICLES	
16N19A	0.23	0.00	0.23	2 - HIGH-CLEARANCE VEHICLES	
16N19B	1.40	0.00	1.40	2 - HIGH-CLEARANCE VEHICLES	
16N19D	0.40	0.00	0.40	2 - HIGH-CLEARANCE VEHICLES	
16N19E	0.95	0.00	0.95	2 - HIGH-CLEARANCE VEHICLES	
16N19F	0.76	0.00	0.76	2 - HIGH-CLEARANCE VEHICLES	
16N19G	0.23	0.00	0.23	2 - HIGH-CLEARANCE VEHICLES	
16N21	3.69	0.00	3.69	2 - HIGH-CLEARANCE VEHICLES	
16N21F	0.30	0.00	0.30	2 - HIGH-CLEARANCE VEHICLES	
16N21F	1.50	0.30	1.80	2 - HIGH-CLEARANCE VEHICLES	
16N23	7.40	0.00	7.40	2 - HIGH-CLEARANCE VEHICLES	
16N24	1.10	0.00	1.10	2 - HIGH-CLEARANCE VEHICLES	
16N24A	0.65	0.00	0.65	1 - BASIC CUSTODIAL CARE (CLOSED)	
16N25	0.96	0.00	0.96	2 - HIGH-CLEARANCE VEHICLES	

Alternative 1 – Existing National Forest Transportation System				
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level
16N27	0.50	0.00	0.50	1 - BASIC CUSTODIAL CARE (CLOSED)
16N30	0.24	0.00	0.24	1 - BASIC CUSTODIAL CARE (CLOSED)
16N31	0.35	0.00	0.35	1 - BASIC CUSTODIAL CARE (CLOSED)
16N31B	1.00	0.00	1.00	1 - BASIC CUSTODIAL CARE (CLOSED)
16N32	3.94	0.00	3.94	2 - HIGH-CLEARANCE VEHICLES
16N32A	0.08	0.00	0.08	1 - BASIC CUSTODIAL CARE (CLOSED)
16N32C	0.47	0.00	0.47	1 - BASIC CUSTODIAL CARE (CLOSED)
16N33	0.70	0.00	0.70	2 - HIGH-CLEARANCE VEHICLES
16N33	3.70	0.70	4.40	1 - BASIC CUSTODIAL CARE (CLOSED)
16N33A	0.21	0.00	0.21	1 - BASIC CUSTODIAL CARE (CLOSED)
16N34	0.90	0.00	0.90	2 - HIGH-CLEARANCE VEHICLES
16N34A	0.50	0.00	0.50	2 - HIGH-CLEARANCE VEHICLES
16N35	0.80	0.00	0.80	2 - HIGH-CLEARANCE VEHICLES
16N35	0.84	0.80	1.64	2 - HIGH-CLEARANCE VEHICLES
16N35A	0.14	0.00	0.14	1 - BASIC CUSTODIAL CARE (CLOSED)
16N35B	0.16	0.00	0.16	2 - HIGH-CLEARANCE VEHICLES
16N35C	0.12	0.00	0.12	2 - HIGH-CLEARANCE VEHICLES
16N36	1.20	0.00	1.20	2 - HIGH-CLEARANCE VEHICLES
16N36B	0.80	0.00	0.80	2 - HIGH-CLEARANCE VEHICLES
16N37	1.20	0.00	1.20	2 - HIGH-CLEARANCE VEHICLES
16N37B	0.17	0.00	0.17	2 - HIGH-CLEARANCE VEHICLES
16N38	1.60	0.00	1.60	2 - HIGH-CLEARANCE VEHICLES
16N39	0.58	0.00	0.58	1 - BASIC CUSTODIAL CARE (CLOSED)
16N39A	0.22	0.00	0.22	1 - BASIC CUSTODIAL CARE (CLOSED)
16N40	0.66	0.00	0.66	2 - HIGH-CLEARANCE VEHICLES
16N41	1.43	0.00	1.43	2 - HIGH-CLEARANCE VEHICLES
16N41A	0.17	0.00	0.17	2 - HIGH-CLEARANCE VEHICLES
16N41B	0.09	0.00	0.09	2 - HIGH-CLEARANCE VEHICLES
16N41C	0.89	0.00	0.89	2 - HIGH-CLEARANCE VEHICLES
16N55	0.50	0.00	0.50	1 - BASIC CUSTODIAL CARE (CLOSED)
16N71	0.70	0.00	0.70	2 - HIGH-CLEARANCE VEHICLES
17N01	0.70	0.00	0.70	2 - HIGH-CLEARANCE VEHICLES
17N03	1.20	0.00	1.20	1 - BASIC CUSTODIAL CARE (CLOSED)
17N04	7.89	0.00	7.89	3 - SUITABLE FOR PASSENGER CARS
17N04L	3.10	0.00	3.10	1 - BASIC CUSTODIAL CARE (CLOSED)
17N04R	0.59	0.00	0.59	1 - BASIC CUSTODIAL CARE (CLOSED)
17N04S	1.80	0.00	1.80	1 - BASIC CUSTODIAL CARE (CLOSED)
17N05	8.00	0.00	8.00	4 - MODERATE DEGREE OF USER COMFORT
17N05	0.50	8.00	8.50	4 - MODERATE DEGREE OF USER COMFORT
17N05	0.18	8.50	8.68	4 - MODERATE DEGREE OF USER COMFORT
17N05	1.06	8.68	9.74	4 - MODERATE DEGREE OF USER COMFORT
17N05A	1.04	0.00	1.04	2 - HIGH-CLEARANCE VEHICLES
17N05C	0.97	0.00	0.97	1 - BASIC CUSTODIAL CARE (CLOSED)
17N05E	0.71	0.00	0.71	1 - BASIC CUSTODIAL CARE (CLOSED)

Alternative 1 – Existing National Forest Transportation System				
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level
17N05F	1.56	0.00	1.56	1 - BASIC CUSTODIAL CARE (CLOSED)
17N05G	0.67	0.00	0.67	1 - BASIC CUSTODIAL CARE (CLOSED)
17N05U	0.28	0.00	0.28	1 - BASIC CUSTODIAL CARE (CLOSED)
17N07	0.60	0.00	0.60	3 - SUITABLE FOR PASSENGER CARS
17N07	9.79	0.60	10.39	3 - SUITABLE FOR PASSENGER CARS
17N07G	1.67	0.00	1.67	2 - HIGH-CLEARANCE VEHICLES
17N07J	1.50	0.00	1.50	2 - HIGH-CLEARANCE VEHICLES
17N07K	0.80	0.00	0.80	2 - HIGH-CLEARANCE VEHICLES
17N07Q	0.22	0.00	0.22	2 - HIGH-CLEARANCE VEHICLES
17N07R	0.44	0.00	0.44	2 - HIGH-CLEARANCE VEHICLES
17N08	7.08	0.00	7.08	3 - SUITABLE FOR PASSENGER CARS
17N08A	0.50	0.00	0.50	1 - BASIC CUSTODIAL CARE (CLOSED)
17N13	0.70	0.00	0.70	2 - HIGH-CLEARANCE VEHICLES
17N13A	0.38	0.00	0.38	2 - HIGH-CLEARANCE VEHICLES
17N14	0.39	0.00	0.39	2 - HIGH-CLEARANCE VEHICLES
17N15	0.90	0.00	0.90	2 - HIGH-CLEARANCE VEHICLES
17N15A	0.13	0.00	0.13	1 - BASIC CUSTODIAL CARE (CLOSED)
17N16	0.65	0.00	0.65	2 - HIGH-CLEARANCE VEHICLES
17N17	0.60	0.00	0.60	1 - BASIC CUSTODIAL CARE (CLOSED)
17N18	0.70	0.00	0.70	3 - SUITABLE FOR PASSENGER CARS
17N18	2.94	0.70	3.64	3 - SUITABLE FOR PASSENGER CARS
17N18	0.71	3.64	4.35	3 - SUITABLE FOR PASSENGER CARS
17N18	2.92	4.35	7.27	3 - SUITABLE FOR PASSENGER CARS
17N18	0.39	7.27	7.66	3 - SUITABLE FOR PASSENGER CARS
17N18A	0.39	0.00	0.39	1 - BASIC CUSTODIAL CARE (CLOSED)
17N18A	0.55	0.39	0.94	1 - BASIC CUSTODIAL CARE (CLOSED)
17N18C	0.67	0.00	0.67	2 - HIGH-CLEARANCE VEHICLES
17N18E	0.42	0.00	0.42	1 - BASIC CUSTODIAL CARE (CLOSED)
17N18F	0.07	0.00	0.07	1 - BASIC CUSTODIAL CARE (CLOSED)
17N19	0.50	0.00	0.50	1 - BASIC CUSTODIAL CARE (CLOSED)
17N20	0.19	0.00	0.19	2 - HIGH-CLEARANCE VEHICLES
17N21	2.00	0.00	2.00	3 - SUITABLE FOR PASSENGER CARS
17N21	1.80	2.00	3.80	3 - SUITABLE FOR PASSENGER CARS
17N21A	0.20	0.00	0.20	2 - HIGH-CLEARANCE VEHICLES
17N21A	0.30	0.20	0.50	2 - HIGH-CLEARANCE VEHICLES
17N21B	0.31	0.00	0.31	2 - HIGH-CLEARANCE VEHICLES
17N21C	0.20	0.00	0.20	2 - HIGH-CLEARANCE VEHICLES
17N22	1.50	0.00	1.50	3 - SUITABLE FOR PASSENGER CARS
17N22	2.89	1.50	4.39	3 - SUITABLE FOR PASSENGER CARS
17N22A	0.79	0.00	0.79	2 - HIGH-CLEARANCE VEHICLES
17N22B	0.63	0.00	0.63	2 - HIGH-CLEARANCE VEHICLES
17N22C	0.16	0.00	0.16	2 - HIGH-CLEARANCE VEHICLES
17N22D	0.08	0.00	0.08	2 - HIGH-CLEARANCE VEHICLES
17N22G	0.29	0.00	0.29	2 - HIGH-CLEARANCE VEHICLES

Alternative 1 – Existing National Forest Transportation System				
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level
17N22J	0.12	0.00	0.12	2 - HIGH-CLEARANCE VEHICLES
17N23	2.80	0.00	2.80	1 - BASIC CUSTODIAL CARE (CLOSED)
17N24	1.00	0.00	1.00	2 - HIGH-CLEARANCE VEHICLES
17N25	0.49	0.00	0.49	1 - BASIC CUSTODIAL CARE (CLOSED)
17N26	0.25	0.00	0.25	2 - HIGH-CLEARANCE VEHICLES
17N26A	0.37	0.00	0.37	2 - HIGH-CLEARANCE VEHICLES
17N27	1.70	0.00	1.70	3 - SUITABLE FOR PASSENGER CARS
17N27	2.29	1.70	3.99	3 - SUITABLE FOR PASSENGER CARS
17N27A	0.50	0.00	0.50	1 - BASIC CUSTODIAL CARE (CLOSED)
17N27B	0.40	0.00	0.40	1 - BASIC CUSTODIAL CARE (CLOSED)
17N27C	0.40	0.00	0.40	1 - BASIC CUSTODIAL CARE (CLOSED)
17N28	0.20	0.00	0.20	1 - BASIC CUSTODIAL CARE (CLOSED)
17N29	1.00	0.00	1.00	2 - HIGH-CLEARANCE VEHICLES
17N29B	0.20	0.00	0.20	2 - HIGH-CLEARANCE VEHICLES
17N30	1.30	0.00	1.30	2 - HIGH-CLEARANCE VEHICLES
17N30A	0.40	0.00	0.40	2 - HIGH-CLEARANCE VEHICLES
17N31	1.60	0.00	1.60	2 - HIGH-CLEARANCE VEHICLES
17N32	3.40	0.00	3.40	2 - HIGH-CLEARANCE VEHICLES
17N32B	0.80	0.00	0.80	2 - HIGH-CLEARANCE VEHICLES
17N32F	1.00	0.00	1.00	2 - HIGH-CLEARANCE VEHICLES
17N32G	2.00	0.00	2.00	2 - HIGH-CLEARANCE VEHICLES
17N35	0.50	0.00	0.50	2 - HIGH-CLEARANCE VEHICLES
17N36	2.50	0.00	2.50	2 - HIGH-CLEARANCE VEHICLES
17N36B	1.00	0.00	1.00	2 - HIGH-CLEARANCE VEHICLES
17N36C	0.43	0.00	0.43	1 - BASIC CUSTODIAL CARE (CLOSED)
17N36F	1.20	0.00	1.20	1 - BASIC CUSTODIAL CARE (CLOSED)
17N37	0.14	0.00	0.14	2 - HIGH-CLEARANCE VEHICLES
17N39	2.19	0.00	2.19	2 - HIGH-CLEARANCE VEHICLES
17N39A	0.95	0.00	0.95	1 - BASIC CUSTODIAL CARE (CLOSED)
17N39B	0.51	0.00	0.51	1 - BASIC CUSTODIAL CARE (CLOSED)
17N39C	0.12	0.00	0.12	1 - BASIC CUSTODIAL CARE (CLOSED)
17N40	1.00	0.00	1.00	2 - HIGH-CLEARANCE VEHICLES
17N40B	0.53	0.00	0.53	2 - HIGH-CLEARANCE VEHICLES
17N40C	0.51	0.00	0.51	2 - HIGH-CLEARANCE VEHICLES
17N40D	0.18	0.00	0.18	1 - BASIC CUSTODIAL CARE (CLOSED)
17N41	4.25	0.00	4.25	2 - HIGH-CLEARANCE VEHICLES
17N41A	0.30	0.00	0.30	1 - BASIC CUSTODIAL CARE (CLOSED)
17N41G	0.95	0.00	0.95	2 - HIGH-CLEARANCE VEHICLES
17N41H	0.90	0.00	0.90	2 - HIGH-CLEARANCE VEHICLES
17N42	1.51	0.00	1.51	2 - HIGH-CLEARANCE VEHICLES
17N42A	1.28	0.00	1.28	2 - HIGH-CLEARANCE VEHICLES
17N43	1.00	0.00	1.00	2 - HIGH-CLEARANCE VEHICLES
17N45	0.70	0.00	0.70	2 - HIGH-CLEARANCE VEHICLES
17N46	1.20	0.00	1.20	2 - HIGH-CLEARANCE VEHICLES

Alternative 1 – Existing National Forest Transportation System				
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level
17N46A	0.16	0.00	0.16	1 - BASIC CUSTODIAL CARE (CLOSED)
17N48	1.66	0.00	1.66	2 - HIGH-CLEARANCE VEHICLES
17N48C	0.47	0.00	0.47	1 - BASIC CUSTODIAL CARE (CLOSED)
17N49	0.66	0.00	0.66	3 - SUITABLE FOR PASSENGER CARS
17N49	1.16	0.66	1.81	3 - SUITABLE FOR PASSENGER CARS
17N49	0.03	1.81	1.84	3 - SUITABLE FOR PASSENGER CARS
17N49	0.52	1.84	2.36	3 - SUITABLE FOR PASSENGER CARS
17N49	0.06	2.36	2.42	3 - SUITABLE FOR PASSENGER CARS
17N49	0.54	2.42	2.96	3 - SUITABLE FOR PASSENGER CARS
17N49	0.10	2.96	3.06	3 - SUITABLE FOR PASSENGER CARS
17N49	0.37	3.06	3.43	3 - SUITABLE FOR PASSENGER CARS
17N49	0.04	3.43	3.47	3 - SUITABLE FOR PASSENGER CARS
17N49	0.10	3.47	3.57	3 - SUITABLE FOR PASSENGER CARS
17N49	0.06	3.57	3.63	3 - SUITABLE FOR PASSENGER CARS
17N49	2.31	3.63	5.93	3 - SUITABLE FOR PASSENGER CARS
17N49	0.11	5.93	6.05	3 - SUITABLE FOR PASSENGER CARS
17N49	1.02	6.05	7.07	3 - SUITABLE FOR PASSENGER CARS
17N49	0.09	7.07	7.16	3 - SUITABLE FOR PASSENGER CARS
17N49	0.10	7.16	7.25	3 - SUITABLE FOR PASSENGER CARS
17N49	0.16	7.25	7.42	3 - SUITABLE FOR PASSENGER CARS
17N49	0.19	7.42	7.61	3 - SUITABLE FOR PASSENGER CARS
17N49	0.24	7.61	7.85	3 - SUITABLE FOR PASSENGER CARS
17N53	0.30	0.00	0.30	4 - MODERATE DEGREE OF USER COMFORT
17N53A	0.30	0.00	0.30	2 - HIGH-CLEARANCE VEHICLES
17N62	0.37	0.00	0.37	4 - MODERATE DEGREE OF USER COMFORT
17N62A	0.41	0.00	0.41	4 - MODERATE DEGREE OF USER COMFORT
17N62B	0.24	0.00	0.24	4 - MODERATE DEGREE OF USER COMFORT
17N63	0.30	0.00	0.30	2 - HIGH-CLEARANCE VEHICLES
17N64	0.09	0.00	0.09	4 - MODERATE DEGREE OF USER COMFORT
17N64A	0.25	0.00	0.25	5 - HIGH DEGREE OF USER COMFORT
17N64B	0.08	0.00	0.08	4 - MODERATE DEGREE OF USER COMFORT
17N69	0.04	0.00	0.04	2 - HIGH-CLEARANCE VEHICLES
17N69	0.72	0.18	0.90	2 - HIGH-CLEARANCE VEHICLES
17N69	2.00	0.90	2.90	2 - HIGH-CLEARANCE VEHICLES
17N70	0.18	0.00	0.18	4 - MODERATE DEGREE OF USER COMFORT
17N70A	0.09	0.00	0.09	4 - MODERATE DEGREE OF USER COMFORT
17N70B	0.09	0.00	0.09	4 - MODERATE DEGREE OF USER COMFORT
17N71	0.20	0.00	0.20	2 - HIGH-CLEARANCE VEHICLES
17N92	1.52	0.00	1.52	1 - BASIC CUSTODIAL CARE (CLOSED)
18N01	0.10	0.00	0.10	1 - BASIC CUSTODIAL CARE (CLOSED)
18N01	0.06	0.10	0.16	1 - BASIC CUSTODIAL CARE (CLOSED)
18N02	2.00	0.00	2.60	3 - SUITABLE FOR PASSENGER CARS
18N03	1.91	0.00	1.91	1 - BASIC CUSTODIAL CARE (CLOSED)
18N04	5.35	0.00	5.35	2 - HIGH-CLEARANCE VEHICLES

Alternative 1 – Existing National Forest Transportation System				
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level
18N04B	0.83	0.00	0.83	2 - HIGH-CLEARANCE VEHICLES
18N04E	0.86	0.00	0.86	2 - HIGH-CLEARANCE VEHICLES
18N05	2.00	0.00	2.00	1 - BASIC CUSTODIAL CARE (CLOSED)
18N06	0.88	0.00	0.88	2 - HIGH-CLEARANCE VEHICLES
18N06	0.45	0.88	1.33	2 - HIGH-CLEARANCE VEHICLES
18N06A	0.18	0.00	0.18	1 - BASIC CUSTODIAL CARE (CLOSED)
18N07	8.00	0.00	8.00	3 - SUITABLE FOR PASSENGER CARS
18N07	5.53	8.00	13.53	3 - SUITABLE FOR PASSENGER CARS
18N08	12.38	0.00	12.38	3 - SUITABLE FOR PASSENGER CARS
18N08F	1.80	0.00	1.80	2 - HIGH-CLEARANCE VEHICLES
18N08G	1.12	0.00	1.12	1 - BASIC CUSTODIAL CARE (CLOSED)
18N08M	1.00	0.00	1.00	1 - BASIC CUSTODIAL CARE (CLOSED)
18N09	5.10	0.00	5.10	2 - HIGH-CLEARANCE VEHICLES
18N09	6.93	5.10	11.00	1 - BASIC CUSTODIAL CARE (CLOSED)
18N10	1.42	0.00	1.42	2 - HIGH-CLEARANCE VEHICLES
18N11	1.91	0.00	1.91	2 - HIGH-CLEARANCE VEHICLES
18N11	3.79	2.28	6.07	2 - HIGH-CLEARANCE VEHICLES
18N11A	0.80	0.00	0.80	1 - BASIC CUSTODIAL CARE (CLOSED)
18N11B	0.19	0.00	0.19	1 - BASIC CUSTODIAL CARE (CLOSED)
18N11C	0.20	0.00	0.20	1 - BASIC CUSTODIAL CARE (CLOSED)
18N11D	0.46	0.00	0.46	1 - BASIC CUSTODIAL CARE (CLOSED)
18N12	1.10	0.00	1.10	2 - HIGH-CLEARANCE VEHICLES
18N12A	0.43	0.00	0.43	1 - BASIC CUSTODIAL CARE (CLOSED)
18N13	7.51	0.24	7.75	1 - BASIC CUSTODIAL CARE (CLOSED)
18N13	0.24	0.00	0.24	2 - HIGH-CLEARANCE VEHICLES
18N14	1.00	0.00	1.00	1 - BASIC CUSTODIAL CARE (CLOSED)
18N15	1.20	0.00	1.20	2 - HIGH-CLEARANCE VEHICLES
18N15A	0.60	0.00	0.60	2 - HIGH-CLEARANCE VEHICLES
18N15D	0.23	0.00	0.23	2 - HIGH-CLEARANCE VEHICLES
18N16	5.33	0.00	5.33	2 - HIGH-CLEARANCE VEHICLES
18N16B	0.55	0.00	0.55	2 - HIGH-CLEARANCE VEHICLES
18N16E	0.38	0.00	0.38	1 - BASIC CUSTODIAL CARE (CLOSED)
18N16F	0.78	0.00	0.78	2 - HIGH-CLEARANCE VEHICLES
18N16G	0.70	0.00	0.70	1 - BASIC CUSTODIAL CARE (CLOSED)
18N16J	0.99	0.00	0.99	2 - HIGH-CLEARANCE VEHICLES
18N16W	0.17	0.00	0.17	2 - HIGH-CLEARANCE VEHICLES
18N17	5.90	0.00	5.90	2 - HIGH-CLEARANCE VEHICLES
18N17	2.20	5.90	8.10	2 - HIGH-CLEARANCE VEHICLES
18N17A	0.21	0.00	0.21	2 - HIGH-CLEARANCE VEHICLES
18N17B	0.87	0.00	0.87	2 - HIGH-CLEARANCE VEHICLES
18N17C	1.18	0.00	1.18	2 - HIGH-CLEARANCE VEHICLES
18N17D	0.25	0.00	0.25	2 - HIGH-CLEARANCE VEHICLES
18N17E	0.90	0.00	0.90	2 - HIGH-CLEARANCE VEHICLES
18N17F	0.54	0.00	0.54	2 - HIGH-CLEARANCE VEHICLES

Alternative 1 – Existing National Forest Transportation System					
Road Number	Total Miles	Begin Mile Point	End Mile Point	Maintenance Level	
18N17G	0.12	0.00	0.12	2 - HIGH-CLEARANCE VEHICLES	
18N17H	0.15	0.00	0.15	2 - HIGH-CLEARANCE VEHICLES	
18N18	1.43	0.00	1.43	2 - HIGH-CLEARANCE VEHICLES	
18N18A	0.20	0.00	0.20	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N18B	0.15	0.00	0.15	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N18C	0.08	0.00	0.08	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N18D	0.13	0.00	0.13	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N19	3.44	0.00	3.44	2 - HIGH-CLEARANCE VEHICLES	
18N19A	0.22	0.00	0.22	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N19B	0.20	0.00	0.20	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N19C	0.17	0.00	0.17	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N20	1.00	0.00	1.00	2 - HIGH-CLEARANCE VEHICLES	
18N20A	0.40	0.00	0.40	2 - HIGH-CLEARANCE VEHICLES	
18N21	0.10	0.00	0.10	2 - HIGH-CLEARANCE VEHICLES	
18N22	2.00	0.00	2.00	2 - HIGH-CLEARANCE VEHICLES	
18N22D	0.62	0.00	0.62	2 - HIGH-CLEARANCE VEHICLES	
18N22E	0.14	0.00	0.14	2 - HIGH-CLEARANCE VEHICLES	
18N23	0.10	0.00	0.10	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N24	1.10	0.00	1.10	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N26	1.75	0.00	1.75	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N26A	0.15	0.00	0.15	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N26B	0.08	0.00	0.08	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N27	0.10	0.00	0.10	3 - SUITABLE FOR PASSENGER CARS	
18N28	0.30	0.00	0.30	3 - SUITABLE FOR PASSENGER CARS	
18N30	0.03	0.00	0.03	2 - HIGH-CLEARANCE VEHICLES	
18N30	2.74	0.03	2.77	2 - HIGH-CLEARANCE VEHICLES	
18N30A	0.28	0.00	0.28	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N30B	0.46	0.00	0.46	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N31	0.60	0.00	0.60	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N46	0.39	0.00	0.39	2 - HIGH-CLEARANCE VEHICLES	
18N47	0.44	0.00	0.44	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N48	0.31	0.00	0.31	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N50	0.24	0.00	0.24	2 - HIGH-CLEARANCE VEHICLES	
18N51	0.70	0.00	0.70	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N56	0.88	0.00	0.88	2 - HIGH-CLEARANCE VEHICLES	
18N57	0.56	0.00	0.56	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N58	0.86	0.00	0.86	2 - HIGH-CLEARANCE VEHICLES	
18N58	0.45	0.86	1.31	1 - BASIC CUSTODIAL CARE (CLOSED)	
18N58B	0.25	0.00	0.25	1 - BASIC CUSTODIAL CARE (CLOSED)	
19N01	1.60	0.00	1.60	2 - HIGH-CLEARANCE VEHICLES	
19N01E	0.47	0.00	0.47	2 - HIGH-CLEARANCE VEHICLES	

Table A-2. Alternative 1 – Inventoried Unauthorized Routes (UARs).

Alternative 1 – Inventoried UARs					
Route Number	Miles				
13N35.5	0.14				
13N37.1	0.11				
14N15.1	3.80				
14N32.1	0.26				
14N33.3	0.52				
14N46.2	0.13				
15N01.102	0.29				
15N01.102	0.19				
15N01A.1	0.10				
15N01A.2	0.05				
15N01A.4	3.84				
15N01U.1	0.58				
15N02.101	0.81				
15N02.103	0.58				
15N02.106	0.48				
15N02.107	0.42				
15N02.108	1.14				
15N02.108A	0.59				
15N02.2	0.24				
15N02.4	0.49				
15N02.5	0.90				
15N02.5A	0.05				
15N11.2	0.32				
15N11A.1	0.25				
15N13.100	0.49				
15N13.100	0.48				
15N36.1	0.62				
15N36N.1	0.90				
15N36N.1A	0.16				
15N36N.1B	0.21				
15N36N.1C	0.03				
15N39A.1	0.18				
15N45.100	0.22				
15N45.101	0.12				
16N02.1	0.10				
16N02.2	0.87				
16N02.5	0.21				
16N02S.1	0.21				
16N02T.1	0.12				
16N03.100	0.10				
16N03.2	0.87				
16N10.1	0.14				
16N10.2	0.21				
16N18.1	1.04				
16N18.3	0.49				
	1				

Alternative 1 – Inventoried UARs				
Route Number	Miles			
16N18.4	0.67			
16N18B.1	0.66			
16N19.1	0.05			
16N19.2	0.08			
16N19.3	0.30			
16N19.4	0.87			
16N19.5	0.19			
16N19E.1	0.41			
16N21.1	0.15			
16N21.2	0.10			
16N21F.1	0.09			
16N23.100	0.64			
16N23.2	0.22			
16N23.4	0.69			
16N23A.1	1.90			
16N31A.1	0.22			
16N31B.2	0.13			
16N36.1	0.11			
16N36.1	0.69			
16N55.1	0.16			
17N01.1	0.21			
17N01.100	2.49			
17N01.1A	0.02			
17N01.1B	0.03			
17N01.1C	0.09			
17N01.1D	0.13			
17N01.2	0.30			
17N01.2B	0.03			
17N01.3	0.13			
17N01.3A	0.07			
17N04.1	0.12			
17N04.2	0.35			
17N04.3	0.97			
17N05.100	0.88			
17N05.101	0.06			
17N05.4	0.32			
17N05.4A	1.36			
17N05.5	0.14			
17N07.1	0.25			
17N07.101	0.09			
17N07.102	3.07			
17N07.2	0.51			
17N07.4	0.21			
17N07.5	0.32			
17N07.5A	0.15			
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Alternative 1 – Inventoried UARs				
Route Number	Miles			
17N07.6	0.75			
17N07.7	0.30			
17N07R.1	0.16			
17N07R.1A	0.25			
17N08.3	0.30			
17N16.1	0.17			
17N16.100	0.07			
17N17.1	1.98			
17N18.2	0.39			
17N18.3	0.74			
17N18.4	0.15			
17N21.1	0.41			
17N22A.1	0.21			
17N22A.2	0.25			
17N22W.1	0.46			
17N23C.1	2.24			
17N23C.2	0.59			
17N27A.1	0.21			
17N27D.1	0.36			
17N29.100	0.04			
17N31.3	0.17			
17N31A.1	0.36			
17N32.1	0.31			
17N32.2	0.17			
17N35.100	0.35			
17N36B.1	0.26			
17N40B.1	0.19			
17N40C.1	0.20			
17N41.1	0.74			
17N41.2	0.02			
17N41G.1	0.17			
17N41H.100	0.06			
17N42A.100	0.48			
17N43.1	0.04			
17N48.1	0.33			
17N48.3	0.16			
17N48.4	0.46			
17N49.1	0.04			
17N49.100	4.00			
17N49.100A	0.21			
17N49.101	1.17			
17N49.102	0.87			
17N49.102A	0.71			
17N49.102B	0.17			
17N49.102C	0.20			

Route Number Miles 17N49.103 0.26 17N49.104 4.66 17N49.104A 0.05 17N49.104B 0.08 17N49.105 1.43 17N49.105 0.12 17N49.106 0.32 17N49.107 0.64 17N49.108 0.31 17N49.11 4.49 17N49.11 0.17 17N49.11M 0.17 17N49.11M 0.17 17N49.11N 0.23 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15 0.62 17N49.15 0.62 17N49.15 0.62 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4 2.04 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 <td< th=""><th colspan="5">Alternative 1 – Inventoried UARs</th></td<>	Alternative 1 – Inventoried UARs				
17N49.104 17N49.104B 17N49.104B 17N49.105 17N49.105A 17N49.106 17N49.106 17N49.107 1644 17N49.1108 17N49.11M 17N49.11N 17N49.11P 17N49.12 17N49.13 17N49.14 17N49.15 17N49.15 17N49.15 17N49.15 17N49.16 17N49.17 17N49.18 17N49.19 17N49.2 17N49.3 17N49.4 17N49.4 17N49.4 17N49.7 17N49.7 17N49.7 17N49.7 17N49.8 17N4	Route Number	Miles			
17N49.104A	17N49.103	0.26			
17N49.104B 0.08 17N49.105 1.43 17N49.106A 0.12 17N49.106 0.32 17N49.107 0.64 17N49.108 0.31 17N49.11 4.49 17N49.11M 0.17 17N49.11N 0.23 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4 1.06 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N05.1 0.20 18N05.100 2.16 18N05.100 2.16 18N07.11 0.06 18N07.12 0.04 18N07.3 0.08 <td< td=""><td>17N49.104</td><td>4.66</td></td<>	17N49.104	4.66			
17N49.105	17N49.104A	0.05			
17N49.105A 0.12 17N49.106 0.32 17N49.107 0.64 17N49.108 0.31 17N49.11 4.49 17N49.11M 0.17 17N49.11N 0.23 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.7A 0.82 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.100 2.16 18N05.1 0.20 18N05.100 2.16 18N07.11 0.06 18N07.14 0.05 18N07.2 0.13 18N07.6 0.25 18N07.8 0.38	17N49.104B	0.08			
17N49.106 0.32 17N49.107 0.64 17N49.108 0.31 17N49.11 4.49 17N49.11M 0.17 17N49.11N 0.23 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	17N49.105	1.43			
17N49.107	17N49.105A	0.12			
17N49.108 0.31 17N49.11 4.49 17N49.11M 0.17 17N49.11N 0.23 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.106	0.32			
17N49.11M 0.17 17N49.11N 0.23 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.15A 0.24 17N49.15A 0.24 17N49.15A 0.20 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N49.1 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N05.1 0.20 18N05.1 0.20 18N05.1 0.06 18N07.11 <td>17N49.107</td> <td>0.64</td>	17N49.107	0.64			
17N49.11M 0.17 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.108	0.31			
17N49.11N 0.23 17N49.11P 0.21 17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.15A 0.24 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7A 0.82 17N49.8 0.39 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	17N49.11	4.49			
17N49.11P 0.21 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.7 3.35 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.8 0.38	17N49.11M	0.17			
17N49.12 2.10 17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	17N49.11N	0.23			
17N49.13 0.30 17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.7A 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	17N49.11P	0.21			
17N49.14 0.54 17N49.15 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7 3.35 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.12	2.10			
17N49.15A 0.62 17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7 3.35 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.13	0.30			
17N49.15A 0.24 17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.14	0.54			
17N49.2 0.20 17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.3 0.08 18N07.8 0.38	17N49.15	0.62			
17N49.3 0.23 17N49.4 2.04 17N49.4A 1.06 17N49.7 3.35 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.3 0.08 18N07.8 0.38	17N49.15A	0.24			
17N49.4 2.04 17N49.4A 1.06 17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.2	0.20			
17N49.4A 1.06 17N49.7 3.35 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.3 0.08 18N07.8 0.38	17N49.3	0.23			
17N49.7 3.35 17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.4	2.04			
17N49.7A 0.82 17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.4A	1.06			
17N49.8 0.39 17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.7	3.35			
17N85 0.00 18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.7A	0.82			
18N02.1 0.14 18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.8 0.38	17N49.8	0.39			
18N02.2 0.28 18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	17N85	0.00			
18N02.3 0.02 18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N02.1	0.14			
18N04.2 0.11 18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N02.2	0.28			
18N05.1 0.20 18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N02.3	0.02			
18N05.100 2.16 18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N04.2	0.11			
18N05.2 0.53 18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N05.1	0.20			
18N07.11 0.06 18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N05.100	2.16			
18N07.12 0.04 18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N05.2	0.53			
18N07.14 0.05 18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N07.11	0.06			
18N07.2 0.13 18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N07.12	0.04			
18N07.3 0.08 18N07.6 0.25 18N07.8 0.38	18N07.14	0.05			
18N07.6 0.25 18N07.8 0.38	18N07.2	0.13			
18N07.8 0.38	18N07.3	0.08			
	18N07.6	0.25			
18N08.2 0.03	18N07.8	0.38			
10.100.2	18N08.2	0.03			
18N09.100 0.27	18N09.100	0.27			
18N09.100A 0.16	18N09.100A	0.16			
18N09.101 0.16	18N09.101	0.16			
18N09.102 1.84	18N09.102	1.84			

Alternative 1 – Ir	nventoried UARs
Route Number	Miles
18N09.103	0.04
18N09.104	0.05
18N09.105	0.12
18N09.106	0.02
18N09.107	0.01
18N09.108	0.03
18N10.1	0.70
18N11D.1	1.75
18N11D.2	0.25
18N11D.3	0.29
18N11D.4A	0.73
18N11D.5	2.11
18N13.100	0.21
18N13.101	0.08
18N16.100	2.60
18N16F.1	0.16
18N17.100	1.01
18N17.100A	0.08
18N17.101	0.05
18N17.102	0.06
18N17.103	0.21
18N17.104	0.20
18N17.104A	0.02
18N17C.1	0.05
18N20.100	0.28
18N20.100A	0.08
18N20.101	0.12
18N20.102	0.47
18N26A.2	0.06
18N30.100	0.04
18N31.1	0.16
18N31.2	0.23
18N31.3C	0.18
18N31.4	1.25
18N51.100	1.45
18N51.100A	0.46
18N56.100	0.04
18N58.1	0.13
199.102	0.13
199.103	0.10
199.104	0.11
199.105	0.03
199.106	0.18
199.107	0.10
199.108	0.24

Alternative 1 – Inventoried UARs				
Route Number	Miles			
199.109	0.10			
199.111	0.09			
199.111A	0.07			
199.112	0.29			
199.113	0.07			
305.100	0.57			
305.101	1.08			
305.101A	0.04			
305.101B	0.50			
305.102	0.15			
305.103	0.14			
305.104	0.14			
305.105	0.22			
305.106	0.21			
305.107	1.25			
305.108	0.06			
305.109	2.43			
305.109A	1.02			
305.113	0.12			
305.114	0.63			
305.115	1.74			
305.115A	0.18			
305.118	0.80			
305.119	0.22			
305.120	0.04			
305.121	0.63			
305.121A	0.28			
305.121B	1.03			
305.123	0.63			
305.124	1.20			
305.125	1.44			
305.125A	0.21			
305.126	1.56			
305.128	0.70			
305.129	0.40			
305.130	1.72			
305.131	0.09			
305.132	0.04			
305.133	0.01			
305.134	0.14			
314.1	1.21			
314.102	0.80			
314.107	0.26			
314.108	0.06			
315.100	1.68			

Alternative 1 – Inventoried UARs				
Route Number	Miles			
315.102	0.48			
315.103	0.26			
315.104	0.82			
315.106	0.25			
315.107	0.30			
315.108	0.46			
315.109	0.50			
315.110	0.07			
315.111	0.03			
315.2	0.51			
315.3	0.98			
315.3A	0.24			
315.9A	1.22			
316.1	0.26			
316.10	0.03			
316.11	0.04			
316.12	0.03			
316.2	0.20			
316.3	0.08			
316.4	0.07			
316.5	0.03			
316.6	0.03			

Alternative 1 – Inventoried UARs				
Route Number	Miles			
316.7	0.02			
316.7A	0.02			
316.8	0.05			
316.9	0.06			
316.9A	0.05			
324.100	0.13			
405.10	0.74			
405.100	0.11			
405.101	0.17			
405.103	3.47			
405.9	0.05			
411.101	0.30			
411.102	0.17			
427.101	0.15			
427.103	0.32			
427.104	0.30			
427.105	0.29			
427.106	0.13			
427.107	0.05			
427.108	0.09			
427.108A	0.04			
Total	154.82			

Table A-3. Alternative 4.

Alternative 4						
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions
13N35.5	0.14	0.00	0.14	UAR	Restore	Barricade.
13N35K	0.10	0.18	0.28	2	Decommission	Remove from system.
13N37	2.00	0.00	2.00	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade. Downgrade to OML 1.
13N37.1	0.11	0.00	0.11	UAR	Restore	Barricade.
13N37A	0.77	0.00	0.77	2	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.
13N37B	0.27	0.00	0.27	2	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.
14N01	4.61	9.60	14.21	3	3	POC Mitigation: seasonal gate closure.
14N01D	1.80	0.00	1.80	2	2	Maintain, repair, or replace each culvert; improve surface drainage. POC Mitigation: seasonal gate closure.
14N08	0.50	0.00	0.50	2	2	POC Mitigation: year-round gate closure.
14N08T	0.11	0.00	0.11	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.
14N15	0.50	0.00	0.50	2	2	Maintain, repair, or replace each culvert; improve surface drainage. POC Mitigation: proposed seasonal gate on 14N01 restricts access.
14N15.1	3.80	0.00	3.80	UAR	2	Add to road system. OML 2. Replace culverts and repair road surface.
14N32.1	0.26	0.00	0.26	UAR	Restore	Barricade.
14N33	1.60	0.18	1.78	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars and barricade.
14N33.3	0.52	0.00	0.52	UAR	Restore	Remove culverts and associated fill from stream channels as on 14N33. Waterbars as needed.
14N33A	0.22	0.00	0.22	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.
14N38	0.41	0.00	0.41	2	2	Improve surface drainage and maintain as OML 2. POC Mitigation: seasonal gate closure at beginning of road.
14N38	0.19	0.41	0.60	2	Decommission	Decommission past water source. Remove culverts. Waterbar as needed and barricade.

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Appendix A. Alternative Tables

Alternative 4						
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions
14N46	2.70	0.00	2.70	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade. Downgrade to OML 1.
14N46.2	0.13	0.00	0.13	UAR	Restore	Waterbar and barricade.
14N46B	0.37	0.00	0.37	1	Decommission	Remove from system. Waterbars as needed and barricade.
15N01.102	0.29	0.00	0.29	UAR	2	Add to road system.
15N01.102	0.19	0.29	0.48	UAR	2	Add to road system. OML 2. POC Mitigation: seasonal closure – gate at right spur (milepost 0.09). Barricade last 50' of southern fork, located about 500' from 15N01.
15N01A.1	0.10	0.00	0.10	UAR	Restore	Barricade.
15N01A.2	0.05	0.00	0.05	UAR	Restore	Barricade.
15N01A.4	3.84	0.00	3.84	UAR	2	Add as OML 2. POC Mitigation: seasonal gate before approach to first POC stand about 2.2 miles from start.
15N01P	0.09	0.79	0.88	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.
15N01Q	0.50	0.00	0.50	1	Motorized Trail	Convert to motorized trail to Marlow Campsite.
15N01R	0.10	0.00	0.10	1	1	Waterbar as needed and barricade.
15N01S	0.10	0.00	0.10	1	1	Waterbar as needed and barricade.
15N01U	0.70	0.00	0.70	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.
15N01U.1	0.58	0.00	0.58	UAR	Restore	Barricade.
15N02	11.10	0.00	11.10	2	2	Replace 3 priority culverts. POC Mitigation: gravel at culverts and wet areas
15N02.101	0.51	0.00	0.51	UAR	Motorized Trail	Add to trail system. Motorized trail.
15N02.101	0.30	0.51	0.81	UAR	Restore	Barricade.
15N02.103	0.58	0.00	0.58	UAR	Motorized Trail	Add to trail system. Motorized trail.
15N02.106	0.48	0.00	0.48	UAR	Motorized Trail	Add to trail system. Motorized trail.
15N02.107	0.42	0.00	0.42	UAR	Motorized Trail	Add to trail system. Motorized trail. Barricade at milepost 0.37, about 0.05 mile before end of road.
15N02.108	1.14	0.00	1.14	UAR	Restore	Barricade.
15N02.108A	0.59	0.39	0.98	UAR	Restore	Barricade.
15N02.2	0.24	0.00	0.24	UAR	Restore	Barricade.
15N02.4	0.49	0.00	0.49	UAR	Motorized Trail	Add to trail system. Motorized trail.
15N02.5	0.71	0.19	0.90	UAR	Restore	Waterbar or rolling dips as needed and barricade.
15N02.5	0.19	0.00	0.19	UAR	Motorized Trail	Add as motorized trail.

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Alternative 4						
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions
15N38	2.90	0.00	2.90	2	2	Improve surface drainage and install culvert at stream ford on road near private land. POC Mitigation: barricade last 300' of road, before bottom of POC stand.
15N39A	1.20	0.00	1.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Barricade.
15N39A.1	0.18	0.00	0.18	UAR	Restore	Barricade.
15N39B	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Barricade.
15N42	1.06	0.00	1.06	2	2	Manage as OML 2. POC Mitigation: seasonal gate on 16N18.
15N42A	0.44	0.00	0.44	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
15N45	1.13	0.00	1.13	1	1	Remove or repair road drainage features as needed to improve resource protection. Barricade.
15N45.100	0.22	0.00	0.22	UAR	Restore	Barricade.
15N45.101	0.12	0.00	0.12	UAR	Restore	Barricade.
15N63	0.30	0.00	0.30	2	2	Manage as OML 2.
16N02.1	0.10	0.00	0.10	UAR	2	Add to road system. OML 2. Bear Basin water source
16N02.2	0.87	0.00	0.87	UAR	Restore	Barricade.
16N02.5	0.21	0.00	0.21	UAR	Restore	Waterbar or rolling dips as needed and barricade.
16N02D	0.61	0.00	0.61	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
16N02H	0.40	0.00	0.40	1	1	Waterbar or rolling dips as needed.
16N02L	1.70	0.00	1.70	2	2	Upsize culverts, install waterbars or rolling dips. POC Mitigation: current seasonal gate restricts access.
16N02S	1.20	0.00	1.20	1	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars and barricade.
16N02S.1	0.21	0.00	0.21	UAR	Restore	Barricade.
16N02T	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.
16N02T.1	0.12	0.00	0.12	UAR	Restore	Barricade.
16N03.100	0.10	0.00	0.10	UAR	Restore	Barricade.
16N03.2	0.87	0.00	0.87	UAR	Restore	Remove 3 culverts and associated fill from stream channels. Waterbar as needed and barricade.
16N03A	0.06	0.00	0.06	1	Motorized Trail	Convert to motorized trail for access to a small peak on Hurdygurdy Butte.

Appendix A
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Alternative 4								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions		
16N19.2	0.08	0.00	0.08	UAR	2	Add as OML 2 for access to Coon Creek. POC Mitigation: rock/gravel length of road as needed.		
16N19.3	0.30	0.00	0.30	UAR	Restore	Barricade.		
16N19.4	0.87	0.00	0.87	UAR	Restore	Barricade.		
16N19.5	0.19	0.00	0.19	UAR	Restore	Remove fill from culvert. Barricade.		
16N19A	0.23	0.00	0.23	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.		
16N19B	1.40	0.00	1.40	2	1	Waterbar as needed and barricade. Downgrade to OML 1.		
16N19E	0.95	0.00	0.95	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade. Downgrade to OML 1.		
16N19E.1	0.41	0.00	0.41	UAR	Restore	Barricade.		
16N19F	0.76	0.00	0.76	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.		
16N19G	0.23	0.00	0.23	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.		
16N21.1	0.15	0.00	0.15	UAR	Restore	Waterbar or rolling dips as needed and barricade.		
16N21.2	0.10	0.00	0.10	UAR	Restore	Barricade.		
16N21F.1	0.09	0.00	0.09	UAR	Restore	Barricade.		
16N23	7.40	0.00	7.40	2	2	Improve road drainage at all culverts. POC Mitigation: seasonal gate closure and add gravel in areas with POC within 50' of road.		
16N23.100	0.64	0.00	0.64	UAR	Motorized Trail	Add to trail system. Motorized trail.		
16N23.2	0.22	0.00	0.22	UAR	Motorized Trail	Add to trail system. Motorized trail. POC Mitigation: Gravel and rock route as needed.		
16N23.4	0.69	0.00	0.69	UAR	Motorized Trail	Add to trail system. Motorized trail.		
16N23A.1	1.90	0.00	1.90	UAR	Motorized Trail	Add to trail system. Motorized trail.		
16N24A	0.65	0.00	0.65	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.		
16N27	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.		
16N30	0.24	0.00	0.24	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and Barricade.		
16N31	0.35	0.00	0.35	1	2	Upgrade to OML 2.		
16N31A.1	0.22	0.00	0.22	UAR	Restore	Barricade.		
16N31B	1.00	0.00	1.00	1	Motorized Trail	Convert to motorized trail.		

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	Alternative 4								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions			
16N41B	0.09	0.00	0.09	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
16N55	0.50	0.00	0.50	1	2	Upgrade to OML 2. Existing gate on 16N33.			
16N55.1	0.16	0.00	0.16	UAR	Restore	Barricade.			
17N01	0.70	0.00	0.70	2	2	POC Mitigation: rock/gravel road as needed.			
17N01.1	0.21	0.00	0.21	UAR	2	Add to road system. OML 2. POC Mitigation: rock/gravel length of road as needed.			
17N01.100	2.49	0.00	2.49	UAR	Restore	Remove all culverts and associated fill from stream channels. Barricade.			
17N01.1A	0.02	0.00	0.02	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.			
17N01.1B	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.			
17N01.1C	0.09	0.00	0.09	UAR	Restore	Waterbars as needed. Barricade.			
17N01.2	0.30	0.00	0.30	UAR	2	Add as OML 2. POC Mitigation: rock/gravel entire length as needed.			
17N01.2B	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail.			
17N01.3	0.13	0.00	0.13	UAR	Motorized Trail	Add as motorized trail. Rolling dips as needed. POC Mitigation: rock/gravel as needed.			
17N01.3A	0.07	0.00	0.07	UAR	Restore	Barricade.			
17N03	1.20	0.00	1.20	1	Motorized Trail	Convert to motorized trail.			
17N04.1	0.12	0.00	0.12	UAR	Restore	Barricade.			
17N04.3	0.97	0.00	0.97	UAR	Restore	Remove culvert and associated fill. Rolling dips as needed and barricade.			
17N04L	3.10	0.00	3.10	1	2	Upgrade to OML 2.			
17N04S	1.80	0.00	1.80	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
17N05.100	0.88	0.00	0.88	UAR	Restore	Barricade.			
17N05.101	0.06	0.00	0.06	UAR	Restore	Barricade.			
17N05.4	0.32	0.00	0.32	UAR	Restore	Barricade.			
17N05.4A	1.36	0.00	1.36	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
17N05.5	0.14	0.00	0.14	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
17N05C	0.97	0.00	0.97	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
17N05F	1.56	0.00	1.56	1	2	Upgrade to OML 2.			
17N05G	0.67	0.00	0.67	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			

Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions
17N16	0.65	0.00	0.65	2	2	Manage as OML 2. Rolling dips as needed.
17N16.1	0.17	0.00	0.17	UAR	Restore	Barricade.
17N16.100	0.07	0.00	0.07	UAR	Restore	Waterbars or rolling dips as needed and barricade.
17N17	0.60	0.00	0.60	1	Decommission	Remove from system. Remove culvert and associated fill from stream channel. Waterbars as needed and barricade.
17N17.1	1.98	0.00	1.98	UAR	Restore	Closed by barricade on 17N17.
17N18.2	0.39	0.00	0.39	UAR	Restore	Remove 2 culverts and associated fill from stream channels. Waterbars as needed and barricade.
17N18.3	0.74	0.00	0.74	UAR	Restore	Barricade.
17N18.4	0.15	0.00	0.15	UAR	Restore	Barricade.
17N18A	0.94	0.00	0.94	1	2	Upgrade to OML 2.
17N18C	0.67	0.00	0.67	2	2	Improve maintenance, repair, or replace each of the 3 culverts. POC Mitigation: rock/gravel length of road as needed.
17N18E	0.42	0.00	0.42	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
17N18F	0.07	0.00	0.07	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
17N20	0.19	0.00	0.19	2	2	Improve maintenance, repair, or replace each of the 3 culverts.
17N21.1	0.41	0.00	0.41	UAR	Restore	Waterbars or rolling dips as needed and barricade.
17N22A	0.79	0.00	0.79	2	2	Improve maintenance on, repair, or replace culvert at milepost 0.7.
17N22A.1	0.21	0.00	0.21	UAR	Restore	Waterbars or rolling dips as needed and barricade.
17N22A.2	0.25	0.00	0.25	UAR	Restore	Barricade.
17N22D	0.08	0.00	0.08	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
17N22J	0.12	0.00	0.12	2	2	Waterbar or rolling dips as needed.
17N22W.1	0.46	0.00	0.46	UAR	Restore	Waterbar as needed. Barricade.
17N23	1.30	1.50	2.80	1	Decommission	Remove from system. Waterbars as needed, remove culverts, barricade.
17N23	1.15	0.35	1.50	1	Decommission	Remove from system.
17N23C.1	1.04	0.05	1.09	UAR	1	Add to road system. OML 1.
17N23C.1	0.05	0.00	0.05	UAR	1	Add to road system. OML 1.
17N23C.1	1.15	1.09	2.24	UAR	1	Add to road system. OML 1.
17N23C.2	0.59	0.00	0.59	UAR	1	Add to road system. OML 1.

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	Alternative 4								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions			
17N36B.1	0.26	0.00	0.26	UAR	Restore	Barricade.			
17N36C	0.43	0.00	0.43	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
17N36F	1.20	0.00	1.20	1	2	Upgrade to OML 2.			
17N39	2.19	0.00	2.19	2	2	Improve maintenance, repair, or replace each of the 25 culverts. POC Mitigation: rock/gravel stretch with infected POC as needed, from junction with 411 to approx. milepost 0.65			
17N39A	0.95	0.00	0.95	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
17N39B	0.51	0.00	0.51	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Barricade.			
17N39C	0.12	0.00	0.12	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
17N40	0.35	0.65	1.00	2	1	Waterbars as needed, barricade, and downgrade to OML 1.			
17N40	0.65	0.00	0.65	2	2	POC Mitigation: seasonal gate closure.			
17N40B	0.53	0.00	0.53	2	Motorized Trail	Convert to motorized trail.			
17N40B.1	0.19	0.00	0.19	UAR	Restore	Barricade.			
17N40C.1	0.20	0.00	0.20	UAR	Restore	Barricade.			
17N40D	0.18	0.00	0.18	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
17N41	4.25	0.00	4.25	2	2	Improve maintenance on, repair, or replace/upgrade each of the 13 culverts and waterbar as needed. POC Mitigation: rock/gravel with infected POC, from junction with 411 to approx. milepost 1.05.			
17N41A	0.30	0.00	0.30	1	1	POC Mitigation: barricade.			
17N41G.1	0.17	0.00	0.17	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
17N41H	0.90	0.00	0.90	2	2	POC Mitigation: rock/gravel stretch with infected POC as needed, first 0.23 mile.			
17N42A.100	0.48	0.00	0.48	UAR	Motorized Trail	Add as motorized trail.			
17N43	1.00	0.00	1.00	2	2	POC Mitigation: rock/gravel stretch with infected POC as needed, approx. milepost 0.47 to 0.68.			
17N46	1.20	0.00	1.20	2	2	POC Mitigation: seasonal gate on 17N40 closes access to this route.			
17N46A	0.16	0.00	0.16	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
17N48	1.66	0.00	1.66	2	2	POC Mitigation: rock/gravel entire length of road as needed, infested POC throughout.			

Appendix A. Alternative Tables

	Alternative 4								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions			
17N49.11	2.55	1.94	4.49	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route. POC Mitigation: seasonal gate closure, gate mid-slope near longitude 124.0119W and latitude 41.88593. Seasonal POC gate (approx. 124.00726W 41.88399N (NAD83)).			
17N49.11M	0.17	0.00	0.17	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.11N	0.23	0.00	0.23	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.11P	0.18	0.00	0.18	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route. POC Mitigation: proposed seasonal gates on 17N49.11 and 17N49.7 restrict access.			
17N49.11P	0.03	0.18	0.21	UAR	Restore	POC Mitigation: barricade.			
17N49.12	2.10	0.00	2.10	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: seasonal gate closure at beginning.			
17N49.13	0.30	0.00	0.30	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.14	0.54	0.00	0.54	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.15	0.62	0.00	0.62	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.15A	0.24	0.00	0.24	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.4	1.29	0.00	1.29	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.4	0.75	1.29	2.04	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route. POC Mitigation: seasonal closure, just to east of 17N49.102.			
17N49.4A	1.06	0.00	1.06	UAR	Restore	Gate. Permanent closure.			
17N49.7	2.15	0.91	3.06	UAR	Motorized Trail	Add to trail system. Motorized trail. Repair road drainage at spring area and 2 culverts. Delineate route. POC Mitigation: seasonal closure, gate north of 17N49.15.			
17N49.7	0.29	3.06	3.35	UAR	Restore	Barricade.			
17N49.7	0.91	0.00	0.91	UAR	Motorized Trail	Add to trail system. Motorized trail. Repair road drainage at spring area and 2 culverts. Delineate route and gravel areas with POC.			
17N49.7A	0.82	0.00	0.82	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.8	0.39	0.00	0.39	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N63	0.30	0.00	0.30	2	2	POC Mitigation: rock/gravel entire length of road as needed.			
17N85	1.20	0.00	1.20	UAR	1	Add to NFTS as OML 1. Remove or repair road drainage features as needed to improve resource protection. POC Mitigation: barricade.			
18N01	0.10	0.00	0.10	2	2	Maintain as OML 2.			
18N01	0.06	0.10	0.16	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			

	Alternative 4								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions			
18N02	2.60	0.00	2.60	3	3	POC Mitigation: rock/gravel as needed the road segment 100' either side of Sanger Lake outlet, and the road segment through the POC stand south of the 18N07 intersection.			
18N02.1	0.14	0.00	0.14	UAR	Restore	Barricade.			
18N02.2	0.08	0.00	0.08	UAR	Motorized Trail	Add as motorized trail.			
18N02.3	0.02	0.00	0.02	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel length of route as needed.			
18N03	1.91	0.00	1.91	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
18N04E	0.21	0.65	0.86	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars or rolling dips as needed and barricade.			
18N05	2.00	0.00	2.00	1	Motorized Trail	Convert to motorized trail.			
18N05.1	0.20	0.00	0.20	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Barricade.			
18N05.100	2.16	0.00	2.16	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. POC Mitigation: barricade.			
18N05.2	0.53	0.00	0.53	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Barricade.			
18N06A	0.18	0.00	0.18	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
18N07	0.05	0.00	0.05	3	3	Bridge repair/replacement			
18N07.12	0.04	0.00	0.04	UAR	Motorized Trail	Add as motorized trail.			
18N07.14	0.05	0.00	0.05	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.			
18N07.2	0.13	0.00	0.13	UAR	2	Add as OML 2.			
18N07.3	0.08	0.00	0.08	UAR	2	Add to road system. Manage as OML 2. POC Mitigation: rock/gravel entire route as needed.			
18N07.6	0.25	0.00	0.25	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Barricade.			
18N07.8	0.38	0.00	0.38	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. POC Mitigation: barricade.			
18N08.2	0.03	0.00	0.03	UAR	2	Add to road system. OML 2			
18N08F	1.10	0.70	1.80	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed. POC Mitigation: barricade.			

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Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions
18N08G	1.12	0.00	1.12	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
18N09	5.10	0.00	5.10	2	2	POC Mitigation: seasonal gate closure.
18N09.100	0.21	0.00	0.21	UAR	Motorized Trail	Add as motorized trail.
18N09.100	0.06	0.21	0.27	UAR	Restore	Waterbars/rolling dips as needed and barricade at 18N09.
18N09.100A	0.16	0.21	0.37	UAR	Restore	Waterbar as needed and barricade.
18N09.101	0.16	0.00	0.16	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: gravel last 100' of route.
18N09.102	1.84	0.00	1.84	UAR	Restore	Barricade.
18N09.103	0.04	0.00	0.04	UAR	Restore	Waterbar or rolling dips as needed and barricade.
18N09.104	0.05	0.00	0.05	UAR	Restore	Barricade.
18N09.105	0.12	0.00	0.12	UAR	Restore	Barricade.
18N09.106	0.02	0.00	0.02	UAR	Motorized Trail	Add as motorized trail.
18N09.107	0.01	0.00	0.01	UAR	Motorized Trail	Add as motorized trail.
18N09.108	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.
18N11	1.92	4.15	6.07	2	2	Replace culvert at milepost 5.78.
18N11A	0.80	0.00	0.80	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
18N11B	0.19	0.00	0.19	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
18N11C	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
18N11D	0.46	0.00	0.46	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
18N11D.2	0.25	0.00	0.25	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Barricade.
18N11D.3	0.29	0.00	0.29	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Barricade.
18N11D.4A	0.73	0.00	0.73	UAR	Restore	Barricade.
18N11D.5	2.11	0.00	2.11	UAR	Restore	Remove culverts and fill from stream channels. Waterbars as needed. POC Mitigation: barricade.
18N12A	0.43	0.00	0.43	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.
18N15	1.20	0.00	1.20	2	2	Resource risk mitigation: delineate route near milepost 0.01. Upsize culverts, install waterbars or rolling dips.

Alternative 4										
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions				
18N19B	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N19C	0.17	0.00	0.17	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N20	1.00	0.00	1.00	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and gate.				
18N20.100	0.28	0.00	0.28	UAR	Restore	Barricade.				
18N20.100A	0.08	0.00	0.08	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Barricade.				
18N20.101	0.12	0.00	0.12	UAR	Restore	Barricade.				
18N20.102	0.47	0.00	0.47	UAR	Restore	Remove culverts and associated fill. Waterbars as needed. Barricade				
18N20A	0.40	0.00	0.40	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N22	2.00	0.00	2.00	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade. Downgrade to OML 1.				
18N22D	0.62	0.00	0.62	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N22E	0.14	0.00	0.14	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N23	0.10	0.00	0.10	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N24	1.10	0.00	1.10	1	Motorized Trail	Convert to motorized trail.				
18N26	1.75	0.00	1.75	1	Motorized Trail	Convert to motorized trail.				
18N26A	0.15	0.00	0.15	1	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade.				
18N26B	0.08	0.00	0.08	1	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade.				
18N30A	0.28	0.00	0.28	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N30B	0.46	0.00	0.46	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.				
18N31	0.60	0.00	0.60	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Barricade.				
18N31.2	0.23	0.00	0.23	UAR	Restore	Waterbar or rolling dips as needed and barricade.				

Appendix
A.
Alternative
Tables

	Alternative 4								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions			
19N34	1.95	0.00	1.95	1	Decommission	Remove from system. Remove culvert and associated fill as needed. Waterbars as needed and barricade.			
19N34A	0.28	0.00	0.28	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
19N34B	0.29	0.00	0.29	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
19N34C	0.08	0.00	0.08	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
305.100	0.57	0.00	0.57	UAR	Restore	Barricade.			
305.101	1.08	0.00	1.08	UAR	Restore	Barricade.			
305.101A	0.04	0.00	0.04	UAR	Restore	Barricade.			
305.101B	0.50	0.00	0.50	UAR	Restore	Barricade.			
305.102	0.15	0.00	0.15	UAR	Restore	Barricade.			
305.103	0.14	0.00	0.14	UAR	Restore	Barricade.			
305.104	0.14	0.00	0.14	UAR	Restore	Barricade.			
305.105	0.22	0.00	0.22	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
305.106	0.21	0.00	0.21	UAR	Restore	Barricade.			
305.107	1.25	0.00	1.25	UAR	Restore	Barricade.			
305.108	0.06	0.00	0.06	UAR	Restore	Barricade.			
305.109	2.43	0.00	2.43	UAR	Motorized Trail	Add to trail system. Motorized trail. POC Mitigation: install drains gravel at wet areas to keep vehicles on roadway (near milepost 1 and 1.5), install culvert. Improve surface drainage, route delineation (place boulders strategically), increase enforcement.			
305.109A	1.02	0.00	1.02	UAR	Restore	Barricade.			
305.113	0.12	0.00	0.12	UAR	Restore	Barricade.			
305.114	0.63	0.00	0.63	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
305.115	1.74	0.00	1.74	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
305.115A	0.18	0.00	0.18	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
305.118	0.80	0.00	0.80	UAR	Motorized Trail	Add to trail system. Motorized trail. POC Mitigation: seasonal closure required at beginning of route. Gate mid-Oct thru early June; need culvert at POC site, barricade end of route gravel and culvert placement in seepy area as needed. Route delineation.			
305.118	0.76	0.80	1.56	UAR	Restore	Waterbar/rolling dips as needed. Barricade.			
305.121	0.63	0.00	0.63	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: seasonal gate closure.			

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Appendix A. Alternative Tables

Alternative 4								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions		
315.9A	1.22	0.00	1.22	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. POC Mitigation: barricade.		
316.1	0.26	0.00	0.26	UAR	2	Add to road system. OML 2. Administrative use only. Add rolling dips. POC Mitigation: rock/gravel length of road.		
316.10	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.11	0.04	0.00	0.04	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.12	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.2	0.20	0.00	0.20	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.3	0.08	0.00	0.08	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.4	0.07	0.00	0.07	UAR	Motorized Trail	Add as motorized trail. Route delineation. POC Mitigation: rock/gravel as needed.		
316.5	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.6	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.7	0.02	0.00	0.02	UAR	Motorized Trail	Add as motorized trial. Route delineation.		
316.7A	0.02	0.00	0.02	UAR	Motorized Trail	Add as motorized trail. Route delineation.		
316.8	0.05	0.00	0.05	UAR	Motorized Trail	Add as motorized trail. Route delineation; waterbars. POC Mitigation: gravel as needed.		
316.9	0.06	0.00	0.06	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.		
316.9A	0.05	0.00	0.05	UAR	Restore	Barricade.		
324.100	0.13	0.00	0.13	UAR	Restore	Barricade.		
405.10	0.74	0.00	0.74	UAR	Motorized Trail	Add drivable portion to trail system. Motorized trail. Delineate route. Route delineation at milepost 0.36.		
405.100	0.11	0.00	0.11	UAR	Restore	Barricade.		
405.101	0.17	0.00	0.17	UAR	Restore	Barricade.		
405.103	3.47	0.00	3.47	UAR	Motorized Trail	Add to trail system. Motorized trail. Improve surface drainage near creek; repair culvert.		
405.9	0.05	0.00	0.05	UAR	Restore	Barricade.		
411.101	0.30	0.00	0.30	UAR	Restore	Barricade.		
411.102	0.17	0.00	0.17	UAR	Restore	SUP access road.		
427.101	0.15	0.00	0.15	UAR	1	Add to road system. OML 1.		
427.103	0.32	0.00	0.32	UAR	2	Add to road system. OML 2. Delineate route.		
427.104	0.30	0.00	0.30	UAR	Motorized Trail	Add as motorized trail.		

Appendix A. Alternative
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	Alternative 4									
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 4: Proposed Actions				
427.105	0.29	0.00	0.29	UAR	2	Add to road system. OML 2. County disposal site; may be gated periodically for administrative purposes.				
427.106	0.13	0.00	0.13	UAR	Motorized Trail	Add to trail system. Motorized trail. Install rolling dips to improve drainage.				
427.107	0.05	0.00	0.05	UAR	2	Add as OML 2. POC Mitigation: gravel as needed.				
427.108	0.09	0.00	0.09	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel as needed.				
427.108A	0.04	0.00	0.04	UAR	Restore	Barricade.				

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Alternative 5

Table A-4. Alternative 5.

Alternative 5									
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
13N35.5	0.14	0.00	0.14	UAR	Restore	Barricade.			
13N35K	0.10	0.18	0.28	2	Decommission	Remove from system. Barricade.			
13N37	2.00	0.00	2.00	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade. Downgrade to OML 1.			
13N37.1	0.11	0.00	0.11	UAR	Restore	Barricade.			
13N37A	0.77	0.00	0.77	2	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.			
13N37B	0.27	0.00	0.27	2	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.			
14N01	4.61	9.60	14.21	3	3	POC Mitigation: seasonal gate closure.			
14N01D	1.80	0.00	1.80	2	Decommission	Decommission and barricade. Remove culverts. Waterbars and rolling dips as needed.			
14N08	0.50	0.00	0.50	2	2	POC Mitigation: year-round gate closure			
14N08T	0.11	0.00	0.11	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
14N15	0.50	0.00	0.50	2	Decommission	Decommission and barricade. Remove culverts. Waterbars and rolling dips as needed. POC Mitigation: proposed seasonal gate on 14N01 restricts access.			
14N15.1	3.80	0.00	3.80	UAR	Restore	Remove culverts and associated fill. Waterbar as needed and barricade.			
14N32.1	0.26	0.00	0.26	UAR	Restore	Barricade.			
14N33	1.60	0.18	1.78	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars and barricade.			
14N33.3	0.52	0.00	0.52	UAR	Restore	Remove culverts and associated fill from stream channels as on 14N33. Waterbar as needed. Closed by barricade on 14N33.			
14N33A	0.22	0.00	0.22	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
14N38	0.60	0.00	0.60	2	Decommission	Decommission. Remove culverts. Waterbars and rolling dips as needed. Barricade.			
14N39	1.90	0.00	1.90	2	Decommission	Decommission and barricade. Remove culverts and associated fill. Waterbar as needed and barricade.			

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	Alternative 5									
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions				
15N11A.1	0.25	0.00	0.25	UAR	Restore	Remove all culverts and associated fill from stream channels. Waterbars as needed. Closed by barricade on 15N11A.				
15N11B	1.39	0.00	1.39	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars and barricade.				
15N13	3.80	0.00	3.80	2	2	Improve maintenance, repair/replace all culverts and drainage structures as needed. Manage as OML 2. POC Mitigation: seasonal gate closure.				
15N13.100	0.49	0.62	1.11	UAR	Restore	Year-round gate closure southern terminus adjacent to private landholding.				
15N13.100	0.48	1.74	2.22	UAR	Restore	Year-round gate closure northern terminus adjacent to private landholding.				
15N33	0.90	0.00	0.90	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
15N35A	0.24	0.00	0.24	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
15N35B	0.57	0.00	0.57	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
15N35C	0.57	0.00	0.57	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
15N36.1	0.62	0.00	0.62	UAR	Restore	Remove 3 culverts and associated fill from stream channels. Waterbars as needed and barricade.				
15N36C	0.55	0.00	0.55	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
15N36N	1.30	0.00	1.30	1	2	Upgrade first 1.3 miles to OML 2. Maintain, repair, or replace each culvert. Improve surface drainage with waterbars and rolling dips as needed.				
15N36N	1.30	1.30	2.60	1	Decommission	Decommission from 1.3 to 2.6. Barricade.				
15N36N.1	0.90	0.00	0.90	UAR	2	Add to road system. OML 2. Access to Blackhawk Bar. Keep, maintain, repair, or replace each culvert. Improve surface draining with waterbars and rolling dips as needed. POC Mitigation: add gravel at drainage crossings and along areas with POC.				
15N36N.1A	0.16	0.00	0.16	UAR	Restore	Barricade.				
15N36N.1B	0.21	0.00	0.21	UAR	Restore	Barricade.				
15N36N.1C	0.03	0.00	0.03	UAR	Restore	Closed by barricade on 15N36N.1B.				
15N38	1.50	0.00	1.50	2	2	Improve surface drainage and install culvert at stream ford on road near private land.				
15N38	1.40	1.50	2.90	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed. Barricade.				
15N39A	1.20	0.00	1.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Barricade.				

	Alternative 5									
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions				
15N39A.1	0.18	0.00	0.18	UAR	Restore	Barricade.				
15N39B	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
15N42	1.06	0.00	1.06	2	Decommission	Decommission and barricade. Remove all 3 culverts and associated fill. Waterbars as needed.				
15N42A	0.44	0.00	0.44	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
15N45	1.13	0.00	1.13	1	Decommission	Decommission and barricade. Excavate culverts and associated fill.				
15N45.100	0.22	0.00	0.22	UAR	Restore	Barricade.				
15N45.101	0.12	0.00	0.12	UAR	Restore	Barricade.				
15N63	0.30	0.00	0.30	2	2	Manage as OML 2.				
16N02.1	0.10	0.00	0.10	UAR	2	Add to road system. OML 2. Bear Basin water source. Route delineation.				
16N02.2	0.87	0.00	0.87	UAR	Restore	Barricade.				
16N02.5	0.21	0.00	0.21	UAR	Restore	Waterbar or rolling dips as needed and barricade.				
16N02D	0.61	0.00	0.61	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
16N02G	0.70	0.00	0.70	2	Decommission	Decommission and barricade. Remove culverts and associated fill. Waterbar as needed.				
16N02H	0.40	0.00	0.40	1	1	Waterbars or rolling dips as needed.				
16N02L	1.70	0.00	1.70	2	Decommission	Decommission and barricade. Remove culverts. Install waterbars or rolling dips. POC Mitigation: current seasonal gate restricts access.				
16N02S	1.20	0.00	1.20	1	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.				
16N02S.1	0.21	0.00	0.21	UAR	Restore	Barricade.				
16N02T	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.				
16N02T.1	0.12	0.00	0.12	UAR	Restore	Barricade.				
16N03.100	0.10	0.00	0.10	UAR	Restore	Barricade.				
16N03.2	0.87	0.00	0.87	UAR	Restore	Remove 3 culverts and associated fill from stream channels. Waterbars as needed and barricade.				
16N03D	1.48	0.00	1.48	1	1	Waterbars as needed and barricade.				
16N03F	0.70	0.00	0.70	2	Decommission	Decommission and barricade. Remove all 4 culverts and associated fill. Waterbars as needed.				
16N03G	0.08	0.00	0.08	1	Decommission	Remove from system. Waterbar landing as needed and barricade.				

Tables	Appendix A. Alternative
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	Alternative 5									
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions				
16N03H	0.30	0.00	0.30	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
16N03K	0.63	0.87	1.50	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed and barricade. POC Mitigation: current seasonal gate restricts access.				
16N03L	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill as needed. Waterbars as needed and barricade.				
16N10.1	0.14	0.00	0.14	UAR	Restore	Barricade.				
16N10.2	0.21	0.00	0.21	UAR	Restore	POC Mitigation: route extends from non-motorized trail. No motorized access.				
16N15A	0.17	0.00	0.17	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
16N16	1.50	0.00	1.50	2	2	Repair or replace plugged culverts.				
16N16	0.60	1.50	2.10	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbars and barricade.				
16N18.1	1.04	0.00	1.04	UAR	Restore	Barricade past point where two access point joint, approx. 200' up road.				
16N18.3	0.49	0.00	0.49	UAR	Restore	Barricade.				
16N18.4	0.67	0.00	0.67	UAR	Restore	Barricade.				
16N18A	1.35	0.00	1.35	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Rolling dips as needed. Barricade.				
16N18A	0.95	1.35	2.30	2	Decommission	Remove 5 culverts and decommission.				
16N18B.1	0.66	0.00	0.66	UAR	Restore	Barricade.				
16N18C	0.39	0.00	0.39	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
16N18E	0.96	0.00	0.96	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.				
16N18K	1.10	0.00	1.10	1	1	Waterbar or rolling dips as needed.				
16N19	8.28	0.00	8.28	2	1	Downgrade to OML 1. Barricade. Remove or repair road drainage features as needed to improve resource protection.				
16N19.1	0.05	0.00	0.05	UAR	Restore	Barricade.				
16N19.2	0.08	0.00	0.08	UAR	Restore	Rolling dips as needed and barricade.				
16N19.3	0.30	0.00	0.30	UAR	Restore	Barricade.				
16N19.4	0.87	0.00	0.87	UAR	Restore	Barricade.				
16N19.5	0.19	0.00	0.19	UAR	Restore	Remove fill from culvert. Barricade.				

Appendix
A.
Alternative
Tables

	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
16N32	0.82	0.00	0.82	2	2	Improve maintenance, repair, or replace culverts. POC Mitigation: current seasonal gate restricts access.			
16N32A	0.08	0.00	0.08	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
16N32C	0.47	0.00	0.47	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Closed through network barricade on 16N32.			
16N33	0.70	0.00	0.70	2	Decommission	Decommission and barricade.			
16N33	3.70	0.70	4.40	1	Decommission	Decommission and barricade.			
16N33A	0.21	0.00	0.21	1	Decommission	Decommission and barricade.			
16N34	0.60	0.00	0.60	2	2	Add culvert at milepost 0.34.			
16N34	0.30	0.60	0.90	2	1	Downgrade to OML 1. Remove last culvert at milepost 0.9 switchback. POC Mitigation: barricade.			
16N34A	0.50	0.00	0.50	2	1	Waterbars as needed and barricade. Downgrade to OML 1.			
16N35A	0.14	0.00	0.14	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
16N35C	0.12	0.00	0.12	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Barricade.			
16N36	1.20	0.00	1.20	2	2	Improve maintenance, repair, or replace each of the culverts.			
16N36.1	0.11	0.69	0.80	UAR	Restore				
16N36.1	0.69	0.00	0.69	UAR	Restore	Barricade.			
16N36B	0.82	0.00	0.82	2	2	Clean blocked culverts and install 2 additional culverts.			
16N37	1.20	0.00	1.20	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbars or rolling dips as needed. Barricade.			
16N37B	0.17	0.00	0.17	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
16N38	1.32	0.28	1.60	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed and barricade.			
16N39A	0.22	0.00	0.22	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
16N41	0.06	0.53	0.59	2	2	Replace culvert at milepost 0.56. POC Mitigation: gravel areas with dead POC along road as needed.			
16N41A	0.17	0.00	0.17	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
16N41B	0.09	0.00	0.09	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			

	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
17N07	10.39	0.00	10.39	3	2	Downgrade to OML 2. POC Mitigation: rock/gravel as needed at wet areas, draws and areas with POC.			
17N07.1	0.25	0.00	0.25	UAR	Restore	Waterbars or rolling dips as needed and barricade.			
17N07.101	0.09	0.00	0.09	UAR	Restore	Barricade.			
17N07.102	3.07	0.00	3.07	UAR	Restore	Road not stable; failing. Remove all culverts and associated fill from stream channels. Barricade.			
17N07.2	0.51	0.00	0.51	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
17N07.4	0.21	0.00	0.21	UAR	Restore	Waterbars/rolling dips as needed. No treatment recommended for this segment, but larger segment should have road blocked at beginning of route.			
17N07.5	0.32	0.00	0.32	UAR	Restore	Barricade.			
17N07.5A	0.15	0.00	0.15	UAR	Restore	Barricade.			
17N07.6	0.75	0.00	0.75	UAR	Restore	Barricade.			
17N07.7	0.30	0.00	0.30	UAR	Restore	Barricade.			
17N07G	1.67	0.00	1.67	2	1	Downgrade to OML 1. Barricade.			
17N07J	1.64	0.00	1.64	2	2	Repair culvert at milepost 1.25. POC Mitigation: rock/gravel as needed at wet areas, draws and areas with POC.			
17N07K	0.80	0.00	0.80	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade. Downgrade to OML 1.			
17N07Q	0.22	0.00	0.22	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
17N07R	0.44	0.00	0.44	2	Decommission	Remove from system. Remove culvert and associated fill. Barricade.			
17N07R.1	0.16	0.00	0.16	UAR	Restore	Barricade.			
17N07R.1A	0.25	0.00	0.25	UAR	Restore	Barricade.			
17N08.3	0.30	0.00	0.30	UAR	Restore	Barricade.			
17N08A	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Barricade.			
17N13	0.70	0.00	0.70	2	1	Downgrade to OML 1. Barricade. Remove or repair road drainage features as needed to improve resource protection.			
17N13A	0.38	0.00	0.38	2	1	Waterbars as needed and barricade. Downgrade to OML 1.			
17N14	0.39	0.00	0.39	2	1	Downgrade to OML 1. Barricade first 100' from west side access.			
17N15	0.90	0.00	0.90	2	1	Waterbars as needed and barricade. Downgrade to OML 1.			
17N15A	0.13	0.00	0.13	1	Decommission	Remove from system. Waterbar as needed and barricade.			
17N16	0.65	0.00	0.65	2	1	Waterbars as needed and barricade. Downgrade to OML 1.			

Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions		
17N16.1	0.17	0.00	0.17	UAR	Restore	Barricade.		
17N16.100	0.07	0.00	0.07	UAR	Restore	Waterbar or rolling dips as needed and barricade.		
17N17	0.60	0.00	0.60	1	Decommission	Remove from system. Remove culvert and associated fill from stream channel. Waterbars as needed and barricade.		
17N17.1	1.98	0.00	1.98	UAR	Restore	Closed by barricade on 17N17.		
17N18.2	0.39	0.00	0.39	UAR	Restore	Remove 2 culverts and associated fill from stream channels. Waterbar as needed and barricade.		
17N18.3	0.74	0.00	0.74	UAR	Restore	Barricade.		
17N18.4	0.15	0.00	0.15	UAR	Restore	Barricade.		
17N18A	0.94	0.00	0.94	1	2	Upgrade to OML 2.		
17N18C	0.67	0.00	0.67	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbars and rolling dips as needed. Barricade.		
17N18E	0.42	0.00	0.42	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N18F	0.07	0.00	0.07	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N20	0.19	0.00	0.19	2	2	Improve maintenance, repair, or replace each of the 3 culverts.		
17N21.1	0.41	0.00	0.41	UAR	Restore	Waterbar or rolling dips as needed and barricade.		
17N22A	0.79	0.00	0.79	2	2	Improve maintenance, repair, or replace culvert at milepost 0.7.		
17N22A.1	0.21	0.00	0.21	UAR	Restore	Waterbar or rolling dips as needed and barricade.		
17N22A.2	0.25	0.00	0.25	UAR	Restore	Barricade.		
17N22D	0.08	0.00	0.08	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N22J	0.12	0.00	0.12	2	2	Waterbars or rolling dips as needed.		
17N22W.1	0.46	0.00	0.46	UAR	Restore	Waterbar as needed. SUP Road, do not barricade.		
17N23	1.30	1.50	2.80	1	Decommission	Remove from system. Waterbars as needed, remove culverts, barricade.		
17N23	1.15	0.35	1.50	1	Decommission	Remove from system.		
17N23C.1	1.04	0.05	1.09	UAR	1	Add to road system. OML 1.		
17N23C.1	0.05	0.00	0.05	UAR	1	Add to road system. OML 1. Barricade.		
17N23C.1	1.15	1.09	2.24	UAR	1	Add to road system. OML 1.		
17N23C.2	0.59	0.00	0.59	UAR	1	Add to road system. OML 1.		
17N26	0.25	0.00	0.25	2	1	Downgrade to OML 1. Barricade.		

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Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions		
17N26A	0.37	0.00	0.37	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed and barricade.		
17N27A.1	0.21	0.00	0.21	UAR	Restore	Closed by barricade on 17N27.		
17N27B	0.40	0.00	0.40	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N27C	0.40	0.00	0.40	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N27D.1	0.36	0.00	0.36	UAR	Restore	Waterbar or rolling dips as needed and barricade.		
17N28	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N29	1.00	0.00	1.00	2	Decommission	Decommission. Pull fill back from landing.		
17N29.100	0.04	0.00	0.04	UAR	Restore	Closed by barricade on 17N32G.		
17N29B	0.20	0.00	0.20	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N30	0.89	0.00	0.89	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed. Downgrade to OML 1 and barricade.		
17N30	0.55	0.89	1.44	2	Decommission	Remove from system.		
17N30A	0.40	0.00	0.40	2	1	Downgrade to OML 1.		
17N31	1.60	0.00	1.60	2	1	Waterbars as needed and barricade. Downgrade to OML 1.		
17N31.3	0.17	0.00	0.17	UAR	Restore	Barricade.		
17N31A.1	0.36	0.00	0.36	UAR	Restore	Barricade.		
17N32	2.22	0.00	2.22	2	Decommission	Decommission and barricade. Remove culvert and fill. Waterbar as needed.		
17N32.1	0.31	0.00	0.31	UAR	Restore	Barricade.		
17N32.2	0.17	0.00	0.17	UAR	Restore	Closed by barricade on 17N32.		
17N32B	0.80	0.00	0.80	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N32F	1.00	0.00	1.00	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N32G	1.20	0.00	1.20	2	Decommission	Decommission. Repair or replace culverts.		
17N35	0.50	0.00	0.50	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.		
17N35.100	0.35	0.00	0.35	UAR	Restore	Barricade.		
17N36	2.50	0.00	2.50	2	2	Improve maintenance, repair, or replace each of the 14 culverts. POC Mitigation: seasonal gate closure near 17N04.		

	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
17N46A	0.16	0.00	0.16	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
17N48	1.66	0.00	1.66	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed and barricade.			
17N48.1	0.33	0.00	0.33	UAR	Restore	Barricade.			
17N48.3	0.16	0.00	0.16	UAR	Restore	Waterbars or rolling dips as needed and barricade.			
17N48.4	0.46	0.00	0.46	UAR	Restore	Waterbars or rolling dips as needed and barricade.			
17N48C	0.47	0.00	0.47	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Barricade.			
17N49	1.75	2.96	4.71	3	2	Downgrade to OML 2. POC Mitigation: rock/gravel as needed stretch with infected POC, approx. milepost 3.8, just north of 17N49.101 junction, for 100'.			
17N49	1.34	4.71	6.05	3	2	Downgrade to OML 2.			
17N49	1.80	6.05	7.85	3	2	Downgrade to OML 2.			
17N49.1	0.04	0.00	0.04	UAR	Restore	Barricade.			
17N49.100	0.12	0.00	0.12	UAR	Restore	Barricade.			
17N49.100	3.88	0.12	4.00	UAR	Restore	Barricade.			
17N49.100A	0.21	0.00	0.21	UAR	Restore	Barricade.			
17N49.101	1.17	0.00	1.17	UAR	Restore	Barricade.			
17N49.102	0.87	0.00	0.87	UAR	Restore	Barricade.			
17N49.102A	0.71	0.00	0.71	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.102B	0.17	0.00	0.17	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.102C	0.20	0.00	0.20	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
17N49.103	0.26	0.00	0.26	UAR	Restore	Waterbars or rolling dips as needed and barricade.			
17N49.104	3.82	0.00	3.82	UAR	Restore	Barricade.			
17N49.104	0.86	3.82	4.68	UAR	Restore	Barricade.			
17N49.104A	0.05	0.00	0.05	UAR	Restore	Barricade.			
17N49.104B	0.08	0.00	0.08	UAR	Restore	Barricade.			
17N49.105	1.43	0.00	1.43	UAR	Restore	Barricade.			
17N49.105A	0.12	0.00	0.12	UAR	Restore	Barricade.			
17N49.106	0.32	0.00	0.32	UAR	Restore	Barricade.			
17N49.107	0.64	0.00	0.64	UAR	Restore	Barricade.			

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	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
18N03	1.91	0.00	1.91	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N04.2	0.11	0.00	0.11	UAR	Restore	Barricade.			
18N04E	0.21	0.65	0.86	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar or rolling dips as needed and barricade.			
18N05.1	0.20	0.00	0.20	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N05.100	2.16	0.00	2.16	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbar as needed. POC Mitigation: barricade.			
18N05.2	0.53	0.00	0.53	UAR	Restore	Remove culverts and associated fill from stream channels. Closed by barricade on 18N05.			
18N06A	0.18	0.00	0.18	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N07	0.05	0.00	0.05	3	3	bridge repair/replacement			
18N07.11	0.06	0.00	0.06	UAR	Restore	Barricade.			
18N07.12	0.04	0.00	0.04	UAR	Restore	Barricade.			
18N07.14	0.05	0.00	0.05	UAR	Restore	Barricade.			
18N07.2	0.13	0.00	0.13	UAR	2	Add to road system. Manage as OML 2.			
18N07.3	0.08	0.00	0.08	UAR	Restore	Barricade.			
18N07.6	0.25	0.00	0.25	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N07.8	0.38	0.00	0.38	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N08.2	0.03	0.00	0.03	UAR	2	Add to road system. OML 2.			
18N08F	0.90	0.90	1.80	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed and barricade.			
18N08G	1.12	0.00	1.12	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N09	5.10	0.00	5.10	2	2	POC Mitigation: seasonal gate closure.			
18N09.100	0.27	0.00	0.27	UAR	Restore	Rolling dips as needed and barricade at 18N09.			
18N09.100A	0.16	0.00	0.16	UAR	Restore	Rolling dips as needed and barricade.			
18N09.101	0.16	0.00	0.16	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: gravel last 100' of route.			
18N09.102	1.84	0.00	1.84	UAR	Restore	Rolling dips as needed and barricade.			
18N09.103	0.04	0.00	0.04	UAR	Restore	Waterbar or rolling dips as needed and barricade.			

Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions		
18N16E	0.38	0.00	0.38	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.		
18N16F.1	0.16	0.00	0.16	UAR	Restore	Barricade.		
18N16W	0.17	0.00	0.17	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.		
18N17	8.10	0.00	8.10	2	Decommission	Decommission and barricade. Remove culverts. Rolling dips and waterbars as needed. POC Mitigation: current seasonal gate.		
18N17.100	1.01	0.00	1.01	UAR	Restore	Barricade.		
18N17.100A	0.08	0.00	0.08	UAR	Restore	Barricade.		
18N17.101	0.05	0.00	0.05	UAR	Restore	Closed by barricade on 18N17.		
18N17.102	0.06	0.00	0.06	UAR	Restore	Closed by barricade on 18N17.		
18N17.103	0.21	0.00	0.21	UAR	Restore	Barricade.		
18N17.104	0.20	0.00	0.20	UAR	Restore	Barricade.		
18N17.104A	0.02	0.00	0.02	UAR	Restore	Closed by barricade on 18N17.		
18N17A	0.21	0.00	0.21	2	Decommission	Decommission. Remove culverts and associated fill. Waterbar as needed. Barricade 100' north from junction of 18N17H.		
18N17B	0.87	0.00	0.87	2	Decommission	Decommission. Install culvert at milepost 0.5.		
18N17C	1.18	0.00	1.18	2	Decommission	Decommission. Remove culverts. Rolling dips and waterbars as needed. Barricade. POC Mitigation: existing seasonal gate on 18N17 restricts access.		
18N17C.1	0.05	0.00	0.05	UAR	Restore	Closed by barricade on 18N17C.		
18N17D	0.25	0.00	0.25	2	Decommission	Decommission.		
18N17E	0.90	0.00	0.90	2	Decommission	Decommission. Remove culverts and fill. Waterbar as needed.		
18N17F	0.54	0.00	0.54	2	Decommission	Decommission.		
18N17G	0.12	0.00	0.12	2	Decommission	Decommission. Remove culverts and associated fill from stream channels. Waterbar as needed.		
18N17H	0.15	0.00	0.15	2	Decommission	Decommission. Remove culverts and associated fill from stream channels. Waterbar as needed.		
18N18A	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.		
18N18B	0.15	0.00	0.15	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.		
18N18C	0.08	0.00	0.08	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.		

	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
18N18D	0.13	0.00	0.13	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N19A	0.22	0.00	0.22	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N19B	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N19C	0.17	0.00	0.17	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N20	1.00	0.00	1.00	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N20.100	0.28	0.00	0.28	UAR	Restore	Barricade.			
18N20.100A	0.08	0.00	0.08	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbar as needed. Closed by barricade on 18N20.			
18N20.101	0.12	0.00	0.12	UAR	Restore	Barricade.			
18N20.102	0.47	0.00	0.47	UAR	Restore	Remove culverts and associated fill. Waterbar as needed.			
18N20A	0.40	0.00	0.40	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N22	2.00	0.00	2.00	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade. Downgrade to OML 1.			
18N22D	0.62	0.00	0.62	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N22E	0.14	0.00	0.14	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N23	0.10	0.00	0.10	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N24	1.10	0.00	1.10	1	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade.			
18N26	1.75	0.00	1.75	1	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade.			
18N26A	0.15	0.00	0.15	1	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade.			
18N26A.2	0.06	0.00	0.06	UAR	Restore	Closed by barricade on 18N26A.			
18N26B	0.08	0.00	0.08	1	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade.			
18N30.100	0.04	0.00	0.04	UAR	Restore	Barricade.			

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Appendix A. Alternative Tables

	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
18N30A	0.28	0.00	0.28	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N30B	0.46	0.00	0.46	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N31	0.60	0.00	0.60	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Barricade.			
18N31.1	0.16	0.00	0.16	UAR	Restore	Closed by barricade on 18N31.			
18N31.2	0.23	0.00	0.23	UAR	Restore	Rolling dips as needed. Closed by barricade on 18N31.			
18N31.3C	0.18	0.00	0.18	UAR	Restore	Rolling dips as needed. Barricade.			
18N31.4	1.25	0.00	1.25	UAR	Restore	Rolling dips as needed. Barricade.			
18N46	0.39	0.00	0.39	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N47	0.44	0.00	0.44	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N48	0.31	0.00	0.31	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N51	0.27	0.00	0.27	1	2	Upgrade to OML 2.			
18N51.100	1.45	0.00	1.45	UAR	Restore	Barricade.			
18N51.100A	0.46	0.00	0.46	UAR	Restore	Barricade.			
18N56	0.88	0.00	0.88	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Rolling dips and waterbars as needed. Barricade.			
18N56.100	0.04	0.00	0.04	UAR	Restore	Closed by barricade on 18N56.			
18N57	0.56	0.00	0.56	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
18N58.1	0.13	0.00	0.13	UAR	Restore	Barricade.			
18N58B	0.25	0.00	0.25	1	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbar as needed and barricade.			
199.102	0.13	0.00	0.13	UAR	2	Add to road system. OML 2.			
199.103	0.10	0.00	0.10	UAR	3	Add to road system. OML 3. Griffin Bridge. POC Mitigation: gravel areas near creek and river as needed.			
199.104	0.11	0.00	0.11	UAR	3	Add to road system. OML 3. Madrona Campground. POC Mitigation: gravel areas near creek and river as needed.			
199.105	0.03	0.00	0.03	UAR	3	Add to road system. OML 3. Darlingtonia Trail head access.			

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	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
305.113	0.12	0.00	0.12	UAR	Restore	Barricade.			
305.114	0.63	0.00	0.63	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
305.115	1.74	0.00	1.74	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
305.115A	0.18	0.00	0.18	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
305.118	0.80	0.00	0.80	UAR	Restore	POC Mitigation: barricade. Waterbars/rolling dips as needed.			
305.119	0.22	0.00	0.22	UAR	Restore	Barricade.			
305.120	0.04	0.00	0.04	UAR	Restore	Barricade.			
305.121	0.63	0.00	0.63	UAR	Restore	Barricade.			
305.121A	0.28	0.00	0.28	UAR	Restore	Barricade.			
305.121B	1.03	0.00	1.03	UAR	Restore	Barricade.			
305.123	0.63	0.00	0.63	UAR	Restore	Barricade.			
305.124	1.20	0.00	1.20	UAR	Restore	Waterbar or rolling dips as needed and barricade.			
305.125	1.44	0.00	1.44	UAR	Restore	Barricade. Place barricade 600' up road from NE junction with 305, before first POC storm crossing, other barricade at milepost 1.02 from west side of 305.			
305.125A	0.21	0.00	0.21	UAR	Restore	Barricade.			
305.126	1.56	0.00	1.56	UAR	Restore	Barricade.			
305.128	0.70	0.00	0.70	UAR	Restore	Barricade.			
305.129	0.40	0.00	0.40	UAR	Restore	Barricade.			
305.130	1.72	0.00	1.72	UAR	Restore	Barricade.			
305.131	0.09	0.00	0.09	UAR	Restore	Barricade.			
305.132	0.04	0.00	0.04	UAR	Restore	Barricade.			
305.133	0.01	0.00	0.01	UAR	Restore	Barricade.			
305.134	0.14	0.00	0.14	UAR	Restore	Barricade.			
314.1	1.21	0.00	1.21	UAR	Restore	Barricade.			
314.102	0.80	0.00	0.80	UAR	Restore	Barricade.			
314.107	0.26	0.00	0.26	UAR	Restore	Barricade. Place large boulders at each entrance to pond areas.			
314.108	0.06	0.00	0.06	UAR	Restore	Barricade.			
315.100	1.68	0.00	1.68	UAR	Restore	Barricade.			
315.102	0.48	0.00	0.48	UAR	Restore	Barricade.			
315.103	0.26	0.00	0.26	UAR	Restore	Barricade.			
315.104	0.82	0.00	0.82	UAR	Restore	Barricade.			

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	Alternative 5								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 5 Proposed Actions			
405.101	0.17	0.00	0.17	UAR	Restore	Barricade.			
405.103	3.47	0.00	3.47	UAR	Motorized Trail	Add to trail system. Motorized trail. Improve surface drainage near creek; repair culvert.			
405.9	0.05	0.00	0.05	UAR	Restore	Barricade.			
411.101	0.30	0.00	0.30	UAR	Restore	Barricade.			
411.102	0.17	0.00	0.17	UAR	Restore				
427.101	0.15	0.00	0.15	UAR	1	Add to road system. OML 1.			
427.103	0.32	0.00	0.32	UAR	2	Add to road system. OML 2. Delineate route.			
427.104	0.30	0.00	0.30	UAR	Restore	Barricade.			
427.105	0.29	0.00	0.29	UAR	2	Add to road system. OML 2. County disposal site; may be gated periodically for administrative purposes.			
427.106	0.13	0.00	0.13	UAR	Motorized Trail	Add to trail system. Motorized trail. Install rolling dips to improve drainage.			
427.107	0.05	0.00	0.05	UAR	2	Add as OML 2. POC Mitigation: gravel as needed.			
427.108	0.09	0.00	0.09	UAR	Restore	Barricade.			
427.108A	0.04	0.00	0.04	UAR	Restore	Closed by barricade on 427.108.			

Alternative 6

Table A-5. Alternative 6.

	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
13N35.5	0.14	0.00	0.14	UAR	Restore	Barricade.			
13N35K	0.10	0.18	0.28	2	Decommission	Remove from system. Barricade.			
13N37	2.00	0.00	2.00	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade. Downgrade to OML 1.			
13N37.1	0.11	0.00	0.11	UAR	Restore	Barricade.			
13N37A	0.77	0.00	0.77	2	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
13N37B	0.27	0.00	0.27	2	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
14N01	4.61	9.60	14.21	3	3	POC Mitigation: seasonal gate closure.			
14N01D	1.80	0.00	1.80	2	2	Maintain, repair, or replace each culvert; improve surface drainage. POC Mitigation: seasonal gate near private property to mitigate POC risk.			
14N08	0.50	0.00	0.50	2	2	POC Mitigation: year-round gate closure.			
14N08T	0.11	0.00	0.11	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
14N15	0.50	0.00	0.50	2	2	Maintain, repair, or replace each culvert; improve surface drainage. POC Mitigation: proposed seasonal gate on 14N01 restricts access.			
14N15.1	3.80	0.00	3.80	UAR	1	Designate as ML1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed and year-round gate.			
14N32.1	0.26	0.00	0.26	UAR	Restore	Barricade.			
14N33	1.60	0.18	1.78	2	Decommission	Remove from system. Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			
14N33.3	0.52	0.00	0.52	UAR	Restore	Remove culverts and associated fill from stream channels as on 14N33. Waterbars as needed. Closed by barricade on 14N33.			
14N33A	0.22	0.00	0.22	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
14N38	0.40	0.00	0.40	2	2	Improve surface drainage and maintain as OML 2. POC Mitigation: seasonal gate closure at beginning of road.			
14N38	0.20	0.40	0.60	2	Decommission	Decommission past water source. Remove culverts, waterbar as needed and barricade.			

	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
14N46	2.70	0.00	2.70	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade. Downgrade to OML 1.			
14N46.2	0.13	0.00	0.13	UAR	Restore	Waterbars as needed and barricade.			
14N46B	0.37	0.00	0.37	1	Decommission	Remove from system. Waterbars as needed and barricade.			
15N01.102	0.29	0.00	0.29	UAR	2	Add to road system. OML 2. POC Mitigation: add gravel at terminus of road where water accumulates.			
15N01.102	0.19	0.29	0.48	UAR	Restore	Barricade.			
15N01A.1	0.10	0.00	0.10	UAR	Restore	Barricade.			
15N01A.2	0.05	0.00	0.05	UAR	Restore	Barricade.			
15N01A.4	3.84	0.00	3.84	UAR	1	Remove or repair road drainage features as needed to improve resource protection. Manage as OML 1 and gate year round.			
15N01P	0.09	0.79	0.88	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
15N01Q	0.50	0.00	0.50	1	Motorized Trail	Convert to motorized trail to Marlow Campsite.			
15N01R	0.10	0.00	0.10	1	1	Waterbars as needed and barricade.			
15N01S	0.10	0.00	0.10	1	1	Waterbars as needed and barricade.			
15N01U	0.70	0.00	0.70	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
15N01U.1	0.58	0.00	0.58	UAR	Restore	Barricade.			
15N02	11.10	0.00	11.10	2	2	Replace 3 priority culverts. POC Mitigation: seasonal gate near beginning of road.			
15N02.101	0.81	0.00	0.81	UAR	Motorized Trail	Add to trail system. Motorized trail. Barricade at end.			
15N02.103	0.58	0.00	0.58	UAR	Motorized Trail	Add to trail system. Motorized trail.			
15N02.106	0.48	0.00	0.48	UAR	Motorized Trail	Add to trail system. Motorized trail.			
15N02.107	0.42	0.00	0.42	UAR	Motorized Trail	Add to trail system. Motorized trail. Barricade at milepost 0.37, about 0.05 miles before end of road.			
15N02.108	1.14	0.00	1.14	UAR	Restore	Barricade.			
15N02.108A	0.59	0.39	0.98	UAR	Restore	Barricade.			
15N02.2	0.24	0.00	0.24	UAR	Restore	Barricade.			
15N02.4	0.49	0.00	0.49	UAR	Motorized Trail	Add to trail system. Motorized trail. POC Mitigation: barricade at end of segment.			
15N02.5	0.71	0.19	0.90	UAR	Restore	Waterbars/rolling dips as needed and barricade at 15N02 junction.			
15N02.5	0.19	0.00	0.19	UAR	Motorized Trail	Add as motorized trail. Proposed barricade at the end of this segment.			

	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
15N38	2.90	0.00	2.90	2	2	Improve surface drainage and install culvert at stream ford on road near private land. POC Mitigation: barricade last 300' of road, before bottom of POC stand.			
15N39A	1.20	0.00	1.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
15N39A.1	0.18	0.00	0.18	UAR	Restore	Barricade.			
15N39B	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
15N42	1.06	0.00	1.06	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade. Downgrade to OML 1.			
15N42A	0.44	0.00	0.44	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
15N45	1.13	0.00	1.13	1	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade.			
15N45.100	0.22	0.00	0.22	UAR	Restore	Barricade.			
15N45.101	0.12	0.00	0.12	UAR	Restore	Barricade.			
15N63	0.30	0.00	0.30	2	2	Manage as OML 2.			
16N02.1	0.10	0.00	0.10	UAR	2	Add to road system. OML 2. Bear Basin water source. Route delineation.			
16N02.2	0.87	0.00	0.87	UAR	Restore	Barricade.			
16N02.5	0.21	0.00	0.21	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
16N02D	0.61	0.00	0.61	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N02H	0.40	0.00	0.40	1	1	Waterbars/rolling dips as needed.			
16N02L	1.70	0.00	1.70	2	2	Upsize culverts, install waterbars or rolling dips. POC Mitigation: current seasonal gate restricts access.			
16N02S	1.20	0.00	1.20	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
16N02S.1	0.21	0.00	0.21	UAR	Restore	Barricade.			
16N02T	0.50	0.00	0.50	1	Decommission	Remove from system. Remove all culverts and associated fill. Waterbars as needed and barricade.			
16N02T.1	0.12	0.00	0.12	UAR	Restore	Barricade.			
16N03.100	0.10	0.00	0.10	UAR	Restore	Barricade.			
16N03.2	0.87	0.00	0.87	UAR	Restore	Remove 3 culverts and associated fill from stream channels. Waterbars as needed and barricade.			

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Appendix A. Alternative Tables

	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
16N19.1	0.05	0.00	0.05	UAR	2	Add as OML 2; water source. POC Mitigation: rock/gravel entire route as needed.			
16N19.2	0.08	0.00	0.08	UAR	2	Add as OML 2 for access to Coon Creek. POC Mitigation: rock/gravel entire route as needed.			
16N19.3	0.30	0.00	0.30	UAR	Restore	Barricade.			
16N19.4	0.87	0.00	0.87	UAR	Restore	Barricade.			
16N19.5	0.19	0.00	0.19	UAR	Restore	Remove fill from culvert. Waterbars as needed and barricade.			
16N19A	0.23	0.00	0.23	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N19B	1.40	0.00	1.40	2	1	Waterbars as needed and barricade. Downgrade to OML 1.			
16N19E	0.95	0.00	0.95	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade. Downgrade to OML 1.			
16N19E.1	0.41	0.00	0.41	UAR	Restore	Barricade.			
16N19F	0.76	0.00	0.76	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N19G	0.23	0.00	0.23	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N21.1	0.15	0.00	0.15	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
16N21.2	0.10	0.00	0.10	UAR	Restore	Barricade.			
16N21F.1	0.09	0.00	0.09	UAR	Restore	Barricade.			
16N23	7.40	0.00	7.40	2	2	Improve road drainage at all culverts. POC Mitigation: seasonal gate closure and add gravel in areas with POC within 50' of road.			
16N23.100	0.64	0.00	0.64	UAR	Motorized Trail	Add to trail system. Motorized trail.			
16N23.2	0.22	0.00	0.22	UAR	Motorized Trail	Add to trail system. Motorized trail. POC Mitigation: gravel and rock route as needed.			
16N23.4	0.69	0.00	0.69	UAR	Motorized Trail	Add to trail system. Motorized trail.			
16N23A.1	1.90	0.00	1.90	UAR	Motorized Trail	Add to trail system. Motorized trail.			
16N24A	0.65	0.00	0.65	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N27	0.50	0.00	0.50	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N30	0.24	0.00	0.24	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N31A.1	0.22	0.00	0.22	UAR	Restore	Barricade.			

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	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
16N41B	0.09	0.00	0.09	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
16N55	0.50	0.00	0.50	1	2	Upgrade to OML 2.			
16N55.1	0.16	0.00	0.16	UAR	Restore	Barricade.			
17N01	0.70	0.00	0.70	2	2	POC Mitigation: rock/gravel road as needed.			
17N01.1	0.21	0.00	0.21	UAR	2	Add to road system. OML 2. POC Mitigation: rock/gravel length of road as needed.			
17N01.100	2.49	0.00	2.49	UAR	Restore	Remove all culverts and associated fill from stream channels. Waterbar as needed and Barricade.			
17N01.1A	0.02	0.00	0.02	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel route as needed.			
17N01.1B	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel route as needed.			
17N01.1C	0.09	0.00	0.09	UAR	Restore	Barricade. Waterbar as needed.			
17N01.1D	0.13	0.00	0.13	UAR	Restore	Barricade.			
17N01.2	0.30	0.00	0.30	UAR	2	Add as OML 2. POC Mitigation: rock/gravel entire route as needed.			
17N01.2B	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel entire route as needed.			
17N01.3	0.13	0.00	0.13	UAR	Motorized Trail	Add as motorized trail. Rolling dips as needed. POC Mitigation: rock/gravel route as needed.			
17N01.3A	0.07	0.00	0.07	UAR	Restore	Barricade.			
17N03	1.20	0.00	1.20	1	1	Waterbars as needed and barricade.			
17N04.1	0.12	0.00	0.12	UAR	Restore	Barricade.			
17N04.2	0.05	0.00	0.05	UAR	Restore	Barricade.			
17N04.3	0.97	0.00	0.97	UAR	Restore	Remove culvert and associated fill. Waterbars/rolling dips as needed and barricade.			
17N04S	1.80	0.00	1.80	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
17N05.100	0.88	0.00	0.88	UAR	Restore	Barricade.			
17N05.101	0.06	0.00	0.06	UAR	Restore	Barricade.			
17N05.4	0.32	0.00	0.32	UAR	Restore	Barricade.			
17N05.4A	1.36	0.00	1.36	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
17N05.5	0.14	0.00	0.14	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
17N05C	0.97	0.00	0.97	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
17N05E	0.71	0.00	0.71	1	1	Barricade.			

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Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions		
17N15	0.90	0.00	0.90	2	1	Waterbars as needed and barricade. Downgrade to OML 1.		
17N15A	0.13	0.00	0.13	1	Decommission	Remove from system. Waterbars as needed and barricade.		
17N16	0.65	0.00	0.65	2	1	Waterbars as needed and barricade. Downgrade to OML 1.		
17N16.1	0.17	0.00	0.17	UAR	Restore	Barricade.		
17N16.100	0.07	0.00	0.07	UAR	Restore	Waterbars/rolling dips as needed and barricade.		
17N17	0.60	0.00	0.60	1	Decommission	Remove from system. Remove culvert and associated fill from stream channel. Waterbars as needed and barricade.		
17N17.1	1.98	0.00	1.98	UAR	Restore	Closed by barricade on 17N17.		
17N18.2	0.39	0.00	0.39	UAR	Restore	Remove 2 culverts and associated fill from stream channels. Waterbars as needed and barricade.		
17N18.3	0.74	0.00	0.74	UAR	Restore	Barricade.		
17N18.4	0.15	0.00	0.15	UAR	Restore	Barricade.		
17N18A	0.94	0.00	0.94	1	2	Upgrade to OML 2.		
17N18C	0.67	0.00	0.67	2	2	Improve maintenance, repair, or replace each of the 3 culverts. POC Mitigation: rock/gravel entire length of road as needed, infested POC.		
17N18E	0.42	0.00	0.42	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N18F	0.07	0.00	0.07	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N20	0.19	0.00	0.19	2	2	Improve maintenance, repair, or replace each of the 3 culverts.		
17N21.1	0.41	0.00	0.41	UAR	Restore	Waterbars/rolling dips as needed and barricade.		
17N22A	0.79	0.00	0.79	2	2	Improve maintenance on, repair, or replace culvert at milepost 0.7.		
17N22A.1	0.21	0.00	0.21	UAR	Restore	Waterbars/rolling dips as needed and barricade.		
17N22A.2	0.25	0.00	0.25	UAR	Restore	Barricade.		
17N22D	0.08	0.00	0.08	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N22J	0.12	0.00	0.12	2	2	Waterbars/rolling dips as needed.		
17N22W.1	0.46	0.00	0.46	UAR	Restore	Rolling dips as needed. SUP road, do not barricade.		
17N23	1.30	1.50	2.80	1	Decommission	Remove from system. Remove culverts, waterbars as needed and barricade.		
17N23	1.15	0.35	1.50	1	Decommission	Remove from system.		
17N23C.1	1.04	0.05	1.09	UAR	1	Add to road system. OML 1.		
17N23C.1	1.15	1.09	2.24	UAR	1	Add to road system. OML 1.		

Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions		
17N23C.1	0.05	0.00	0.05	UAR	1	Add to road system. OML 1. Barricade.		
17N23C.2	0.59	0.00	0.59	UAR	1	Add to road system. OML 1. Closed by barricade on 17N23C.1.		
17N26	0.25	0.00	0.25	2	2	POC Mitigation: rock/gravel entire length of road as needed, infested POC.		
17N26A	0.37	0.00	0.37	2	2	POC Mitigation: rock/gravel entire length of road as needed.		
17N27A.1	0.21	0.00	0.21	UAR	Restore	Closed by barricade on 17N27A.		
17N27B	0.40	0.00	0.40	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N27C	0.40	0.00	0.40	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N27D.1	0.36	0.00	0.36	UAR	Restore	Waterbars/rolling dips as needed and barricade.		
17N28	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N29	1.00	0.00	1.00	2	2	Pull fill back from landing. Proposed seasonal gate on network.		
17N29.100	0.04	0.00	0.04	UAR	Restore	Barricade.		
17N29B	0.20	0.00	0.20	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade. Proposed seasonal gate on network.		
17N30	0.89	0.00	0.89	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed. Downgrade to OML 1. Barricade.		
17N30	0.55	0.89	1.44	2	Decommission	Remove from system. Waterbars as needed. Closed by barricade on first segment of 17N30 that is OML 1.		
17N30A	0.40	0.00	0.40	2	1	Downgrade to OML 1. Closed by barricade on 17N30 that is OML 1.		
17N31	1.60	0.00	1.60	2	1	Waterbars as needed and barricade. Downgrade to OML 1.		
17N31.3	0.17	0.00	0.17	UAR	Restore	Barricade.		
17N31A.1	0.36	0.00	0.36	UAR	Restore	Barricade.		
17N32	3.40	0.00	3.40	2	2	POC Mitigation: seasonal gate closure. Rock/gravel POC crossing as needed.		
17N32.1	0.31	0.00	0.31	UAR	Restore	Barricade.		
17N32.2	0.17	0.00	0.17	UAR	Restore	Barricade.		
17N32B	0.80	0.00	0.80	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N32F	1.00	0.00	1.00	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade. Proposed seasonal gate on network.		

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Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions		
17N32G	1.20	0.00	1.20	2	2	Improve maintenance, repair, or replace culverts. Proposed seasonal gate on network.		
17N35	0.50	0.00	0.50	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N35.100	0.35	0.00	0.35	UAR	Restore	Barricade.		
17N36	2.50	0.00	2.50	2	2	Improve maintenance, repair, or replace each of the 14 culverts. POC Mitigation: seasonal gate near beginning, just off 17N04.		
17N36B.1	0.26	0.00	0.26	UAR	Restore	Barricade.		
17N36C	0.43	0.00	0.43	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N36F	1.20	0.00	1.20	1	2	Upgrade to OML 2.		
17N39	2.19	0.00	2.19	2	2	Improve maintenance, repair, or replace each of the 25 culverts. POC Mitigation: rock/gravel stretch with infected POC as needed, from junction with 411 to approx. milepost 0.65.		
17N39A	0.95	0.00	0.95	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N39B	0.51	0.00	0.51	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N39C	0.12	0.00	0.12	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N40	0.35	0.65	1.00	2	1	Waterbars as needed, barricade, and downgrade to OML 1.		
17N40	0.65	0.00	0.65	2	2	POC Mitigation: seasonal gate closure.		
17N40B	0.53	0.00	0.53	2	1	Waterbars as needed and barricade. Downgrade to OML 1.		
17N40B.1	0.19	0.00	0.19	UAR	Restore	Barricade.		
17N40C.1	0.20	0.00	0.20	UAR	Restore	Barricade.		
17N40D	0.18	0.00	0.18	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.		
17N41	4.25	0.00	4.25	2	2	Improve maintenance on, repair, or replace/upgrade each of the 13 culverts and waterbars as needed. POC Mitigation: rock/gravel stretch with infected POC, from junction with 411 to approx. milepost 1.05.		
17N41.1	0.74	0.00	0.74	UAR	Restore	Barricade.		
17N41.2	0.02	0.00	0.02	UAR	Restore	Barricade.		
17N41A	0.35	0.00	0.35	1	1	Barricade.		
17N41G.1	0.17	0.00	0.17	UAR	Restore	Waterbars/rolling dips as needed and barricade.		

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Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions		
17N49.104A	0.05	0.00	0.05	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.104B	0.08	0.00	0.08	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.105	1.43	0.00	1.43	UAR	Restore	Barricade.		
17N49.105A	0.12	0.00	0.12	UAR	Restore	Barricade.		
17N49.106	0.32	0.00	0.32	UAR	Restore	Barricade.		
17N49.107	0.64	0.00	0.64	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.108	0.31	0.00	0.31	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.11	1.94	0.00	1.94	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.11	2.55	1.94	4.49	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route. POC Mitigation: seasonal gate closure, gate mid-slope of 17N49.11, near long 124.0119W and lat 41.88593.		
17N49.11M	0.17	0.00	0.17	UAR	Restore	Barricade.		
17N49.11N	0.23	0.00	0.23	UAR	Restore	Barricade.		
17N49.11P	0.18	0.00	0.18	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route. POC Mitigation: proposed seasonal gates on 17N49.11 and 17N49.7, restrict access.		
17N49.11P	0.03	0.18	0.21	UAR	Restore	Barricade.		
17N49.12	2.10	0.00	2.10	UAR	Restore	Barricade.		
17N49.13	0.30	0.00	0.30	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.14	0.54	0.00	0.54	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.15	0.62	0.00	0.62	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.15A	0.24	0.00	0.24	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.2	0.20	0.00	0.20	UAR	Restore	Barricade.		
17N49.3	0.23	0.00	0.23	UAR	Restore	Barricade.		
17N49.4	1.29	0.00	1.29	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.		
17N49.4	0.75	1.29	2.04	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route. POC Mitigation: seasonal gate closure, just to east of 17N49.102.		
17N49.4A	1.06	0.00	1.06	UAR	Restore	Year-round gate.		
17N49.7	2.15	0.91	3.06	UAR	Motorized Trail	Add to trail system. Motorized trail. Repair road drainage at spring area and two culverts. Delineate route. POC Mitigation: install seasonal gate north of junction with 17N49.15.		
17N49.7	0.29	3.06	3.35	UAR	Restore	Barricade.		
17N49.7	0.91	0.00	0.91	UAR	Motorized Trail	Add to trail system. Motorized trail. Repair road drainage at spring area and two culverts. Delineate route and gravel areas with POC.		

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	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
18N07.6	0.25	0.00	0.25	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Barricade.			
18N07.8	0.38	0.00	0.38	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. POC Mitigation: barricade.			
18N08.2	0.03	0.00	0.03	UAR	2	Add to road system. OML 2			
18N08F	0.90	0.90	1.80	2	1	POC Mitigation: downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbars as needed and barricade.			
18N08G	1.12	0.00	1.12	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N09	5.10	0.00	5.10	2	2	POC Mitigation: seasonal gate closure at beginning of road.			
18N09.100	0.21	0.00	0.21	UAR	Motorized Trail	Add as motorized trail. Route delineation at site, POC Mitigation: seasonal gate on 18N09 closes access to this route.			
18N09.100	0.06	0.21	0.27	UAR	Restore	Waterbars/rolling dips as needed and barricade at 18N09.			
18N09.100A	0.16	0.00	0.16	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
18N09.101	0.16	0.00	0.16	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: gravel last 100' of route.			
18N09.102	1.84	0.00	1.84	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
18N09.103	0.04	0.00	0.04	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
18N09.104	0.05	0.00	0.05	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
18N09.105	0.12	0.00	0.12	UAR	Restore	Waterbars/rolling dips as needed and barricade.			
18N09.106	0.02	0.00	0.02	UAR	Motorized Trail	Add as motorized trail.			
18N09.107	0.01	0.00	0.01	UAR	Motorized Trail	Add as motorized trail.			
18N09.108	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel route as needed.			
18N10.1	0.70	0.00	0.70	UAR	Restore	Barricade.			
18N11	1.92	4.15	6.07	2	2	Replace culvert at milepost 5.78.			
18N11A	0.80	0.00	0.80	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N11B	0.19	0.00	0.19	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N11C	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N11D	0.46	0.00	0.46	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N11D.1	1.75	0.00	1.75	UAR	Restore	Closed by barricade on 18N11D.			

	Alternative 6									
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions				
18N11D.2	0.25	0.00	0.25	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Closed by barricade on 18N11D.				
18N11D.3	0.29	0.00	0.29	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Closed by barricade on 18N11D.				
18N11D.4A	0.73	0.00	0.73	UAR	Restore	Barricade.				
18N11D.5	2.11	0.00	2.11	UAR	Restore	Remove culverts and fill from stream channels. Waterbars as needed. POC Mitigation: barricade.				
18N12A	0.43	0.00	0.43	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.				
18N13.100	0.21	0.00	0.21	UAR	Restore	Barricade.				
18N13.101	0.08	0.00	0.08	UAR	Restore	Closed by barricade on 18N13.				
18N15	1.20	0.00	1.20	2	2	Resource risk mitigation: Delineate route near milepost 0.01. Upsize culverts, install waterbars or rolling dips.				
18N15D	0.23	0.00	0.23	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.				
18N16	5.33	0.00	5.33	2	2	POC Mitigation: rock/gravel first 0.28 miles as needed.				
18N16.100	2.60	0.00	2.60	UAR	Restore	Barricade.				
18N16E	0.38	0.00	0.38	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.				
18N16F.1	0.16	0.00	0.16	UAR	Restore	Barricade.				
18N16W	0.17	0.00	0.17	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.				
18N17	8.10	0.00	8.10	2	2	Improve maintenance on, repair, or replace/upgrade each of the 19 culverts and waterbars as needed. POC Mitigation: current seasonal gate.				
18N17.100	1.01	0.00	1.01	UAR	Restore	Barricade.				
18N17.100A	0.08	0.00	0.08	UAR	Restore	Barricade.				
18N17.101	0.05	0.00	0.05	UAR	Restore	Closed by barricade on 18N17.				
18N17.102	0.06	0.00	0.06	UAR	Restore	Closed by barricade on 18N17.				
18N17.103	0.21	0.00	0.21	UAR	Restore	Barricade.				
18N17.104	0.20	0.00	0.20	UAR	Restore	Barricade.				
18N17.104A	0.20	0.00	0.20	UAR	Restore	Closed by barricade on 18N17.				
18N17B	0.87	0.00	0.87	2	2	Install culvert at milepost 0.5. POC Mitigation: seasonal gate closure on 18N17.				

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	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
18N17C	1.18	0.00	1.18	2	2	Replace culverts at milepost 0.35 and 0.77; and maintain, repair or upgrade remaining 4 culverts and improve surface drainage. POC Mitigation: existing seasonal gate on 18N17 restricts access.			
18N17C.1	0.05	0.00	0.05	UAR	Restore	Barricade.			
18N17G	0.12	0.00	0.12	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N17H	0.15	0.00	0.15	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N18A	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N18B	0.15	0.00	0.15	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N18C	0.08	0.00	0.08	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N18D	0.13	0.00	0.13	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N19A	0.22	0.00	0.22	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N19B	0.20	0.00	0.20	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N19C	0.17	0.00	0.17	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N20	1.00	0.00	1.00	2	1	Downgrade to OML 1. Remove or repair road drainage features as needed to improve resource protection. Waterbar as needed and gate.			
18N20.100	0.28	0.00	0.28	UAR	Restore	Barricade.			
18N20.100A	0.08	0.00	0.08	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed. Closed by barricade on 18N20.			
18N20.101	0.12	0.00	0.12	UAR	Restore	Barricade.			
18N20.102	0.47	0.00	0.47	UAR	Restore	Remove culverts and associated fill. Waterbars as needed. Closed by barricade on 18N20.			
18N20A	0.40	0.00	0.40	2	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N22	2.00	0.00	2.00	2	1	Remove or repair road drainage features as needed to improve resource protection. Waterbars/rolling dips as needed and barricade. Downgrade to OML 1.			

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	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
18N56	0.88	0.00	0.88	2	2	Replace culverts; install rolling dips as needed. POC Mitigation: rock/gravel 100' either side of infected creek crossing near milepost 0.15 as needed.			
18N56.100	0.04	0.00	0.04	UAR	Restore	Barricade.			
18N57	0.56	0.00	0.56	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
18N58.1	0.13	0.00	0.13	UAR	Restore	Barricade.			
18N58B	0.25	0.00	0.25	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
199.102	0.13	0.00	0.13	UAR	2	Add to road system. OML 2.			
199.103	0.10	0.00	0.10	UAR	3	Add to road system. OML 3, Griffin Bridge. POC Mitigation: rock/gravel entire route of infected POC as needed.			
199.104	0.11	0.00	0.11	UAR	3	Add to road system. OML 3, Madrona Campground. POC Mitigation: rock/gravel entire route of infected POC as needed.			
199.105	0.03	0.00	0.03	UAR	3	Add to road system. OML 3, Darlingtonia Trail head access.			
199.106	0.18	0.00	0.18	UAR	3	Add to road system. OML 3, Eighteen-mile river access site. POC Mitigation: rock/gravel entire route of infected POC as needed.			
199.107	0.10	0.00	0.10	UAR	Restore	Barricade.			
199.108	0.24	0.00	0.24	UAR	Restore	Barricade.			
199.109	0.10	0.00	0.10	UAR	Restore	Barricade to allow parking at turnout and hiking access to river.			
199.111	0.07	0.02	0.09	UAR	Restore	Barricade.			
199.111	0.02	0.00	0.02	UAR	2	Add to road system. Add road to creek as OML 2. POC Mitigation: rock/gravel entire route of infected POC as needed.			
199.111A	0.07	0.00	0.07	UAR	Restore	Closed by barricade on 199.111.			
199.112	0.29	0.00	0.29	UAR	Restore	Barricade.			
199.113	0.07	0.00	0.07	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel route as needed.			
19N34	1.95	0.00	1.95	1	Decommission	Remove from system. Remove culvert and associated fill as needed. Waterbars as needed and barricade.			
19N34A	0.28	0.00	0.28	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
19N34B	0.29	0.00	0.29	1	Decommission Remove from system. Remove culverts and associated fill from stre channel. Waterbar as needed and barricade.				
19N34C	0.08	0.00	0.08	1	Decommission	Remove from system. Remove culverts and associated fill from stream channel. Waterbar as needed and barricade.			
305.100	0.57	0.00	0.57	UAR	Restore	Barricade.			

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	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
305.126	1.56	0.00	1.56	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
305.128	0.70	0.00	0.70	UAR	Restore	Barricade.			
305.129	0.40	0.00	0.40	UAR	Restore	Barricade.			
305.130	1.72	0.00	1.72	UAR	Restore	Barricade.			
305.131	0.09	0.00	0.09	UAR	Restore	Barricade.			
305.132	0.04	0.00	0.04	UAR	Motorized Trail	Designate as motorized trail.			
305.133	0.01	0.00	0.01	UAR	Motorized Trail	Add as motorized trail.			
305.134	0.13	0.00	0.13	UAR	Restore	Barricade.			
314.1	1.21	0.00	1.21	UAR	Motorized Trail	Add to trail system. Motorized trail. POC Mitigation: barricade at milepost 1.21.			
314.102	0.80	0.00	0.80	UAR	Restore	Barricade.			
314.107	0.26	0.00	0.26	UAR	2	Add to road system. OML 2. Delineate route. Three Ponds camping area. POC Mitigation: rock/gravel length of motorized trail as needed.			
314.108	0.06	0.00	0.06	UAR	Restore	Barricade.			
315.100	1.48	0.20	1.68	UAR	Restore	Barricade.			
315.100	0.20	0.00	0.20	UAR	Motorized Trail	Add to trail system. Motorized trail.			
315.102	0.48	0.00	0.48	UAR	Restore	Barricade.			
315.103	0.26	0.00	0.26	UAR	Restore	Barricade.			
315.104	0.82	0.00	0.82	UAR	Restore	Barricade.			
315.106	0.25	0.00	0.25	UAR	Restore	Barricade.			
315.107	0.30	0.00	0.30	UAR	Restore	Barricade.			
315.108	0.46	0.00	0.46	UAR	Motorized Trail	Add to trail system. Motorized trail. Delineate route.			
315.109	0.49	0.00	0.49	UAR	Restore	Barricade.			
315.110	0.07	0.00	0.07	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel route as needed.			
315.111	0.03	0.00	0.03	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel route as needed.			
315.2	0.51	0.00	0.51	UAR	Restore	Waterbars/rolling dips as needed. Remove culverts at milepost 0.07, 0.13 and 0.18 to improve drainage. POC Mitigation: barricade.			
315.3	0.98	0.00	0.98	UAR	Restore	Remove all culverts. Waterbars as needed. POC Mitigation: barricade.			
315.3A	0.24	0.00	0.24	UAR	Restore	Remove all culverts. Waterbars as needed and barricade.			
315.9A	1.22	0.00	1.22	UAR	Restore	Remove culverts and associated fill from stream channels. Waterbars as needed and barricade.			

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	Alternative 6								
Road or Route	Miles	Beginning Mile Point	End Mile Point	Existing Status or Maintenance Level	Final Status or Maintenance Level	Alternative 6 Proposed Actions			
427.105	0.29	0.00	0.29	UAR	2	Add to road system. OML 2. County disposal site; may be gated periodically for administrative purposes.			
427.106	0.13	0.00	0.13	UAR	Motorized Trail	Add to trail system. Motorized trail. install rolling dips to improve drainage.			
427.107	0.05	0.00	0.05	UAR	2	Add as OML 2. POC Mitigation: gravel.			
427.108	0.09	0.00	0.09	UAR	Motorized Trail	Add as motorized trail. POC Mitigation: rock/gravel route as needed.			
427.108A	0.04	0.00	0.04	UAR	Restore	Barricade.			

Appendix B. Monitoring Plan

Water Quality Monitoring Plan

The *Water Resources Monitoring Plan* presented here was developed to meet state water quality objectives as identified by the State of California Regional Water Quality Management Plan, which is intended to protect and maintain the identified beneficial uses of water flowing from NFS land. Best Management Practices (BMPs) were developed specifically for meeting all state water quality objectives. The BMP (Practice: 4-7) for off-highway vehicle (OHV) use is described below. This monitoring also satisfies the requirements of the *Watershed and Fisheries Restoration Program* biological assessment (WFR BA) for coho salmon as well as soils and geology resource concerns.

Water Quality Monitoring of OHV Use According to a Developed Plan

Objective: To provide a systematic process to determine when and to what extent OHV use will cause, or is causing adverse effects on water quality.

Explanation: Each forest's OHV plan will:

- Identify areas or routes where OHV use could cause degradation of water quality.
- Establish baseline water quality data for normal conditions as a basis from which to measure change.
- Identify water quality standards and the amount of change acceptable.
- Establish monitoring methods and frequency.
- Identify controls and mitigation appropriate in management of OHVs.
- Restrict OHV use to designated routes.

Implementation: Monitoring results are evaluated against the OHV plan objectives for water quality and the Forest Plan objectives for the area. These results are documented, along with the actions necessary to correct identified problems.

If considerable adverse effects are occurring, or are likely to occur, immediate corrective action will be taken. Corrective actions may include, but are not limited to, reduction in the amount of OHV use, signing, or barriers to redistribute use, partial closure of areas, rotation of use on areas, closure to causative vehicle type(s), or total closure, and structural solutions, such as culverts and bridges. Closure is accomplished through authority of the forest supervisor.

Water Resources Monitoring Plan

Over the next 10-year period, monitor and evaluate at least 20 percent of routes added to the NFTS annually, which were identified as high risk. Monitoring is predicated on available funding.

The recommended protocol for monitoring of newly added routes is the Region 5 OHV Trail-Monitoring Protocol, commonly referred to as *Green-Yellow-Red*. This protocol was developed in Region 5 specifically to evaluate OHV route impacts to soil and water resources (see following table).

Table B-1. Green-yellow-red water quality monitoring indicators.

	Green Condition		Yellow Condition	Red Condition		
G1	Water control is provided by enough functional water breaks to divert runoff from the trail before it has the volume and velocity to cause erosion. Where present, rills occur on less than one-third of the distance between water breaks.	Y1	Water breaks do not divert all runoff from the trail because they are nearly filled to capacity and/or are partially breached, or spaced too widely. Where present, rills occur on more than one-third of the distance between water breaks.	R1	Water breaks no longer divert runoff from the trail because they are full and/or have been breached, or are absent or spaced too widely. Gully or rill erosion may be present.	
G2	No accelerated erosion off-trail. Runoff at water break outlets and on slopes adjacent to the trail is dispersed effectively. All sediment is filtered by vegetation or litter.	Y2	Rill erosion and/or sediment deposition occurs at water break outlets and/or on slopes adjacent to the trail. All sediment is filtered or deposited before it reaches a watercourse with a scoured channel.		Gully erosion occurs at water break outlets or on slopes adjacent to the trail and/or sediment is transported to an intermittent or perennial watercourse.	
G3	Sediment traps, where present, are all functional and have adequate capacity for at least one season of use. Trapped sediment can be retrieved during normal maintenance.	Y3	Where present, most sediment traps are full or nearly full, but still functional. Most trapped sediment can be retrieved during normal maintenance.		Where present, sediment traps have been breached and have a plume of sediment and/or a gully below the breach. Most sediment cannot be retrieved.	
G4	Tread wear is minimal. Tread is generally incised less than 6 inches. Tread wear is generally evident on less than one-third of the distance between water breaks or on less than one-third of the tread width.	Y4	Tread wear is evident. Tread is generally incised 6 to 12 inches and tread wear is generally evident on more than one-third the distance between water breaks and on more than one-third of the tread width. If present, whoops or stutter bumps and high berms are well developed.		Tread wear is severe. Tread incision is generally greater than 12 inches deep and tread wear is generally evident on the entire distance between water breaks. If present, deep whoops and stutter bumps force traffic off the trail.	
G5	Tread width is generally no greater than 1.5 times the design width for the designated use.	Y5	Tread width is generally greater than 2 times the design width for the designated use and appears to be increasing.		Tread width is generally greater than 3 times the design width for the designated use and has caused or is causing severe resource damage.	
G6	Unauthorized user-created trails are limited to single tracks or single passes generally less than 300 feet long. Tracks are not eroded and have little effect on water control.	Y6	Unauthorized user-created trails are common, well defined, and generally greater than 300 feet long. Water control is inadequate. Areas with resource damage can be revegetated/restored with ordinary effort.		Unauthorized user-created trails have caused severe resource damage such as gully erosion, eroded hill climbs, or extensive damage to vegetation and/or sensitive habitat. Restoration will usually require a major effort (e.g., large equipment, topsoil replacement, etc.)	
G7	Approach to watercourse crossing is short and has a gentle gradient. Tread is stable, shows little evidence of erosion, and is at design width. No damage to riparian vegetation outside the tread.	Y7	Approach to watercourse crossing is short and steep or long and gentle. Tread may show some evidence of erosion and may show evidence of widening. Minimal damage to riparian vegetation.	R7	Approach to watercourse crossing is both steep and long and/or tread is unstable and shows evidence of accelerated erosion. Approach may be widening and damaging riparian vegetation.	

Port-Orford-Cedar Monitoring Plan

Objectives

- 1) Monitoring for the illegal use (i.e. use outside allowed season of use) of roads and motorized trails on the NFTS rated as high risk of introducing *Phytophthora lateralis (PL)* into POC stands.
- 2) Monitoring and inspecting current gates and newly installed gates and barricades to determine gate condition and efficacy in limiting motor vehicle access to the open dry season.
- 3) Monitoring of known or unmapped areas of uninfected trees behind POC closures near NFTS roadways for signs of PL and confirming the presence of the disease.

Timing: All of the above shall occur at least once during closure season, more often depending on available resources. In addition to specified monitoring for the above items, monitoring will also occur during routine work across the district.

Methodology

- **Gate and Barricade Monitoring and Inspections:** Forest Service personnel shall inspect seasonal gates annually to look for signs of illegal use beyond the gate and to ensure gate integrity is sound. At each gate location, at a minimum the following data will be collected:
 - o Name of personnel performing monitoring
 - District
 - o Date
 - o Location (road number and intersecting road number if applicable)

The following observations shall also be collected.

- o Condition of gate: Is gate still functional?
- o What repairs are needed, if applicable?
- o Is there evidence that motor vehicle traffic is bypassing gate?
- o If yes, list recommendations to increase effectiveness.
- Uninfected POC Stand Monitoring: FS personnel will be trained to look for new signs of POC root disease in trees and stands that appear to be otherwise healthy. This will primarily be observing POC trees with changes in color from a healthy green crown, primarily yellow, orange and reddish colors occurring throughout the entire crown. The location of the site will be recorded and given to the district POC manager. Follow-up will occur to confirm presence of the disease.

Implementation: If signs of illegal access are noted, corrective action will be taken. Corrective actions may include, but are not limited to, reinforcing areas around gates to restrict access beyond areas of illegal use, such as boulder placement or moving gates to a different location that may be more effective at preventing trespass, or complete closure of the road.

Botanical Resources Monitoring Plan

Introduction: It is Forest Service policy to analyze impacts to sensitive species to ensure management activities do not create a significant trend toward federal listing or loss of viability. The Botanical Resources Monitoring Plan was developed to assess impacts to Sensitive plants resulting from the implementation of the *Smith River National Recreation Area Restoration and Travel Management* project.

Objective: The objective is to collect population data over time in order to detect if a consequential downward trend in any population of sensitive plant species within 30 feet of UARs proposed for addition to the NFTS has occurred and to implement a management response to avoid reaching the threshold of concern for loss of viability or trend toward federal listing.

Location: A selection of the following routes will be monitored:

Table B- 2. Routes to be monitored - botany.

Road_Route	Miles	OCC_ID	LEOP	SISE10	STHO	VIPRO2
17N49.100	3.88	SISE10_020		1139		
17N49.100	3.88	STHO_014			2	
17N49.100	3.88	STHO_017			50	
17N49.101	1.17	SISE10_007		300		
17N49.101	1.17	SISE10_009		300		
17N49.102	0.87	SISE10_008		1000		
17N49.104	3.82	SISE10_012		200		
17N49.104	3.82	SISE10_016		650		
17N49.104	3.82	SISE10_018		616		
17N49.104	0.86	STHO_017			4	
17N49.104	3.82	STHO_017			120	
17N49.107	0.64	STHO_017			2	
17N49.108	0.31	STHO_017			2	
17N49.11	1.94	SISE10_014		147		
17N49.11	2.55	SISE10_014		517		
17N49.11	1.94	STHO_017			19	
17N49.11	2.55	STHO_017			16	
17N49.11N	0.23	STHO_002			3	
17N49.12	2.1	SISE10_017		302		
17N49.12	2.1	STHO_010			76	
17N49.13	0.3	SISE10_019		45		
17N49.14	0.54	STHO_017			9	
17N49.15	0.62	STHO_017			1	
17N49.4	0.75	SISE10_006		750		
17N49.7	2.15	SISE10_013		400		
17N49.7	0.29	SISE10_015		800		
17N49.7	2.15	VIPRO2_005				500
17N49.7	2.15	VIPRO2_007				100
17N49.7	2.15	VIPRO2_008				100
17N49.7A	0.82	SISE10_017		600		
17N49.8	0.39	SISE10_016		58		

Road_Route	Miles	OCC_ID	LEOP	SISE10	STHO	VIPRO2
17N49.8	0.39	STHO_017			13	
18N51.100	1.45	LEOP_014	27			
305.109	2.43	LEOP_011	29			
305.109	2.43	LEOP_012	42			
305.109	2.43	LEOP_013	162			
305.109	2.43	SISE10_027		295		
305.118	0.8	STHO_039			7	
305.121B	1.03	STHO_027			6	
305.125	1.44	STHO_016			1	
305.126	1.56	STHO_009			44	
305.126	1.56	STHO_013			1	
Totals			260	8,119	376	700

Timing: Baseline data collection of sensitive plant occurrences corresponding with UARS will occur within three years prior to designating a UAR as a motorized trail or road on the MVUM and occur within that timeframe over at least two consecutive years. Once baseline is established monitoring will commence within three years of the addition of motorized trails to the NFTS and will occur once a year thereafter for five years until analysis shows that occurrences are stable.

Methodology: The analysis of effects on rare botanical species (federally listed, Forest Service sensitive botanical species) involve a process that starts with reviewing existing data sources (FSM 2672.43). In the first step, federally listed and sensitive botanical species that are known or are believed to have potential to occur in the analysis area were reviewed to identify potential affected botanical species associated with the proposed actions. A list of federally listed species to review for the analysis was compiled using the Arcata USFWS office online IPaC (Information for Planning and Conservation) search page (USDI 2016). The list of sensitive botanical species was from the USDA Forest Service Region 5 Sensitive Species List (USDA Forest Service 2013).

The second step in the analysis of effects on sensitive botanical species was field reconnaissance surveys. Field surveys were conducted at the time of year when plants were evident and identifiable. Additionally, information on rare plants from past field surveys, monitoring, and personal field observations were utilized during the analysis. Surveys were performed on a subset of inventoried UARs, which includes motorized trails, contained in the project, specifically in those areas where target species could be affected to determine the presence or absence of federally listed plant species, or Region 5 Forest Service sensitive plants (herein referred to as sensitive plant species). Where detected, federally listed or sensitive plants were documented by species and the number of individuals (herein synonymous with the number of ramets or above ground shoots as determining actual plant counts would requiring digging individuals up) were tallied by occurrence—an occurrence being an aggregation of plants that are geographically separated by another aggregate by less than a quarter mile¹. Occurrences for species

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¹ Occurrence definition follows the standard established by NatureServe, which defines the ranking methodology nationally for all Heritage Programs including the California Natural Diversity Database www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

analyzed in this document are commensurate with sub-populations. National Forest Transportation System roads were not surveyed, as their highly altered, engineered surfaces are not considered suitable habitat for the target species nor are the target species known to occur on these surfaces. No federally listed plant species were found within 100 feet of UARs proposed for addition to the NFTS.

Sensitive Plant Species Management Actions

It is Forest Service policy (FSM 2670.22) to analyze impacts to sensitive species to ensure management activities do not create a significant trend toward federal listing or loss of viability. The overall objective of the sensitive species management actions is to assess direct effects over time to sensitive plants associated with UARs designated on the NFTS as motorized trails and seek to guide management response. Specifically, these management actions would:

- Update baseline conditions for the four sensitive plant species that will refine, if needed, thresholds triggering management response,
- Substantiate the findings on the direct effects of the project to sensitive plants occurring within the active road prism and adjacent to the UAR by using a paired sampling approach,
- Determine if a downward trend in a sensitive plant occurrence has occurred that would result in a management response, and
- In coordination with the line officer, identify and implement the applicable management response (e.g., barricading) to prevent a loss of viability or a trend towards federal listing.

The goal is to detect if a downward trend in any population has occurred through direct effects of motorized use that could foreshadow a loss of viability or a trend toward federal listing and to take management action at the management response threshold before a loss of viability occurs.

Important background is the definition of *occurrence* for the purposes of collecting the baseline and effects data associated with management. Surveys performed for the *Smith River National Recreation Area Restoration and Motorized Travel Management Project* were restricted to within 100 feet of UARs by the district ranger. One of the consequences of restricting sensitive plant surveys to 100 feet of UARs is that our universe of a species' occurrence, against which we measure viability losses, is also restricted. The context of a given sensitive plant's occurrence is now defined as within 100 feet of UARs. The distribution of the sensitive plant, if any, beyond this parameter of 100 feet, does not apply to the analysis of viability since no surveys were conducted beyond this distance for the project.

Baseline Data Collection - Phase 1

Project surveys for the opposite leaved lewisia, the serpentine Indian pink and Howells jewelflower occurred in 2006 and are considered dated in terms of establishing a baseline for the respective occurrences against which current thresholds can be evaluated and updated as necessary. Western bog violet surveys have occurred more recently than the other species (2014), but not over consecutive years.

Baseline data collection of sensitive plant occurrences corresponding with UARS will occur within three years prior to designating a UAR as a motorized trail or road on the MVUM and occur within that

timeframe over at least two consecutive years. The consecutive years of sampling is an attempt to account for year-to-year fluctuations due to natural population variations. Data collection will occur in keeping with the phenology of the respective species, which typically ranges from late April and May for opposite-leaved lewisia and western bog violet and June to July for serpentine Indian pink and Howells jewelflower.

Data (e.g. counts of individuals/ramets, bare ground cover, associating species) will be collected within one meter quadrats along paired transects that are monumented to improve accuracy in re-locating quadrat installation points and repeated sampling. Given its scattered, non-clumped distribution, sampling methodology for Howells jewelflower will depart from the quadrat methodology and instead focus on a count of individuals along a transect and paired sampling where it can be accommodated.

Paired transects will provide a comparison between plants in a setting most vulnerable to direct effects by motor vehicles against those that are not. The respective transects will correspond to this gradient of disturbance with one located within the travel way and the other in close proximity on the edge or sides that are unlikely to be impacted by vehicular disturbance.

A backdrop to these management actions is that the proposed action would designate existing inventoried UARs as motorized trails or roads that have experienced a low-level use of motorized recreation use over the years. Baseline data will therefore reflect some level of previous disturbance.

Monitoring - Phase 2

Once baseline data is collected, management response thresholds are reviewed by a journey level botanist based upon such factors as changes in plant numbers of an occurrence and visual signs of motorized use. Monitoring would begin in keeping with the designation of the UARs on the MVUM and the commencement of use.

The types of data collected will follow that of the baseline data collection and sample the same paired transects and associated quadrats. In addition:

- Data collected along the transect not effected by motorized use *outside* of the immediate travel
 way will serve as the reference against which the data collected along the transect directly
 affected within the travel way will be compared. Measurements along the transect out of the
 travel way will aim to account for natural fluctuations in the occurrence.
- Additional metrics will be added pertaining to direct effect measurements, such as the number of
 individuals crushed by vehicle tires, documentation of wheel ruts present in quadrat, etc.
- Photo points will be established.
- Traffic counters will be installed initially to capture quantity and rate of motorized use along
 those UARs associated with sensitive plant monitoring. This information may assist in
 correlations relative to extent of direct effects to the occurrence.

Frequency and duration of monitoring will be evaluated based on monitoring results from the prior year. Initially monitoring will occur annually. The yearly frequency may be lessened (i.e. every second or third year) if data collected over subsequent years indicates that there is little or no difference from

reference conditions. If subsequent years indicate that there are changes to the reference condition due to motorized use, more frequent monitoring will resume and may indicate a need to monitor beyond 10 years.

If at any time during monitoring a downward trend is detected in any of the four sensitive species measured, the data will be analyzed in relation to the management response thresholds discussed in the next section.

Management Response Threshold

The management response thresholds shown in Table B-3 identifies the point at which management actions are triggered to avoid a loss of viability or trend toward federal listing of the species. Professional knowledge of the respective species is factored into determining thresholds such as a species growth habit (perennial or annual, rhizomatous or not), b) its phenology (e.g. season of emergence, blooming and dormancy if applicable), or c) habitat setting and vulnerability (e.g. opposite-leaved lewisia occupies habitat of relatively gentle topography compared to Howells jewelflower which can occupy rocky slopes) in determining a given species management response threshold. The management response threshold in the proposed action is lower than the *threshold of concern* identified in the Forest Plan (USDA Forest Service 1995) which is identified as a more than 20 percent decline in the number of individuals over a 5-year sampling period. The management response threshold is lower in order to provide time for corrective action to occur before the threshold of concern, indicating a loss of viability or trend toward federally listing, is approached.

The loss of an occurrence with a good or better viability rating would represent a management response threshold. An assessment of viability loss will generally incorporate methodology developed by NatureServe whose rankings are used by the Forest Service to designate Sensitive species. The California Natural Diversity Data Base, which is the California based NatureServe organization, provides a definition of an element occurrence (herein referred to as an occurrence) which is used to identify finite spatial portions of meta-populations that have practical conservation value as evidenced by potential continued presence or regular occurrence at a given location (NatureServe 2002). This methodology provides a succinct assessment of estimated viability or probability of persistence to assess the likelihood of whether an occurrence will persist for a defined period by ranking them on a scale from 'A' (excellent estimated viability) to 'X' (extirpated). The occurrence rank reflects "the degree to which people have directly or indirectly adversely impacted community composition, structure, and/or function, including alteration of natural disturbance processes". In general, occurrences are ranked based on size (both spatial and population abundance), condition and landscape context. An occurrence with at least good (i.e., excellent-to-good) viability exhibits favorable characteristics with respect to population size and/or quality and quantity of occupied habitat; and, if current conditions prevail, the occurrence is likely to persist for the foreseeable future (NatureServe 2009). Evaluating a downward change in viability rating of an occurrence will be based on the NatureServe ranking methodology titled Key for Ranking Species Element Occurrences Using the Generic Approach (Tomaino 2008). The evaluation will be performed by a journey level botanist who is knowledgeable of the sensitive plant species affected and their analysis of a comparison between baseline data and monitoring data collected over time.

The percentages in Table B-3 reflect the culmination of the aforementioned factors to foreshadow when a given species' viability is a concern and when management response is needed. The opposite-leaved lewisia and Howells jewelflower, which are represented by low plant counts, have a management response threshold of 10 percent. The management response threshold for the serpentine Indian pink and the western white bog violet is 15 percent. These thresholds can change if baseline data collection reveals that population size has changed significantly since survey data was last collected for these species in 2006 and 2014.

If a management response threshold is breached due to motorized use of UARs, a concern for species viability is triggered thus warranting line office involvement and management action that includes: barricading the affected occurrence, buffering the occurrence with boulders, or having use restricted or prohibited by order of the forest supervisor (Forest Plan standard and guideline 18-24, IV-128). If impacts are noted that are below the management response threshold but which create a concern for a downward trend, actions such as, but not limited to, signing or route delineation will be implemented

Table B-3. Management response thresholds.

Thresholds	Opposite leaved lewisia	Serpentine Indian pink	Howells jewelflower	Western bog violet
Alternative 6 plant totals within 30 feet of UARs	260	6,678	1,96	700
Plant numbers triggering a management concern	26	1,002	20	105
Management Response Threshold	10%	15%	10%	15%
Alternative 6 occurrence totals	4	13	3	3
Occurrence decline – a decline in an occurrence from a good to a poor viability ranking will trigger a management response.	0	0	0	0

Implementation: If significant downward trends are noted, or are likely to occur, corrective action will be taken. Corrective actions may include, but are not limited to, signing, barriers, closure to causative vehicle type(s), or removal of the route from the Motor Vehicle Use Map (MVUM).

Protocol: The recommended protocol for monitoring affects to Sensitive plants is the Region 5 OHV Trail-Monitoring Protocol, using the *Green-Yellow-Red* indicators.

Table B-4. Green-yellow-red botany monitoring indicators.

Green Condition	Yellow Condition	Red Condition
There is no downward trend in numbers of individuals or loss of viable occurrences.	There is evidence of downward trend in numbers of individuals.	10% loss of opposite leaved lewisia or Howells jewelflower. 15% loss of serpentine Indian pink or western bog violet. A change in viability rating from good to poor for an occurrence of any of the four sensitive species.

Table B-5. Cost per year.

Personnel	Number of Days	Cost Per Day	Total Cost
2 GS-430-11	10	\$770	\$15,400
2-GS-430-09	10	\$420	8,400
Travel and Per Diem	6	\$150	\$3,600
Total Cost Per Year	\$27,400		

Recreation Monitoring Plan

Objective: Monitoring of motorized trail use is conducted by the forest to meet standards and guidelines set by the LRMP and by national and regional direction. Note that the Forest Plan references *OHV routes*. These routes are analogous to NFTS motorized trails as referenced in this document.

Timing: Monitoring/field reviews of motorized trail conditions is required annually, currently monitored on a five-year cycle (approximately 20 percent per year), in accordance with national and regional direction. If the national or regional policy inspection frequency changes in the future, then Forest trail monitoring frequency and cycles will conform to policy direction at that time.

Implementation: If monitoring, or trail condition surveys, lead the Responsible Official to determine motor vehicle use is directly causing or will directly cause considerable adverse effects on public safety or soil, vegetation, wildlife, wildlife habitat, or cultural resources, then corrective actions will be taken immediately. Corrective actions may include but are not limited to signing, maintenance, stormproofing, barriers, closure to causative vehicle type(s), partial closure, or total closure.

Protocol: The annual monitoring of NFTS motorized trails and dispersed recreation resources (currently required at about 20 percent of routes per year) is generally focused on routes with specific resource concerns, such as those in areas classified as having a semi-primitive recreation setting (as determined by the recreation opportunity spectrum or ROS). Routine road and trail condition surveys are conducted using a random sample and must meet national and regional standards. The recreation monitoring element thresholds of concern, as provided in the Forest Plan include:

- More than 10 percent variance from planned use levels; and/or
- Visible damage of forest resources along or adjacent to NFTS motorized trails.

Noxious Weed Monitoring Plan

Table B-6. Noxious weed sites to be monitored.

Route	Miles	Species	Date Last Treated	Plants Treated	Exist	Alt 6
13N37	2.00	Scotch broom	7/10/2012	1	2	1
15N38	2.90	Scotch broom	1/27/2012	69	2	2
15N63	0.30	Scotch broom	9/15/2010	20	2	2
16N03K	1.50	Scotch broom	8/23/2011	67	2	2
16N19	8.28	Scotch broom	7/24/2013	63	2	2
16N38	2.90	Scotch broom	5/23/2010	327	2	2
16N41	1.43	Scotch broom	5/27/2010	10	2	2
17N04S	1.80	Scotch broom	6/5/2006	50	1	DECO
17N05C	0.97	Scotch broom	6/15/2012	986	1	DECO
17N13A	0.38	Scotch broom	9/19/2012	280	2	1
17N15A	0.13	Scotch broom	7/27/2012	282	2	DECO
17N16	0.65	meadow knapweed	7/19/2012	6	2	1
17N22J	0.12	Scotch broom	4/21/2011	5	2	2

Route	Miles	Species	Date Last Treated	Plants Treated	Exist	Alt 6
17N26	0.25	tansy ragwort	7/24/2013	13	2	2
17N31	1.60	Scotch broom	1/4/2012	82	2	1
17N36	2.50	Scotch broom	9/11/2012	1	2	2
17N41H	0.90	Scotch broom	11/19/2008	463	2	2
17N48	1.66	Scotch broom	4/25/2012	85	2	2
17N49	3.52	French broom	8/23/2011	1	3	3
17N49	0.44	Scotch broom	6/10/2010	1	3	3
18N07.2	0.13	Scotch broom	4/8/2013	5745	UAR	2
18N08.2	0.03	Scotch broom	12/7/2011	14	UAR	2
18N16E	0.38	Scotch broom	3/8/2013	671	1	DECO
18N17	8.10	Scotch broom	8/8/2012	10	2	2
18N19C	0.17	Scotch broom	11/17/2011	30	1	DECO
18N20	1.00	Scotch broom	8/7/2012	10	2	DECO
18N20		Scotch broom	8/7/2012	1	2	DECO
18N20		tansy ragwort	8/7/2012	160	2	DECO
18N56	0.88	Scotch broom	8/8/2012	7	2	2
199.104	0.11	Scotch broom	3/17/2013	132	UAR	3
427.103	0.32	Scotch broom	12/16/2011	71	UAR	2
427.106	0.13	Scotch broom	4/28/2011	476	UAR	TRAIL

Timing: Monitoring will commence at the end on one full growing season following the addition of the routes to the NFTS. Monitoring shall occur in late Fall, following the first rains. Monitoring shall occur every year thereafter.

Methodology: Priority will be given to sites treated. Rangeland General Forms (weed inventory forms) shall be completed for each site visited to quantify weed species present.

Protocol: Motorized trails and NFTS roads shall be maintained in a weed free state. If weed sites are found on motorized trails or NFTS roads, they will be treated to removal all weeds. If yellow star-thistle, diffuse or spotted knapweed infestations are found on motorized trails, these trails should be removed from the Motor Vehicle Use Map (MVUM) until the infestations are eradicated.

Table B-7. Green-yellow-red weed monitoring indicators.

Green Condition	Yellow Condition	Red Condition
There is no evidence of priority noxious weeds on designated routes.	Due to proximity, there is potential for priority noxious weeds to spread from existing system roads to newly designated motorized trails or newly designated NFTS roads.	Priority noxious weeds have spread to newly designated motorized trails or newly designated NFTS roads.

Table B-8. Cost.

Personnel	Number of Days	Cost Per Day	Total Cost
2 GS-430-09	10	\$600	\$6,000
Travel	10	\$70	\$700
Total Cost Per Year	\$6,700		

Heritage Monitoring

There are twenty-seven cultural resources within the APE, which represents the maximum footprint of the project (Alternative 4). Twenty-three are historic archaeological sites, three are multi-component archaeological sites, and one is a gathering area, which contains an historic component. A route-by-route assessment was completed to determine the effects to cultural resources from the proposed alternatives (Confidential Tables in CRIR # R2014051011033 and CRIR # R2015051000047). These detailed assessments looked at the type of effect, nature of effects, severity of effect, and Standard Resource Protection Measures prescribed under Appendix E of the PA and Appendix B of the Motorized PA to determine no adverse effects.

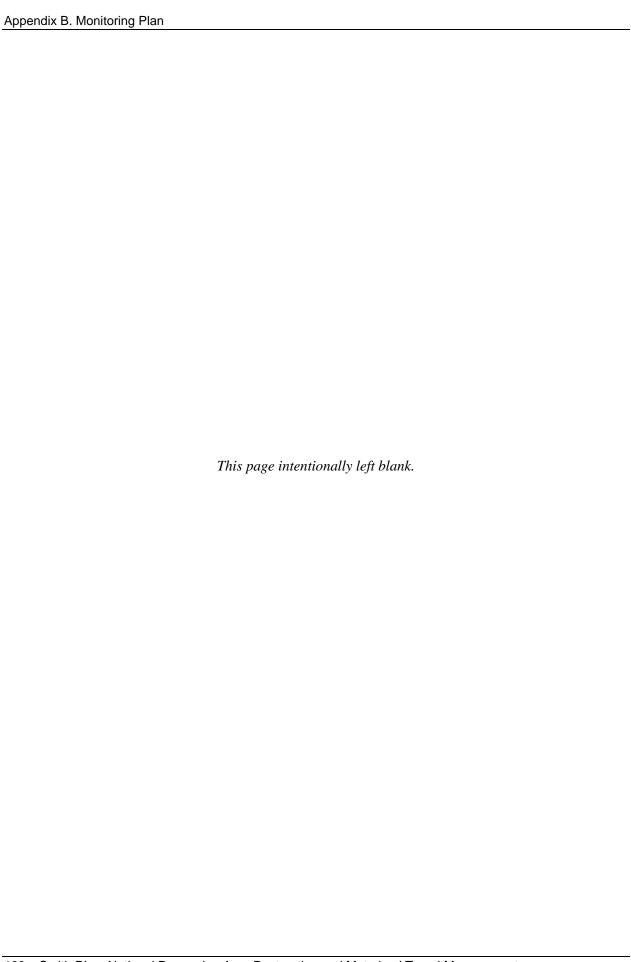
Monitoring will be conducted at archaeological sites where minor effects are anticipated. Where moderate effects are anticipated, barriers (or other standard protection measures) will be in place. No sites are at risk for having severe effects. It is anticipated that there will be no adverse effects to historic properties under Alternatives 4, 5, or 6, if all standard protection measures are followed.

Table B-9. Site effects and SRPM by alternative.

Count	FS Site #	Type of Effect	Severity of	SRPM ² Required by Alternative			
Count	rs site #	Type of Effect	Effect	Alt 1	Alt 4	Alt 5	Alt 6
1	05-10-51-2	None	N/A	No	No	No	No
2	05-10-51-10	Indirect	Minor	No	Monitor	No	Monitor
3	05-10-51-11	None	N/A	No	No	No	No
4	05-10-51-18	Indirect	Moderate	No	Barrier	Barrier	Barrier
5	05-10-51-26	Direct	Moderate	No	Barrier	Barrier	Barrier
6	05-10-51-27	Direct / Indirect	Minor	No	Monitor	No	Monitor
7	05-10-51-33	None	N/A	No	No	No	No
8	05-10-51-34	None	N/A	No	No	No	No
9	05-10-51-37	None	N/A	No	No	No	No
10	05-10-51-39	None	N/A	No	No	No	No
11	05-10-51-49	Direct / Indirect	Minor	No	Monitor	No	Monitor
12	05-10-51-55	Indirect	Minor	No	Monitor	No	Monitor
13	05-10-51-68	None	N/A	No	No	No	No
14	05-10-51-133	Indirect	Minor	No	Monitor	No	No
15	05-10-51-143	None	N/A	No	No	No	No
16	05-10-51-144	None	N/A	No	No	No	No
17	05-10-51-178	Indirect	Minor	No	Monitor	No	No
18	05-10-51-204	None	N/A	No	No	No	No
19	05-10-51-207	None	N/A	No	No	No	No
20	05-10-51-310	Indirect	Negligible	No	No	No	No
21	05-10-51-315	None	N/A	No	No	No	No
22	05-10-51-318	None	N/A	No	No	No	No
23	05-10-51-320	None	N/A	No	No	No	No

² SRPM refers to the Standard Resource Protection Measure defined in Appendix B of The Programmatic Agreement for Designating Motor Vehicle Routes and Managing Motorized Recreation on the National Forests in California.

Count FS Site #		Type of Effect	Severity of	SRPM ² Required by Alternative			
Count	ro one #	Type of Effect	Effect	Alt 1	Alt 4	Alt 5	Alt 6
24	05-10-51-321	Indirect	Moderate	No	Allow Access	Allow Access	Allow Access
25	05-10-51-322	None	N/A	No	No	No	No
26	05-10-51-327	None	N/A	No	No	No	No
27	05-10-51-328	None	N/A	No	No	No	No



Appendix C. Past, Present and Reasonably Foreseeable Activities

A detailed description of these activities is located in the project record.

Implementation Complete

Forest Service

- Coast to Crest Trail
- Abandon Mines Safety Closure Decision
- Abandoned Mines Safety Closure Decision
- Abandoned Mines Safety Closure Decision
- Altaville Mining District Site: Union-Zaar Mine Rehabilitation
- Goose Creek Land Acquisition
- Hurdygurdy Land Acquisition
- Siskiyou Fork Donation Land Acquisition
- Gasquet MVUM
- Roadside Sanitation of 15N39
- Youngs Valley Trailhead Relocation and Road Improvement
- Doe Flat Trail and Trailhead Relocation Project
- Gasquet Fires Complex Suppression and Repair

Non-Forest Service

- Del Norte County Rural Recreation Roads Ordinance
- Hardscrabble Bridge Replacement Project (US 199, PM 10.9–PM 11.2)
- Del Norte 199 Cable Mesh Drape Project (US 199, PM 18.3–PM 18.6)
- Hurdygurdy Bridge Replacement
- Steven Memorial Bridge Replacement
- CalTrans Hiouchi Community Improvements Project (US 199, PM 5.4-6.2)
- CalTrans Culvert replacement on Griffin Creek
- CalTrans Storm damage repair Dollar Bend Soldier Pile Wall
- Private timber harvests

Implementation Ongoing

Forest Service

- Hurdygurdy Recreation Improvement Project
- Dome Timber Sale (High Dome Meadow Restoration)
- Big Flat Vegetation and Fuels Management Project
- Station 3 Fuelbreak
- Coon Mountain Meadow Restoration
- Gasquet Community Wildfire Protection and Supplemental Information Report
- Hiouchi Community Protection Fuelbreak Project
- Gasquet Shaded Fuel Break / Rescoped as Elk Camp Fuel Break Project
- Mus-Yeh-Sait-Neh Understory Burn and Supplemental Information Report
- North Fork Smith Special Interest Area Road Access and Supplemental Information Report
- Forest-wide Integrated Management of Invasive Non-native Plant Species
- Gordon Hill Vegetation and Fuels Management Project
- Gasquet Complex Burn Area Emergency Response

Planned Activities

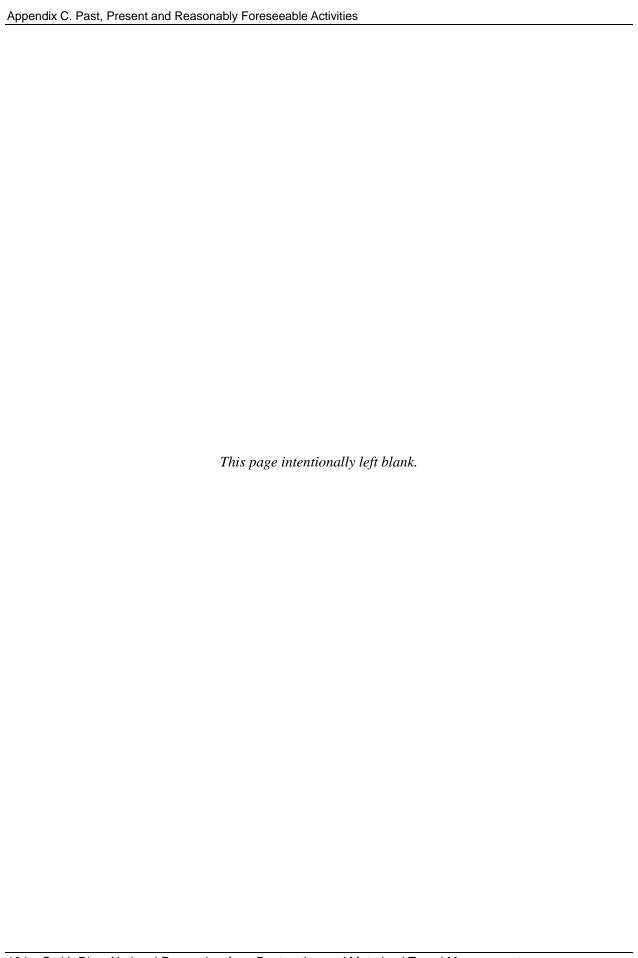
Forest Service

- Aquatic Restoration EA
- Rogue River Siskiyou National Forest Travel Management
- Hurdygurdy Land Acquisition
- Hardscrabble Mine Engineering Evaluation and Cost Analysis
- Mammoth Mine Engineering Evaluation and Cost Analysis
- Cleopatra Mine Preliminary Assessment and Site Inventory
- Aurora Mine Preliminary Assessment and Site Inventory
- Webb Pine PA/SI

Non-Forest Service

- Private Timber Harvests
- Hiouchi Community Improvements Project (US 199, PM 5.4–6.2)
- Major Bridge Seismic Retrofit Project at five bridges (US 101 and US 199, various locations)

- Maintenance project for a thin blanket overlay (US 199, PM 0.7–4.2), planned for 2014
- Three storm damage repair projects on US 199 (PMs 8.6 8.8, 21.7, 24.67, and 26.31, these being called *Patrick Creek Slipout*, *Dollar Bend Soldier Pile Wall*, and *Siskiyou Forks Slipout*)
- Hamilton Road High Friction Surface Treatment (US 101, PM 22.5–23.0)
- Smith River Canyon Safety Project (US 199, PM 8.1–8.4)
- Dr. Fine Bridge Project
- CalTrans STAA Hwy 199:
 - o Patrick Creek Narrows Location 1 (US 199: PM 20.5 to 20.7)
 - o Patrick Creek Narrows Location 2 (US 199: PM 23.9 to 24.3)
 - o Patrick Creek Narrows Location 3 (US 199: PM 25.55 to 25.65)
 - o The Narrows (US 199: PM 22.7 to 23.0)
 - o Washington Curve (US 199: PM 26.3 to 26.5)



Appendix D. Mitigation Measures

Mitigation measures (also design features, design criteria) are described throughout the FEIS for the various resources in general and specific to the individual roads, UARs and motorized trails. Some mitigations are identified as part of the proposed actions, others as added on to the activities described. For instance, adding seasonal gates to certain roads or motorized trails is included as part of the management actions under all action alternatives and it is listed as a mitigation or design feature for POC and water quality. Many of the actions and mitigations below are considered restoration and risk reduction for identified resources.

In addition, the FEIS will follow best management practices for water quality (Regional and National) and for noxious weeds (Forest) on all management actions from planning through implementation. Monitoring identified in Appendix B is a feedback loop to effectiveness of implementation of the management actions, mitigations and design feature.

Table D-1 includes all mitigations and design feature included in the FEIS. All roads and UARs in Appendix A identify the proposed action for that road or route, including any site-specific mitigations, design feature or monitoring. Routes will not be placed on the MVUM until mitigations identified in the tables in Appendix A are in place (i.e., UARs proposed for designation on the NFTS as roads or motorized trails need mitigations in place prior to including them to MVUM). Actions/mitigations that would need to occur on a UAR-by-UAR basis include:

- Storm proofing (water quality, soils, geology, aquatic biota),
- Signage (recreation, NOA, transportation),
- Sensitive plant surveys (botanical resources),
- Seasonal gate installation (POC, aquatic biota), and
- Noxious weed treatments (noxious weeds).

Table D-1. Mitigation measures by resource.

Mitigation Measures	Resources	Rationale	
Mitigations/Management Actions			
Road improvements to UARs added to existing NFTS when change in maintenance level.	Recreation, Transportation, Water Quality	Recreational opportunities, improve roads for public safety, reduce resource impacts	
Block or barricade roads, UARs. Block ML 1 roads. Barricade decommissioned roads. Barricade UARs not added to the System.	Recreation, Water Quality, Botany, Geology, Soils, POC, Transportation, Noxious Weeds	Implement Subpart A; prevent illegal use; public safety; prevent resource damage to water quality, POC and botanical resources; reduce risk of spread of weeds.	
Season of Use: Install seasonal gates as identified in Appendix A prior to onset of wet weather. Seasonal, year-round gates.	POC, Water Quality, Fisheries	Protect uninfected POC stands, reduce risk of spread, reduces risk to water quality and fisheries.	
Sensitive plant species management actions. Motorized trail (route) delineation through use of boulders, logs, etc. Changes to road/motorized trails based on effectiveness (see monitoring).	Botany	Reducing the risk of loss of viability for Sensitive plant species on UARs added to the NFTS of roads and motorized trails.	

Mitigation Measures	Resources	Rationale
Maintain NFTS road and motorized trail system. Six Rivers Road Maintenance Decision Memo 2016-2022. Motorized trail maintenance.	All	Maintain NFTS roads and motorized trails to protect the transportation system investment, public safety and access, reduce resource impacts.
Mitigations/Design Feature		
Improve road surface by adding gravel/rock to roads and trails surface.	POC, Water Quality, Recreation, Transportation	Reduce risk of spread of POC and impacts to water quality while allowing use of motorized trails.
Delineate route/motorized trails. Using boulders, logs, barricades, or gates to protect resource, shorten route prior to addition, direct vehicles. Place signs.	Water Quality, Botany, POC, Cultural Resources	To prevent unlawful use and keep vehicles on the road or motorized trail.
Stormproofing roads and motorized trails. Add waterbars/rolling dips to reduce diversion potential. Repair/upgrade culverts (100-year flood) Maintain roads and motorized trails.	Water Quality, Soils, Transportation, Public Safety, Geology, Recreation	Reduce the risk of road failures during storm events, maintain roads and trails thereafter to keep risk low, protect the road and trail investment, and increase public safety.
Restore drainage patterns on UARs not added, decommissioned roads and ML 1 roads. Remove culverts and fill. Add waterbars/rolling dips.	Water Quality, Soils, Geology, Wildlife, POC	Reduce/eliminate potential for water quality impacts. For ML 1: restore drainage patterns to put ML roads into road storage category (hydrologically maintenance free status).
Season of use/operating period: limitations for use of heavy equipment. Wet weather standards for construction (BMPs). Noise disturbance (TES Wildlife BA).	Water Quality, Geology, Fisheries, Soils, POC, Wildlife TE Species	Limit ground-disturbing actions (decommissioning, culvert upgrades, etc.) to dry season. Limit noise disturbance effects for TE wildlife species.
Limitations on watershed disturbance. Road Maintenance CE. Watershed and Fisheries Restoration Program BA/BO.	Water Quality, Geology, Fisheries, Soils	Reduce the risk of multiple ground- disturbing actions occurring that would lead to excess water quality concerns.
Noxious weed control mitigations. Materials used (straw, gravel, etc.). Eradication: survey/treat roads/UARs prior to decommissioning/closing. See BMPs below.	Noxious Weeds	Reduce the risk of introduction and the rate and spread of weed populations.
Naturally occurring asbestos (NOA). Public education. Speed limits. Sign roads and trails with NOA risk as indicated in Appendix A.	Public Safety	Air Quality, Geology, Transportation
Best Management Practices		
Water quality BMPs. Region 5 BMPs. National BMPs.	Watershed, Geology, Fisheries, Soils	Reduce impacts to water quality as per the CWA.
Invasive plant species and aquatic organisms BMPs.	Noxious Weeds, Aquatic Invasives	Reduce the risk of introduction and the rate and spread of weed populations.

Resource Mitigations/Design Feature

Water Quality

To reduce the risk of sediment delivery to streams, all applicable best management practices (BMPs) will be implemented. In addition, the following design features would be implemented.

- Restoration, decommissioning, downgrading and upgrading work will occur when stream flow is at a minimum, typically during the summer months. Streams will be dewatered where necessary prior to any activity involving heavy equipment. Specific dewatering methods (pipe, pump, etc.) will be determined on a site-by-site basis.
- Native or straw mulch will be applied to all disturbed ground prior to seasonal rain or summer thunderstorms to minimize surface erosion.
- Decommissioned or restored stream channel side slopes and channel bottom gradients will be
 designed to blend with the natural channel above and below to minimize potential for unexpected
 channel adjustments.
- Large rocks will be placed in the restored stream channels where needed to protect newly created side slopes and reduce the potential for post-treatment channel adjustments.
- Replacement of stream crossings (upsizing) culverts will be designed to accommodate the 100year flood event and have no diversion potential.

Fisheries

Project implementation would be consistent with the activities described in the *Watershed and Fisheries Restoration Program* biological assessment (WFR BA; 2015). Changes to the design features listed within the BA would be discussed with NMFS Level 1 to ensure variations to the following design features would not cause an effect that was not analyzed:

- Individual projects with the potential to generate sediment would typically be implemented
 annually during the Normal Operating Season (between June 15 and November 1) or first
 significant rainfall, whichever comes first. Actual project start and end dates are based on weather
 predictions and rainfall predictions. The work window can be extended to November 15
 contingent on appropriate dry weather conditions and stream flows.
- Reduce delivery of sediment to stream network through upslope watershed restoration projects.
 Road and trail related actions fall into two main categories:
- First: maintaining and upgrading the identified minimum road (and trail) transportation system as
 determined through travel management plans and implemented through past and future decisions
 across the forest to prevent existing road network from degrading such water quality impacts
 occur, and programmatic/public notice road closures. This includes:
 - o Upgrading undersized or worn out pipes,

- o Storm-proofing by adding rolling dips to prevent diversions at stream crossings,
- Changing maintenance level of road (either increase or decrease to meet management objective),
- Closing roads make the road unavailable for vehicle use, make hydrologically maintenance free, which could include:
 - Installation of gates (for ML 1 roads and/or seasonally for POC concerns),
 - Placement of boulders or earth berm/vehicle trap to prevent traffic.
- Maintaining and improving OHV and non-motorized trails to reduce sedimentation and could include:
 - Sediment reduction work on routes not added to trail system as identified during travel management NEPA,
 - Relocation of recreation sites/reducing impacts.
- Second: Implementing decisions to decommission system roads, trails and unauthorized routes to restore drainage patterns (i.e. removing culvert, re-establish vegetation, re-contour).
- Griffin Creek Bridge is a full spanning bridge and allows for full passage and will not affect habitat/flow conditions.
 - O Site containment during demolition so concrete wash water or other concrete does not enter stream. When concrete is poured to construct bridge footings or other infrastructure in the vicinity of flowing water, work must be conducted to prevent contact of wet concrete with water (e.g., within a cofferdam). Concrete or concrete slurry will not come into direct contact with flowing water.
 - Falsework will be installed to keep bridge debris and construction, maintenance, and repair materials from falling into streams during demolition, construction, and substantial maintenance and repair activities.

Wildlife

Northern Spotted Owl (NSO)

Road/route upgrades, decommissioning, or restoration activities has the potential to cause noise disturbance to nesting NSO from loud and sustained noise-generating activities (use of heavy equipment machinery or chainsaws). Based on consultation with the USFWS, except for specific high priority roads that pose a high risk to aquatic resources scheduled for upgrades or decommissioning:

 Noise-generating activities within 0.25 miles of unsurveyed northern spotted owl nesting and roosting habitat will not occur between February 1 and July 9, unless surveys determine the site to be unoccupied.

To minimize impacts to northern spotted owl from noise-generating activities on high priority roads:

- No activities will occur between February 1 and July 31 within 0.25 miles of occupied NSO activity centers (AC; nest site) unless surveys determine the birds are non-nesting;
- No limited operating period (LOP) will be applied on high priority roads outside of known NSO ACs:
- No suitable nesting or roosting habitat will be removed;
- No large snags would be felled unless they pose a hazard to public or staff safety; and
- All hazard trees would be felled and left on site.

Marbled Murrelet (MAMU)

Road/route upgrades, decommissioning, or restoration activities has the potential to cause noise disturbance to nesting MAMU from loud and sustained noise-generating activities (use of heavy equipment machinery or chainsaws). Based on consultation with the USFWS, except for high priority roads that pose a high risk to aquatic resources roads:

- Noise-generating activities within 0.25 miles of unsurveyed MAMU nesting habitat will not occur between March 24 and August 5; and
- Work between August 5 and September 15 will not begin until 2 hours after sunrise and stop two hours before sunset unless surveys determine the site to be unoccupied.

To minimize impacts to MAMU from noise-generating activities on high priority roads:

- No activities will occur between March 24 and September 15 within 0.25 miles of occupied MAMU site unless surveys determine the birds are non-nesting;
- No LOP will be applied on high priority roads outside of known MAMU sites; and
- No suitable nesting habitat will be removed.

Port-Orford-Cedar

All mitigation measures proposed in the various alternatives, including barricades, gates, seasonal road closures, and road surface and drainage improvements did not factor into the initial analysis of risk. They were, however, included in the effects section to show how each alternative reduced the degree of risk, which is primarily a function of the ability to restrict motor vehicle traffic into areas that have uninfected POC.

Management action refers to mitigations put in place that would reduce the risk of disease spread. These include:

- Improvements to road surfaces, such as applying gravel and improving culverts,
- Seasonal gates during the wet season,
- Year-round gates where occasional use is anticipated (sup), but otherwise closed to public use, and
- Change in maintenance level downgrade to ML 1 (closed to public use).

This indicator is being used to show the relative risk reduction of each mitigation. On a spectrum of the greatest risk to the least risk, unrestricted road use is the greatest risk and complete road blockage where motor vehicle access is not even possible is the least risk. The following diagram displays a continuum of risk:



These management mitigation actions are not quantitative but demonstrate increased or decreased risk associated with spreading POC root disease when compared to one another. Using this indicator for routes accessing POC stands gives a relative measure of determining the quantity (acres) of POC at risk. For example, when comparing a route with different mitigations, a route with a permanent barrier that prevents motor vehicle traffic from accessing uninfected POC in a watershed would have less risk of introducing POC root disease beyond that point than a seasonal gate would.

Noxious Weed Control Mitigations Common to All Action Alternatives

It is recommended that the following measures be incorporated into the decision document to reduce the risk of weed introduction and spread:

- Identified weed sites will be removed by hand and weed propagules (seeds) shall be removed from the forest or burned.
- Time removal activities prior to plants producing seed to avoid spread during treatment. The weed species will require repeated treatment over time to remove the seed bank.
- Of particular concern, due to their persistence are the meadow knapweed on 17N16 and the tansy ragwort on 17N26, 17N41G.1 and 18N20.100. These species will require repeated treatment annually, over time, to achieve control. The most effective time to hand pull these species is when the ground is moist.
- Treatment in the spring, with follow up removal after the first ground soaking rains, is the most effective way to remove the plants in their entirety and to reduce the seed bank. Treatment shall reoccur annually until weed sites are eradicated.
- All routes should be monitored over time to avoid infestation.
- System roads that are proposed to have heavy equipment work such as restoration of hydrological function, decommissioning, barricading, or culvert replacement that have weed infestations should have weeds removed prior to commencing work.
- Additionally equipment used in implementation should be cleaned prior to entering the forest and,
 if weed infestations are found, equipment should be cleaned upon leaving infested roads to avoid
 dispersing the weed seed to other areas of the forest.

- Any imported mulch or other erosion control material should come from a certified weed free source.
- Identified routes proposed for closure is treated to remove weed infestations. It is recommended that weed sites are hand pulled prior to commencing any work leading up to closure. All sites noted should have certified weed free mulch (i.e. wood straw or wood chips) installed to impede subsequent germination of the weed seed bank. Vehicles should be cleaned to remove weed propagules prior to leaving site. Introduction and spread of these infestations will continue in the absence of mitigations. Because of their knowledge of the weed sites listed, a botanist should be consulted when developing an implementation plan for closure. The weed sites listed have been treated multiple times and are a high priority for treatment.
- Use of mulch such as wood straw or mulch from chipped or masticated native material is
 preferable to imported materials that may be weed contaminated. Ensure rock, boulders, sand or
 other material to be used for project implementation originate from a weed-free source. Sources
 for these materials shall be inspected by staff trained in invasive plant identification or
 documented by contractor that material is weed-free. Do not use borrow material from weedinfested stockpiles.
- Where determined to be appropriate, use clauses requiring contractors or permittees to clean their
 equipment prior to entering NFS lands.

USDA Forest Service – Region 5 BMPs OHV Use and Road Construction and Maintenance

The following are the Best Management Practices (BMPs) for the control of non-point source pollution associated with OHV use and road maintenance activities (Regional Water Quality Management Plan, 2000). These BMPs were formulated based on the administrative directives that guide and direct the Forest Services' construction and maintenance of roads, buildings, and administrative facilities on NFS land. The line officer on each administrative subunit is responsible for fully implementing the directives that require water quality protection and improvement for maintenance of motorized trails and NFTS roads. The BMPs synthesize the direction into a *process* to be followed.

Trained and qualified earth scientists, and other professional employees, are available to provide the engineering work force with technical assistance to identify beneficial uses and the most recent state-of-the-art water quality control methods and techniques; and to evaluate results. Publications and training sessions provide road and motorized trail maintenance engineers with knowledge of the latest proven water-quality protection methods.

Water Quality Monitoring of OHV Use According To a Developed Plan (Practice: 4-7)

Objective: To provide a systematic process to determine when and to what extent OHV use will cause, or is causing adverse effects on water quality.

Explanation: Each forest's OHV plan will:

- Identify areas or routes where OHV use could cause degradation of water quality.
- Establish baseline water-quality data for normal conditions as a basis from which to measure change.
- Identify water quality standards and the amount of change acceptable.
- Establish monitoring methods and frequency.
- Identify controls and mitigation appropriate in management of OHVs.
- Restrict OHV use to designated routes.

Implementation: Monitoring results are evaluated against the OHV plan objectives for water quality and Forest Plan objectives for the area. These results are documented, along with the actions necessary to correct identified problems. If considerable adverse effects are occurring, or are likely to occur, immediate corrective action will be taken. Corrective actions may include, but are not limited to, reduction in the amount of ORV use, signing, or barriers to redistribute use, partial closure of areas, rotation of use on areas, closure to causative vehicle type(s), or total closure, and structural solutions, such as culverts and bridges. Closure is accomplished through authority of the forest supervisor.

Erosion Control Plan (Practice: 2-2)

Objective: To limit and mitigate erosion and sedimentation through effective planning prior to initiation of construction and maintenance activities and through effective contract administration during implementation.

Explanation: Land disturbing activities can result in short term erosion. By effectively planning for erosion control, sedimentation can be controlled or prevented. Within a specified period after award of a contract (presently 60 days prior to the first operating season in Timber Sale Contracts, per C6.3) the purchaser or contractor will submit a general plan which, among other things, sets forth erosion control measures. Operations cannot begin until the Forest Service has given written approval of the plan. The plan recognizes the mitigation required in the contract. A similar plan is required of miners and special use permittees.

Implementation: Design engineers develop detailed mitigation using an IDT. The detailed mitigations are reflected in the contract specifications and provisions. The intent of mitigation is to prevent construction and maintenance-generated erosion, as well as that generated from the completed road, from entering watercourses. Contracted projects are implemented by the contractor or operator. Compliance with contract specifications and operating plans is ensured by the Contracting Officer Representative (COR), Engineering Representative (ER), or Forest Service Representative (FSR) through inspection.

This practice is commonly applied to all road construction through contract clauses and specifications and will apply to road construction and maintenance for timber sales, mining, recreation, special uses and other roadwork on NFS lands.

Timing of Construction Activities (Practice: 2-3)

Objective: To minimize erosion by conducting operations during minimal runoff periods.

Explanation: The amount of erosion and sedimentation from road construction are affected by the magnitude of water runoff. An essential element of effective erosion control is to schedule operations during the dry season or when rain and runoff are unlikely. Purchasers will be required to schedule and conduct operations during the dry season or when rain and runoff are unlikely. Purchasers will be required to schedule and conduct operations to minimize erosion and sedimentation. Equipment will not be allowed to operate when ground conditions are such that excessive rutting and soil compaction could result. Such conditions will be identified by the COR or ER with the assistance of an earth scientist or other specialists as needed.

Erosion control work will be kept as current as practicable on active road construction projects. Construction of drainage facilities and performance of other contract work to control erosion and sedimentation will be required in conjunction with earthwork projects. The operator should limit the amount of area being graded at a site at any one time, and should minimize the time that an area is laid bare. Erosion control work must be kept current when road construction occurs outside of the normal operating season.

Implementation: Detailed mitigations developed by design engineers and an IDT will be included in the environmental analysis and in subsequent project plans and contracts.

Project crew leaders and supervisors will be responsible for implementing force account projects to construction specifications and as specified in the project plan. Contracted projects are implemented by the contractor, or operator. Compliance with plans, specifications, and the operating plan will be achieved by the COR or ER through inspection.

Control of Road Drainage (Practice: 2-7)

Objective: Is to minimize the erosive effects of water concentrated by road drainage features; to disperse runoff from disturbances within the road clearing limits; to lessen the sediment yield from roaded areas; to minimize erosion of the road prism by runoff from road surfaces and from uphill areas.

Explanation: This is a preventive practice. A number of treatments can be used, alone, or in combination, to control unacceptable effects of road drainage. Methods used to reduce erosion include but are not limited to such controls as construction of properly spaced cross drains, water bars or rolling dips; installing energy dissipaters, apron, downspouts, gabions, flumes, overside drains and debris racks; armoring of ditches, drain inlets and outlets and removing or adding berms to control runoff. Accomplish dispersal of runoff on the road surface by such means as rolling the grade, outsloping, or crowning. Installing water spreading ditches or contour trenching can disperse road water after the water leaves the road surface.

Dispersal of runoff reduces downstream peak flows and associated scouring of the channels and sediment transport. Reduce sediment loads from road surfaces by adding aggregate or paving surfaces or by installing

such controls as: sediment filters, settling ponds, and contour trenches. Soil stabilization can reduce sedimentation by lessening erosion on borrow and waste areas, on cut and fill slopes, and on road shoulders.

Implementation: Project location, design criteria and detailed mitigation are determined and documented during the environmental analysis process. These are then incorporated into the project plan.

Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications, and project criteria. Contracted projects are implemented by the contractor, or operator. Compliance with plans, specifications, and operating plans is ensured by the COR, ER, or FSR.

This practice is required in contracts when the need is identified in the project planning process.

Timely Erosion Control Measures on Incomplete Roads and Stream Crossing Projects (Practice: 2-9)

Objective: To minimize erosion and sedimentation from disturbed ground on incomplete projects.

Explanation: The best drainage design can be ineffective if erosion control has not been completed by the end of the normal operating season. Affected areas can include roads, road fills, tractor trails, skid trails, landings, stream crossings, bridge excavations, and firelines. Preventive measures include:

- Removal of temporary culverts, culvert plugs, diversion dams, or elevated stream crossings.
- Installation of temporary culverts, side drains, flumes, cross drains, diversion ditches, energy dissipaters, drainage or diversion dips, sediment basins, berms, debris racks, or other facilities needed to control erosion.
- Removal of debris, obstructions and spoil material from channels and floodplains.
- Planting vegetation, mulching, and/or covering exposed surfaces with jute mats or other protective material.

Implementation: Apply protective measures to all areas of disturbed, erosion-prone, unprotected ground that is not to be further disturbed in the present year. When conditions permit operations outside of the normal operating season, update the operating plan as necessary and keep erosion control measures sufficiently current with ground disturbance to allow rapid closure when weather conditions deteriorate. Do not leave project areas for the winter with remedial measures incomplete.

Develop project mitigation measures and layout requirements during the environmental analysis process. Incorporate them into subsequent project plans and/or contracts.

Project crew leaders and supervisors are responsible for ensuring that force account projects meet construction specifications and project criteria. Contracted projects are implemented by the contractor or operator. Compliance with project plan criteria, contract specifications and operating plans is ensured by the COR, ER, or FSR.

Control of Sidecast Material during Construction and Maintenance (Practice: 2-11)

Objective: To minimize sediment production originating from sidecast material during road construction or maintenance.

Explanation: Unconsolidated materials including rocks and boulders that are cast over the side of the road shoulder can roll directly into streams, damage downslope vegetation and create bare areas that are difficult to stabilize with vegetation. Where spoil does not directly reach a stream, it is still highly susceptible to erosion, dry ravel and mass instability, and subsequently can directly deliver sediment to a nearby stream. Site-specific limits and controls for side casting or end hauling are developed and documented during environmental analysis. Loose, unconsolidated sidecast material must not be permitted to enter stream management zones, (see Practice 2-17).

Sidecasting is an unacceptable construction and maintenance alternative in areas where it can adversely impact water quality. Prior to the start of construction, or maintenance activities, waste areas must be located where excess material can be deposited and stabilized. During road maintenance operations, potential sidecast and other waste material will be utilized on the road surface or removed to designated disposal sites.

The roadway will be constructed within reasonable limits of the lines, grades, and dimensions given in the engineering drawings and designated on the ground. Provisions for waste material disposal are included in every road construction and maintenance contract.

Implementation: Project location, selected disposal areas, and mitigation will be developed and documented during the environmental analysis.

Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications and project criteria. Road maintenance plans are developed for each forest and include slide and slump repairs and disposal site locations for excess material.

Contracted projects are implemented by the contractor or timber sale operator. Compliance with project criteria, contract specifications, and operating plans will be enforced by the COR, ER, or FSR. Standard maintenance specifications have been prepared which include disposal area operation, disposal methods, and surface treatment. Timber sale contracts include clause C5.4 to address temporary road maintenance specifications, which includes slide and slump repair, surface blading, and side casting during road maintenance.

Control of Construction and Maintenance Activities Adjacent to Stream Management Zones (Practice: 2-13)

Objective: To protect water quality by controlling construction and maintenance actions within and adjacent to any streamside management zone so that the following stream management zone functions are not impaired:

- Acting as an effective filter for sediment generated by erosion from bare surfaces, road fills, dust drift, and oil traces;
- Maintaining shade, riparian habitat (aquatic and terrestrial), and channel stabilizing effects;
- Keeping the floodplain surface in a resistant, undisturbed condition to slow water velocities and limit erosion by flood flows.

Explanation: Construction and maintenance fills, sidecast, and end-hauled materials are kept out of stream management zones except at designated sites to minimize effects on the aquatic environment. Factors such as stream class, channel stability, sideslope steepness, ground cover, and sideslope stability are taken into account in developing zone widths. In some situations, stream management zone widths are established by records of decision and by EIS standards and guidelines (e.g., PACFISH EA, Northwest Forest Plan ROD). It is also necessary to stabilize fill slopes to prevent sediment accumulations in the streamside zone.

Stream management zones are determined and documented during the environmental analysis process by the IDT, which includes hydrologists, fishery biologists, and other specialists as required.

Implementation: Project location alternatives are formulated, and mitigation measures developed by the IDT are included into the contract by design engineers. Project crew leaders and supervisors are responsible for ensuring that force account projects meet maintenance and construction specifications and project criteria.

Contracted projects are implemented by the contractor, or operator. Compliance with mitigation measures, contract specifications, and operating plans is ensured by the COR, FSR, or ER.

Controlling In-Channel Excavation (Practice: 2-14)

Objective: To minimize stream channel disturbances and related sediment production.

Explanation: During construction, heavy equipment may need to cross, or work in and near streams or lakes. This is permitted only as necessary in the construction, or removal of culverts and bridges and other facilities (e.g., water sources, boat ramp/launching sites) and only under specific protection requirements. The ER is authorized to designate the location of crossings or work sites and coordinate with the contractor to manage heavy equipment. Excavation during the installation of instream structures must follow all of the following minimum water-quality protection requirements.

- Unless otherwise approved, no excavation will be made outside of caissons, cribs, cofferdams, or sheet piling.
- The natural streambed or lake bottom adjacent to the structure will not be disturbed without prior approval of the ER or COR.
- If any excavation, or dredging is made at the site of the structure before caissons, cribs, or cofferdams are sunk in place, all such excavations will be restored to the original surface and the streambed or lake bottom must be protected with suitable stable material.

- Material deposited within the stream or lake area from foundation, or other excavation will not be
 discharged directly into live streams or lakes, but will be put into settling areas as shown on the
 engineering drawings or as approved by the ER, or COR. (See Practice 2-15)
- If the channel or lake bottom is disturbed during construction, it must be restored to its original configuration while minimizing any additional disturbance.
- Disturbances of stream or lake banks are kept to a minimum. Disturbed banks are stabilized.

Implementation: Mitigation measures developed by the IDT are set forth in the environmental documentation and incorporated into the contract by design engineers. Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications and project criteria. Contracted projects are implemented by the contractor or operator. Compliance with mitigation measures, contract specifications, and operating plans is enforced by the CI, COR, FSR or ER.

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Rec-4. Motorized and Non-motorized Trails

Reference: FSM 2353, FSH 2309.18, FSM 7715.5, FSM 7723 and EM 7720-104

Objective: Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by controlling soil erosion, erosion of trail surface materials and water quality problems originating from construction, maintenance and use of motorized and non-motorized trails.

Explanation: The Forest Service manages about 133,000 miles of trails that are part of the designated transportation system. Only portions of these trails are open to motorized vehicle use. Almost all NFS trails serve non-motorized users, including hikers, bicyclists and equestrians, alone or in some combination with motorized uses.

Trail construction, maintenance and use by motorized vehicles, human or stock traffic can adversely affect water quality by increased sediment delivery and contamination from vehicle fluids, human and animal wastes to nearby waterbodies. Compaction of the trail surface limits water infiltration, which can lead to concentrated runoff on the trail surface. Concentrated runoff on trails lacking adequate drainage causes erosion of the trail surface and can transport sediment and other pollutants directly into waterbodies if not filtered. Heavy tread, foot or hoof traffic can loosen some trail surface materials, making them more susceptible to erosion.

Trails open to motorized use are designated during the Travel Management process and depicted on the Motor Vehicle Use Map (MVUM). Motorized use is designated by allowed vehicle class and, if appropriate, time of year, with the objective of minimizing damage to soil and water resources.

Practices: Develop site-specific BMP prescriptions for the following practices, as appropriate or when required, using state BMPs, Forest Service regional guidance, Forest or Grassland Plan direction, BMP monitoring information and professional judgment:

- Use applicable Road Management Activities BMPs for construction, operation and maintenance of motorized trails.
- Locate or relocate trails to conform to the terrain, provide suitable drainage, provide adequate
 pollutant filtering between the trail and nearby waterbodies, and reduce potential adverse effects
 to soil, water quality or riparian resources.
 - Avoid sensitive areas, such as riparian areas, wetlands, stream crossings, inner gorges and unstable areas to the extent practicable.
 - O Use suitable measures to mitigate trail impacts to the extent practicable where sensitive areas are unavoidable.
 - Use suitable measures to hydrologically disconnect trails from waterbodies to the extent practicable.
- Design, construct and maintain trail width, grades, curves and switchbacks suitable to the terrain and designated use.
- Use applicable practices of BMP Fac-2 (Facility Construction and Stormwater Control) for control of erosion and stormwater when constructing trails.
- Install and maintain suitable drainage measures to collect and disperse runoff and avoid or minimize erosion of trail surface and adjacent areas.
- Use and maintain surfacing materials suitable to the trail site and use to withstand traffic and minimize runoff and erosion.
 - Pay particular attention to areas where high wheel slip (curves, acceleration and/or braking) during motorized use generates loose soil material.
- Design stream crossings to use the most cost efficient structure consistent with resource protection, facility needs and types of use, and safety obligations (see BMP Road-2 (Road Location and Design) and BMP Road-7 (Stream Crossings)).
- Designate season-of-use to avoid periods when trail surfaces are particularly prone to unacceptable erosion, rutting or compaction.
- Designate class of vehicle and type of non-motorized uses (e.g., hiking, bicycling, equestrian,) suitable for the trail width, location, waterbody crossings and trail surfaces to avoid or minimize adverse effects to soil, water quality or riparian resources.
- Monitor trail condition at regular intervals to identify drainage and trail surface maintenance needs to avoid, minimize, or mitigate adverse effects to soil, water quality, and/or riparian resources.

- Manage designated trails to mitigate adverse effects to soil, water quality and/or riparian resources from over-use when closure and rehabilitation is not practicable or desired.
 - o Change designated vehicle class and/or season-of-use period as necessary.
- Close and rehabilitate unauthorized trails that are causing adverse effects on soil, water quality and/or riparian resources (see BMP Fac-10 (Facility Site Reclamation)).

Road-1. Travel Management Planning and Analysis

Reference: FSM 7710, FSH 7709.55 and FSH 7709.59 Chapter 10

Objective: Use the travel management planning and analysis processes to develop measures to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources during road management activities.

Explanation: Road management related planning includes travel analyses as well as consideration of road management objectives and maintenance levels to address access needs and adjustments for projects. Planning occurs at scales that range from forest-wide assessments and plans, to watershed scale or project level analyses, to individual road activities. Effects to soil, water quality and riparian resources are evaluated during planning and balanced with the social, economic, and land management needs of the area. Appropriate protection and mitigation measures are considered when soil, water quality and riparian resources may be adversely impacted.

Travel analysis is conducted at a scope and scale determined by the line officer, and used to inform future project decisions on the benefits and risks, and the ongoing need for, the transportation system. Project-level travel analyses are conducted to inform decisions and facilitate vegetation, fire and fuels, rangeland, recreation, minerals or other management actions. Such analyses contain detail on the condition of individual roads.

Road management objectives are developed and documented for each system road and include the intent and purpose in providing access to implement the Forest or Grassland Plan. In addition to considering route needs at the site scale, road management objectives also document the purpose of the road (access needs) along with maintenance levels and objectives.

Practices: Develop site-specific BMP prescriptions for the following practices, as appropriate or when required, using state BMPs, Forest Service regional guidance, Forest or Grassland Plan direction, BMP monitoring information and professional judgment:

- Use applicable practices of BMP Plan-2 (Project Planning and Analysis) and BMP Plan-3 (AMZ Planning) when conducting travel management planning and analysis.
- Use interdisciplinary coordination for travel planning and project-level transportation analysis, including engineers, hydrologists, soil scientists and other resource specialists as needed, to balance protection of soil, water quality and riparian resources with transportation and access needs.

- Design the transportation system to meet long-term Forest or Grassland Plan desired conditions, goals and objectives for access rather than to access individual sites.
- Limit roads to the minimum practicable number, width and total length consistent with the
 purpose of specific operations, local topography, geology, and climate to achieve Forest or
 Grassland Plan desired conditions, goals and objectives for access and water quality management.
 - o Use existing roads when practicable.
 - Use system roads where access is needed for long-term management of an area or where control is needed in the location, design or construction of the road to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources.
 - Use temporary roads for short-term access needs if the road can be constructed, operated and obliterated without specific control of techniques to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources (See BMP Road-5 (Temporary Roads)).
 - Decommission temporary roads and return to resource production when the access is no longer needed (See BMP Road-6 (Road Storage and Decommissioning)).
 - O Consider placing roads in storage (ML 1) when the time between intermittent uses exceeds one year and the costs of annual maintenance (both economic and potential disturbance) or potential failures due to lack of maintenance, exceed the benefits of keeping the road open in the interim (See BMP Road-6 (Road Storage and Decommissioning)).
 - Consider decommissioning unneeded existing roads within a planning area when planning new system roads to reduce cumulative impacts to soil, water quality and riparian resources (See BMP Road-6 (Road Storage and Decommissioning)).
- Plan road networks to have the minimum number of waterbody crossings as is practicable and necessary to achieve transportation system desired conditions, goals and objectives.
- Develop or update road management objectives for each system road to include design criteria, operation criteria and maintenance criteria to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources.
 - Use applicable practices of BMP Road-2 (Road Location and Design) to establish design elements and standards.
 - O Use applicable practices of BMP Road-4 (Road Operations and Maintenance) to establish criteria on how the road is to be operated and maintained.
 - o Revise road management objectives as needed to meet changing conditions.
- Identify and evaluate road segments causing, or with the potential to cause, adverse effects to soil, water quality and/or riparian resources.

O Identify and prioritize suitable mitigation measures to avoid, minimize or mitigate adverse effects (see BMPs Road-2 (Road Location and Design), Road-3 (Road Construction and Reconstruction), Road-4 (Road Operations and Maintenance), Road-6 (Road Storage and Decommissioning), and Road-7 (Stream Crossings) for potential mitigation measures).

Road-4. Road Operations and Maintenance

Reference: FSM 7732 and FSH 7709.59 Chapter 60

Objective: Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by controlling road use and operations and providing adequate and appropriate maintenance to minimize sediment production and other pollutants during the useful life of the road.

Explanation: Control of road use and operations, and appropriate maintenance can protect road investment and soil, water quality and riparian resources. Periodic inventory and assessment that determine road condition are used to determine operational controls and maintenance needs.

Operational objectives and activities are documented in the road management objective. In Travel Management decisions, roads open to motorized vehicle use are designated by allowed vehicle class and, if appropriate, by time of year. Road operations include permit, contract, and agreement administration, control of allowed use, maintaining roads in closed status and revising maintenance levels and seasonal closures as needed. Road closures and restrictions are necessary because many forest roads are designed for dry season use. Many local roads are not surfaced; while others have some surfacing but little to no base. Such roads can be damaged by use during wet periods or by loads heavier than the road was designed to convey.

Properly maintained road surfaces and drainage systems can reduce adverse effects to water resources by encouraging natural hydrologic function. Roads and drainage systems normally deteriorate because of traffic, weather, and age. In addition, roads occasionally become saturated by groundwater springs and seeps after a wildfire or unusually wet periods. Many such conditions can be corrected by timely maintenance. However, while routine maintenance is needed to ensure the road performs as designed, it can also be a source of soil disturbance, concentrated flow, sediment production and slope instability if done improperly. Lower impact maintenance techniques may be desired to minimize disturbance of stable sites.

Practices: Develop site-specific BMP prescriptions for the following practices, as appropriate or when required, using state BMPs, Forest Service regional guidance, Forest or Grassland Plan direction, BMP monitoring information and professional judgment:

Operations

 Designate season-of-use to avoid or restrict road use during periods when use would likely damage the roadway surface or road drainage features.

- Designate class of vehicle and type of uses suitable for the road width, location, waterbody
 crossings and road surfaces to avoid or minimize adverse effects to soil, water quality or riparian
 resources to the extent practicable.
- Use suitable measures to communicate and enforce road use restrictions.
- Use suitable measures to avoid or minimize adverse effects to soil, water quality or riparian
 resources when proposed operations involve use of roads by traffic and/or during periods for
 which the road was not designed.
 - Strengthen the road surface in areas where surfaces are vulnerable to movement such as corners and steep sections.
 - Upgrade drainage structures to avoid, to the extent practicable, or minimize direct discharges into nearby waterbodies.
 - o Restrict use to low-ground-pressure vehicles or frozen ground conditions.
 - o Strengthen the road base if roads are tending to rut.
 - Adjust maintenance to handle the traffic while minimizing excessive erosion and damage to the road surface.
- Ensure that drainage features are fully functional upon completion of seasonal operations.
 - Shape road surfaces to drain as designed.
 - o Construct or reconstruct drainage control structures as needed.
 - o Ensure that ditches and culverts are clean and functioning.
 - o Remove berms unless specifically designed for erosion control purposes.
- Consider potential for water quality effects from road damage when granting permits for oversize/overweight loads.
- Use suitable road surface stabilization practices and dust abatement supplements on roads with high/heavy traffic use (See FSH 7709.56 and FSH 7709.59).
- Use applicable practices of Chemical Use Management Activities BMPs when chemicals are used in road operations.

Inspection

- Periodically inspect system travel routes to evaluate condition and assist in setting maintenance and improvement priorities.
 - O Give inspection priority to roads at high risk of failure to reduce risk of diversions and cascading failures.
- Inspect drainage structures and road surfaces after major storm events and perform any necessary maintenance (see BMP Road-11 (Road Storm-Damage Surveys)).

- o Repair and/or temporarily stabilize road failures actively producing and/or transporting sediment as soon as practicable and safe to do so.
- Inspect roads frequently during all operations.
 - Restrict use if road damage such as unacceptable surface displacement or rutting is occurring.

Maintenance Planning

- Develop and implement annual maintenance plans that prioritize road maintenance work for the forest or district.
 - o Increase priority for road maintenance work on road sections where road damage is causing, or potentially would cause, adverse effects to soil, water quality and riparian resources.
 - Consider the risk and consequence of future failure at the site when prioritizing repair of road failures.
- Develop and implement annual road maintenance plans for projects where contractors or permittees are responsible for maintenance activities.
 - o Define responsibilities and maintenance timing in the plan.

Maintenance Activities

- Maintain the road surface drainage system to intercept, collect and remove water from the road surface and surrounding slopes in a manner that reduces concentrated flow in ditches, culverts and over fill slopes and road surfaces.
 - o Clean ditches and catch basins only as needed to keep them functioning.
 - o Do not undercut the toe of the cut slope when cleaning ditches or catch basins.
 - Use suitable measures to avoid, to the extent practicable, or minimize direct discharges from road drainage structures to nearby waterbodies.
- Identify diversion potential on roads and prioritize for treatment.
 - Minimize diversion potential through installation and maintenance of dips, drains or other suitable measures.
- Maintain road surface treatments to stabilize the roadbed, reduce dust, and control erosion consistent with anticipated traffic and use.
- Grade road surfaces only as necessary to meet the smoothness requirements of the assigned maintenance level and to provide adequate surface drainage.
 - o Do not undercut the toe of the cut slope when grading roads.
 - Do not permit sidecasting of maintenance-generated debris within the AMZ to avoid or minimize excavated materials entering waterbodies or riparian areas.

- Avoid over-widening of roads due to repeated grading over time especially where sidecast material would encroach upon waterbodies.
- o Utilize potential sidecast or other waste materials on the road surface where practicable.
- o Dispose of unusable waste materials in designated disposal sites.
- Remove vegetation from swales, ditches, shoulders, and cut and fill slopes only when it impedes
 adequate drainage, vehicle passage or obstructs necessary sight distance to avoid or minimize
 unnecessary or excessive vegetation disturbance.
- Maintain permanent stream crossings and associated fills and approaches to reduce the likelihood that water would be diverted onto the road or erode the fill if the structure becomes obstructed.
- Identify waterbody-crossing structures that lack sufficient capacity to pass expected flows, bedload or debris, or that do not allow for desired aquatic organism passage, and prioritize for treatment.
 - o Use applicable practices of BMP Road-7 (Stream Crossings) to improve crossings.
- Use applicable practices of BMP Road-6 (Road Storage and Decommissioning) for maintenance and management of Maintenance Level 1 roads.
- Assure the necessary specifications concerning pre-haul maintenance, maintenance during haul, and post haul maintenance (putting the road back in storage) are in place when ML 1 roads are opened for use on commercial resource management projects or other permitted activities.
 - Require the commercial operator or responsible party to leave roads in a satisfactory condition when project is completed.

Road-6. Road Storage and Decommissioning

Reference: FSH 7709.59 Chapter 60 and FSM 7734

Objective: Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by storing closed roads not needed for at least one year (Intermittent Stored Service) and decommissioning unneeded roads in a hydrologically stable manner to eliminate hydrologic connectivity, restore natural flow patterns and minimize soil erosion.

Explanation: Roads not needed for access for long periods (greater than one year) may be put into storage (Intermittent Stored Service – ML 1) to reduce maintenance costs. Level 1 roads receive basic custodial maintenance focusing on maintaining drainage facilities and runoff patterns to avoid or minimize damage to adjacent resources and to perpetuate the road for future use. The integrity of the roadway is retained to the extent practicable and measures are implemented reduce sediment delivery from the road surface and fills and reduce the risk of crossing failure and stream diversion.

Roads no longer needed are identified during transportation planning activities at the forest, watershed or project level. The former road may be decommissioned or converted to a trail as appropriate. Decommissioned roads are stabilized and restored to a more natural state to protect and enhance NFS

lands. Temporary roads constructed for a specific short-term purpose (e.g., ski area development, minerals exploration, timber harvesting) are decommissioned at the completion of their intended use.

Road decommissioning includes a variety of treatments to block the road, revegetate the road surface, restore surface drainage, remove crossing structures and fills, mitigate road surface compaction, reestablish drainageways, remove unstable road embankments and/or recontour to restore natural slopes. One or more treatments are applied to decommission the road depending upon resource objectives and cost.

Practices: Develop site-specific BMP prescriptions for the following practices, as appropriate or when required, using state BMPs, Forest Service regional guidance, Forest or Grassland Plan direction, BMP monitoring information and professional judgment:

All Activities

- Implement suitable measures to close and/or physically block the road entrance so that unauthorized motorized vehicles cannot access the road.
 - o Remove the road from the MVUM to include the change in the annual forest-wide order associated with the MVUM.
- Establish effective ground cover on disturbed sites to avoid or minimize accelerated erosion and soil loss.
 - Use suitable species and establishment techniques to stabilize and revegetate the site in compliance with local direction and requirements per FSM 2070 and FSM 2080 for vegetation ecology and prevention and control of invasive species.

Road Storage

- Evaluate all stream and waterbody crossings for potential for failure or diversion of flow if left without treatment.
 - O Use suitable measures to reduce the risk of flow diversion onto the road surface.
 - Consider leaving existing crossings in low risk situations where the culvert is not undersized, does not present an undesired passage barrier to aquatic organisms and is relatively stable.
 - Remove culverts; fill material and other structures that present an unacceptable risk of failure or diversion.
 - Reshape the channel and streambanks at the crossing-site to pass expected flows without scouring or ponding, minimize potential for undercutting or slumping of streambanks, and maintain continuation of channel dimensions and longitudinal profile through the crossing site.
 - o Use suitable measures to avoid or minimize scour and downcutting.
- Use suitable measures to ensure that the road surface drainage system will intercept, collect and remove water from the road surface and surrounding slopes in a manner that reduces concentrated flow in ditches, culverts and over fill slopes and road surfaces without frequent maintenance.

• Use suitable measures to stabilize unstable road segments, seeps, slumps, or cut or fill slopes where there is evidence of potential failure.

Road Conversion to Trail

- Reclaim unneeded road width, cut and fill slopes when converting a road for future use as a trail.
- Use suitable measures to stabilize reclaimed sections to avoid or minimize undesired access and to restore a desired ecologic structures or functions.
- Use suitable measures to ensure that surface drainage will intercept, collect and remove water from the trail surface and surrounding slopes in a manner that minimizes concentrated flow and erosion on the trail surfaces without frequent maintenance.
- Use applicable practices of BMP Road-7 (Stream Crossings) to provide waterbody crossings suitable to the expected trail uses.

Road Decommissioning

- Use existing roads identified for decommissioning as skid roads in timber sales or land stewardship projects prior to closing the road where practicable as the opportunity arises.
- Evaluate risks to soil, water quality and riparian resources and use the most practicable, costeffective treatments to achieve long-term desired conditions and water-quality management goals
 and objectives.
- Use applicable practices of BMP Fac-2 (Facility Construction and Stormwater Control) for stormwater management and erosion control when obliterating system roads.
- Implement suitable measures to re-establish stable slope contours, and surface and subsurface hydrologic pathways where necessary to the extent practicable to avoid or minimize adverse effects to soil, water quality and riparian resources.
 - Remove drainage structures.
 - o Recontour and stabilize cut slopes and fill material.
 - Reshape the channel and streambanks at crossing-sites to pass expected flows without scouring or ponding, minimize potential for undercutting or slumping of streambanks, and maintain continuation of channel dimensions and longitudinal profile through the crossing site.
 - o Restore or replace streambed materials to a particle size distribution suitable for the site.
 - o Restore floodplain function.
- Implement suitable measures to promote infiltration of runoff and intercepted flow and/or desired vegetation growth on the road prism and other compacted areas.
- Use suitable measures in compliance with local direction to prevent and control invasive species.

Road-7. Stream Crossings

Reference: FSM 7722 and FSH 7709.56b

Objective: Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources when constructing, reconstructing or maintaining temporary and permanent waterbody crossings.

Explanation: Forest and grassland management activities often occur in areas that require surface waters to be crossed. Depending on the activity type and duration, crossings may be needed permanently or temporarily. Permanent crossings are generally more durable and are designed by an engineer to meet applicable standards while also protecting water quality and riparian resources.

Examples of crossings include culverts, bridges, arched pipes, low water crossings, vented fords and permeable fills. Crossings materials and construction will vary based on the type of access required, duration of need and volume of use expected. Crossings should be designed and installed to provide for flow of water, bedload and large woody debris, desired aquatic organism passage, and minimize disturbance to the surface and shallow groundwater resources.

Construction, reconstruction and maintenance of a crossing usually requires heavy equipment to be in and near streams, lakes and other aquatic habitats to install or remove culverts, fords and bridges and their associated fills, abutments, piles, and cribbing. Such disturbance near the waterbody can increase the potential for accelerated erosion and sedimentation by altering flow paths and destabilizing streambanks or shorelines, removing vegetation and ground cover, and exposing or compacting the soil. Use of heavy equipment has a potential for contamination of the surface water from vehicle fluids or introduction of aquatic nuisance species.

Some crossings may require adherence to special conditions associated with CWA 401 Certification or CWA 404 permits. State and local entities may also provide guidance and regulations such as a Forest Practices Act or a Stream Alteration Act.

Practices: Develop site-specific BMP prescriptions for the following practices, as appropriate or when required, using state BMPs, Forest Service regional guidance, Forest or Grassland Plan direction, BMP monitoring information and professional judgment:

All Crossings

- Plan and locate surface water crossings to limit the number and extent to that which is necessary
 to provide the level of access needed to meet resource management objectives as described in the
 road management objective.
- Use applicable practices of BMP AqEco-2 (Operations in Aquatic Ecosystems) when working in or near waterbodies.
- Use crossing structures suitable for the site conditions and the road management objective.
- Design and locate crossings to minimize disturbance to the waterbody.
- Use suitable measures to locate, construct and decommission or stabilize bypass roads to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources.

- Use suitable surface drainage and roadway stabilization measures to disconnect the road from the
 waterbody to avoid or minimize water and sediment from being channeled into surface waters
 and to dissipate concentrated flows.
- Use suitable measures to avoid, minimize or mitigate damage to the waterbody and banks when transporting materials across the waterbody or AMZ during construction activities.

Stream Crossings

- Locate stream crossings where the channel is narrow, straight and uniform, has stable soils and relatively flat terrain to the extent practicable.
 - o Select a site where erosion potential is low.
 - Orient the stream crossing perpendicular to the channel to the extent practicable.
 - o Keep approaches to stream crossings to as gentle a slope as practicable.
 - Consider natural channel adjustments and possible channel location changes over the design life of the structure.
- Design the crossing to pass a normal range of flows for the site.
 - Design the crossing structure to have sufficient capacity to convey the design flow without appreciably altering stream flow characteristics.
 - o Install stream crossings to sustain bankfull dimensions of width, depth and slope, and maintain streambed and bank resiliency and continuity through the structure.
- Bridge, culvert or otherwise design road fill to prevent restriction of flood flows.
 - o Use site conditions and local requirements to determine design flood flows.
 - O Use suitable measures to protect fill from erosion and to avoid or minimize failure of the crossing at flood flows.
 - o Use suitable measures to provide floodplain connectivity to the extent practicable.
- Use suitable measures to avoid or minimize scour and erosion of the channel, crossing structure and foundation to maintain the stability of the channel and banks.
- Design and construct the stream crossing to maintain the desired migration or other movement of fish and other aquatic life inhabiting the waterbody.
 - Consider use of bottomless arch culverts where appropriate to allow for natural channel migration and desired aquatic organism passage.
 - Install or maintain fish migration barriers only where needed to protect endangered, threatened, sensitive, or unique native aquatic populations, and only where natural barriers do not exist.
 - Use stream simulation techniques where practicable to aid in crossing design.

Bridges

- Use an adequately long bridge span to avoid constricting the natural active flow channel and minimize constriction of any overflow channel.
- Place foundations onto non-scour susceptible material (e.g., bedrock or coarse rock material) or below the expected maximum depth of scour.
- Set bridge abutments or footings into firm natural ground (e.g., not fill material or loose soil) when placed on natural slopes.
- Use suitable measures as needed in steep, deep drainages to retain approach fills or use a relatively long bridge span.
- Avoid placing abutments in the active stream channel to the extent practicable.
- Place in-channel abutments in a direction parallel to the stream flow where necessary.
- Use suitable measures to avoid or minimize, to the extent practicable, damage to the bridge and associated road from expected flood flows and floating debris and bedload.
- Inspect the bridge at regular intervals and perform maintenance as needed to maintain the function of the structure.

Culverts

- Align the culvert with the natural stream channel.
- Cover culvert with sufficient fill to avoid or minimize damage by traffic.
- Construct at or near natural elevation of the streambed to avoid or minimize potential flooding upstream of the crossing and erosion below the outlet.
- Install culverts long enough to extend beyond the toe of the fill slopes to minimize erosion.
- Use suitable measures to avoid or minimize water from seeping around the culvert.
- Use suitable measures to avoid or minimize culvert plugging from transported bedload and/or debris.
- Regularly inspect culverts and clean as necessary.

Low Water Crossings

- Consider low water crossings on roads with low traffic volume and slow speeds, and where water depth is safe for vehicle travel.
- Consider low water crossings to cross ephemeral streams, streams with relatively low baseflow
 and shallow water depth or streams with highly variable flows or in areas prone to landslides or
 debris flows.
- Locate low water crossings where streambanks are low with gentle slopes and channels are not deeply incised.
- Select and design low water crossing structures to maintain the function and bedload movement of the natural stream channel.

- Locate unimproved fords in stable reaches with a firm rock or gravel base that has sufficient load bearing strength for the expected vehicle traffic.
- Construct the low water crossing to conform to the site, channel shape and original streambed elevation, and to minimize flow restriction, site disturbance and channel blockage to the extent practicable.
- Use suitable measures to stabilize/harden the streambed and approaches, including the entire bankfull width and sufficient freeboard, where necessary to support the design vehicle traffic.
- Use vented fords with high vent area ratio (VAR) to maintain stream function and aquatic organism passage.
- Construct the roadway-driving surface with material suitable to resist expected shear stress or lateral forces of water flow at the site.
 - o Consider using temporary crossings on roads that provide short-term or intermittent access to avoid, minimize or mitigate erosion, damage to streambed or channel and flooding.
- Design and install temporary crossings suitable for the expected users, loads and timing of use.
- Design and install temporary crossing structures to pass a design storm determined based on local site conditions and requirements.
- Install and remove temporary crossing structures in a timely manner as needed to provide access during use periods and minimize risk of washout.
- Use suitable measures to stabilize temporary crossings that must remain in place during high runoff seasons.
- Monitor temporary crossings regularly while installed to evaluate condition.
- Remove temporary crossings and restore the waterbody profile and substrate when the need for the crossing no longer exists.

Standing Water and Wetland Crossings

- Disturb the least amount of area as practicable when crossing a standing waterbody.
- Provide for sufficient cross drainage to minimize changes to, and avoid restricting, natural surface and subsurface water flow of the wetland under the road to the extent practicable.
 - Locate and design roads or road drainage to avoid dewatering or polluting wetlands.
 - Avoid or minimize actions that would significantly alter the natural drainage for flow patterns on forestlands immediately adjacent to wetlands.
- Use suitable measures to increase soil-bearing capacity and reduce rutting from expected vehicle traffic.
- Construct fill roads only when necessary.

- Construct fill roads parallel to water flow and to be as low to natural ground level as practicable.
- o Construct roads with sufficient surface drainage for surface water flows.

Road-9. Parking and Staging Areas

Reference: FSM 7710, FSM 7720 and FSM 7730

Objective: Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources when constructing and maintaining parking and staging areas.

Explanation: Parking and staging areas on NFS lands may be permanent or temporary and are associated with a variety of uses including administrative buildings, developed recreation sites, trailheads, and forest management projects. These parking facilities sometimes constitute large areas with little or no infiltration capacity. Runoff from these areas can create rills or gullies and carry sediment, nutrients and other pollutants to nearby surface waters.

Practices: Develop site-specific BMP prescriptions for the following practices, as appropriate or when required, using state BMPs, Forest Service regional guidance, Forest or Grassland Plan direction, BMP monitoring information and professional judgment:

- Design and locate parking and staging areas of appropriate size and configuration to accommodate expected vehicles and avoid or minimize adverse effects to adjacent soil, water quality and riparian resources.
 - o Consider the number and type of vehicles to determine parking or staging area size.
- Use applicable practices of BMP Fac-2 (Facility Construction and Stormwater Control) for stormwater management and erosion control when designing, constructing, reconstructing or maintaining parking or staging areas.
- Use suitable measures to harden and avoid or minimize damage to parking area surfaces that experience heavy use or are used during wet periods.
- Use and maintain suitable measures to collect and contain oil and grease in larger parking lots with high use and where drainage discharges directly to streams.
- Connect drainage system to existing stormwater conveyance systems where available and practicable.
- Conduct maintenance activities commensurate with parking or staging area surfacing and drainage requirements as well as precipitation timing, intensity and duration.
- Limit the size and extent of temporary parking or staging areas.
 - Take advantage of existing openings, sites away from waterbodies and areas that are apt to be more easily restored to the extent practicable.

- o Use temporary stormwater and erosion control measures as needed.
- Use applicable practices of BMP Fac-10 (Facility Site Reclamation) to rehabilitate temporary parking or staging areas as soon as practicable following use.

Road-10. Equipment Refueling and Servicing

Reference: FSM 2160 and FSH 7109.19 Chapter 40

Objective: Avoid or minimize adverse effects to soil, water quality and riparian resources from fuels, lubricants, cleaners and other harmful materials discharging into nearby surface waters or infiltrating through soils to contaminate groundwater resources during equipment refueling and servicing activities.

Explanation: Many activities require the use and maintenance of petroleum-powered equipment in the field. For example, mechanical vegetation management activities may employ equipment that uses or contains gasoline, diesel, oil, grease, hydraulic fluids, antifreeze, coolants, cleaning agents, and/or pesticides. These petroleum and chemical products may pose a risk to contaminating soils, surface water and groundwater during refueling and servicing the equipment. BMP Fac-6 (Hazardous Materials) provides additional guidance for handling hazardous materials.

Practices: Develop site-specific BMP prescriptions for the following practices, as appropriate or when required, using state BMPs, Forest Service regional guidance, Forest or Grassland Plan direction, BMP monitoring information and professional judgment:

- Plan for suitable equipment refueling and servicing sites during project design.
 - Allow temporary refueling and servicing only at approved locations, located well away from the AMZ, groundwater recharge areas and waterbodies.
- Develop or use existing fuel and chemical management plans (e.g., SPCC, spill response plan, emergency response plan) when developing the management prescription for refueling and servicing sites.
- Locate, design, construct and maintain petroleum and chemical delivery and storage facilities consistent with applicable local, state and federal regulations.
- Use suitable measures around vehicle service, storage and refueling areas, chemical storage and
 use areas, and waste dumps to fully contain spills and avoid or minimize soil contamination and
 seepage to groundwater.
- Provide training for all agency personnel handling fuels and chemicals in their proper use, handling, storage and disposal.
 - Ensure that contractors and permit holders provide documentation of proper training in handling hazardous materials.
- Use suitable measures to avoid spilling fuels, lubricants, cleaners and other chemicals during handling and transporting.

- Prohibit excess chemicals or wastes from being stored or accumulated in the project area.
- Remove service residues, used oil and other hazardous or undesirable materials from NFS land and properly dispose them as needed during and following completion of the project.
- Clean up and dispose of spilled materials according to specified requirements in the appropriate guiding document.
- Report spills and initiate suitable clean-up action in accordance with applicable state and federal laws, rules and regulations.
 - Remove contaminated soil and other material from NFS lands and dispose of this material in a manner consistent with controlling regulations.
- Prepare and implement a certified SPCC Plan for each facility, including mobile and portable facilities, as required by federal regulations.
- Use applicable practices of BMP Fac-10 (Facility Site Reclamation) to reclaim equipment refueling and services site when the need for them ends.

Invasive Plant Species and Aquatic Organisms BMPs

The Forest Service National Strategic Framework for Invasive Species Management (USDA 2013; framework) was developed in 2004 and updated in 2013 to guide the implementation of Executive Order 13112 and Forest Service Policy (FSM 2900) (Appendix A of the framework). The framework provides strategic direction for all Forest Service programs and outlines four key elements necessary to respond to the threat of invasive species on ecosystems. The four elements of the Invasive Species Systems Approach (ISSA) are a) prevention, b) detection, c) control and management, and d) restoration and rehabilitation.

Prevention and early detection and rapid response are the most strategic, and thus effective, elements in the framework to reduce the risk of invasive species introduction and spread. Prevention requires integrated planning and implementation across all forest activities. Early detection requires personnel trained in invasive species threats, identification and effective treatment techniques, as well as the infrastructure to coordinate reporting and documentation of occurrences. The framework identifies the following actions for prevention:

- Identify, forecast, and prioritize invasive species threats,
- Identify high-risk pathways of movement and introduction,
- Identify vulnerable ecosystems,
- Improve cooperative efforts, and
- Recommend, program, and implement appropriate actions to prevent introductions and spread.

Since 2001, the SRNF has had in place a standardized method assessing the risk of introducing or spreading invasive plant species related to proposed actions (USFS 2001). The SRNF's Invasive Plant Species Risk Assessment uses a standard methodology to analyze ground-disturbing projects for the risk

of introducing or spreading invasive plant species, emphasizing those invasive species considered a priority on the forest by virtue of a particular species' distribution, abundance and geographic location. Risk is evaluated in the assessment based five factors: 1) presence of known invasive plant species in the project area, 2) habitat vulnerability, 3) non-project-dependent vectors such as existing roads or trails, adjacent private property, 4) habitat alteration expected as a result of project implementation, and 5) increased vectors as a result of project implementation.

In order to more fully implement the 2013 framework and associated law and policy, to improve coordination between all Six Rivers' program areas and administrative units, and to provide invasive species prevention practices applicable to various forest and contractor activities, the following BMPs have been developed including one overarching prevention practice relative to aquatic invasive organisms.

The invasive plant BMPS are consistent with, if not directly drawn from *Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers, 3rd Edition* (Cal-IPC 2012), developed by the California Invasive Plant Council, in coordination with a technical advisory team of whose members represented such agencies as the US Forest Service, National Park Service, Bureau of Land Management, US Geological Survey, US Fish and Wildlife, California Department of Forestry and Fire Prevention, California State Parks, California Department of Fish and Wildlife, and other entities including University of California Cooperative Extension, California Association of Resource Conservation District and land trusts.

BMP Implementation on the Six Rivers National Forest

Best management practices would be incorporated as standard operating procedures for all forest management activities, across all program areas to reduce or eliminate the risk of invasive plant species introduction or spread. Best management practices do not necessarily preclude the need for a risk assessment; the latter may be warranted depending on the nature of the activity proposed where site-specific project design features are needed such as relatively large-scale, projects or activities (e.g., vegetation and fuels projects, travel analysis). Best management practices alone may suffice for planning documents or National Environmental Policy Act (NEPA) for activities that are programmatic or routine in nature that lend themselves to an adaptive management approach, specifically on-site inspection prior to implementation by trained staff (e.g., road maintenance, storm-proofing, trail construction, emergency road repair, certain special use permits).

The level of risk assessment needed for a given project—the application of BMPs or a risk assessment with site-specific design features—would be determined by the forest invasive plant coordinator or interdisciplinary team botanist.

Following are BMPs organized by those that are associated with administration, prevention measures applicable to all resource areas, and then itemized by specific resource areas.

General Category Prevention and Management Practices

Administrative

- GA1. Appoint Forest Service staff members to serve respectively as the forest invasive plant coordinator and forest invasive aquatics coordinator.
- GA2. As feasible, district ranger to identify district staff interested in serving as unit invasive plant species liaison to the forest invasive plant coordinator.
- GA3. Ensure invasive species prevention practices are incorporated in every staff area and activities are designed to minimize or eliminate the possibility of establishment or spread of invasive species on National Forest System (NFS) or adjacent lands (FSM 2903).
- GA4. Coordinate with State and county agencies, with adjacent federal and tribal agencies, with non-governmental organizations and landowners through active involvement in county Weed Management Areas (WMAs) in prevention, control, containment, monitoring, and education efforts involved with the management of invasive species.
- GA5. Conduct periodic trainings on the forest related to invasive species identification, biology and dispersal, prevention practices, treatment methodologies, and invasive plant reporting protocol.
- GA6. Develop and foster partnerships at different scales to enhance opportunities for funding, continuity in on-the-ground invasive plant management, and local community participation.
- GA7. Maintain standardized databases for invasive plant occurrences and monitoring.
- GA8. Maintain and update geographic information system (GIS) files of invasive plant locations on the forest in a corporate area for use by various resource areas in project planning and wildfire suppression/rehabilitation.
- GA9. Implement a monitoring/management program for high priority invasive species sites.

Prevention - Aquatics

A major pathway for the spread of aquatic invasive species is as *hitchhikers* on waders, boats, trailers, nets, and other equipment used by aquatic specialists and helicopters and water tenders used for firefighting or road related work. Any equipment used in a water body containing an invasive species could transport various life stages (eggs, resting stages, or fragments that are hardly visible to the human eye) to an un-infected water body.

- GPA1. Minimize the movement of aquatic invasive species, including fish, crustaceans, mollusks, plants, insects, and diseases among waterways during actions involving transfer of water between basins including aquatic habitat management and assessment activities. In consultation with a fisheries biologist or aquatic specialist, BMPs may include the following:
 - Clean equipment that comes in contact with water infested with aquatic invasive species,

- Equipment that draws water from one water body should not be drained into another water body,
- As part of general maintenance, equipment, portable pumps and hoses should be flushed with clean water between uses.
- GPA2. See Appendix D of the framework for 2010 Draft Operational Guidelines for Aquatic Invasive Species Prevention and Equipment Cleaning.

Prevention - Terrestrial Invasive Plants

- GP1. Include invasive plant prevention costs in budgeting for project planning, project layout and design and, implementation. This cost could include site inspection for presence of invasives or design/construction costs applicable during implementation (e.g., contractor equipment cleaning, application of native mulch).
- GP2. Prior to implementation of any forest activities or those authorized by the forest a risk assessment of the potential for invasive species introduction and spread shall be completed by a staff botanist or other staff trained in invasive plant management. Level of analysis (e.g., Invasive Plant Risk Assessment with site-specific design features or over-arching BMPs) may vary depending on such variables as geographic scope, type and location of the activity.
- GP3. Incorporate applicable BMPs into contract specifications (FSM 2904.47) or partner agreement responsibilities. Address invasive plant provisions during pre-work and other meetings prior to ground disturbance.
- GP4. Prevention of invasive species introduction will be incorporated into landscape-level or other planning documents such as watershed analysis; roads analysis; fire and fuels management plans; Wildland Fire Decision Support System (WFDSS), Burned Area Emergency Recovery Plans (BAER); community wildfire protection plans, grazing allotment management plans, recreation management plans, and vegetation management plans.
- GP5. Actions conducted or authorized by written permit by the Forest Service operating on and outside the road prism (including public works, special-uses, and service contracts) will require cleaning of all heavy equipment (bulldozers, skidders, graders, backhoes, dump trucks, etc.) prior to entering NFS lands.
- GP6. Each unit shall identify sites for Forest Service vehicle cleaning and equip the sites sufficiently (i.e. high-pressure hose) to ensure mud or vegetative material trapped in tires or on the carriage of the vehicle can be effectively removed.
- GP7. If there is a moderate to high risk of spreading invasives from an infested area to an uninfested area during operations and alternate project design features are not feasible to reduce risk of spread, equipment/machinery shall be cleaned prior to leaving the infested area and operating elsewhere.

- GP8. When needed to control soil erosion, use mulch from chipped or masticated native material or certified weed-free straw (see www.cal-ipc.org/ip/prevention for a weed-free forage and straw supplier list).
- GP9. Rock, sand or other material to be used for projects conducted or authorized by the Forest Service shall originate from a weed-free source. Rock source shall be inspected by staff trained in invasive plant identification or if source is off-forest, contractor shall provide documentation that material is weed-free. Appendix B of the Invasive Plant Species BMPs includes material source inspection forms for contract specifications.
- GP10. Material excavated at a project site that is contaminated with invasive plants can be a) reused at the site, b) stockpiled on site, or c) relocated to an area that is already contaminated.

 During transport of contaminated soil or sand, cover material with an impervious material.
- GP11. Consider stockpiling native mulch at designated areas on districts for use in projects (e.g., post-fire rehabilitation) where ground cover will reduce the risk of invasive plant establishment.
- GP12. District shall identify one or more disposal sites when large quantities of invasive plant material are planned for removal. Select areas for disposal that either already include invasive plants or are otherwise compromised.
- GP13. Post educational/prevention information at Forest Service administrative sites including Ranger Stations, trailheads, campground kiosks, river access sites, interpretive and historic sites, and boat launches.
- GP14. For activities conducted or authorized by the forest and where seeding is determined to be necessary (including emergency soil stabilization related to fire, flood, landslide, etc.) use when available native seed stock or refer to the forest's seeding guidelines for direction related to non-persistent alternatives.
- GP15. Locate activity boundaries or areas of concentrated use to exclude areas infested with invasive plants. Activity boundaries include staging areas, parking areas, trailheads, river access points, roadside pullouts, and timber harvest landings.

In addition to the general practice BMPs above, the following are identified for specific resource areas:

Forest Road-Related Projects

In the course of planning any road-related project, coordinate with botany staff to review invasive plant location GIS maps (see GP2 above) and document those known invasive plant occurrences/or information gaps in contracts or agreements that may necessitate site review and application of design features to reduce the risk of spreading invasive plants.

RD1. Avoid staging equipment where invasive plants occur. If avoidance is not feasible, contractor shall treat staging areas prior to using (e.g., manual or mechanically remove) and maintain as needed throughout the life of the project. Locate treated material on site and out of the way of equipment operations.

- RD2. Attempt to implement ground disturbing activities (e.g., road-blading, brushing, ditch cleaning, storm proofing) according to a progression of work schedule, operating first in invasive plant-free areas (typically upper watershed areas) before moving to heavily infested road segments.
- RD4. Based upon botany review (GP2):
 - If consistent with project objectives, identify specific areas where mowing or ground disturbance can be avoided to reduce spreading invasives,
 - To reduce the alteration of site conditions that favor invasive plant establishment and spread, limit mowing and other mechanical control to the minimum needed to meet maintenance objective.
 - If feasible, avoid operations during the time of year when invasive plants pose the highest risk of spread (e.g., when ground is wet and seeds can be picked up in the mud) (See Appendix C for seasonality of species).
- RD5. Incorporate, where applicable, the following into forest road decommissioning projects to reduce the risk of an existing invasive plants occurrence from spreading occurrence to unoccupied areas as a result of project implementation:
 - Where there is a risk of spread of invasive plants from an existing occurrence on or along the road to be decommissioned into unoccupied wildland settings (e.g., in settings where the vegetative ground and canopy cover in the adjacent habitat is minimal), remove entire plant (including roots) mechanically or manually prior to decommissioning,
 - Mechanically or manually remove any invasive plant occurrence (remove entire plant) at the intersection of the decommissioned road and forest system road.
 - Apply ground cover in the form of native mulch/finely masticated material spread to depth of 6 inches over the area where plants were removed, or
 - If feasible, decompact/rip and revegetate area with suitable native planting stock that optimizes resistance to invasive plant establishment (e.g., tree stock, early-successional/disturbance tolerant shrubs).
- RD6. See GP8 to GP10 above relative to rock, sand, gravel; material used in erosion control; and contaminated material on-site.

Recreation

Rec 1. Use educational and permit programs to increase invasive plant weed awareness and understanding of prevention practices. For example, post invasive plant prevention

- information at trailhead kiosks or river access points; include prevention measures in recreation outfitter permits. See LSU 10.
- Rec 2. Conduct periodic inventory along designated off-highway vehicle trails for new introductions and treat as necessary.
- Rec 3. Prioritize trailheads, boat launches, administrative sites, campgrounds, picnic areas, river access sites and other areas of concentrated public use for invasive plant management/containment. Priority sites could include those that pose a risk of invasive plant species spreading into wildland settings or into corridors of potential spread. As examples, remove and maintain invasive plant occurrences associated with priority settings that are:
 - Adjacent to river or riparian corridors
 - Adjacent to grassland or other open settings
 - In high use areas such as trailhead parking areas or boat launches
 - Adjacent to roads that are not occupied by invasive plants.
- Rec 4. Seek partners among recreation groups or campground hosts to *adopt a site* for invasive plant species management.
- Rec 5. See GPA1 relative to aquatic invasives.

Six Rivers Road Maintenance Project – 2016 to 2022

In 2016, Forest Supervisor Merv George Jr. signed the *Six Rivers Road Maintenance Project* Decision Memo. This decision memo authorized road maintenance throughout the forest to meet the following goals and objectives:

- Smoothing road surfaces, repairing road signs, removing hazards and vegetation blocking driver visibility to maintain drivable road conditions that promote safe passage on all roads open for the public to drive (ML 2-5).
- Maintaining road stream crossings, drainage structures, ditches and replacing culverts to
 effectively channel storm runoff during 100-year flood events in compliance with the 1994 Six
 Rivers National Forest Land and Resource Management (LRMP pg. IV-49) (ML 1-5).
- Reshaping slopes and stabilizing eroding soils to lower non-point source pollution into waterways in compliance with the Clean Water Act; thereby lowering environmental stressors to aquatic habitats to aid listed salmon species recovery on all roads (ML 1-5).

Maintenance Activities Covered

The R5 Forest Service Specifications for Maintenance of Roads (USDA 1992), water quality BMPs, general prevention (GP) measures to prevent the introduction and spread of invasive plant and aquatic species (GPA) and specific road-related prevention measures (RD) will be applied to avoid, minimize, or

mitigate potential adverse resource effects, as described below. Following the list of activities are additional design features by resource area (archeology, wildlife, hydrology, etc.) that would be applied during the annual review on a road-by-road basis.

Road maintenance will be confined to previously maintained surfaces, ditches, culverts and cut and fill slopes within the road prism. An annual operating allowance is identified for a subset of road maintenance activities in order to prevent multiple projects impacting water quality in a single 6th-field watershed. For each road maintenance activity that involved the potential for sediment entering a watercourse, the historic range of activity intensity (number of culverts replaced, miles of ditch maintenance) was identified. Exceeding these annual operating allowances in a single watershed may require additional review, documentation or, postponement of site-specific road actions:

- Grading/reshaping
- Dust abatement
- Spot surfacing
- Asphalt pavement
- Paved surface cleaning
- Re-paving
- New paving
- Surface treatment
- Maintenance of unpaved shoulders
- Asphalt crack cleaning and repairing
- Ditch maintenance
- Remove and end haul road debris
- Culvert replacement
- Drainage structure maintenance
- Drainage dip maintenance
- Vegetation establishment
- Cutting roadway vegetation
- Logging out
- Hazard removal and cleanup
- Maintenance of cattle guards
- Sign maintenance
- Maintenance of road closures
- Rock and common borrow sites

- Slide and fill stabilization
- Bridge repair (no replacement).

Design Features and Mitigation Measures

Timing of Activities

Generally, road maintenance will occur during dry weather in the summer and fall, although work may occur at any time if conditions allow and clearance from appropriate specialists has been obtained (wildlife, botany, fisheries, hydrology, and archeology). Six Rivers' *Wet Weather Operation Standards* will apply to protect water quality and road investment. In addition, preventing the transmittal of Port-Orford-cedar root disease will also restrict the timing of activities.

Roads under fire closure or other closure orders for special events and uses will not receive maintenance during restricted periods in order to mitigate user conflicts.

Archeology

It is anticipated that there will be no adverse effects to historic properties, provided these project design features are followed.

If new sites are found during implementation, all work shall halt until the heritage program manager is notified and clearance to continue work is approved. Should inadvertent effects to or unanticipated discoveries of human remains be made on Region 5 lands, the county coroner (California Health and Safety Code 7050.5(b)) shall be notified immediately. If the remains are determined to be Native American or if Native American (Indian) cultural items pursuant to NAGPRA are uncovered, the provisions of NAGPRA and its regulations at 43 CFR 10 and ARPA at 43 CFR 7 shall be followed on federal lands (Stipulation 7.9 (a)).

On an annual basis, and as early as possible, engineering and watershed staffs will provide a list of roads proposed for maintenance that year to the forest heritage program manager and tribal relations program manager. The heritage and tribal relations program managers will provide information back to the engineering and watershed departments regarding whether or not there are any heritage concerns prior to implementation of any roadwork.

Tribes will be consulted with on an annual basis regarding scheduled roadwork activities, locations, and timelines. Close coordination is especially critical when roadwork is scheduled within the boundaries of traditional cultural properties, Native American contemporary use areas, or cultural management areas, or when ground-disturbing activities (e.g. culvert replacements) are scheduled.

- Road maintenance will be confined to previously maintained surfaces, ditches, culverts, and cut and fill slopes within the road prism (i.e., previously disturbed areas).
- All activities will involve less than one cubic meter of cumulative new ground disturbance per acre.
- When felling standing hazardous trees at work sites or clearing wind-thrown trees that have fallen within the existing road prism, tree trunks, limbs and tops will be: 1) left in place, or 2) cut up with hand tools, including chain saws, and removed from the roadway by hand, or 3) felled into

and removed from within the existing road prism. All material removed would be hauled to designated disposal sites as per activity 12 – *Remove and end haul road debris*.

Botany - Invasive Plants

Maintenance activities will be planned and implemented to reduce the introduction and spread of invasive species (aquatic and terrestrial) that coincide with road maintenance activities. The *Forest Service National Strategic Framework for Invasive Species Management* (USDA 2013; framework) was developed in 2004 and updated in 2013 to guide the implementation of Executive Order 13112 and Forest Service Policy (FSM 2900). Those maintenance activities with the potential to have a moderate to high risk of introducing or spreading invasive species will be reviewed in the field by botany staff and as applicable, control measures will be undertaken to reduce this risk. Control measures or BMPs have been developed on the SRNF and are applicable to all forest projects. Examples of BMPs pertaining to road maintenance activities include:

- Actions conducted or authorized by written permit by the Forest Service operating on and outside
 the road prism (including public works, special-uses, and service contracts) will require cleaning
 of all heavy equipment (bulldozers, skidders, graders, backhoes, dump trucks, etc.) prior to
 entering National Forest System Lands). GP5
- Minimize the movement of aquatic invasive species, including fish, crustaceans, mollusks, plants, insects, and diseases among waterways during actions involving transfer of water between basins including aquatic habitat management and assessment activities. In consultation with a fisheries biologist or aquatic specialist, equipment that comes in contact with water infested with aquatic invasive species may need to be cleaned prior to use. GPA1
- Based upon pre-implementation field review, if consistent with project objectives, identify specific areas where mowing or ground disturbance can be avoided to reduce spreading invasive plants. RD4
- Rock, sand or other material to be used for projects conducted or authorized by the Forest Service shall originate from a weed-free source. Rock source shall be inspected by staff trained in invasive plant identification or if source is off-forest, contractor shall provide documentation that material is weed-free. GP9

Botany - ESA-listed plants and Forest Service Sensitive plant species

This project will be in compliance with the *Forest-wide Road Maintenance Wildlife*, *Fisheries and Botany* biological assessment/biological evaluation (2015; BA/BE), and as such, this document may be used for any type of road maintenance activity where the activity is not occurring within occupied McDonalds rockcress (*Arabis macdonaldiana*) habitat nor has the potential to indirectly impact the occurrence. In the event that McDonalds rockcress is known or detected within 0.25 miles of the activity area, additional review by the Level 1 Team is required to determine how impacts to this species will be avoided. If impacts cannot be avoided, re-initiation of consultation is required.

Also in keeping with the BA/BE, this document may be used for any type of road maintenance activity that is not within 0.25 miles of documented early-successional Forest Service Sensitive plant occurrences (e.g., California globe mallow, Siskiyou bells) or documented Sensitive plants associated with Darlingtonia wetlands (e.g., western bog violet, Waldo gentian). Early successional species do occur on road edges or within the road prism. An occurrence may expand beyond where originally mapped depending on the roadside setting; therefore, 0.25 miles provides a trigger for field surveys by botany staff to determine the extent of the occurrence. Darlingtonia wetland species do occur in association with stream courses that maybe indirectly affected by road maintenance activities (i.e. culvert replacement); therefore, 0.25 miles trigger applies to these species as well. In the event planned activities do coincide with occurrences of early successional or Darlingtonia wetland Sensitive plants, project design features may be needed to alleviate or reduce impacts to the Sensitive plant occurrence.

Hydrology

A waiver of waste discharge requirements application will be filed prior to project implementation in compliance with the Clean Water Act, Porter-Cologne Water Quality Control Act, applicable water quality control plans, and the Regional Board waiver of waste discharge requirements (Order No. R1-2015-0021).

An erosion control plan shall be prepared describing the storm water control structures and maintenance management practices that will be implemented to minimize pollutants in storm water discharges after project activity phases have been completed at the site. It shall also specify controls to be removed from the activity site(s) and methods for their removal. Site-specific factors and seasonal conditions must be considered when designing the control practices that will function after the project is complete.

The application of regional and national BMPs will be applied as described in the Hydrology Report (Black 2015).

- Location of Designated Disposal Sites (under Region 5 BMP 2.3 and National Road-3): Locate and designate disposal areas before operations begin such as that the location of sites are away from failure and erosion prone areas. Provide for adequate surface drainage and erosion protection at disposal sites.
- Road Maintenance and Operations (Region 5 BMP 2.4 and National BMP Road-4): All roads were assigned maintenance levels that were commensurate with the planned use and potential impacts to water quality. The portion of BMP 2.3 that addresses disposal of debris may also be applicable to road maintenance activities and helpful in reducing the risk of slope failure. This BMP directs designation of disposal sites, locations of sites away from failure- and erosion-prone areas, and adequate drainage of disposal sites.
- Road Storage (Region 5 BMP 2.6 and National BMP Road-4): Where necessary for resource protection, all drainage structure shall be removed prior to closure/storage to preclude the need for routine road maintenance and insure water quality standards are met.

- Stream Crossings (Region 5 BMP 2.8 and National BMP Road-7): Where field data indicated evidence of undersized culverts, diversion potential, or other physical defects associated with any stream crossings in the project area, BMPs will be used to reduce risks to water quality. New crossings will be sized to meet the 100-year flood where feasible and shall have no diversion potential. All live streams shall be dewatered prior to construction. Dewatering techniques typically include using a pump and hose lay to route water around construction site and deposited below the work site and into the same channel that was dewatered.
- Equipment Refueling and Servicing (Region 5 BMP 2.11 and National BMP Road-10): All temporary refueling and servicing will occur at approved locations, located well away from streams and waterways.
- Water Drafting (Region 5 BMP 2.5): All water source drafting operations will protect base flows and beneficial uses at the water drafting site. Water drafting occurring in occupied ESA listed salmonid habitat would have additional requirements, including screening.
- *Erosion Control Plans (BMP 2.13):* All road maintenance activities shall develop a site-specific erosion control plan. In addition, these plans will comply with the forest's *Wet Weather Operating Standards* (See Appendix 2 of Hydrologist Report). Erosion control plans are also a requirement set forth by the Regional Water Quality Control Boards Discharge Waiver as described above.

Soils and Slope Stability

The Road Maintenance and Operations BMP 2.4 is applicable to slope stability, and will be followed to ensure that mass wasting does not negatively impact water quality during road maintenance. Provisions of this BMP that will help maintain slope stability include: required inspections; maintenance, repair, and resiting of drainage structures to reduce diversion potential and hydrologic connectivity; addressing of known failure sites with proven remedies; avoidance of undercutting cutslopes; installation of erosion control structures; and enforcement of timber-associated maintenance requirements, including restoration of all drainage structures.

The portion of BMP 2.3 that addresses disposal of debris may also be applicable to road maintenance activities and helpful in reducing the risk of slope failure.

Road maintenance should not require consultation with earth science professionals to remedy routine situations such a rockfall, cutslope erosion or failure, plugged culverts, or minor drainage diversions. However, if any such problem appears to involve any of the natural hillslope outside of the road prism or appears to be part of a larger slope failure or landslide, engineering personnel should consult with Forest geologists before proceeding with maintenance and/or repairs. If necessary, geotechnical expertise should be consulted when problems appear to be beyond the scope of routine maintenance.

Fisheries

This project will be in compliance with the *Forest-wide Road Maintenance Wildlife, Fisheries and Botany* BA/BE (2015), which includes analysis of effects of road maintenance on aquatic Forest Service Sensitive

and incorporates the requirements of the *Watershed and Fisheries Restoration Program* biological assessment (WFR BA; 2015) for ESA-listed salmonids.

- ESA listed salmonids: Activities resulting in ground disturbance that may impact listed salmonids
 would be reviewed by the Six Rivers National Forest/National Marine Fisheries Level 1 team as
 per the WFR Program BA.
- Exceeding the annual allowance may require additional review and documentation to be in compliance with the WFR Program BA.
- ESA listed and FSS aquatic species: To reduce the impacts to aquatic species, individual or a combination of the following broad design features will occur, depending on the methods of road maintenance being planned, local environmental conditions and distance to occupied habitat:
 - Water quality BMPs and Waiver compliance for reducing sediment delivery into stream channels;
 - Water drafting at approved locations only and NMFS Water Drafting Guidelines implemented in ESA-listed fish bearing stream reaches;
 - Application of SRNF Wet Weather Operating Guidelines for any work outside the normal operating window with potential notification to NMFS.

Naturally occurring asbestos (NOA)

Naturally occurring asbestos (NOA) has only relatively recently been identified as a health hazard in areas where ultramafic bedrock is present and dust generated during recreational or construction and maintenance activities may be inhaled and cause respiratory illness or certain types of cancers. NOA may be present and co-located wherever ultramafic bedrock (serpentine and/or peridotite) occurs, or where it has been applied as an aggregate surface.

Where road maintenance is planned to occur in areas of known or likely ultramafic rock or NOA presence with less than one acre of disturbance, a suite of preventative measures are required, including speed limits, dust abatement by wetting, wetting or coverage of storage piles, and track-out prevention and removal. The local air pollution control or air quality management district must also be notified before any work begins. Projects over an acre also require an air quality district-approved asbestos dust mitigation plan.

Vegetation

Port-Orford-cedar

Operations planned where there is a potential to spread Port-Orford-cedar root disease or wet weather associated damage will be limited to the dry season (June 1 through September 30), in compliance with the Six Rivers LRMP, Appendix K – Port-Orford-Cedar Action Plan, provision E-7A of the Engineering and Road Management Disease Control Strategies.

Wildlife

Any maintenance activities within 0.25 miles of an occupied marbled murrelet (MAMU) site, occupied northern spotted owl (NSO) activity center (AC), or known fisher den require additional review by the Six Rivers National Forest/Arcata Fish and Wildlife Service Level 1 Consultation Team before any actions can occur to ensure no adverse effects will occur.

Noise Disturbance

For the most part, the proposed road maintenance activities will occur on high-use roads where normal background noise equals or exceeds the noise generated by the maintenance; therefore, activities on high use roads would not require a limited operating period (LOP). A high-use road is defined as one or more of the following:

High-use Road

- Use by an average of 5 vehicles or more per day typically associated with MLs 3 to 5,
- Access to a high-use destination such as a trailhead or campground,
- Use for hauling associated with timber harvest that is concurrent with maintenance activities.

Since low-use roads receive less traffic, background (ambient) noise levels for these roads would be lower than for frequently traveled roads. As a result, road maintenance projects on low use roads may occur with no LOP only if:

- They do not occur within 0.25 miles of unsurveyed or occupied nesting/denning habitat for any TEPS species during the breeding season or
- Activities are of a mobile nature, such as blading or brushing, or,
- If they are stationary activities that meet the definition of *short duration* (15 minutes per 0.25 mile of road within 0.25 mile of suitable habitat).

Long duration, stationary road maintenance projects could exceed ambient noise levels and create noise disturbance to nesting/denning TEPS species. Road maintenance activities that may *exceed the ambient noise levels* (generally on low-use roads) will require the following limiting operating periods (LOPs):

Northern Spotted Owl:

- o Any noise-generating activity within 0.25 miles of known NSO AC will not occur between February 1 and July 31, unless surveys determine the site to be unoccupied.
- Any noise-generating activity within 0.25 miles of unsurveyed, high quality NSO nesting and roosting habitat will not occur between February 1 and July 9, unless surveys determine the site to be unoccupied.

Marbled Murrelet:

O Any noise generating activity within 0.25 miles of known MAMU nest will not occur between March 24 and September 15.

o Any noise generating activity within 0.25 miles of unsurveyed, high quality MAMU nesting habitat will not occur between March 24 and August 5. In addition, work between August 5 and September 15 will not begin until 2 hours after sunrise and stop 2 hours before sunset unless surveys determine the site to be unoccupied.

Fisher:

- Any noise-generating activity within 0.25 miles of known fisher den will not occur between February 1 and July 9, unless surveys determine the site to be unoccupied.
- O Any noise-generating activity within 0.25 miles of unsurveyed, high quality fisher denning habitat will not occur between February 1 and July 9, unless surveys determine the site to be unoccupied.

Activities that Exceed Ambient Noise

Certain activities (blasting, pile driving, jackhammers, and chippers) always exceed ambient noise levels, regardless of maintenance level of the road. Therefore, LOPs will be applied wherever these actions are used and will be applied as follows:

- Pile Driving, Jackhammers, and Chippers:
 - NSO: Use of this equipment will not occur within 0.25 mile of unsurveyed northern spotted owl nesting/roosting habitat between February 1 and July 9, unless surveys determine the site to be unoccupied.
 - o *MAMU:* Use of this equipment will not occur within 0.25 mile of unsurveyed suitable MAMU nesting habitat between March 24 and August 5. In addition, work between August 5 and September 15 will not begin until 2 hours after sunrise and stop 2 hours before sunset unless surveys determine the site to be unoccupied
 - o *Fisher:* Use of this equipment will not occur within 0.25 miles of unsurveyed fisher denning habitat between February 1 and July 9, unless surveys determine the site to be unoccupied.
- Blasting and Rock Crushing:
 - NSO: These actions will not occur within 1 mile of unsurveyed northern spotted owl nesting/roosting habitat between February 1 and July 9, unless surveys determine the site to be unoccupied.
 - o *MAMU:* These actions will not occur within 1 mile of unsurveyed suitable MAMU nesting habitat between March 24 and August 5. In addition, work between August 5 and September 15 will not begin until 2 hours after sunrise and stop 2 hours before sunset unless surveys determine the site to be unoccupied
 - o *Fisher:* These actions will not occur within 1 mile of unsurveyed fisher denning habitat between February 1 and July 9, unless surveys determine the site to be unoccupied.

Projects located within the nest protection or primary disturbance zones of any Forest Service Wildlife Sensitive species would be evaluated on an individual basis to determine if further mitigations would be appropriate to minimize disturbance or impacts to habitat (SRNF LRMP Standard and Guidelines General Wildlife Management, under section 8-2 (page IV-97)).

Habitat Disturbance

No actions will occur within any NSO nest grove or within an occupied MAMU site.

- Vegetation removal may be required at culvert replacements sites. Removal is limited to 11-inch or less dbh trees and less than 1/10th acre in size under this decision unless site specific review by a wildlife biologist determines that no TEP species habitat will be removed or downgraded and that any affected habitat retains all habitat function post-project.
- All vegetation removal in nesting/denning or Critical Habitat must maintain the current function of the habitat.

Hazard Trees: Large-scale hazard tree removal is not part of this proposed action; however, in some cases work sites may need hazard trees removed for safe operations. A work site is defined as an area where stationary work needs to occur (such as a culvert removal site).

Under this decision, the following conditions apply:

- *Hazard trees* must meet the current FS definition and be within reach of the work site (Region 5 Hazard Tree Policy, April 2012).
- Activities cannot remove more than three hazard trees in suitable TEP habitat from any one work site.
- Road maintenance activities that remove hazard trees greater than 18-inch dbh require sitespecific review by a wildlife biologist to ensure that nesting habitat or primary constituent elements of Critical Habitat will not be removed or downgraded and the habitat will remain functional post-project.
- Activities that remove trees in suitable habitat must ensure that the canopy closure will remain unchanged and that large snags are not limited in the stand. Any hazard tree cut will be left on site or removed to designated disposal site as per activity 12 *Remove and end haul road debris*.

Attachment B: Specialist Annual Review Process

Implementing the Road Maintenance Program

Goal: Implement the *Road Maintenance CE* in a way that: preserves investments in the NFTS infrastructure to mandated design standards, sustains safe public and administrative access to NFS lands; and, reduces risk to water quality while preventing resource damage or impacts. This *Plan to Implementation* can be achieved by:

- Providing a process for documenting specialist review, issues and approval on a yearly basis;
- Providing a simple visual of what roads are ready for implementation (contracting);
- Providing documentation of resolution of specialist issues.

Objective: To implement an iterative interdisciplinary review process that optimizes roadwork accomplishments within the NEPA decision as funding becomes available. This process would:

- Identify which specific roads/activities can be implemented immediately (no resource concerns or issues);
- Identify which roads/activities have issues that need follow up specialist review/action;
- Identify by road/activity what project design features from the NEPA CE apply (LOPs, surveys, etc.);
- Identify which roads need onsite implementation review and which specialist needs to be contacted prior to activity;
- Identify ways to streamline review process.

Initial Strategy on how this works:

- Engineering and watershed (with line officers) staff provide a list of new roads/activities (with as much detail as possible as to the types and locations of activities that would occur) to district and supervisor's specialists for their review 2 weeks (minimum) prior to the annual review meeting.
- Engineering/Watershed staff also identify the previous year's approved actions that did not get implemented on the ground (for ground disturbing activities limitations by watershed).
- Specialists come to the meeting (at district and/or supervisor's office) prepared to fill out tracking spreadsheet to identify:
 - Roads that are reviewed and approved for contracting (IDIQ) and on-the-ground
 implementation no resource concerns (these are automatically coded green see Figure 1),
 - Roads that need additional survey work/information (issues) to identify potential design features,
 - o Roads that need specific PDFs (LOPs, buffers, etc.),
 - o Roads that have issues, but can be resolved with on-site monitoring, timing, etc.
- Document outcome in the yearly spreadsheet those that are all *green* can move forward with no more review.
- Based on district ranger's input, engineering/watershed staff works with specialists with issues/concerns for current fiscal year priorities. Funding, staffing levels and timing of surveys may result in roads moving to next year's list.

Specifically: This documents that all road maintenance projects are implementing the *Road Maintenance CE* and all associated law policy and regulation. The spreadsheet as developed, can also serve as documentation of us identifying issues, and identifying that we resolved them before implementing.

Related Law Policy Regulation

ESA Compliance and FS Sensitive: ESA compliance is met during this process and by the *approved list* being attached to the September 24, 2015 Forest-wide Road Maintenance Wildlife, Fisheries and Botany BA/BE (2015) 2015-2022 Tiering Form and copies submitted to USFWS and NMFS.

Clean Water Act Compliance: NCWQCB Waiver compliance is met during this process by having the approved list of Category B projects to the water board along with identification of addition documentation. This process would be updated as the waiver process is finalized.

Tribal/Cultural: The National Historic Preservation Act Section 106 process is met by following all stipulations in the *Programmatic Agreement among the USDA Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region (2013). Tribal consultation will be on going throughout the life of the project. A copy of the document with an original signature may be found in the project record at the Six Rivers National Forest Supervisor's office, in Eureka, California.*

Motorized Trail Maintenance

The Six Rivers Road Maintenance Project CE (Road Maintenance CE) design criteria, mitigation measures and annual operating allowance thresholds are applicable to all NFTS roads designated and existing (remaining ML 3 to 5) included in the Smith River National Recreation Area Restoration and Motorized Travel Management Project including:

- Smoothing road surfaces, repairing road signs, removing hazards and vegetation blocking driver visibility to maintain drivable road conditions that promote safe passage on all roads open for the public to drive (ML 2 to 5).
- Maintaining road stream crossings, drainage structures and ditches, and replacing culverts to
 effectively channel storm runoff during 100-year-flood events, in compliance with the LRMP (p.
 IV-49) (ML 1 to 5). These types of actions implement *stormproofing* measures identified in the
 FEIS for NFTS roads.

This decision clarifies that future maintenance would also occur on all motorized trails added to the NFTS in all action alternatives. The motorized trails proposed for addition would follow the same process identified in the *Road Maintenance CE*, including the requirement for notifying specialists on the proposed annual trail maintenance.

- Maintain designated motorized trails, road surfaces, repairing road signs, removing hazards and vegetation blocking driver visibility to promote safe OHV experiences.
- Maintain trail stream crossings, drainage structures (water bars/rolling dips) and ditch cleaning, clean and replace culverts to effectively channel storm runoff during 100-year-flood events, and add additional gravel to control rutting

The following motorized trail maintenance activities were reviewed by the IDT to determine if the design features contained within the *Road Maintenance CE* listed above were sufficient for minimizing effects to resources.

The FEIS identifies mitigations that would need to occur on some of the proposed motorized trails prior to being added on the MVUM. Post decision, all motorized trails designated would be maintained as needed, actions would include the following types of activities:

- Brushing
- Culvert cleaning
- Maintain rolling dips
- Add dips/waterbars as needed
- Spot rocking of motorized trails
- Rocking longer sections of motorized trials as conditions change (applies to motorized trails only)
- Drainage maintenance
- Maintain route delineation (including any barriers)
- Maintenance of identified seasonal gates.

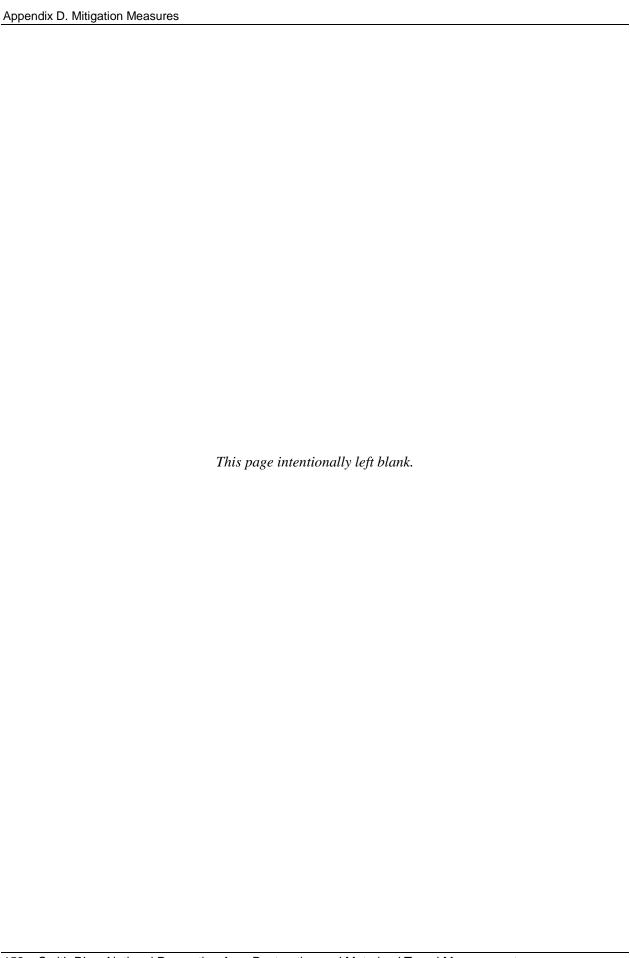
Assumption for motorized trail maintenance:

- Annual Trail Maintenance proposed plan would have review by specialist, and
- All work would occur within the motorized trail prism.

The interdisciplinary team was emailed on September 22, to determine if including motorized trail maintenance in the FEIS would result in additional analysis or new consultation. Table D-2 documents the responses of the IDT.

Table D-2. Additional analysis or new consultation required if motorized trail maintenance included in FEIS.

Resource	Design Features and Process in Road Maintenance CE	Additional Effects to be Analyzed/Consultation
Air Quality	No additional design features.	N/A
Aquatics	No additional design features.	No – ESA consultation covered WFRBA - No additional analysis
Botany	Annual maintenance plan would need review by a botanist. Of particular concern are trail side ditches associated with the Spring Road (17N49.7). Add dips and waterbars, and spot rocking and	No new effects analysis or consultation would be required. Effects would be mitigated through the review process.
Recreation/Engineering	brushing where Sensitive plants are present. No additional design features.	N/A
Tecreation/Engineering	9	·
Heritage Resources	All work would remain within existing motorized trail system. No additional design features.	Any effects would be mitigated through the review process.
Water Quality, Soils	No additional design features.	Trail maintenance is not a category B project that would require consultation with the water board.
Wildlife	All the wildlife design features of the Road Maintenance CE would be applied to motorized trail maintenance. No additional design features required.	No additional analysis or consultation required.



Appendix E. Cumulative Watershed Effects Analysis Using R-5 ERA Model

Assumptions and ERA Coefficients used for Travel Management Assessment

The Forest Service in Region 5 has adopted the Equivalent Roaded Acres (ERA) model as a method of addressing cumulative watershed effects. This model is designed as a preliminary indicator for managers to determine whether past and present land management disturbances in a given watershed approach or exceed a threshold of concern (TOC). Where ERAs approach or exceed a given watershed's TOC, further fieldwork would be necessary to ascertain whether cumulative watershed effects are present and if land management activities would adversely add to those effects and result in detrimental impacts to beneficial uses.

The ERA methodology has both strengths and weaknesses. The analysis is readily duplicated and easily understood. It also incorporates rates of management disturbance and recovery times associated with those disturbances, an attribute which is missing in many other CWE models. On the other hand, it is only an office exercise based on management-related hill slope disturbance. It also does not address physical or biological processes in stream channels, nor does it account for the time lag associated with routing sediment delivered from a given activity. Recovery times in the ERA model apply only to onsite treatments, not to recovery of downstream impacts.

ERA Calculations

The CWE ERA analysis for the Travel Management Project was conducted on all lands within the affected watersheds (Public and Private). The methods used to calculate %ERAs for past and present land management activities are described below. The coefficients used in the ERA calculations are listed in Tables E-1 through E-6, which include the rational for assigning of coefficients.

ERA Equations and Coefficients for Existing and Current Land Management Activities

Timber Harvest

The timber harvest ERA is calculated using the following formula:

• ERA = [Acres Harvested] x [Logging System Coefficient]

Table E-1 lists the coefficients assigned to various logging systems. In addition, the recovery times anticipated for each activity is included as well as the type of recovery curves. Some activities recover gradually and mimic a linear recovery while other activities recover rapidly initially and then gradually taper off. Those activities are better represented by a concave recovery curve.

Table E-1. Logging system ERA coefficient and recovery times.

Logging Activity	Logging System	ERAs per Acre Coefficient	Recovery Time	Recovery Curve
Changes	Fire	0.15	15	Linear
Fuel-Treatment	Broadcast Burn	0.04	4	Concave
Fuel-Treatment	Burn Piles	0.02	2	Concave
Fuel-Treatment	Mechanical	0.15	15	Concave
Fuel-Treatment	Piling – hand	0.02	2	Concave
Fuel-Treatment	Piling – tractor	0.15	15	Concave
Fuel-Treatment	Under burning	0.1	10	Concave
Harvest	Change Detection, NFS	0.2	20	Concave
Harvest	Change Detection, Other	0.25	25	Concave
Harvest	Clear-cut	0.25	25	Concave
Harvest	Clear-cut, Skyline	0.2	20	Concave
Harvest	Clear-cut, Tractor/Mechanical	0.3	30	Concave
Harvest	Group Select	0.2	20	Concave
Harvest	Group Select, Helicopter	0.1	10	Concave
Harvest	Group Select, Skyline	0.15	15	Concave
Harvest	Group Select, Tractor/Mechanical	0.2	20	Concave
Harvest	Overstory Removal	0.25	25	Concave
Harvest	Overstory Removal, Helicopter	0.1	10	Concave
Harvest	Overstory Removal, Skyline	0.2	20	Concave
Harvest	Overstory Removal, Tractor/Mechanical	0.3	30	Concave
Harvest	Shelter wood	0.25	25	Concave
Harvest	Shelter wood, Skyline	0.2	20	Concave
Harvest	Shelter wood, Tractor/Mechanical	0.25	25	Concave
Harvest	Thin	0.2	20	Concave
Harvest	Thin, Skyline	0.15	15	Concave
Harvest	Thin, Tractor/Mechanical	0.2	20	Concave
TSI	Pre-commercial Thin	0.05	5	Concave
TSI	Pre-commercial Thin, Biomass	0.15	15	Concave
TSI	Pre-commercial Thin, Manual	0.02	2	Concave
TSI	Pre-commercial Thin, Tractor	0.15	15	Concave

Roads

The road ERA is calculated using the following formula:

ERA = [Road Miles] x [Average width of Road Prism]

Road miles (all public, state, county and privately owned) were converted to acres (ERAs) based on an average road prism width of 35 feet. Roads are a permanent feature on the landscape and unless they are decommissioned or restored, they do not recover over time. As such, their recovery curve is shown in Table E-2 as a flat curve. The recovery rate for a decommissioned or restored road, based on professional judgment and experience, is estimated to be 10 years. The ERAs associated with open roads will stay

constant over time and not reduce as in the case of timber sale acres that recover over time. Table E-2 lists the coefficients used to develop ERAs per road mile.

Table E-2. Road ERA coefficient and recovery times.

Roads and Motorized Trails	ERAs per Mile	Recovery Time	Recovery Curve
Existing/In Use	4.2	0	Flat
Decommissioned or Restored	4.2	10	Linear

Wildfire

Table E-3 shows the ERAs assigned to burned areas (within the past 15 years) in the analysis watersheds. It was assumed that low to moderate burn intensities had no negative watershed impacts. Moderate intensity burns were assumed to have a light impact on a watershed similar to that of an extremely light land management ground disturbing activity (e.g., timber stand improvement activities). Higher burn intensities were given ERAs/Acre similar to more ground disturbing activities such as skyline or cable suspension systems and in the case of the most intense burned areas, ERAs/Acre values were assigned similar to disturbances associated with tractor yarding systems.

Wildfire burn severity ERAs were calculated using the following formula:

ERA = Wildfire Acres x Burn Severity (ERAs/Ac) x Burn Recovery Coefficient³

Table E-3. Wildfire equivalent roaded areas.

Wildfire Burn Severity Description	ERAs
0 – No burn	0.00
1 – Low burn intensity	0.00
2 – Low to moderate burn intensity	0.00
2a – Moderate burn intensity	0.05
3 – Moderate to high burn intensity	0.10
4a – High burn intensity	0.15
4b – Extreme burn intensity	0.20

Table E-4 illustrates the estimates made as to how long it would take a burned area to recover relative to the burn severity. Estimates on recovery times were extremely conservative, especially since evidence exists that surface erosion is essentially negligible after the first 1 to 5 years after a fire. However, due to the decay of roots associated with dead trees, steep hillslopes may reach maximum instability 10 to 15 years after the fire and become more susceptible to mass wasting processes.

³ Burn recovery coefficient = 1 – (current year–year burned)/years to recover after burn.

Table E-4. Years to recover post-wildfire.

Burn Severity Descriptions	Years To Recovery
0 – No burn	0
1 – Low burn severity	0
2 – Low to moderate burn severity	0
2a - Moderate burn severity	5
3 – Moderate to high burn severity	10
4a – High burn severity	15
4b – Extreme burn severity	15

Percent ERAs for all Past Actions (existing condition)

The CWE ERA Analysis for the Travel Management project was conducted on twenty 6th-field watersheds (including all federal, state and privately owned lands). The methods used to calculate %ERAs for past and present land management activities are described in the above sections. The coefficients used in the ERA calculations are listed above in Tables E-1 through E-3.

The following equation is used to calculate total percent ERAs for all past actions and represents the current condition:

• %ERA = (([Timber Harvest ERA] + [Roads ERA] + [Wildfire ERA]) / [watershed acres]) x 100 The total percent ERA results are shown below in Table E-5.

Table E-5. Total percent ERAs by watershed.

6 th -Field Watershed Name	Watershed Acres	Existing National Forest Roads / Motorized Trails	Past National Forest Mgmt Projects	Private Land Timber Harvest	Wildfire	ERA Total	%ERA	Threshold of Concern
Craigs Creek	11,533	224	12	188	1	425	3.7%	10.0%
Diamond Creek	21,307	312	0	0	1051	1,363	6%	12.9%
Eightmile Creek	15,243	20	1	0	515	536	3.5%	13.1%
Goose Creek	26,022	577	57	70	0	703	3%	11.7%
Hardscrabble Creek – Smith River	17,788	338	7	15	265	624	4%	10.0%
Hurdygurdy Creek	19,149	303	52	0	0	355	2%	11.9%
Jones Creek	15,714	157	41	0	0	197	1%	12.1%
Lower Middle Fork Smith River	27,251	347	31	0	310	687	3%	10.0%
Lower North Fork Smith River	35,484	354	7	0	769	1,130	3%	10.0%
Lower South Fork Smith River	27,359	433	27	0	236	737	3%	11.6%
Smith River- Frontal Pacific Ocean	25,513	35	0	341	0	376	1%	12.7%
Middle South Fork Smith River	33,111	505	65	4	538	1,157	3%	10.7%
Hunter Creek	19,103	72	0	284	0	355	2%	13.1%
Patrick Creek	14,789	369	2	0	37	407	3%	12.9%
Rock Creek	10,288	65	0	95	0	160	2%	11.7%

6 th -Field Watershed Name	Watershed Acres	Existing National Forest Roads / Motorized Trails	Past National Forest Mgmt Projects	Private Land Timber Harvest	Wildfire	ERA Total	%ERA	Threshold of Concern
Rowdy Creek	21,864	198	2	850	25	1,075	5%	10.5%
Siskiyou Fork Smith River	17,504	202	31	0	154	425	2%	11.4%
Turwar Creek	20,380	0	1	77	0	77	0.4%	11.7%
Upper Middle Fork Smith River	24,177	461	46	3	6	516	2%	11.8%
Upper South Fork Smith River	28,514	116	8	0	103	235	0.8%	12.7%

ERA Calculations for Reasonably Foreseeable Future Land Management Activities

The same equations as the ones used calculate existing and project related ERAs were used to estimate near future timber and fuel treatment projects. The Gordon Hill Vegetation and Fuel Management Project was added to the total percent ERAs in the Hardscrabble Creek-Smith River, Lower Middle Fork Smith River, Craigs Creek, Hurdygurdy Creek and Lower South Fork Smith River watersheds.

Development of Threshold of Concern (TOC)

Thresholds of concern (TOC) by watershed were developed in 1995 Six Rivers National Forest Land and Resource Management Plan revision. The TOC is an estimated upper limit of total disturbance that a watershed can tolerate without adverse impacts to beneficial uses. In the event that the %ERAs begin to approach a TOC, management actions should be evaluated to insure that detrimental cumulative watershed effects do not occur. In developing TOCs, several physical and biological parameters were evaluated, including inherent geologic stability, extent of inner gorges plus active and inactive landslides, erodibility of soils, slope steepness, status of anadromous fish, condition of riparian areas and others. Assigning a TOC to a given watershed is an interdisciplinary professional judgment that weighs the various environmental indicators described above. The TOCs for this project range between 10.0 to 13.1 percent ERAs in all affected watersheds (see Table E-6).

Table E-6. Existing %ERA compared to threshold of concern.

6 th -Field Watershed Name	Existing %ERA	% Threshold of Concern	
Craigs Creek	3.69	10.0	
Diamond Creek	6.41	12.9	
Eightmile Creek	0.33	13.1	
Goose Creek	2.72	11.7	
Hardscrabble Creek-Smith River	3.51	10.0	
Hunter Creek	1.86	13.1	
Hurdygurdy Creek	1.86	11.9	
Jones Creek	1.25	12.1	
Lower Middle Fork Smith River	2.52	10.0	
Lower North Fork Smith River	3.18	10.0	
Lower South Fork Smith River	1.67	11.6	
Middle South Fork Smith River	2.96	10.7	
Patrick Creek	2.76	12.9	
Rock Creek	1.56	11.7	
Rowdy Creek	4.93	10.5	
Siskiyou Fork Smith River	1.36	11.4	
Smith River-Frontal Pacific Ocean	1.47	12.7	
Turwar Creek	0.38	11.7	
Upper Middle Fork Smith River	2.14	11.8	
Upper South Fork Smith River	0.48	12.7	

Appendix F. Law Enforcement

Forest Service Law Enforcement and Investigations (LEI) personnel are responsible for protecting the public, employees, natural resources, and other property under the agency's jurisdiction. Additionally, LEI investigates and enforces applicable laws and regulations that affect the National Forest System (NFS) lands and prevents criminal violations. The Travel Management Rule is one such regulation.

The Travel Management Rule requires designation of roads, trails, and areas open to motor vehicle use, and the prohibition of cross-country wheeled motor vehicle travel by the public. The implementation of designated routes and areas for motor vehicles will be the responsibility of all agency employees, especially in the area of education and enforcement. The law enforcement program is primarily responsible for issuing violations to enforce the Travel Management Rule.

The national LEI budget is funded by appropriated dollars from Congress to provide law enforcement services on the NFS lands. The Travel Management program is one of many forest programs to benefit from federal law enforcement funding. Law Enforcement and Investigations staff work in cooperation with Forest Service line officers to accomplish forest resource management objectives, yet LEI is administratively separated to maintain legal and investigatory independence.

To enhance enforcement of Travel Management Rule, Region 5 Forest Recreation Programs applied for and received grant dollars (green sticker funding) from the State of California Off-Highway Motor Vehicle Recreation Division Grants Program. These state funds are earmarked specifically for enforcement of off-highway vehicle laws and regulations on the various forests, and are performed primarily by forest protection officers (FPOs). In addition, law enforcement officers (LEOs) support the FPOs as needed, especially if serious violations occurred. In recent years, state law enforcement grants ranged from 1.26 to 1.67 million dollars annually with similar funding anticipated for the 2014-2015 grant cycle.

Authority and Jurisdiction

The Forest Service exercises its law enforcement authority when violation of laws or regulations occurs on NFS lands or when incidents affect the NFS. The existing authorities for enforcement are completely adequate and no new laws will be needed to enforce the Travel Management Rule.

Every national forest annually updates a law enforcement plan. All Forest Service employees have a duty to know and understand their authorities and responsibilities, and to properly enforce laws and regulations relating to the forest within their authority and capability. Law Enforcement and Investigations and agency personnel provide a regular and recurring presence on vast amounts of public land, roads, trails, and areas taking appropriate action if illegal activity is discovered. Violations are primarily enforced by LEOs and FPOs who patrol off-highway use roads, trails, and areas. Law enforcement officers use discretion when deciding what type of action to initiate when handling violations to the following federal laws that pertain specifically to motor-vehicle use.

• The Act of June 4, 1897 (Title 16 USC 551) is the authority for issuing regulations at 36 CFR 261. Specific OHV travel management regulations are in §261.9 – Property, §261.13 – Motor

- Vehicle Use, and §261.15 Use of Vehicles Off-Road. These CFRs cover a wide array of misdemeanor infractions.
- The Act of March 3, 1905 (16 USC 559) authorizes all employees of the Forest Service to make arrests for violation of the laws and regulations pertaining to national forests. Normally, arrest authority is limited to trained law enforcement personnel. Any employee may take immediate action when necessary to protect life and prevent serious damage to or destruction of property, escape of a suspect, or loss of material evidence when such action can be done with reasonable safety.

The legal foundation for enforcement on the forest was established by Congress as *proprietary jurisdiction*. This term means that the federal government has acquired some degree of right or title to an area in a state, but has not obtained any measure of the state's authority over the area. The legal scope of the Forest Service is limited to laws established for that property, or national forest. However, enforcement agencies with state authority in California retain their full legal authority on the forest. Notably, for enforcement of violations committed by motor vehicle operators, the California Highway Patrol and the four county Sheriffs have separate authority and jurisdiction to enforce OHV laws under the California Vehicle Code (CVC).

In November 2008, the Regional Forester signed a new regional order that allows Forest Service officers to enforce the OHV section (CVC §38000) of the CVC on NFS roads.

Cooperation

The Forest Service shares responsibility and cooperates with local, state, and other federal agencies in the execution of its law enforcement program. The authority for cooperation among agencies, especially as it pertains to Travel Management Rule is within the following laws:

- The Act of August 10, 1971 (16 USC 551a) authorizes the Secretary of Agriculture to cooperate with, and provide reimbursement to, any state or political subdivision thereof, for the enforcement of their laws within NFS. This law does not deprive any state or local law enforcement agency from exercising its criminal and civil jurisdiction on lands that are part of the NFS.
- California Penal Code §830.8 provides that Forest Service law enforcement personnel may
 exercise state peace officer authority where the sheriff of the county wherein the officer works
 provided specific written permission for the officer.
- California Vehicle Code §38301 allows state law enforcement officers to support enforcement of any of the federal CFRs related to motor vehicles on NFS lands (CVC penalties would apply.).

Each forest maintains close working relationships with many state and local law enforcement agencies with law enforcement responsibilities in or adjacent to the forest boundary. Significant cooperating agencies relative to enforcing Travel Management Rule include the local county sheriff departments, the California Department of Fish and Game, California Highway Patrol, California Department of Forestry and Fire Protection, and occasionally one or more Federal agencies depending on

the violation. Forest Service law enforcement personnel cooperate fully with these agencies in carrying out their law enforcement responsibilities by providing assistance, liaison, advice, and information.

Forests maintain Cooperative Law Enforcement Agreements with their respective county sheriff's office. These funds are for performance of duties in addition to the normal activities in which the sheriff's deputies handle crimes against persons and their property that may occur within the NFS boundary. In these agreements, both parties recognize that public use of NFS lands is usually located in areas that are remote or sparsely populated and the enforcement of state and local law is related to the administration and regulation of NFS lands. Within the Cooperative Law Enforcement Agreements, an operating plan is developed outlining the supplemental work to be performed by the cooperating agency. Operating plans may provide:

- Supplemental patrols in areas of high use.
- Supplemental patrols on weekends or during particular months of high use.
- Additional officers for large group gatherings or events (Enduros).
- Vehicle checkpoints for vehicle registration spark arrestors, and other miscellaneous items.

Implementation and Tracking

Implementation of the Forest Service law enforcement program is continually adapting as law enforcement personnel assess the changing patterns of visitor use and attitudes, and the trends in violations, especially for property and resource damage. One method of assessment is the analysis of Law Enforcement and Investigations Management Attainment Reporting System (LEIMARS) data. LEIMARS tracks all known violations of criminal law or regulation on NFS lands (FSH 5309.11 Chapter 40 and FSM 5340). Additionally, imbedded in LEIMARS is the Case Tracking System, which tracks all felony and serious misdemeanor cases. These tracking systems:

- Capture and record information on location, volume, damages, and type of violations occurring on NFS lands.
- Provide a retrieval system of data on incidents and violations that is responsive to the needs of all
 organizational levels.
- Provide agency managers with a means to identify and monitor law enforcement activities.
- Specifically identify problem areas and periods of activity.
- Provide a method to record and analyze incidents involving violations or suspected violations on NFS lands.

Trends in violations can be analyzed and appropriate action(s) taken, if needed. Appropriate action(s) may involve one or more techniques or adaptive strategies. In the law enforcement community, this is often referred to as *the three E strategy* of engineering, education, and enforcement. With the changes to how the public accesses and travels on NFS lands, it is anticipated that the law enforcement program will use a combination of strategies, especially during the first five years of implementation of the MVUM.

Assumptions

Based on many years of enforcing off-highway vehicles, implementing change in access and enforcement of Travel Management Rule, from a law enforcement perspective, assumes the following assumptions to be true. These assumptions may change over time with analysis of the LEIMARS database.

Enforcement Assumptions

- Enforcement of the laws and regulations related to Travel Management Rule are enforced equally in authority and weight as with all other Federal laws and regulations.
- As with any change in a regulation on NFS lands, there is usually a transitional period for the public
 to understand the changes. It is anticipated there will be a higher number of violations to Travel
 Management Rule in the first couple of years and the number of violations will decline as the users
 understand and comply with the rules.
 - o Users in communities adjacent to the forest will comply within 1 to 2 years.
 - o Frequent users, but further in distance from the forest, will comply within 2 to 3 years.
 - o Infrequent users regardless of distance may take up to 5 years to comply.
- Law enforcement officer and agency personnel's presence and enforcement actions will positively affect OHV users' behaviors and attitudes.
- The MVUM defines the designated routes, season of use, and type of use, therefore, making violations unequivocal.
- Once the MVUM is published, the designated network of roads and trails with signs, and user education programs, will reduce the number of violations.
- Depending on location of the forest, FPOs may spend a large percentage of their time on travel management issues.

Agency Funding Assumptions

- Appropriated program funding levels and number of law enforcement personnel does not affect enforcement of Travel Management Rule. All laws and regulations are enforced equally.
- The state of California Off-Highway Motor Vehicle Recreation Division Grants Program (green sticker funding) enhances and provides additional law enforcement presence in the field at the forest level.

Public Attitude and Compliance Assumptions

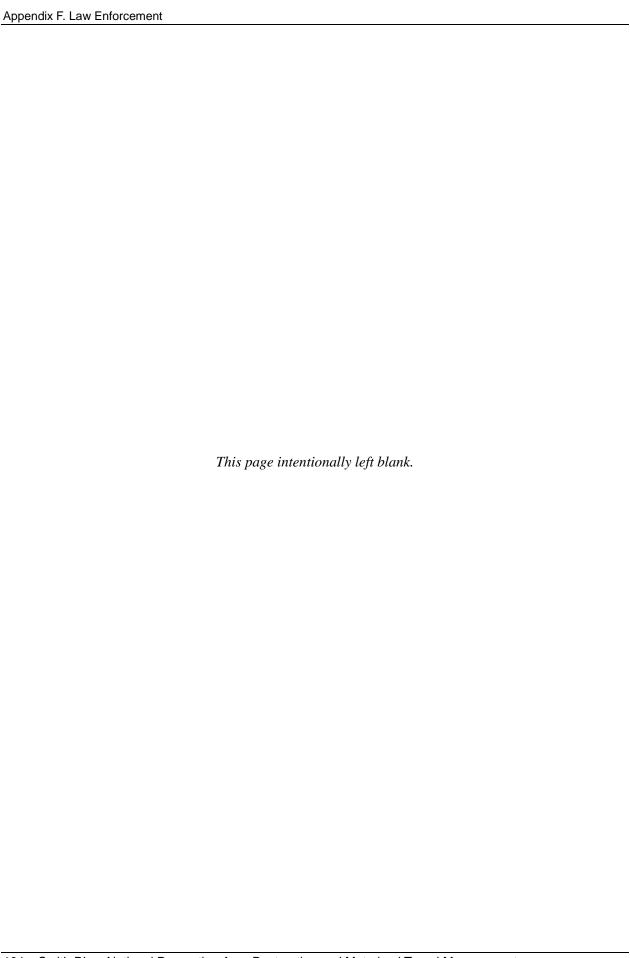
Forest users want to do the right thing, and will therefore, obey the Travel Management Rule (Tyler 2006), once they understand the Travel Management Rule and Motor Vehicle Use Map (MVUM).

Measure of Success

Measuring the success of the compliance with Travel Management Rule will be done using the LEIMARS database. An analysis of the data may alert a forest to a particular problem area for violations such as a dispersed group campsite area that may be surrounded by flat meadow areas inviting riders to potentially violate the regulation. A successful program will see a positive change in the following measures:

Measure 1. A reduction in the number of off-route travel violations.

Measure 2. A reduction in the number of resource damage violation.



Appendix G. Response to Comments

One goal of NEPA is to inform decision makers about the consequences of proposed and alternative actions. Public comments play a role in guiding the scope of the analysis and in identifying concerns to be addressed through the decision making process. The preparation of a NEPA document does not determine which alternative to choose. It does not prevent environmental impacts from happening or guarantee the final decisions will resolve everyone's concerns. It does not prohibit any actions. Simply stated, NEPA is a public information disclosure process that results in better and more informed decision.

The public was invited to submit comments on the proposed action during the scoping period in April 2012. Comments submitted during the scoping period were analyzed to identify significant issues. Alternatives to the proposed action were considered and developed that address the significant issues that were within the scope of the project, compliant with law, regulation, and policy, within the agency's purview to implement, and met the purpose and need of the project. The public was invited to provide comment on the DEIS, and will be given the opportunity to review the FEIS and draft Record of Decision and participate in the Objection process (36 CFR 218 subparts A and B). Three significant issues, including Impacts to Access and Recreation Opportunity, Impacts to Inventoried Roadless Areas, and Impacts to Resources, drove the development of three action alternatives, which include a modified version of the proposed action. These alternatives range from one alternative that emphasizes motorized recreation opportunities by proposing designation of motorized trails on the Smith River NRA, including designation of additional miles of motorized trails in IRAs, to another alternative that emphasizes risk reduction to resources by not designating any additional motorized trails that occur within IRA boundaries or have any occurrences of sensitive plants within 30 feet of the UAR.

To systematically document and respond to the concern of the public, each comment letter was assigned a number with each comment within that letter also receiving a number – resulting in a unique identifier for every comment (e.g., 42-5 would be the 42nd letter, 5th comment in that letter). An initial analysis was completed using the Content Analysis and Response Application (CARA) software to identify form letters and unique letters. CARA was further used in the content analysis process to code issues. The interdisciplinary team worked in concert to sort comments into two categories: substantive and non-substantive comments.

Substantive comments identify an issue or concern that commenter has with the project, or identify where more information or clarification is needed. The SRNF may respond to such comments by expanding modifying the scope context and/or parameters of the analysis, changing the parameters of the analysis, developing a new or modifying an existing alternative, or providing an answer, clarification, or further information when appropriate.

Non-substantive comments do not state a cause-effect relationship related to the project, but offer opinions about the project or vote on their favorite alternative. While these comments cannot be used to affect the scope of the analysis or drive the development of an alternative, they are helpful in providing the decision maker a sense of the community values and sentiments at stake in the decision. Other non-

substantive comments are either beyond the scope of the project, or beyond the authority of decision makers to address.

The Six Rivers National Forest (forest or SRNF) received 854 comments during the comment period in response to the draft environmental impact statement (DEIS), including comments from Del Norte County Board of Supervisors, Smith River Alliance, Northwest Trail Riders, Blue Ribbon Coalition, Klamath-Siskiyou Wildlands Center, Del Norte Resource Advisory Committee, Deschutes County 4 Wheelers, Four Runners of Klamath Falls, Pacific Northwest Four Wheel Drive Association, PacifiCorp, ADH Environmental, US Environmental Protection Agency (EPA), USDI Office of Environmental Policy and Compliance, and 841 individuals. The full list of commenters is located at the end of this appendix.

Organizational Structure of Response to Comments

To assist the reader in locating comments related to their issue of interest, the response to comments is organized by general comment categories, topics and sub-topics, where applicable. In many cases, multiple comments were submitted that addressed one topic or subtopic. Such comments were grouped and presented in a table with unique identifiers (letter and comment number). Identical comments are grouped and listed in the table with their unique identifiers. Following is an example of the organizational structure:

General Comment Category

Topic

Sub topic (if applicable)

Letter Number	Comment Number	Comment Text
Number	Number	Comment

Response: SRNF response to comments received on this concern statement.

In some cases, a large number of similar comments that covered a number of inter-related topics were received. In such cases, a *concern statement* was generated to summarize the issues identified in the comments for the ease of the reader. Representative example comments are provided to give the reader a sense of the tone and breadth of the comment, which is followed by the forest's response. Following is an example of the organizational structure described above:

General Comment Topic

Sub topic (if applicable)

Concern Statement: like comments were summarized into a concern statement.

Example Comments: example of comments (with unique number identifier)

Letter Number	Comment Number	Comment Text
Number	Number	Comment

Response: SRNF response to comments received on this concern statement.

Project Development, NEPA and Implementation

OSE OF THE TRAVEL ANALYSIS FROCESS (TALL) III AIGENIALIVE DEVELOPINEI	Use of the Travel An	alvsis Process i	(TAP) i	in Alternative Developmen
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Letter Number	Comment Number	Comment Text
819	26	It appears that the findings of the Forest Service 2005 RAP regarding the need for a minimum road system and the risk/need assessment seem largely irrelevant to the content of the agency's preferred alternative. Rather than utilize the data in the RAP to inform the agency proposal, it appears that decision making authority has been largely handed over to the collaborative group assigned with adding controversial high-risk routes to the NFTS.
819	97	The 2005 RAP identified the minimum road system and produced risk/need assessments, which provide a rational basis for determining the size of the NFTS in relation to the agency's maintenance obligations. Yet this information was not utilized in developing the preferred alternative. Instead the Forest Service insists on adding high risk-high maintenance – low use motorized trails in some of the most sensitive botanical, roadless and POC watersheds in the Recreation Area. Such an approach is arbitrary and capricious.
819	133	Please Account For Changes in Use Patterns and For Impacts From Roads That Were Not Built To USFS Specifications. While it is true that some of the routes proposed for addition to the road system have been in existence for many years, this does not mean their uses, especially the changing use patterns and increasing "extreme" use, will not result in additional significant hydrological and botanical impacts. Many of the routes of concern were established either by repeated travel or by miners with bulldozers for the purpose of mining access, mineral exploration, or for mining claim assessment work. They were not established to Forest Service specifications or standards and were located without consideration of resource protection and values.

Response: The 2005 Smith River NRA Roads Analysis (RAP) addressed Forest System roads with a maintenance level of 1 through 5, as well as inventoried Unauthorized Roads (UARs) for planning. One of the purposes of this project is to implement the recommendations identified in the 2005 RAP and revised by the USFS Travel Analysis Process (TAP) guidance, and the 2005 Travel Management Rule (cite), which identified public and administrative access needs.

As stated in the 2005 RAP, the intent of the analysis was to provide decision-makers with critical information to develop a road system that is *safe and responsive to public needs and desires* as well as has *minimal negative ecological effects on the land*. To that end, the forest has provided multiple opportunities for the public to provide information on what roads/routes are needed for access, with the majority of public comments provided after the RAP was completed. The RAP is a planning tool, not a decision document, and both resource risk and public need ratings were modified based on information provided by the public during the NEPA process in the 11 years since the RAP was completed. The RAP and subsequent public comments were indeed used to develop the preferred alternative. Only roads/routes with an identified public or administrative need were proposed for addition, provided any identified resource risks could be mitigated. No low-use routes proposed for addition to the system.

The collaborative group, convened by US Institute for Collaborative Policy, was narrowly focused on reaching agreement on nine UARs in IRAs that were the subject of two appeal processes in the 2007 Road Management and Decommissioning NEPA process. Some interest groups that were invited to participate in the collaborative group choose not to participate.

All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including in sensitive plant habitat and POC areas. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits

including 1) less than 0.1 percent of the serpentine sensitive plant habitats on the NRA are being affected; 2) all routes into the North Fork Botanical Area are being closed, protecting over 20,000 acres of potential habitat; 3) routes to be kept will be upgraded to correct drainage problems, and 4) POC protection measures are common to all action alternatives.

The majority of UARs on the NRA are not user created routes. They include old mining roads, old logging roads from previously private land that was later acquired by the FS, and previous access routes to private lands. Although construction standards have changed and improved, many of these old roads were engineered. Mitigations proposed in this project would minimize resource impacts. The Forest Service would close and restore between 2 to 4 times the miles of UARs that would be added. Adding the UARs that are needed for access would be consistent with Forest Service Rules and Regulations.

Coordination with Del Norte County

Coordination Process

Letter Number	Comment Number	Comment Text
826	1	Specifically, it is the opinion of the BOS that the following issues require further review before this plan can be adopted: outstanding conflict with the Del Norte County General Plan's stated goal of maintaining recreational opportunities in the County, negative effects on public safety, diminished access to historic areas, errors and inconsistencies in mapping, and a failure to sufficiently coordinate the planning process with the County.
826	15	The Forest has not coordinated with the County pursuant to the various section of law pertaining to coordination (i.e. FLPMA 43 USC 1712, 1982 Planning Rule Section 219.7, 2012 Planning Rule Section 219.4, etc.) as well as the 2012 Memorandum of Agreement (MOA) signed by the Regional Forester, the Bureau of Land Management, the California State Association of Counties (CSAC), and the Regional Council of Rural Counties (RCRC) and adopted locally under Del Norte County Resolution 2012-06. Under the terms of the MOA all Forests within the Pacific Southwest Region are required to participate in meetings with their respective county's Board of Supervisors at any time during the planning process.
826	16	While the Forest's preferred alternative (Alternative 6) may come closest to achieving the goals identified by the Forest it falls well short of the Board's hope for a plan that accommodates the needs of the County and the policies adopted by this Board. It is the opinion of the BOS that had the Forest adequately engaged in coordination many of the issues identified herein could have been more appropriately addressed in this plan. At this time, we have reservations with all of the alternatives, including the Forest's preferred alternative, and request that the Forest not proceed with the adoption of the plan until the issues identified herein can be resolved through adequate coordination with the BOS and/or incorporation of the amendments in these comments. While the BOS appreciates the considerable efforts the Forest has undertaken in the development of this Plan we ask that you contact the County Administrative Officer, Jay Sarina, who is designated by Del Norte County Resolution 2012-06 as the point of contact between the County and the Forest, for proper coordination. It is our sincere hope that a final plan may be adopted that best accommodates the goals established by the County Board of Supervisors and the Six Rivers National Forest for the NRA.
826	17	At this time, the BOS has significant reservations with the project, as proposed, as well as concerns relating to the process by which the Forest has solicited the BOS's involvement in the development of this plan.

Response: The Forest Service has coordinated extensively with the Del Norte County over the 12 years of the RAP and NEPA process. These opportunities included meetings, field trips, and months of review time. Numerous *two-by-two* meetings with Board members regarding travel management have been conducted since this process began. On August 3, 2009, Del Norte County Board of Supervisors and staff met with Forest Service representatives, including Regional Forester Randy Moore, Forest Supervisor

Tyrone Kelley, Deputy Forest Supervisor Nancy Gibson, District Ranger Mary Kay Vandiver, and Forest staff to discuss the Smith River NRA travel management process. The Forest Service proposed the use of a collaborative process to proceed with the Travel Management EA. The process was designed to include appellants to the two previous Decisions, as well as interested stakeholders. The Board agreed to participate, provided the forest use the first Decision (dated April 4, 2007) as the starting point for the process. The *draft proposed action* presented to the collaborative group included the all the actions and tables from the first Decision. During the collaborative process, Mr. Kelley and Ms. Vandiver met with the Board, and were commended on the process. Since that time, current Forest Supervisor Merv George Jr. and current District Ranger David Palmer have met with the Board on numerous occasions, including a field trip to discuss specific road issues.

The SRNF has coordinated with Del Norte County as required, and has met its obligations under the law. See Chapter 1 under the Public Involvement section, subheading County Coordination for the response to these comments.

Consistency with Del Norte County General Plan and Smith River NRA Act

Letter Number	Comment Number	Comment Text
826	6	The purpose, as stated in the Smith River NRA Management Plan, for the establishment of the Smith River NRA includes ensuring that recreational opportunities are preserved (specifically, the need to provide a broad range of recreation uses including roads, trails, and OHV routes). The concept of road "restoration", decommissioning, and downgrading to ML 1, as expressed in the proposed plan, should present cause for concern to the forest managers in that such actions are in conflict with the NRA's Management Plan in regard to ensuring recreational opportunities. According to the plan (pg. 54-56) under the preferred alternative a total of 42 miles will be added to the NFTS however it is important to note that these routes are not actually going to be "added" so much as the Forest would now merely recognize these existing non-system routes. On the other hand, under the preferred alternative, 53 miles of roads will be removed (decommissioned) from the NFTS, another 40 miles would be downgraded to level 1 roads (closed) and 98 miles of roads would be "restored". In meetings with the public it was noted that the terms "restored" and "unauthorized routes" were considered to be offensive language to many long time users of these non-system routes. The term "restored", in particular, was taken as a duplicitous term in that it implies a positive end use when, in fact, the term includes actions such as "placing vehicle barriers, installing waterbars and culvert removal." Furthermore, the BOS questions why despite roads being classified as low risk and moderate risks to water quality so many road miles are scheduled for decommission (35 miles of "low risk" and 7 miles of "moderate risk"), downgrade to level 1 (21 miles of "low risk" and 6 miles of "moderate risks") or "restoration" (71 miles of "low risk" and 13 mile of "moderate risk"). With the NRA Management Plan's goal of ensuring recreational opportunities in mind it is not appropriate that these "low risk" and "moderate risk" roads should be considered for decommissi
826	3	Conflict with the Del Norte County General Plan Diminished Recreational Opportunities Section 5 of the Del Norte County General Plan outlines the County's goals, policies, and programs for the continued development and enhancement of Del Norte County's rich recreational opportunities and cultural assets. Under Policy 5.B.1 the General Plan states: "The County shall encourage Federal, State, and local agencies currently providing recreation facilities to maintain, at a minimum, and improve, if possible, their current levels of service." Under all but one (the No Action Alternative) of the various alternatives presented the Forest would effectively close routes that have been recreationally used for many generations. It is the opinion of this Board that any restoration (closure), decommissioning, or downgrading of roads or trails represents a reduction in recreational opportunities.

Response: The Del Norte County Board's opinion that any restoration of drainage patterns, decommissioning, or downgrading of roads represents a reduction in recreational opportunities that have

been used for many generations, and that only Alternative 1, the No Action alternative avoids this reduction, yet does not take into consideration the Smith River National Recreation Act of 1990 (16 USC 460bbb et seq.), which restricted travel on the NRA to designated National Forest Transportation System (NFTS) routes. The Smith River NRA does currently have a map of all designated NFTS routes; those are shown on the Alternative 1 National Forest Transportation System map with the EIS. Routes that are not already designated as part of the NFTS are not on that map and are not legally available for motorized travel, based on the Smith River NRA Act. In order for the public to legally use these routes in the future, the Forest Service must designate them on the Forest Transportation System. Alternative 1 does not designate these UARs to the Forest Transportation System. Therefore, these unauthorized (non-system) routes would not continue to be available for under Alternative 1 and would not be illustrated on the Motor Vehicle Use Map (MVUM). Any of the action alternatives (Alternatives 4, 5, and 6) designate more of these routes to the Forest Transportation System than Alternative 1 does, so that these routes can be used for motorized recreation in the future within the parameters of the law.

Unauthorized routes and roads that provide access to recreation opportunities, or fulfill administrative access needs will be designated or maintained on the NFTS provided risks can be mitigated to an acceptable level. The 1990 Smith River NRA Act restricted motorized travel to designated NFTS routes. In 2009, the forest published the MVUM for the Smith River NRA, in compliance with Subpart B of the Travel Management Rule. The MVUM displays the current designated NFTS of roads and motorized trails open for motorized travel on the NRA pursuant to the Smith River NRA Act and 36 CFR 212.51. Unauthorized routes, while recognized as having an existing footprint on the landscape, are not part of the designated NFTS and therefore are not currently open to legal motorized use. Routes *added* to the NFTS, in other words, designated as part of the NFTS, would be legally authorized for motorized use.

Through the Scoping process, it was identified that the term *restoration* meant different things to different people. In response, the term was changed to *restoration of drainage patterns on unauthorized routes* in the DEIS. Restoration of drainage patterns on unauthorized routes is one of the main proposed actions described in Chapter 2 (Description of Alternatives section) and includes waterbars, rolling dips, removal of culverts and associated fill, and barricades.

Risk to water quality was just one of several criteria considered in the alternatives. The preferred alternative reduces the miles of roads the forest is responsible for maintaining while increasing the number of miles of motorized on the NFTS. Under Alternative 6, there is a net increase in legally authorized motorized trails, compared to the current condition analyzed as Alternative 1 (No action). The forest reviewed the County General Plan and presented the elements of the Plan identified as having relevance to the Project to the County BOS through the two-by-two coordination process on October 25, 2011. The forest found that the purpose and need of the Project and the County General Plan were consistent in that they both identified recreation opportunities as a need but also recognized the need to reduce risk to ecological resources. At no time, have any goals or policies from the County General Plan been presented to the forest that show the Project and the General Plan to be inconsistent.

Planning Process (including NEPA)

Letter Number	Comment Number	Comment Text
1	1	I am dismayed by the direction that the Smith River National Recreation Area Travel Management process is taking. (615-1, 635-1, 759-1, 791-1)
605	1	I am dismayed by the direction that the Smith River National Recreation Area Travel Management process is taking. Living in this beautiful redwood and world-treasure biologically diverse area, I have seen FAR too much illegal and legal destruction by ORV use. I feel, along with many who do not actively communicate with governmental agencies, that ORVs MUST BE BANNED COMPLETELY FROM USE ON PUBLIC LANDS. Being educated in biology and spending much time, observing and exploring the organisms and ecosystems that make up this area, and other areas in the Western USA, I recognize the need for preservation.
819	41	The preference of some in the collaborative group to encourage and codify off-road motorized use of IRAs does not relieve the agency of its NEPA or NFMA responsibilities.

Response: The purpose and need of the project is consistent with the Smith River NRA Act (5.a.2) which states "Provide and maintain adequate public access, including vehicular roads for general recreational activities such as camping, hiking, hunting, and fishing". The 1990 Smith River NRA Act restricted motorized travel to designated routes.

The SRNF is pursuing the revision of the designation of the NFTS through the development of an Environmental Impact Statement pursuant to the National Environmental Policy Act (42 U.S.C. §§4321-4370f). The Responsible official will consider the public's comments and the impacts to resources displayed in Chapter 3 in selecting the alternative that best meets the purpose and need of the project. Consistency with NFMA and the Forest Plan is required for all project alternatives. The FEIS will display the effects to Inventoried Roadless Area character and values, and will be considered by the Responsible Official in the decision making process.

Letter Number	Comment Number	Comment Text
819	25	We remain extremely concerned that this NEPA process may be a precursor to an inevitable and forgone decision. As you know, for a wide variety of reasons, many of our organizations elected not to engage in the "collaborative group" stakeholder process for this project. Collectively our organizations represent thousands of Americans who value wildlife, water quality, botanical hotspots and wildlands.

Response: The collaborative group, convened by US Institute for Collaborative Policy, was narrowly focused on reaching agreement on nine UARs in IRAs that were the subject of two appeal processes in the 2007 Road Management and Decommissioning NEPA process. Some interest groups that were invited to participate in the collaborative group choose not to participate. The project record will show that the procedural aspects of the current analysis comply with the legal requirements of NEPA. The alternatives currently under consideration were developed in response to comments received during an open public scoping process, and address significant issues identified by all responding segments of the public. The preferred alternative, Alternative 6, is not identical to the previous proposed action, which was the result of the collaborative process. The Responsible Official will consider these and other issues brought forth by the public to select the alternative that best responds to those issues while meeting the project's purpose and need.

Violation of Administrative Procedures Act

Letter Number	Comment Number	Comment Text
819	106	The Proposed Action violates the Administrative Procedure Act: The purpose of the project is to establish "a system of roads and designated routes that: is safe and responsive to public needs and desires; is more affordable and efficient to manage; has minimal negative ecological effects on the land; is in compliance with the Smith River NRA Act." The proposal to adopt a road and motorized trail system where there is zero likelihood it can be maintained to standard does not meet the purpose and need for the following reasons: a. The system has zero likelihood of being maintained to standard and this will result in significant risks to the safety of the public/system users. b. Failure to maintain the system to standard will not minimize ecological effects on the land.

Response: As stated above, all action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, which will reduce resource risks and maintenance costs.

The Record of Decision (ROD) is informed by the public comment and the analysis contained within the final Environmental Impact Statement. The ROD articulates Responsible Official's rationale for the decision, including how the selected alternative responds to the purpose and need, addresses significant issues, and complies with the Travel Management Rule as well as other law, policy and regulation relevant to this project. Specific concerns stated above are also addressed in the *Transportation* section of Chapter 3 related to funding and safety concerns.

Compliance with the Travel Management Rule

Letter Number	Comment Number	Comment Text
830	12	A favored line of present attack will be through the "minimization criteria." The minimization criteria have been around since 1972 and long received only passing interest, but have acquired teeth largely through recent litigation involving similar regulatory language addressing management of the National Forest System. See, 36 CFR § 212.55(b) (requiring agency to "consider effectswith the objective of minimizing" a variety of factors including damage to soil, watershed, vegetation and other forest resources; harassment of wildlife and significant disruption of wildlife habitats; conflicts between motor vehicle and other uses; and conflicts among different classes of motor vehicle uses). In particular, this renewed interest springs in large part from the decision by a U.S. Magistrate declaring invalid the Salmon Challis NF travel decision. This decision was issued in 2011, and is published as Idaho Conservation League v. Guzman, 766 F.Supp.2d 1056 (D.Idaho 2011). In short, that decision rejected the Forest Service effort to characterize the minimization criteria as providing broad guidance ("consider with objective of minimizing") and interpreted the language as requiring the agency to show, in its NEPA analysis, how it applied the minimization factors in selecting from decision options for specific routes. There have been several more decisions that have followed similar reasoning, which have only come from federal district courts. The 9th Circuit has on three (3) occasions heard cases involving the OHV "minimization criteria" and has declined to follow the Guzman court's reasoning in two of those cases, with the third still under advisement following argument on November 7, 2013. The agency has broad discretion applying the minimization criteria and is certainly not obligated to restrict motorized access, particularly in response to the subjective complaints or other "evidence" provided by self-interested non-motorized use advocates. Several decisions reflect this important truth, most notably the two (2)

Letter Number	Comment Number	Comment Text
830	13	Another area of frequent preservationist attack, as a subcategory of the minimization arguments or an independent line of attack, is the assertion of "user conflict" which allegedly requires designation of exclusive non-motorized recreation areas. Again, these claims have been recently and forcefully rejected by the courts, as was recently punctuated by the decision in Wild Wilderness v. Allen,F.Supp.2d, 2014 WL 1477398 (D.Or. 2014), in which the court found that "tradeoffs between motorized and non-motorized users have already occurred and will continue in the future. The record demonstrates that the Forest Service is continuing a long, inclusive process to manage winter recreation use on the Cascade Lakes Highway." The court's decision may be viewed at: http://www.snowmobilers.org/docs/KAPKA-decision-March-2014.pdf

Response: The 2005 Smith River NRA RAP and subsequent NEPA process identified site-specific resources risks and site-specific mitigations for every road and UAR on the NRA. However, in the decision making process, the Responsible Official will consider the 'minimization criteria' (36 CFR §212.55) while weighing the alternatives as it is part of the project's purpose and need. The Record of Decision identifies the considerations and rationale that support the decision.

Scope of Analysis

Letter Number	Comment Number	Comment Text
819	91	In addition, routes under consideration cross administrative boundaries into the Rogue River-Siskiyou National Forest (RR-SNF). NEPA analysis of the project's impacts should not stop at the Six Rivers National Forest (SRNF) boundary. Proliferating use on the SRNF will increase use and impacts on the adjacent RR-SNF. Of special mention are roads 16N19 (plus spurs) and 405.103 which present a serious 21 habitat fragmentation problem. These roads have very high maintenance requirements. This system duplicates a cut across route along 17N07.

Response: While the roads managed by the Rogue River-Siskiyou NF are beyond the scope of the proposed actions, the analysis area extent by resource is explained in Chapter 3. Pertaining to the specific concerns identified by the commenter, all action alternatives will reduce the miles of roads and unauthorized routes across the NRA. 16N19 is the only access to a large area of the NRA (17N07 does not provide duplicate access) that also accesses private land. This road has a high administrative need for fire access and was critical in protecting the community of Rock Creek during the 2015 wildfires. The majority of spurs off 16N19 are proposed to be removed. Route 405.103 is a narrow track, the majority of which occurs in naturally open serpentine habitat. Neither the road nor the UAR poses a serious fragmentation issue.

Letter Number	Comment Number	Comment Text
819	93	Please document and analyze the multitude of necessary culverts and road repairs needed to bring user-created routes up to NFTS standards. The agency has acknowledged that if these mitigations do not occur, the risks to resources are significant and unacceptable.

Response: The preferred alternative identified mitigations for UARs that must be implemented prior to its designation on the NFTS and addition to the MVUM. Site-specific mitigations are documented in the 2005 Rap and in the road tables in the DEIS and FEIS.

Traditional Cultural Properties

Letter Number	Comment Number	Comment Text
826	13	It is not clear to the BOS if any of the identified mines and roads in Table 4 exist within Traditional Cultural Properties (TCP) (which have been excluded from analysis by the Forest in the DEIS) however if that is the case the BOS requests that these sites be discussed in coordination for consideration on a case by case basis.

Response: None of the roads/UARS within the TCP were included in the DEIS. These areas will be analyzed in a future NEPA process, which will include coordination with the County.

Alternatives

Preferred Alternative, Alternative 6

Letter Number	Comment Number	Comment Text
846	6	Project and the action alternatives. The DEIS does not identify a "preferred alternative." Based upon our review, we recommend the selection of Alternative 5 as the preferred alternative due to the increased benefits and protections this alternative offers for water quality, cultural resources, sensitive species and their habitats, and its lower relative cost.

Response: The Preferred Alternative was identified in the DEIS as Alternative 6 in the abstract and summary, and in the introduction to Chapter 2. The Recreation Opportunity, Alternative 4, the Environmental Preferred Alternative 5, and the Agency preferred Alternative, Alternative 6 are as well identified in the FEIS, abstract, summary, and in Chapter 2.

Alternative 6

Letter Number	Comment Number	Comment Text
830	8	We urge the Forest Service to understand the full extent of its discretionary authority, and exercise that authority in adopting a Modified Alternative 6 in the same spirit as the Pryors Mountains or Kapka Butte projects.
830	11	IMPORTANCE OF USING DISCRETIONARY AUTHORITY TO CREATE A FUNCTIONAL ROUTE NETWORK It is both legally necessary and pragmatically essential that the agency use its discretionary authority to formally establish a functional yet sustainable network of designated routes. Various preservationist and anti-access special interests will incant a litany of alleged legal violations that prevent adoption of Alternative 6 or any meaningful network of vehicle routes in the NRA. They are certainly entitled to voice their opinions, but the agency should carefully evaluate any such claims and realize they are thinly veiled efforts to advance an agenda that includes significantly reducing, if not eliminating, recreational use of vehicle in the National Forest System. The agency is empowered to reject these anti-access positions through correct interpretation of the law, as reflected in various recent court decisions.

Response: The Forest Service must carefully consider all comments provided, and must balance management of both non-motorized and motorized recreation opportunities, as well as natural and cultural resources. The Agency's preferred alternative, Alternative 6, is aimed at providing adequate public and administrative access while reducing risk to resources and meeting criteria contained in Subpart B of the Travel Management Rule, as described in the Purpose and Need section of the EIS, in Chapter 1. The preferred alternative meets the Purpose and Need by decommissioning roads not needed for public or administrative access, and designating additional pubic access routes, while also investing in ecological protection mitigations to protect resource values where necessary.

Alternatives Analyzed in Detail

No Action Alternative

Letter Number	Comment Number	Comment Text
828	14	The no action alternative assumes that the Forest Service can continue to allow motorized use of unauthorized routes in high resource areas and roadless areas, without repercussions. This baseline for comparison is the equivalent of allowing murders to continue without law enforcement, and then claiming that making murder legal will somehow fix the problem. Elk Camp Ridge motorized trail alone is about 6 miles of motor intrusion into a roadless area.
831	17	We are asking that no roads, motorized routes, Level I or Level II road be closed whether created by blade or mechanized wheel.
243	4	I strongly request that there is no forward movement for motorized vehicles in our forests. We have truly only a fraction of what once was that is undisturbed by noise pollution and environmental pollution.
243	7	We need to allow for a place for humans to be in solitude, in nature. Please, do not add any new roads/trails for motorized vehicles.
144	1	PLEASE DON'T ADD ANY ROADS OR DISTURB ANYTHING IN SMITH RIVER NRA, NO DISRUPTION PLEASE, LEAVE IT WILD, DON'T BUILD ANYTHING AT ALL, ONLY RUINS OUR WILD PLACES FOREVER, HANDS OFF SRNRA IMMEDIATELY, LEAVE IT ALONE, NOW!

Response: The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent.

Elk Camp Ridge Trail is an existing motorized trail on the NFTS. If the agency takes no action then Elk Camp Ridge Trail would continue to exist as designated motorized trail, no changes would occur to the NFTS including decommissioning, or closing roads, or designating new roads or motorized trails. The analysis for the no action alternative provides a comparative basis for which to assess the environmental consequences of the alternatives.

All Action Alternatives

The following comments provide recommendations that were addressed in all action alternatives:

Provide and maintain adequate public access, including vehicular roads for recreational activities

Letter Number	Comment Number	Comment Text
828	2	Provide for a broad range of recreational uses. Provide and maintain adequate public access, including vehicular roads for general recreational activities such as camping, hiking, hunting, fishing.

Response: The purpose and need of the project includes providing for a diversity of motorized recreation opportunities and access to dispersed recreation sites. The action alternatives provide a range of levels of recreation opportunities and access to dispersed recreation sites. The comparison of alternatives table in Chapter 2 outlines the range of motorized recreation and access to dispersed recreation sites analyzed in each alternative.

Repairing or closing and revegetating the backlog of old, unmaintained roads and trails

Letter Number	Comment Number	Comment Text
805	12	The plan must also set about the critical task of either repairing or closing and revegetating the backlog of old, unmaintained roads and trails. This is the first task to achieve before the Forest Service even considers opening new routes or watersheds and magnifies its enforcement challenges beyond its already deficient management capacity

Response: The 2005 Smith River NRA RAP and subsequent NEPA documents identified site-specific resources risks and site-specific mitigations for every road and UAR on the NRA. All action alternatives include actions to decommissioning and barricading existing NFTS roads. The roads and routes being considered in this analysis are open and drivable. No road construction or reconstruction will occur; therefore, no new routes will be opened. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent. See the comparison of alternatives table at the end of Chapter 2 for the miles of decommissioning and barricading restored UARs by alternatives.

Physically close non-system routes that are not added to the system

Letter Number	Comment Number	Comment Text
819	135	Our organizations would like to support a travel management decision that: 1. Recognizes and protects the outstanding natural values that most Americans find in non-motorized Inventoried Roadless Areas; 2. Refrains from adding routes and motorized trails to the road system that occur within occupied sensitive plant habitat; 3. Fully analyzes and discloses the potential for increased motorized off-route and off-road damage to serpentine sites due to the addition of non-system roads to the system; 5. Discloses the actual efficacy of agency road gating, blocking and closure mechanisms; 6. Avoids designation of "high risk" user-created routes and emphasizes decommissioning of "high risk" NFTS roads; 39 7. Contains meaningful and substantive protections for Port Orford Cedar populations across the planning area; 8. Physically closes non-system routes that are not added to the system.
581	1	I urge policy direction for the Smith River National Recreation Area that limits off-road usage. We value the wildlands, watersheds and wildflowers of this special place, and want to protect it from damage by extreme off-road vehicle enthusiasts.
197	1	Do not allow ORV into any more areas and block off areas so that they may be rehabilitated.
806	6	Please close as many roads as possible, and rehabilitate these roads into as natural a state as possible
197	1	I've rafted down the Smith River and explored many of the remote canyons and ridges of the area. Over the last 15 years, I have seen massive damage done to the wild places by off road vehicles. This must be stopped! Do not allow ORV into any more areas and block off areas so that they may be rehabilitated.
197	1	Do not allow ORV into any more areas and block off areas so that they may be rehabilitated.

Response: All action alternatives include physically barricading unauthorized routes not designated on the NFTS. The roads and routes being considered in this analysis are open and drivable. No road construction or reconstruction will occur; therefore, no new routes will be opened. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent. All alternatives would restrict vehicles to designated routes.

Remove sediment fill

Letter Number	Comment Number	Comment Text
819	114	Previously the initial EA for this project (page 35) acknowledged that the Middle Fork Smith watershed process has been "moderately altered by disturbance" yet the agency's Decision rejected the increased removal of sediment fill volume contemplated in Alternative 3 (page 32) in order to stick with the Proposed Action alternative (Alternative 2) with modifications. We urge the agency to reconsider this direction during the current planning process.

Response: Road density is the highest in the Middle Fork Smith (1.62 miles per square mile) due to State Highway 199, Del Norte County roads, and primary Forest Service access roads; however, all action alternatives will reduce road/route miles across the NRA by between 21 and 47 percent, including most of the roads and routes identified in the initial EA. Road density will be reduced across the NRA including in the Middle Fork Smith (down to between 1.05 miles to 1.30 miles per square miles).

Access to dispersed recreation

Letter Number	Comment Number	Comment Text
826	7	During previous discussion with the Forest the County and members of the public emphasized the importance of preserving identified dispersed campsites and a list was provided to the Forest for inclusion in the plan. Now, in review of the proposed plan it appears that while a number of identified dispersed camp sites were included as Dispersed Recreation Sites many County-priority sites were omitted. In addition to being valuable recreational sites many of these sites are regularly used by Del Norte County Search & Rescue (see Table 2). The below identified dispersed camp sites should be included in the final plan and access routes into these sites should be classified as no lower than Motorized Trail in order to allow for access to each identified priority dispersed camp site for recreational and public safety purposes. In order to protect environmental resources and to encourage responsible use of these sites the County suggests that where resources may exist within proximity of dispersed campsites (such as watercourses) that barricades could installed (such as boulders) which would serve to impede encroachment into such resource areas.

Response: Several routes to sites identified by the County are proposed for designation in Alternatives 4 and 6. There were a limited number of situations where the County-provided campsite did not have a route that could be considered in detail for inclusion in an Alternative. Other issues that precluded proposing a route for detailed consideration were that some routes were popular illegal dumping grounds, or far exceeded the general guideline of *short routes* (generally 300 feet or shorter). Likewise, if the resource and/or safety concerns on a route could not be reasonably mitigated, then it was not considered in detail in an alternative, but there were very few sites where this kept a route from being considered one notable example was if the Forest Service would need to build a new bridge to provide access, which would be beyond the scope of the project since it would require new construction.

Mixed-use and county roads ordinance

Letter Number	Comment Number	Comment Text
830	15	OHV USE ON ML 3 ROADS or ML 2 ROADS Historically, the Forest (1994 Smith River NRA Forest Map) designated routes such as 17N49, 17N07, and 18N09 for non-street legal OHV use. It appears the Forest had classified said routes at ML 2 roads (which allow for non-street legal OHV use) or those routes were classified as ML 3 roads — which generally does not allow for non-street legal OHV use unless designated as mixed-use roads — but were managed as ML 2 roads — which does allow for non-street legal OHV use. Alternative 6 appears to have classified those routes (and others) as ML 3 roads, which might be interpreted by some as prohibiting use upon them by non-street legal OHVs such as ATVs, Side-by-Sides, and dirt bikes. It is unclear if that is the intent of the DEIS.

Letter Number	Comment Number	Comment Text
826	5	It is the County's understanding that Off-highway vehicle (OHV) use is not allowed on ML 3, ML 4, or ML 5 designated system roads however OHV's could be allowed on such roads if also designated as Mixed Use. Therefore, as a means to facilitate and promote responsible recreational use the County has proposed a number of ML 3 roads for mixed use in conjunction with promoting additional motorized trails (MTs). The roads identified in the table below include roads that represent ideal OHV routes as they loop around longer segments and tie into designated Motorized Trails. The County believes that designating these roads as Mixed Use will provide an incentive to responsible recreating in the NRA and will discourage irresponsible recreating in unauthorized areas. It is anticipated that in the coming months the County will consider a similar program on its unpaved County road system which could lead to enhanced recreational opportunities as well as access to funding under the California State Parks Off-Highway Motor Vehicle Recreation (OHMVR) Grant Program. In seeking OHMVR grants, it would certainly be seen as positive aspect if the NRA had OHV accessible system roads that could be accessed from County OHV accessible roads.

Response: OHVs are not allowed on ML 3-5 roads unless designated for mixed use. ML 2 roads are constructed for use by high-clearance vehicles, and OHV use is allowed. The project was expanded to include downgrading a limited number of ML 3 roads to ML 2. To provide for expanded motorized recreation in the County Road 17N07 is included in the Alternative 4 and 6 for downgrading to ML 2, which was determined to be consistent with ML 2 management given the road surface type (aggregate). Downgrading 17N07 to ML 2 will open an extensive network of roads to OHV travel, which supports the purpose and need of the project to provide a diversity of motorized recreation opportunities. The northern portion of 17N49 is also proposed for downgrading to ML2 in all action alternatives.

At the time the DEIS was released, state, county, and Smith River NRA ML 3, 4 and 5 roads were being considered in this analysis; however, since this time Del Norte County Board of Supervisors passed the Del Norte County Rural Recreational Roads Ordinance on October 28, 2014, which provided for *Off-Highway Vehicles*, further defined in the ordinance as motorized wheeled vehicles that are not licensed for on-highway use as well as highway licensed vehicles while operating off-highway. The Board then requested during the comment period that the forest supervisor to consider providing mixed-use travel on specific ML 3 roads. The scope of the project was expanded in response to the consideration of coordination with Del Norte County road management to consider a limited number of ML 3 roads for downgrading to ML 2 to accommodate mixed-use, when road surface type, use levels and road geometry were compatible.

Alternative 4

Existing Level I and user-created routes be used for Class II trails

Letter Number	Comment Number	Comment Text
831	25	Most Americans want and ask for a way through the forest slowly as it naturally meanders through the forest terrain in their chosen mode of motorized transportation. The obstacles of the forest and mother earth left in place and very little maintenance done to the wheeled route. This is entirely left out of the alternative provided in this document. Just fast roads, fast/hot routes but the majority of the forest users are there to enjoy the forest at a leisurely pace in a motorize vehicle.
831	12	Class II users have very few trails and insignificant trail mileage within the Smith River National Recreation Area Motorized Travel Plan. As a motorized travel plan this needs a very hard look at as to why there are not hundreds of miles of motorized trails that are below Level II roads. Roads are not trails. We ask you to take a very hard look throughout your forest and see if many of the existing Level I and user created routes could not be used for Class II trails.

Response: The project will provide hundreds of miles of roads and motorized trails that will provide for a variety of user preferences. UARs will be added to the system as motorized trails, including trail systems on Gasquet Mountain and Rattlesnake Mountain.

Create hundreds of miles of different types of motorized trails, motorized ways

Letter Number	Comment Number	Comment Text
831	9	The CFRs state that millions of forest users come in a motorized vehicle and continue to do so throughout their forest visit. Instead of single mile of existing motorized routes being closed the management of this forest should be creating hundreds of miles of different types of motorized trails, motorized ways, opening hundreds of miles of Level I and Level II roads to high-clearance travel vehicles (already existing is thousands of miles of roads that are maintained to some degree). It is the primitive motorized roadway, trail, way, route that the motorized community is looking for.

Response: Alternative 4 most fully explores the options provided within the scope of the project by proposing converting 7.6 miles of ML 1 road to motorized trail, and designating 58.2 miles of UARs as motorized trails. The consideration of complexity of the motorized trails proposed within the project is limited to inventorized UARs and the existing NFTS. Creating new, slow tracks for a high-complexity OHV experience is outside the scope of this project because construction of new routes is outside the scope of the project.

Trails range in difficulty levels: easy, difficult, very difficult, extreme

Letter Number	Comment Number	Comment Text
831	12	There has to be a range for all OHVs and Class II is not being considered for the full range of Class II users currently using your forest. Roads are good for many Americans using national forest lands but these are not trails. Trails range from Easy, Difficult, Very Difficult and Extreme. There are no play areas for mudding, rock crawling or hill climbing that would allow the Class II user to play without damage to a bona-fide trails system (even a road system) included in any of your alternatives. It is not right to write a motorized travel plan without including all of the people currently using this forest. The writers of this document need to take a hard look at why all of the users particularly Class II are not being included. This forest is made up of a variety of plants; Class II users are also a variety of users and all aspect of their current use must be include within these pages.

Response: Preliminary analysis indicates that there are a variety of difficulty levels proposed in Alternatives 4 and 6; however, Alternative 4 offers the greatest variety. The results of the analysis are located in the project record and are available upon request. The final trail class designation will be identified during implementation.

Alternative 5

Letter Number	Comment Number	Comment Text
819	135	Our organizations would like to support a travel management decision that: 1. Recognizes and protects the outstanding natural values that most Americans find in non-motorized Inventoried Roadless Areas; 2. Refrains from adding routes and motorized trails to the road system that occur within occupied sensitive plant habitat; 3. Fully analyzes and discloses the potential for increased motorized off-route and off road damage to serpentine sites due to the addition of non-system roads to the system; 5. Discloses the actual efficacy of agency road gating, blocking and closure mechanisms; 6. Avoids designation of "high risk" user-created routes and emphasizes decommissioning of "high risk" NFTS roads; 39 7. Contains meaningful and substantive protections for Port Orford Cedar populations across the planning area; 8. Physically closes non-system routes that are not added to the system.

Response: As stated in the 2005 RAP, the intent of the analysis was to provide decision-makers with critical information to develop a road system that is *safe and responsive to public needs and desires* as well as *have minimal negative ecological effects on the land*. To that end, the forest has provided multiple opportunities for the public to provide information on what roads/routes are needed for access, with the majority of public comments provided after the RAP was completed. The RAP is a planning tool, not a decision document, and both resource risk and public need ratings were modified based on information provided by the public during the NEPA process in the 11 years since the RAP was completed. The RAP and subsequent public comments were indeed used to develop the preferred alternative. Only roads/routes with an identified public or administrative need were proposed for addition, provided any identified resource risks could be mitigated. No low-use routes proposed for addition to the system.

All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including in sensitive plant habitat and POC areas. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits including: 1) less than 0.1 percent of the serpentine sensitive plant habitats on the NRA are being affected; 2) all routes into the North Fork Botanical Area are being closed, protecting over 20,000 acres of potential habitat; 3) routes to be kept will be upgraded to correct drainage problems, and 4) POC protection measures are common to all action alternatives.

The majority of UARs on the NRA are not user created routes. They are old mining roads to legitimate claims, old logging roads from previously private land that was later acquired by the FS, etc. Although construction standards have changed and improved, many of these old roads were engineered. Many of these roads access popular recreation sites. Mitigations have been proposed to minimize resource impacts while providing access. The Forest Service would close between 2 to 4 times the miles of UARs that would be added. Adding the UARs that are needed for access would be consistent with Forest Service Rules and Regulations.

All alternatives would restrict vehicles to designated routes. Off-road use is illegal. Any areas where such use is occurring will have further mitigations imposed. The Forest Service cannot analyze illegal use of OHVs.

Monitoring by the Six Rivers and Rogue River-Siskiyou national forests has determined that barricades are 96 percent effective and gates are 90 percent effective.

Analyzed Under More than One Alternative

Search and Rescue Routes

Route-by-Route response and review

Letter Number	Comment Number	Comment Text
826	9	In addition to providing for recreational opportunities many NFTS routes and County roads in the NRA provide for emergency response. As stated above a number of dispersed camp sites have been identified as being of importance to Search & Rescue efforts however these sites have been omitted from the Forest's preferred alternative. The below table includes an additional list of roads provided by the Del Norte Search & Rescue Coordinator and members of the public and should be included in the plan in order for the plan to not negatively impact the ability of Search & Rescue personnel in their efforts in the NRA.

Response: All emergency access, including fire suppression, search and rescue, and law enforcement actions, are legally authorized to go wherever needed, whether it is designated on the transportation system or not. Emergency operations in response to threats to health and safety are authorized across the forest and not subject to the restrictions on travel described in the MVUM (36 CFR 212 Subpart B, 212.51a(5)).

Exclude motorized use on 16N23

Letter Number	Comment Number	Comment Text
819	92	Please note that 16N23 has a high risk of PL and moderate for both wildlife and fisheries. This loop should exclude vehicle access for resource protection.

Response: Under Alternative 5, this road is proposed to be decommissioned and barricaded. The preferred alternative, Alternative 6, proposes a seasonal gate closure to mitigate resource risks. The effects of the different types of management for this road will be fully analyzed and displayed in the FEIS.

Eliminated from Detailed Analysis

Search and Rescue Routes

Letter Number	Comment Number	Comment Text
826	9	In addition to providing for recreational opportunities many NFTS routes and County roads in the NRA provide for emergency response. As stated above a number of dispersed camp sites have been identified as being of importance to Search & Rescue efforts however these sites have been omitted from the Forest's preferred alternative. The below table includes an additional list of roads provided by the Del Norte Search & Rescue Coordinator and members of the public and should be included in the plan in order for the plan to not negatively impact the ability of Search & Rescue personnel in their efforts in the NRA.

Response: Emergency operations in response to threats to health and safety are authorized across the forest and not subject to the restrictions on travel described in the MVUM (36 CFR 212 Subpart B, 212.51a(5)).

Route-by-Route response and review

Table 3 as Referenced in Del Norte County Comments		
Road or Trail	Route Specific Considerations identified by Interdisciplinary Team	
305.113	This route leads to Cleopatra Mine. Mine hazards have not been remediated to allow for safe access, it is therefore not proposed for designation in any action alternatives.	
305.121	This route extends off of and leads to private property. The FS does not have ROW across the private parcel. Forest Plan Standard and Guideline #15-5 "Right of way needed for public access and National Forest resource needs must be acquired in advance of scheduled programs." Designating this route as a Motorized Trail would encourage trespass, which is not consistent with the Forest Plan. Emergency operations in response to threats to health & safety are authorized across the forest and not subject to the restrictions on travel described in the MVUM.	
305.121.B	Do not have ROW across private property to this route, Not consistent with LRMP S&G 15-5 "Right of way needed for public access and National Forest resource needs must be acquired in advance of scheduled programs."	
305.124	This route extends off of private property. The FS does not have ROW across the private parcel. Forest Plan Standard and Guideline #15-5 "Right of way needed for public access and National Forest resource needs must be acquired in advance of scheduled programs." Designating this route as a Motorized Trail would encourage trespass, which is not consistent with the Forest Plan. Emergency operations in response to threats to health & safety are authorized across the forest and not subject to the restrictions on travel described in the MVUM.	

Table 3 as Referenced in Del Norte County Comments		
305.126	Surveys for <i>Arabis MacDonaldiana</i> were conducted and it was found that there were no occurrences of this plant associated with this route. Given the reduction in risk ratings for this route, it was reconsidered and decided to propose as a motorized trail with route delineation as a mitigation in Alternatives 4 & 6.	
315.104	This route is not in the project, and is therefore beyond the scope of the project.	

Accessed to Dispersed Sites

Letter Number	Comment Number	Comment Text
826	7	During previous discussion with the Forest the County and members of the public emphasized the importance of preserving identified dispersed campsites and a list was provided to the Forest for inclusion in the plan. Now, in review of the proposed plan it appears that while a number of identified dispersed camp sites were included as Dispersed Recreation Sites many County-priority sites were omitted. In addition to being valuable recreational sites many of these sites are regularly used by Del Norte County Search & Rescue (see Table 2). The below identified dispersed camp sites should be included in the final plan and access routes into these sites should be classified as no lower than Motorized Trail in order to allow for access to each identified priority dispersed camp site for recreational and public safety purposes. In order to protect environmental resources and to encourage responsible use of these sites the County suggests that where resources may exist within proximity of dispersed campsites (such as watercourses) that barricades could installed (such as boulders) which would serve to impede encroachment into such resource areas.

Response: Several routes to sites identified by the County are proposed for designation in Alternatives 4 and 6. There were a limited number of situations where the County-provided campsite did not have a route that could be considered in detail for inclusion in an Alternative. Other issues that precluded proposing a route for detailed consideration were that some routes were popular illegal dumping grounds, or far exceeded the general guideline of *short routes* (generally 300 feet or shorter). Likewise, if the resource and/or safety concerns on a route could not be reasonably mitigated, then it was not considered in detail in an alternative, but there were very few sites where this kept a route from being considered one notable example was if the Forest Service would need to build a new bridge to provide access, which would be beyond the scope of the project since it would require new construction.

Route by Route response and review

Table 2 as Referenced in Del Norte County Comments (826)		
Dispersed Site Name	Access Route	Response to Individual UARs Dispersed Site
18-Mile Camp	314.1	Field check in May 2013 revealed that no site was present at the end of the route as mapped for the PA (which was the whole inventoried route). There is a site at the County-provided point (W97), but this is far (~2100 ft) from the end of 314.1. With this route well beyond 300' of an inventoried route; it was therefore identified in the Scoping Report (Appendix C, Short Routes) of the project record as being beyond scope of this project. Maintaining the action on this route as described in Alternative 6 of the DEIS is consistent with the recommendation of the collaborative group, which was to designate 1.21 miles as motorized trail and barricade the end of the route to mitigate risk to POC.
Cavell Camp	17N07.102	Designating this route would not meet standard and guides for Aquatic Conservation Strategy objectives given slope instability and proximity to the creek and therefore would not be compliant with the Forest Plan. Concerns identified by member of public about having motor vehicle access to an important family gathering site were weighed heavily in the decision, however concerns over meeting ACS objectives given the proximity of the road in relation to Coon Creek drove the decision to not designate this route on the NFTS.
Cleopatra Camp	305.115	Not consistent with Botanical Area Mgt; No sensitive plants on route, however, <i>Arabis MacDonaldiana</i> , Federally Listed Endangered plant, occurs within 30' of route. In the preferred alternative, this route will be barricaded to protect resources.

Table 2 as Referenced in Del Norte County Comments (826)		
Copper Creek View Camp	305.123	This route is only accessible by crossing private property, on which the FS does not possess a ROW or easement. By designating this route, the Forest would be encouraging illegal trespass which is not consistent with Forest Plan standard and guidelines or regulation and policy (S&G15-5). Therefore, designation of this route on the NFTS is beyond the scope of the project.
Hardscrabble Camp	305.124	This is an anadromous fish-bearing stream, the road enters the creek several times with low water crossings, and is in very bad shape – it would be cost-prohibitive to bring to standard. Multiple stream crossings. Anadromous stream habitat Concerns. (Scoping Report Appendix C, Long Routes; Also the RAP). This route is accessed by crossing private lands for which the FS has no easement or ROW.
Hole-in-the- Ground Camp	305.118	This route was considered in the Scoping Report (Appendix B), and was also addressed in the RAP. The road is added to the NFTS as Motorized Trail in Alternatives 4 and 6, with the exception of the last 0.4 miles. The last 0.4 miles are closed to protect uninfected POC adjacent to the LE Horton RNA, before the road enters the steepest area (average grade greater than or equal to 23%). This route was considered through the collaborative process and had a recommendation that is consistent with the proposal in the DEIS alternative 6. It is the intent to maintain the recommendations on nine key routes the collaborative group supported where possible and appropriate.
Island Lake Trailhead Camp	16N02	Road 16N02 has no changes proposed on it under any Alternative, and Island Lake Trailhead can be accessed under all Alternatives. According to the RAP for NRA system roads (July 2005), the Island Lake Trailhead was relocated under a 2001 NEPA decision. The current trailhead is adjacent to wilderness, which is outside the project area and is accessible by non-mechanized means only, in accordance with The Wilderness Act.
Jones Flat Camp #1	17N41.1	After a review of the records associated with 17N41.1 and Forest Road 17N41, it was determined that 17N41.1 was erroneously identified as a UAR not Forest Road 17N41. The corporate and project data will be updated to correct this error, and illustrating the full length of 17N41.
Jones Flat Camp #2	17N41.1	After a review of the records associated with 17N41.1 and Forest Road 17N41, it was determined that 17N41.1 was erroneously identified as a UAR not Forest Road 17N41. The corporate and project data will be updated to correct this error, and illustrating the full length of 17N41.

Leave only main roads open, close wild roads in fragile areas - NRA Act calls for recreation

Letter Number	Comment Number	Comment Text
821	1	I would like to see more wild roads laid to rest, especially in fragile areas. Traditional Mainline roads should remain open and available.
204	1	After reading over the proposals, I see none as having everything that should be available but that Alternative # 5 comes closest. I am in favor of closing more if not all to motorized travel but realize that the political will to do what is the most needed and best is lacking. So, unfortunately compromise of the environment to favor human desires is making an ugly presence again. I would hope further modification(s) in the final plan will be made to eliminate more or all roads and make none that are new.

Response: The Smith River National Recreation Area (NRA) Act requires under (PL 101-612) section 5(b)(2) that in administering the Smith River NRA the Forest Service "will provide and maintain adequate public access, including vehicular roads for general recreational activities such as camping, hiking, hunting, and fishing". In addition, much of the administrative access needs on the Forest are serviced by ML 2 roads. Closing all roads except for *mainline roads* would virtually eliminate needed administrative access and access to much of the remote recreation and cultural use destinations on the Smith River NRA, including wilderness trailheads, hunting and fishing access, and contemporary cultural use areas and is therefore inconsistent with the administrative duties outlined in the Smith River NRA Act. It is therefore eliminated from detailed analysis.

Mixed-Use Consideration

Letter Number	Comment Number	Comment Text
830	15	During the stakeholder process, OHV groups urged the Forest to designate the lower portion of 17N49 as a mixed-use road and to create a parking/staging area just off of Highway 199. Users stated they preferred to stage close to the freeway for security reasons and because it was more practical for users to ride up the dirt road to some of the more rugged trail opportunities in and around Gasquet Mountain.
830	16	Alternative 6 ignores that request and proposes to instead designate several parking areas along the northern section of 17N49. Those staging areas are not practical nor do they enhance the OHV opportunity in that area. In addition, it appears that 17N49 remains closed to OHV use along those proposed staging areas. Remedy – Coordinate with county officials and stakeholders to review looped touring opportunities for non-street legal OHVs on the aforementioned roads. The agency has broad discretion to make administrative decisions to allow OHV use on ML 1 roads (manage them as motorized trails) and to designate ML 3 roads as "mixed-use" roads for use by non-street legal OHVs or to reclassify a ML 3 road as a ML 2 road. Site an OHV staging area on 17N49 near the junction of Highway 199. If the county designates a number of their non-paved county roads as "non-highways" under the CVC, the import of such a coordination meeting becomes even more desirable. Coordination meetings can occur in addition to, or outside of, the public comment period.

Response: Del Norte County specifically requested that the forest evaluate the following ML 3 roads 14N01, 16N02, 17N02, 17N04, 17N07, and 18N08 to allow for mixed-use. Maintenance Level 2 roads allow for OHV use, therefore the forest evaluated downgrading these roads to ML 2 for inclusion in an action alternative, by the recreation opportunity provided, safety considerations, compatibility of uses, road surfacing and geometry, and impacts on funding. There is no 17N02 on the NFTS; therefore, it was eliminated from further consideration. Roads 18N08, 14N01, 16N02, and 17N04 were identified as not being good candidates for downgrading to ML 2, given either the existing level of investment on the road, the administrative needs of the road, the use level of the road, the funding opportunities, potential conflicts with private property owners, and their potential significant effects to areas excluded from the geographic scope in response to a significant issue, and are not proposed for downgrading in any action alternatives.

The entire length of 17N49 was also considered for downgrading to ML 2; however, the southern segment of 17N49 will be maintained as an OML 3 given the road geometry and road surface type, which is paved. Alternatives 4 and 6 propose to downgrade 17N49 to ML 2 beginning at DN 305 road and extending south for approximately 4.9 miles to allow for OHV use. Downgrading 17N49 would support the motorized recreation opportunity in that area by providing loops that connect with nearby motorized trails. In addition, the SRNF analyzed parking areas in Alternatives 4, 5 and 6 in response to scoping comments from the Del Norte County Sherriff regarding safety concerns about OHV staging, by people accessing the proposed motorized trail network near 17N49. No comments were received during scoping for this project requesting a parking area on 17N49 near Highway 199.

Designating a parking site at the intersection of Highway 199 and Forest Road 17N49 as a staging area for motorized recreationist to access the proposed trail network that stems off 17N49 would require that the southernmost segment of 17N49 from milepost 0.0 to 3.8 would need to allow for non-highway legal travel. The entire length of 17N49 was also considered for downgrading to ML 2; however, the southern segment of 17N49 will be maintained as an OML 3 given the road geometry and road surface

type, which is paved. This proposal is therefore eliminated from detailed analysis, as it is not consistent with law, policy and regulation.

The forest has worked closely with Del Norte County in many two-by-two meetings over a period of years, discussed the project with county supervisors at several two-by-two meetings, public meetings, and a field trip and a meeting to clarify the County's top priorities submitted during the DEIS comment period, and carefully considered and responded to the proposals in the County's DEIS comments on a route-by-route basis.

Mixed-Use Table 1. Del Norte County request on existing UAR,ML 1 roads and non motorized trails.

	Mixed Use Table 1 as Referenced in Del Norte County Comments		
Road or Trail	Response to Individual Road or Trail		
4E05	The portion of 4E02 that was previously Road 16N10 was downgraded and barricaded under the 2001 NEPA decision for the Doe Flat and Island Lake Trailhead Relocation Projects. Existing motorized and non-motorized trails are not within the scope of project to consider changing designations. See Chapter 1, Project Scope for more information.		
199.108	This route was erroneously not considered in Alternatives 3 to 6 in the DEIS. This route has a number of problems associated with it. Illegal dumping often occurs here and has been the site of a more than one fire start. Not allowing motorized access down this short route will deter many of these issues occurring here in the future. The LRMP designates the Recreation Opportunity Spectrum (ROS) for this area as Semi-Primitive Non-Motorized, and this designation overlaps the Wild River designation established by Congress along this portion of Myrtle Creek. To designate this route as ML 2 as the commenter proposes would require a Forest Plan amendment. Given the ROS designation of SPNM and the existing issues associated with this site, the Responsible Official recommends not designating the route on the NFTS.		
305.101	The route identified is an unauthorized route that leads directly to private land. As part of the scoping process, the Forest attempted to contact private property owners whose property access could be potentially affected by a project Alternative. If property owners notify us that they need to maintain regular property access using a route that is closed to the public, then the Forest will work with them to establish a reasonable access route to their property. This access is provided via a Special Use Permit and to obtain one, the permit holder assumes certain permit costs and responsibilities. The Forest Service does not typically maintain Forest System roads or trails to access private property when the routes do not serve some broader public or administrative need.		
305.101B	This route extends off private property. The Forest Service does not have ROW across the private parcel. Forest Plan Standard and Guideline #15-5 "Right of way needed for public access and national forest resource needs must be acquired in advance of scheduled programs." Designating this route as a motorized trail would encourage trespass, which is not consistent with the Forest Plan. Emergency operations in response to threats to health and safety are authorized across the forest and not subject to the restrictions on travel described in the MVUM.		
17N01.1C	Field evaluation of the route determined that mitigating erosion issues would be difficult due to steepness of route. Routes where resource risks cannot be readily reduced to an acceptable level are not proposed for addition to the NFTS. The adjacent UAR 17N01.1B is being added to the system at the top of the hill.		
17N01.1D	This is a steep route with one campsite at the bottom by the river, in the flood zone. The route was not proposed for designation to the NFTS because since the campsite is in the active channel, the potential for flooding poses a safety issue. Designating this route would not meet the Forest Plan standard and guides for Aquatic Conservation Strategy objectives.		
17N07.102	Designating this route would not meet the Forest Plan standard and guides for Aquatic Conservation Strategy objectives given slope instability and proximity to the creek and therefore will not be analyzed in detail. Concerns over meeting ACS objectives given the proximity of the road in relation to Coon Creek drove the decision to not propose designation to the NFTS in any action alternatives for this route.		
18N03	This route was identified in the RAP as a high-risk, low-need road posing a high risk to fish and water quality, and a moderate geological risk, with a low need for administrative and recreation purposes. Therefore, it is proposed for decommissioning.		

Reclassify ML 4 and 5 roads mixed-use

Letter Number	Comment Number	Comment Text
826	5	The County believes that designating these roads (ml 3, 4 & 5) as Mixed Use will provide an incentive to responsible recreating in the NRA and will discourage irresponsible recreating in unauthorized areas.

Response: Forest Service Handbook direction (FSH 7709.58, 10, 12.3) defines the level of service provided by the different maintenance level roads. These definitions are provided in the FEIS Glossary. Maintenance Level 4 and 5 roads provide for a moderate to high degree user comfort and convenience, have moderate to high traffic volume and speeds, and are subject to the Highway Safety Act. ML2 roads are built for high-clearance vehicles, to allow for highway and non-highway legal vehicle travel, provide a low level of service where traffic volume and speed are low, and surface smoothness is not a consideration. Maintenance Level 2 roads are not subject to the Highway Safety Act. Downgrading ML 4 and 5 roads to ML 2 roads would unduly limit access to public and private lands, as these roads provide essential administrative access and recreational opportunities. The existing surface type, speed, volume and composition allows for higher speeds and would present a risk to public safety, as allowing for non-highway legal vehicle use on a road designed to accommodate passenger cars would increase conflicts among different classes of motor vehicle uses on NFS lands. Given the potential increase risk to public safety and the decrease level of administrative access this would provide, consideration of ML 4 and 5 roads for mixed-use designation was eliminated from detailed consideration.

Seasonal Closure Dates Flexibility

Letter Number	Comment Number	Comment Text
324	1	I understand the importance of seasonal road closures, but recreation in our forest is very important to me. Opening the Gates should have a specific date, April 1st, which is just prior to Spring Turkey season until November 1st the end of Western Oregon deer season and not be an arbitrary decision by someone with no interest in keeping it available to motorized recreation.
818	1	Seasonal road closures are important, but recreation in our forests is extremely important to me. Specific dates to open gates and roads should not be left open to arbitrary decisions by someone with no interest in keeping access open to the public and motorized recreation. I would like to see the gates open April 1st through November 1st, just prior to turkey season and the end of Western Oregon deer season.
324	2	Every May and June for past 32 years, the Pacific Northwest Four wheel Drive Association uses the McGrew Trail. Every year we run into arbitrary decision making and resistance by ignoring us. In 2010, it took a call from Senator Ron Wyden's office to get our permit to use the McGrew Trial. To me, these acts are demonstrations of a bias, which should be disposed of by having set dates for the gates to open each year.
811	3	I would like to see roads open April first each year and remain open to November first at the end of Deer season.

Letter Number	Comment Number	Comment Text
846	13	EPA supports the implementation of seasonal closures to avoid and minimize the adverse effects of motorized vehicle use during the conditions in which unpaved roadways are the most susceptible to erosion. The DEIS indicates that motorized recreation on unpaved routes within the NRA is limited to the months of May through October. Page 33 of the DEIS addresses the notion of using rainfall based or ground-condition based wet weather closures under the heading "alternatives considered but eliminated from detailed study." While EPA recognizes that, as stated on page 33 of the DEIS, the scope of possible actions available to the Forest is constrained by regulation, we encourage the Forest Service to consider whether an administrative action might enable the use of a precipitation-based approach to seasonal route closures. A precipitation or ground condition-based closure could offer greater protection to sensitive resources, such as water quality, aquatic species and Port-Orford-cedar, while minimizing the effect of seasonal closure on motorized recreational users. Furthermore, changes in patterns of precipitation and snowmelt are predicted effects of global climate change. Route open and closure determinations based on date alone may limit the Forest Service's ability to adapt to changes of this sort in the short term. This approach would be generally consistent with the structural policy goals set forth in the USFS' "Strategic Response to Climate Change" (page 5): http://www.fs.fed.us/climatechange/documents/framework-draft-discussion-paper.pdf Recommendations: The Forest should further consider what actions would be necessary to enable the use of a precipitation or ground-condition based seasonal closure system. The FEIS should describe the circumstances in which such a modification to the season of use rules could be implemented. If such a revision is deemed feasible and within the scope of this project, the FEIS should fully analyze this project component, describing the potential beneficial and adverse consequ
344	1	I understand the importance of seasonal road closures, but recreation in our forest is quite important to me. Opening the Gates should have a specific date and not be an arbitrary decision by someone with no interest in keeping it available to motorized recreation. I would like to see the gates open April 1st just prior to spring turkey season until November 1st witch is the end of Western Oregon deer season. Every May and June for past 32 years, the Pacific Northwest Four wheel Drive Association uses the McGrew Trail. Every year we run into arbitrary decision making and resistance by ignoring us. In 2010, it took a call from Senator Ron Wyden's office to get our permit to use the McGrew Trial. To me, these acts are demonstrations of a bias, which should be disposed of by having set dates for the gates to open each year.
303	1	The McGrew trail should be open to the public from April 1 through November 1 to encompass Turkey through deer seasons. Opening the trail should not be an arbitrary decision by someone with no interest in keeping it available to the public. I understand that there is a person assigned to close the trail nut no one assigned to opening it. Every year we try to use the trail, we run into arbitrary decision making and resistance by ignoring us. One year, it took a call from a legislator to get the trail open. To me, these acts are demonstrations of a bias, which should be disposed of by having set dates for the trail to open each year.
824	7	Closed gates are not an effective tool. Take a hard look at what happens when gates are closed at one point but access is available behind the gate. Gates create frustration and distrust. Education by kiosk and by public service announcements are a far more effective tool. Forests throughout the northwest have seasonal closures generally November 31st through April 1st. Your forest deserves the same treatment: a season closure to align with local hunts. Road 4402, Road 206, Road 450 are good roads for high clearance vehicles. The typical 4-wheel drive vehicle enjoys a slow trip down a road like this. Please do not consider any closures of these roads and reopen the roads that bleed off these, as they are campsites. No maintenance on these roads keeps traffic slower and also delivers a very enjoyable excursion for families and friends.

Response: Site-specific evaluations were conducted for every road and UAR on the NRA. Seasons of use were identified for roads and motorized trails where appropriate to protect resource values from potential spread of Port-Orford-cedar root disease. Use of roads and motorized trails with potential resource risk to Port-Orford-cedar on the Smith River NRA is limited to the dry season. These dates are based on Forest Plan direction identified in Appendix K (provision E-7A of the Engineering and Road Management Disease Control Strategies) in the Forest Plan provides for the restriction of management activities to the dry season, June 1 through September 30.

The Forest Service is managing seasonal road closures based on rainfall/wet weather, and road closure periods do vary from year to year based on the onset or the rainy or dry seasons. However, there is clear Forest Service direction on how the closures are to be described. The Travel Management Rule subpart b (36 CFR 212.56) requires that MVUM display "the times of year for which use is designated". So closure dates must be established for the public to know in advance of when the wet season generally occurs.

16N71 Bear Basin

Letter Number	Comment Number	Comment Text
820	1	The access road to Bear Basin Lookout and Pierson Cabin, 16N71, should be upgraded from Level 2 (high-clearance vehicles) to Level 3 (suitable for passenger cars). This half-mile of road is heavily used by visitors accessing the facility from the beginning of June to the end of October. The facility typically is booked solid during these months. It is also used during the rest of the year, although less so because road access is usually limited by snow. The road is easily passable by passenger cars and has been for several years. A list of the passengers cars that have used the road during the last year, from May 2013 to April 2014, include Toyota Corolla, Toyota Camry, Toyota Prius (3), Chrysler PT Cruiser (2), Kia Forte, and Ford Focus. The road is in as good or better shape than Road 16N02 leading up to it (see attached photos of 16N71). Because this road is classified as "high clearance" the information on the recreation.gov (reservation service) web page for the facility must state, "High clearance vehicles are recommended." This has the effect of unnecessarily discouraging people without access to high-clearance vehicles from reserving the facility and denying them one of the best and most popular experiences the Forest has to offer.
822	1	I believe the access road to Bear Basin Butte Lookout and Pierson Cabin, Road 16N71, should be upgraded from Level 2 (high-clearance vehicles) to Level 3 (suitable for passenger cars). This half-mile of road is heavily used by visitors accessing the facility from June to the end of October. The facility typically is booked solid during these months. It is also used during the rest of the year, the degree to which is dependent on how long road access is limited by snow. According to the Forest Service Guidelines for Road Maintenance Levels, the definition, in part, for road maintenance level 2 is defined in the FSH as, "Traffic is normally minor, usually consisting of one or a combination of administrated, permitted, dispersed, recreation, or other specialized uses." The road is easily passable by passenger cars and has been for many years according to a long-time Smith River NRA employee. A list of the known passengers cars that have used the road during the last year, from May 2013 to April 2014, include Toyota Corolla, Toyota Camry, Toyota Prius (3), Chrysler PT Cruiser (2), Kia Forte, and Ford Focus. The road is in as good or better condition than the half-mile of Road 16N02 leading up to it (see attached photos of 16N71). No complaints about the condition of Road 16N71 have been received by the Smith River NRA district office. Because this road is classified as "high clearance", the information on recreation.gov (reservation service) web page for the facility must state, "High clearance vehicles are recommended." This has the effect of unnecessarily discouraging people without access to high-clearance vehicles from reserving the facility and denying them one of the best and most popular experiences the Six Rivers National Forest has to offer.

Response: The forest can provide maintenance as needed on this road without classifying it as OML3. To classify it as ML 3 would automatically raise the deferred maintenance costs just by reclassifying. The comments provided here indicate that many users of this cabin are already aware that the road is suitable for their passenger vehicles, and that the site does not appear to be under-utilized; on the contrary, it is popular and is fully occupied—possibly with some not able to make reservations at the cabin because of how quickly the availability fills up.

Ban motorized travel

Letter Number	Comment Number	Comment Text
605	6	This destruction must be ended, and I am sure that you are as aware as I that only complete ban can prevent the losses, which include the introduction of <i>Phytophthora</i> fungi, which are killing near 100% of the Port Orford Cedar, for instance, but not limited to this particular catastrophe.

Letter Number	Comment Number	Comment Text
605	1	I am dismayed by the direction that the Smith River National Recreation Area Travel Management process is taking. Living in this beautiful redwood and world-treasure biologically diverse area, I have seen FAR too much illegal and legal destruction by ORV use. I feel, along with many who do not actively communicate with governmental agencies, that ORVs MUST BE BANNED COMPLETELY FROM USE ON PUBLIC LANDS. Being educated in biology and spending much time, observing and exploring the organisms and ecosystems that make up this area, and other areas in the Western USA, I recognize the need for preservation.

Response: All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including in POC areas. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits. POC protection measures are common to all action alternatives.

As required by the 1990 NRA Act, all alternatives would restrict vehicles to designated routes. Offroad use is illegal. Any areas where such use is occurring will have further mitigations imposed.

It is beyond the Forest Service's authority to completely ban motorized travel within the project area, as there are many roads owned and managed by other local, state, and federal government entities, as well as private landowners. Banning motorized travel within the project area is therefore beyond the scope of the project and is not analyzed in detail.

300-foot buffer

Letter Number	Comment Number	Comment Text
826	8	In addition to the priority dispersed campsites identified in the above table there are a vast number of other dispersed recreational sites available for use within 300-feet of the NFTS and county roads. During outreach with the public on this issue the need to add a "300-Foot Rule" to allow for the use of these areas for camping, wood gathering, and hunting was identified as having been omitted from the plan despite prior discussions between the County, users, and the Forest. Currently there is no provision in the plan to allow for such uses within 300-feet of NFTS routes. This should be added in order to facilitate lawful and responsible recreating, wood gathering, and hunting in the NRA. In addition to the priority dispersed sites in the above table, the County has geo-located dozens of other unnamed, dispersed sites that would benefit from the incorporation of a 300-foot Rule into the plan and have been historically used for camping, wood gathering, and hunting.

Response: The 1990 NRA Act limits motorized travel to designated routes. The 300-foot rule did not apply to the NRA. However, allowing motorized travel within 300 feet of the edge of the travelway is no longer consistent with Forest Service Policy on Travel Planning. Forest Service Manual 7700 – Chapter 7710, §7716.1 Content of Designations, effective January 8, 2009, states that "road designations must specify either that they include parking within one vehicle length, or within a specified distance of up to 30 feet, from the edge of the road surface." For the aforementioned reasons this alternative is eliminated from detailed analysis.

Play areas for mud, rock crawling, or hill climbing - beyond scope of NRA Act

Letter Number	Comment Number	Comment Text
831	12	There are no play areas for mudding, rock crawling or hill climbing that would allow the Class II user to play without damage to a bona-fide trails system (even a road system) included in any of your alternatives. It is not right to write a motorized travel plan without including all of the people currently using this forest. The writers of this document need to take a hard look at why all of the users particularly Class II are not being included. This forest is made up of a variety of plants; Class II users are also a variety of users and all aspect of their current use must be include within these pages.

Response: The 1990 NRA Act limits motorized travel to designated routes; therefore play areas for mudding, rock crawling, or hill climbing are illegal and beyond the scope of the project. The project will provide hundreds of miles of roads and motorized trails that will provide for a variety of user preferences. UARs will be added to the system as motorized trails, including trail systems on Gasquet Mountain and Rattlesnake Mountain.

Beyond the Scope

Uninventoried unauthorized routes

Letter Number	Comment Number	Comment Text
830	17	MOTORIZED ACCESS TO DISPERSED CAMPING AND HISTORIC MINING SITES Local access interests have long articulated their passion for motorized access to many of the historic mining sites or camps in the area. These sites are detailed primarily in Table 2 and 4 to the Del Norte County comments. A typical example of such a site is at the end of the 314.1 road, which Alternative 6 proposes to designate as open for motorized use. Alt. 6 proposes to close the road at the 1.2-mile marker. Unfortunately, the road continues up the mountain and onto a plateau for another .5 to .75 of a mile. It makes a loop at the end where there is an old mine site and a water source. This is a popular dispersed camp or hunting area. Concerns about Port Orford cedar root disease is listed a reason for the road closure. BRC believes that a field trip is warranted with county staff to review practical implications of the proposed action and discuss if a seasonal wet weather closure would be sufficient to meet the agency's resource protection objective while meeting the county's general plan prescription for public access to important mining sites.

Response: Alternatives 4 and 6 propose to designate all but the last 0.3 mi of the inventoried UAR, 314.1. This portion of the route accesses an uninfected Port-Orford-cedar spring and will be blocked to protect this unique feature. This mitigation was agreed to the collaborative group in order to be able to add the remainder of the route.

RS 2477

Letter Number	Comment Number	Comment Text
826	12	In the summer of 2013, the Del Norte County Board of Supervisors adopted a resolution (Resolution 2013-022) which recognized various rights of way, across public lands, to identify historic mine locations in Del Norte County. At the time no status or maintenance level was proposed by the County as the adoption of the resolution was simply a recognition of the right of way as allowed for by the United States Congress under Revised State 2477 (RS 2477). The RS 2477 mines were identified as existing between 1866, when RS 2477 was enacted by the US Congress, and 1976, when it was effectively repealed under the Federal Lands Policy Management Act. In passage of Resolution 2013-022 the Board of Supervisors recognized that the locations of these mines are of a "historic" nature and value to the County and that access should be kept open. The resolution was passed unanimously by the BOS with a 5-0 vote.

Response: The RS 2477 law states, "The right-of-way for the construction of highways across public land not reserved for public purposes is hereby granted." Lands administered by the Forest Service were

reserved for public uses as of the date of their reservation, and what is now the Six Rivers National Forest was first established by Presidential proclamation in July 1908. If the route to any of these mines was in existence prior to the establishment of the national forest, it would have been for the specific purpose of allowing the mining claimant(s) access to the claim. This does not meet the criteria of being a public highway as the road's primary purpose. The forest recognizes all legal right-of-way designations, and has identified those routes in this project.

Pappas Flat

Letter Number	Comment Number	Comment Text
819	126	Please note that in our Pappas Flat comments (below) we provide specific examples of illegal off-road use that are both foreseeable and predictable.
819	127	The Forest Service must provide greater protection for the small meadow area called "Pappas Flat" at the end of spur road 17N69 (that immediately forks off the Gasquet Mt. Road, just above, Gasquet Mt. Road's junction with Hwy. 199). Consistent with the Smith River NRA's stated desire to "define a road system that is economically and ecologically sustainable (reduces both maintenance costs and risk to sensitive resources)," the gate on this road needs to be permanently locked, with a key provided only to the power line company, private landowners, or private parties (such as tribal members) that are permitted for special events or other members of the public that have a specific reason requiring that they drive all the way in. Off road vehicle damage to the meadow has been documented by both the public and the Forest Service. Additionally, someone has been inappropriately target shooting, and damaged a mature madrone tree at the edge of this meadow. The Pappas Flat meadow would be best protected by allowing people to use the existing parking area on the west side of the existing gate, and not trying to further develop this area for more intense public use and even easier motorized access-that will facilitate, and likely increase the present problems. The Forest Service should seek to make this area "a more special place" by describing the area as an approximately one-mile hiking destination. Trying to provide parking at the meadow will only create foreseeable harmful impacts. Rock barricades will not be effective in stopping dirt bikes, excessive shooting, excessive campfire building, littering, or dumping of garbage. These concerns were identified in our previous comments on this project and simply ignored by the agency. Improper public use can be better and more effectively restrained by providing a lock on the existing gate. The particular location of this gate also provides a far more effective barrier, while still allowing easily accessible, properly controlled and appropriate public use. Finally, it is in
819	128	Pappas Flat is special, not only due to its cultural and uncharacteristic open meadow habitats. Additional botanical features of the surrounding Pappas Flat area include the native Oregon White Oak grove (on the way in), and at Pappas Flat proper, there are two American chestnut trees.

Response: Pappas Flat was removed from the project area prior to the release of the FEIS in response to a significant issue identified through scoping. Therefore, actions within the Pappas Flat area are eliminated from detailed study as they are beyond the geographic scope of the project.

Letter Number	Comment Number	Comment Text
819	129	Furthermore, just above the Smith River, and southwest of Pappas Flat proper, a small population of a native shrub (& small tree) Toyon, <i>Heteromeles arbutifolia</i> , was recently discovered. This population is currently being investigated as it is believed to be the most northern distribution of this species in California (and thus anywhere in the northwest.) It was not previously included on a Forest Service plant list for the Gasquet area, and except for a few very specific sites downstream of Pappas Flat, this species is not known elsewhere on the Smith River Recreation Area. Signs explaining the special and cultural significance of the area should be placed at the parking area in front of a locked gate. These signs too will do doubt periodically need to be replaced. But the costs of replacing these signs will be far less than the economic and ecological damage that will otherwise result, or continue to occur.

Response: *Heteromeles arbutifolia* is found in Oregon and the location southwest of Pappas Flat is not the northernmost site in the Pacific Northwest. Additionally, this site is adjacent to Highway 199 and will not be affected by the proposed actions, and is outside the geographic scope of the project.

Management of roads and routes on Rogue River-Siskiyou National Forest

Letter Number	Comment Number	Comment Text
824	7	Closed gates are not an effective tool. Take a hard look at what happens when gates are closed at one point but access is available behind the gate. Gates create frustration and distrust. Education by kiosk and by public service announcements are a far more effective tool. Forests throughout the northwest have seasonal closures generally November 31st through April 1st. Your forest deserves the same treatment; a season closure to align with local hunts. Road 4402, Road 206, Road 450 are good roads for high clearance vehicles. The typical 4-wheel drive vehicle enjoys a slow trip down a road like this. Please do not consider any closures of these roads and reopen the roads that bleed off these, as they are campsites. No maintenance on these roads keeps traffic slower and also delivers a very enjoyable excursion for families and friends.
831	20	We ask specifically that Road 4402, (road to Sourdough campground) Road 206, and (road up to McGrew trail) Road 450 and all existing roads leading off from 4402 to be left open to Class II vehicles and all slow traveling OHVs. These three roads are excellent examples of a High Clearance, Easy OHV Roads that is currently being maintained as such. No blade; just motorized wheels of vehicles keeping them open mostly to forest users' primary enjoying the beauty of forest lands. Please keep them as they are.
831	21	These three roads [4402, 206, 450] are an example of how Level 1 and user created routes can be an asset to this forest forever if left open. Instead of closing motorized ways, allow us to keep them open mainly by hand as much as possible. Return these roads to this exact state if logging, mining or fire crews need to use them. Leaving this type of roads to Mother Nature and the ten thousand of motorized forest users (road walkers and MT bikers are also using these roads) who are currently are using them annually as the only maintenance needed normally. The little maintenance that is needed is by those using these roads as each needs with very little mechanical maintenance needed.
811	2	The decision to close roads by a Forest Service worker out of the Cave Junction Forest Service office does not appear to be taking this into account, almost an all or nothing approach to land management. If we close roads to prevent access to OUR forests what is the whole point of the Forest Service? Keep out the public but let in logging operations that rape the land?
811	4	For more than 30 years now, the Klamath Four Runners 4WD club tries to make a run on the McGrew Trail – a wagon road since 1850 for transporting freight to the Illinois Valley – and is still a road open to the public. However, our club has to procure a special permit and follow strict conditions not required by individuals using the road. HOWEVER in recent years we have had to contact Oregon Senator Ron Wyden's office to obtain the required permit in somewhat of a timely manner. Our own telephone calls and e-mails inquiring on the status of the permit are ignored and remain unanswered. This would seem to be an unnecessary discourtesy to the very public they are supposed to be serving. Routine communication especially in this age of technology should not be too much to ask for.
354	1	I'm horrified that you're considering opening up some of the region's most special and rare areas for off-road vehicles. We have very few places left like the Klamath-Siskiyou forest. Do we really need more places for people to drive their giant mud trucks, especially in such ecologically sensitive places? Please don't let ORVs into any more areas. Enough is enough.

Letter Number	Comment Number	Comment Text
344	1	I understand the importance of seasonal road closures, but recreation in our forest is quite important to me. Opening the Gates should have a specific date and not be an arbitrary decision by someone with no interest in keeping it available to motorized recreation. I would like to see the gates open April 1st just prior to spring turkey season until November 1st witch is the end of Western Oregon deer season. Every May and June for past 32 years, the Pacific Northwest Four wheel Drive Association uses the McGrew Trail. Every year we run into arbitrary decision making and resistance by ignoring us. In 2010, it took a call from Senator Ron Wyden's office to get our permit to use the McGrew Trial. To me, these acts are demonstrations of a bias, which should be disposed of by having set dates for the gates to open each year.
324	2	Every May and June for past 32 years, the Pacific Northwest Four wheel Drive Association uses the McGrew Trail. Every year we run into arbitrary decision making and resistance by ignoring us. In 2010, it took a call from Senator Ron Wyden's office to get our permit to use the McGrew Trial. To me, these acts are demonstrations of a bias, which should be disposed of by having set dates for the gates to open each year.
303	1	The McGrew trail should be open to the public from April 1 through November 1 to encompass Turkey through deer seasons. Opening the trail should not be an arbitrary decision by someone with no interest in keeping it available to the public. I understand that there is a person assigned to close the trail nut no one assigned to opening it. Every year we try to use the trail, we run into arbitrary decision making and resistance by ignoring us. One year, it took a call from a legislator to get the trail open. To me, these acts are demonstrations of a bias, which should be disposed of by having set dates for the trail to open each year.
818	2	For the past 32 years in May and June, the Pacific Northwest Four Wheel Drive Association uses the McGrew Trail. Each of these years has seen issues with arbitrary decisions and resistance by ignoring us. In the year 2010, it took a phone call from Senator Ron Wyden to get our permit to use the McGrew Trail. Personally, I see these actions as bias against motorized recreation and public access to public lands, which would be stopped by having concrete dates for the gates to be opened each year.
819	130	The McGrew Trail It has been the position of the SRNF that, because the majority of the McGrew Trail is on the adjacent Rogue River-Siskiyou National Forest, the SRNF bears no responsibility for management of the part of the trail within the Smith River NRA (SRNRA). However, while the RR-SNF has initiated a wet season closure and installed a gate on the northern terminus of the trail, the southern terminus on the NRA remains a no-man's land with neither arm of the Forest Service taking responsibility for making decisions and protecting the public's interest regarding the segment. Because the southern terminus remains open to all users in all weather, it essentially makes efforts of the RR-SNF to at least provide some protection for the large watersheds that are not currently infested with the POC root disease ineffective and meaningless. Our organizations brought this issue up in comments and in meetings with the SRNRA District Ranger and the Forest Supervisor to no avail. The SRNF's excuse for doing nothing is that there's an agreement that the RR-SNF is the lead agency on the trail. However, the RR-SNF cannot come and install a gate on the SRNF end of the trail, nor should they have to. The segment of the trail is clearly on the SRNF and should at the very least be mirroring and complimenting the efforts of the adjacent forest. In addition, populations of the highly invasive alyssum, that's of such great concern on serpentine terrain in Oregon, have been found along the FS Road 4402, which provide access to the northern terminus of the trail. Road 4402 also accesses the SRNRA and North Fork Smith Botanical Area.
819	50	The assumption on page 317 of the DEIS that massive jacked-up 4 by 4 vehicles have the same impact on roadless character as dirt bikes is arbitrary and capricious and not based upon any facts in the administrative record. See photo attachments 6-7 of a large vehicles being hauled back from a "McGrew Trail Run" that enters the Smith River NRA. Does the agency contend that use of these vehicles has the same impacts to riparian, soil, roadless, and botanical resources as would use of a dirt bike on a single-track trail?
824	8	Sourdough Campground with all of its history is just one example of traditional and historic facts that must not be forgotten by closures. Please take a hard look at the devastation closing roads create in forest from fire's horrific murder of plants and animals to the children whose parents are not working as the lumber rots and re-burns to the children that will be deprived of tradition and history.

Response: The Sourdough Camp Road and the McGrew Trail, also referred to as Roads 4402, 206, and 450, are managed by the Rogue River-Siskiyou National Forest and are therefore outside the scope of the project. Although the McGrew Trail extends onto the forest where it intersects with Del Norte County Road 305, it is managed in its entirety by the Rogue River-Siskiyou National Forest, including the issuance of special use permitted events, and is outside the scope of this project. The Gasquet District

Ranger is in communication with the Rogue River-Siskiyou National Forest to aid in addressing the concern over the management of the southern terminus of the McGrew Trail.

The forest is aware of the threat posed by yellow tuft alyssum, which is currently not known to occur on SRNF. The forest will continue to monitor for it. Anyone with knowledge regarding its presence within the proclaimed boundary of SRNF should contact the forest botanist.

High Dome Trail and Elk Camp Ridge Trail

Letter Number	Comment Number	Comment Text
828	14	Elk Camp Ridge motorized trail is a redundant motorized use, as it parallels 314. The supposed strategy of the analysis is to reduce redundancy where it exists. Retaining this route is a direct conflict of guiding principles.
826	4	While the BOS certainly understands the balance the Forest must strike with the proposed plan the County has consistently held the position that maintaining recreational access is a top priority. To wit, according to the most recent data available approximately 69.3% of Del Norte County's lands are under federal management (Source: Del Norte County Economic and Demographic Profile 2014, Center for Economic Development at CSU, Chico). This overwhelmingly preponderance of federally managed lands has, over the years, led to a deterioration of access to the "public" lands of Del Norte County by recreational users. An example proposed in this plan is the downgrading of 3E02, the High Dome Trail, from a trail available for motorized use on the current Motor Vehicle Use Map (MVUM) to a Non-Motorized Trail.
828	4	The only exception for new recreational opportunity for hiking is high dome trail. This route change provides the only new unmotorized recreational opportunity, while also protecting an otherwise roadless area. As it is now, high dome motorized trail is an ugly scar on the landscape, an intrusion into an otherwise pristine area that can be seen on Google Earth. Furthermore, motorized travel on high dome trail is a redundant access that is paralleled by route 315.
830	10	A typical example of a key recreational route is the High Dome Motorized Trail (3E02), which has been a popular motorcycle single-track trail used by off-roaders for several decades. Closure of that trail has never been proposed by the agency or brought up for discussion during the stakeholder process. Yet, Alternative 6 proposes it for closure. This route has long served and become desirable within an array of legitimate forest users, and meets the criteria for formal designation for continuing vehicle access.
830	14	Remedy – BRC strongly urges the agency to modify Alternative 6 to include the specified routes, such as 3E02, among those designated for motorized use.
823	3	I don't think High Dome is appropriate for a motorized trail because it has a talus slope at one end (unsafe), a creek at the other (oil washing into the creek), and a meadow in the middle (vulnerable to damage). Elk Camp Ridge trail is too steep and rocky, at least at the lower end, to be motorized trail. It borders the North Fork Botanical Area and a meadow at the upper end.

Response: High Dome and Elk Camp Trails are existing motorized trails The scope of the actions considered in the project do not include existing motorized trails; therefore there are no proposed actions for these trails in any of the action alternatives. See Chapter 1, for more information on the scope of the project. The maps in the DEIS incorrectly illustrated High Dome Trail as a non-motorized trail, and will be corrected in the FEIS maps.

1872 Mining Act

Letter Number	Comment Number	Comment Text
800	1	The Mining Act of 1872 needs to be abolished. Currently it allows anyone (!) to go anywhere (!) to get anything (!). This "Act" is not something that was written for the year 2014. It was written for the year 1872. It is part of the problem of anyone having access to "Resources," whenever and wherever they choose. The "anyone," part can be from any country. We need to be focusing instead on protecting what is left. By moving into alternative energy and locomotion, and when we quit buying "Their," poisons and get back on the right track for the sake of our grandchildren.

Response: The 1990 Smith River NRA Act withdrew the lands of the Smith River NRA from mineral entry, subject to valid existing rights. Abolishment or further amendment of the 1872 Mining Law is within the purview of Congress and not within the authority of the Responsible Official. Such an action is therefore outside the scope of this project.

Private Property and Special Use Permitting

PacifiCorp powerline access

Letter Number	Comment Number	Comment Text
803	3	Please find enclosed a map showing the approximate location of PacifiCorp's required access. PacifiCorp requests continued access along the existing route to provide for the continued safe operation and maintenance of our facilities and for the restoration of power in the event of an outage or emergency.

Response: No map was enclosed; however, the power line is currently authorized under a special use permit and its location is shown on USGS quadrangle maps.

17N23

Letter Number	Comment Number	Comment Text
847	1	Road 17N23 runs through my property (APN 124-02-58. I feel 17N23 should be left open for fire protection. 17N23 runs on top of the ridge between Myrtle Creek and Hwy 197. 17N23 could be gated at my property, but maintained for fire protection.

Response: Follow-up discussion with this commenter revealed that the concern was for fire protection, and does not need or want to use 17N23 for property access. The Forest Service does not have legal access (an easement) to cross private property to get to the Forest Service portion of 17N23. If the forest gets permission to cross the private properties in order to maintain the fuelbreak on 17N23, then the FS would not need the road to be drivable in order to do that maintenance work.

18N26

Letter Number	Comment Number	Comment Text
849	1	As you are aware, John P Krauss & Fred R Krauss Calif. Trust own 155 acres in TI8N R3E Sections 8, 9, 16, 17, Gov tract 46. Road I8N26 provides access to this tract along with a 1/4 mile spur that runs north off of the 18N26 road as show on attached map.
849	2	We request that the Forest Service maintain road 18N26 in a way that will continue to provide access to our property for management purposes. A particular concern is to have rapid response time for any lightning fires. It is crucial to prevent catastrophic fire loses and maintain the existing thrifty conifer forest. In order to maintain reasonable access time, you need to maintain culverts, fills, water dips or water bars, minimum road maintenance. The road maintenance will then also keep erosion to a minimum.
849	4	We absolutely do not want road 18N26 obliterated or culverts removed.

Response: The Preferred Alternative lists 18N26 as an OML1 (closed road) and calls for reducing the risk of road-related sedimentation to protect water quality. Under the No Action Alternative, Road 18N26 is already OML1, so no change in public access on this road is proposed under the Preferred Alternative. Access to private land parcels from a closed (OML1) road may be accommodated through a special use

permit, if no alternative access is possible across private lands. Emergency response access during fires is analyzed in the Fire and Fuels Analysis section of the EIS.

411.102

Letter Number	Comment Number	Comment Text
853	1	I am the landowner of 160 acres known as French Hill within the Smith River NRA and I just now received notice of this plan. The parcel I own has access by what I believe is marked as 411.102 on Alternative 6 map. Alternative 3 does not have this road on it. I need this access road and it has been the access road to the property for as long as anyone can remember. I am personally aware of records going back 45 years that show the road. As the landowner for the last 10 years, I have used this road as my sole access. My personal preference would be to put a gate where 411.102 meets 411 that Forest Personnel would have a key to and so would I. This would effectively close the road to the public but keep open a necessary access for me and an emergency access for firefighting.

Response: The commenter was contacted regarding the special use permitting process, which would be a separate project from this Travel Management project. The landowner has indicated that they will pursue a special use permit for the use of this route to their property. For these reasons, the barricade will be removed in the proposed action alternative for this route.

17N26

Letter Number	Comment Number	Comment Text
853	1	Dave Scheve is concerned about access to his private property, which continues off the end of road 17N26. He does not like Alternative 5, which would barricade and restore 17N26. He does support Alternatives 4 & 6, which specify rocking 17N26. He would like the Forest Service to rock the whole road to his property. He installed a gate at his expense at the beginning of 17N26 in coordination with District Forest Service staff many years ago.

Response: The commenter's support of Alternatives 4 and 6, and disagreement with Alternative 5, is noted. In Alternatives 4 and 6, the Forest Service proposes surfacing on the entire length of system road 17N26. This system road does not extend to the commenter's private property boundary. There is an uninventoried route that extends from the end of 17N26 to the private property boundary. The commenter has been informed directly that a special use permit is required to use that uninventoried route for private property access. NFTS roads can only be gated for administrative purposes only. The gate would need to be moved to the private land boundary.

16N19

Letter Number	Comment Number	Comment Text
282	2	It was much appreciated a few years back when 16N19 was brushedacross HW3 land and onward toward my home. Monte Saturn started the promise, continued by Pamela Winn, to grade the road. Don Pass said to my gate. I look forward to this mitigation occurring.

Response: Routes needed for private property access can be proposed for a special use permit, and if approved, the permittee must maintain the road in accordance with the terms of that permit. The Forest Service maintains roads for administrative purposes, and maintenance activities will occur based on funding and in order of district priority.

17N22W and 17N22W.1

Letter Number	Comment Number	Comment Text
803	1	As you are aware, PacifiCorp operates and maintains its existing electrical transmission power lines on property located within the Six Rivers National Forest and Smith River National Recreation Area. Pursuant to your letter, the Forest Service is proposing actions, which may include decommissioning or restoring route 17N22W.I which is currently used by PacifiCorp. Such action would negatively impact our ability to maintain and service our existing transmission lines.
803	2	On May 20, 2014, a representative from PacifiCorp met with Mr. Mike McCain of the Forest Service to further discuss the proposed DEIS alternatives and our required access routes.

Response: The proposed actions in the preferred alternative, Alternative 6, for road 17N22W and UAR 17N22W.1 are: to Decommission, and to Restore respectively, with water drainage structures planned. The following is also noted in the action for each road/route: *SUP Road, do not barricade. SUP* means Special Use Permit, and specifically refers to PacifiCorp's powerline special use and associated access roads. Access would be covered by the special use permit, which is currently in the process of reissuance. The permit reissuance project is considered a separate project from the Travel Management project. While these two travelways would not be available for public use were Alternative 6 selected, they would also not be barricaded, therefore Alternative 6 would not conflict with special use access on these roads.

Multiple Routes

Letter Number	Comment Number	Comment Text
848	1	Along with John and Carolyn Westbrook, my wife and I are owners of ten (10) separate parcels (totaling over 610 acres) within the NRA. All of these properties are accessed via USPS roads. These include USPS road 15N01 (G-0 Road), 15N01A, 15N38, 15N63, 16N18, 16N18K, 17N04 and 16N33. Under the preferred Alternative 6 it appears 16NI 8K will be designated as ML 1 (map indicates "closed") maintained with waterbars/rolling dips as needed. Also, 16N33 will be barricaded. These two roads provide the means of accessing two of our parcels (Sugarloaf and Hurdygurdy properties, respectively)
848	6	Obviously, we need to maintain access to all of our properties. It is our understanding that the USPS does enter into agreement (Use Pennit) with private landowners for this purpose. We would willing to maintain (brush and maintain a passable grade) behind gated (rather than barricaded) roadways. Of course, we would need keyed access to all locked gates along the access routes. While we offer this comment specifically in regards to 16N18K and 16N33, the same comment applies to all of the USFS roads which we use for access in the event they are, or may be, proposed for closure or maintenance level reduction under any of the proposed alternatives, or in the future. Thank you in advance for your consideration of our comments. We look forward to working with the USFS to assist in any appropriate management of the USFS roads, which we use for access.

Response: Follow-up discussion with this commenter revealed that although a special use permit for 16N18K may be sought to facilitate private property access in the future, that regular, ongoing access via this road is not needed at this time nor in the foreseeable future. Additionally, Road 16N33 does not actually access one of the commenter's other properties. Access to that private parcel would be via an uninventoried route, which is by definition outside the scope of the Travel Management project yet would still need a special use permit to allow regular, ongoing access. Further discussion revealed that since regular access is not needed at this time, that a special use permit could be sought in the future when access needs are anticipated. The commenter was advised to contact the Forest Service well in advance of needing a special use permit for private property access on any route(s), to allow time to get their proposal on the forest's program of work and to process their request.

Cumulative Effects and Connected Actions

Letter Number	Comment Number	Comment Text
819	60	In the past, our organizations have pointed to concrete and site-specific examples of illegal off-road use, like that occurring at Pappas Flat, only to have the agency respond that "the NRA is steep, rocky and very brushy." Such vague generalizations will not pass NEPA muster. The comments submitted by Barbara Ullian on the initial EA contained photos demonstrating the increased "extreme" ORV use in which riders "rock climb" and "creek" on steep, rocky and brushy terrain located off-road. The agency has a NEPA duty to address this increasingly significant connected and cumulative impact of off road vehicle use that will be facilitated by the designation of controversial user-created routes as part of the NFTS system.
819	120	Cumulative and Connected Impacts Must Be Considered To meet its NEPA obligations the Forest Service must adequately document the past, present, and reasonably foreseeable projects that may, in conjunction with the proposed project, have cumulative effects that are significant. The combined effects of these projects must be evaluated as a whole, regardless of what agency or person undertakes these actions (40 C.F.R. § 1508.7; 1508.25 (a)(2); Natural Resources Defense Council v. Hodel, 865 F.2d 288, 299 (D.C. Cir. 1988); Neighbors of Cuddy Mountain v. U.S.F.S. (9th Cir. 1998) 137 F.3d 1372; Blue Mountain Biodiversity Project v. Blackwood (9th Cir. 1998) 161 F.3d 1208).

Response: Cumulative Effects are addressed in each resource analyzed within Chapter 3. A list of the projects and activities considered in the cumulative effects analysis is in the Appendices, and addressed by resource in Chapter 3. This project does not authorize motorized travel up creeks as shown in Ullian's photos, which are actually of an area located on the Rogue-Siskiyou NF. The project includes mitigations, such as route delineation, boulders, gates and barricades to reduce the likelihood of travel off designated routes, and therefore the risk to resources due to illegal motorized travel off designated routes. The actions shown in the photo are not considered *connected* as defined by CEQ. As such, "Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements; (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously; (iii) Are interdependent parts of a larger action and depend on the larger action for their justification." The actions included in this project do not automatically trigger other actions shown in the photos which would require the preparation of an EIS; the illegal activities are not dependent on the project moving forward, nor is the project dependent on illegal activities occurring to proceed, and lastly neither the illegal activities shown in the photos nor the project depend on one another for their justification.

Cumulative Effects to Sensitive Plants

Letter Number	Comment Number	Comment Text
819	122	The agency must analyze what the cumulative impacts of this project will be on sensitive plant species long-term viability, relative to projects and policies on private land, including fire suppression, mining, timber harvest, and land management practices on other ranger districts (40 CFR 1508.7). The NEPA document must address cumulative effects to sensitive plant occurrences of increased off-highway vehicle use or an increase in illegal off-road vehicle use related to the route designation. According to Appendix D in the previous NEPA analysis, the Cumulative Effects Analysis for the proposed action includes:to allow dual use, licensed and unlicensed motorized recreation vehicles, on county roads within the project area. These demographic processes may increase recreation and other resource demands in the NRA. If future use of routes proposed for designation by motorized recreation results in an increase so to does the potential for intensity of negative effects to TES plant species growing on the road surface.

Response: All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including in sensitive plant habitat. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits including 1) less

than 0.1 percent of the serpentine sensitive plant habitats on the NRA are being affected; 2) all routes into the North Fork Botanical Area are being closed, protecting over 20,000 acres of potential habitat; 3) routes to be kept will be upgraded to correct drainage problems, and 4) POC protection measures are common to all action alternatives.

A cumulative effects analysis was completed which analyzed the impacts of past, present and foreseeable future projects on sensitive plant species long-term viability affected by the proposed actions. It did not include an analysis of off road illegal use, which is beyond the scope of the proposed actions.

Use will be monitored to determine if it is increasing toward a threshold that could lead to a trend toward a loss of viability. Sensitive plant populations within 100 feet of UARs added to the NFTS will be managed via monitoring to determine if a decline in Sensitive plant populations has occurred. If a decline of any Sensitive plant population is found to have occurred that indicates a trend toward a loss of viability, the UARs with the declining species that were added to the NFTS will be removed from the Motor Vehicle Use Map and barricaded until such time that Sensitive plant populations are found to have recovered.

Cumulative Effects to IRAs, POC, Botanical Reserves and Salmon Habitat

Letter Number	Comment Number	Comment Text
828	14	The review document is internally inconsistent, and fails to consider the cumulative impact of adding more unauthorized motorized routes (motorized trails/motorized roads/motorized use of all kinds along a graded surface upon the land) to a road system that is already broken by OHV use and is significantly impacting roadless characteristics and irreplaceable resources such as Port Orford Cedar, and botanical reserves, and cumulatively does impact precious salmonid habitat.

Response: All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including in sensitive plant habitat. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits including: 1) less than 0.1 percent of the serpentine sensitive plant habitats on the NRA are being affected; 2) all routes into the North Fork Botanical Area are being closed, protecting over 20,000 acres of potential habitat; 3) routes to be kept will be upgraded to correct drainage problems, and 4) POC protection measures are common to all action alternatives. All alternatives would restrict vehicles to designated routes.

Cumulative Effects of BMPs

Letter Number	Comment Number	Comment Text
819	124	The Forest Service should not rely on Best Management Practices (BMP) to assure water quality while failing to disclose the cumulative impacts of implementing the proposed BMPs. Please note that on page 587 of the DEIS the agency states that when designating motorized trails it will implement a BMP to "avoid sensitive areas, such as riparian areas, wetlands, stream crossings, inner gorgeous and unstable areas to the extent practicable." Yet the preferred alternative calls for adding high risk routes (such as 305.118) that impact nearly all of the sensitive areas listed above. Page 587 of the DEIS states that it will implement a BMP to "close and rehabilitate unauthorized trails that are causing adverse effects on soil, water quality and or riparian reserves." Actually, the agency is proposing to add a number of high risk, high impact unauthorized trails. Page 588 of the DEIS acknowledges that a BMP is to "design the transportation system to meet long-term Forest or Grassland Plan desired conditions, goals and objectives for access rather than to access individual sites." The preferred alternative places access to individual sites ahead of the long-term maintenance needs, desired conditions, goals and objectives of the Forest Plan. The prevention of potentially adverse impacts at the project site through BMPs is indeed necessary, but not sufficient to avoid cumulative effects (CEQ 1971). As Reid (1993) states: The BMP approach is based on the premise that if on-site effects of a project are held to an acceptable level, then the project is acceptable, regardless of activities going on around it. Interactions between projects are beyond the scope of BMP analysis, and operational controls are applied only to individual projects. However, useful site specific BMPs are in minimizing effects of individual actions, they still do not address the cumulative effects of multiple actions occurring in the watershed, which, though individually "minimized" through application of site-specific BMPs, may still be significant, in

Response: A cumulative watershed effects analysis was conducted for this project. All of the affected watersheds are well below the Threshold of Concern. Implementation of the proposed actions will not result in cumulative adverse impacts to water quality. Consultation with the National Marine Fisheries Service determined that the project was not likely to adversely affect listed fish or Critical Habitat, and in fact is considered beneficial. The project will reduce road miles and sedimentation across the district, and will meet ACS objectives.

All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits.

The route mentioned, UAR 305.188, was identified by the Del Norte County Board of Supervisors and Sheriff's Office as valuable access for search and rescue operations in the North Fork. As such, the preferred alternative designates the first portion of Route 305.118 to be added as a motorized trail open for use during the dry season. The remaining portion, which has a Darlingtonia bog and accesses uninfected POC stands (and the portion with the high risk to water quality) would be barricaded and not open to motorized travel. Because of the steep terrain surrounding much of the NRA, most vehicle barriers are effective for eliminating motorized access. Barriers or gates are placed adjacent to steep cut banks where a vehicle cannot get around the closure area. Best management practice monitoring results across the SRNF verify these findings.

Letter Number	Comment Number	Comment Text
819	125	Besechta et al. (1995) also identified several conditions necessary for accurate analysis of cumulative watershed effects, including: 1) accurate understandings of natural variation in environment; 2) reliable baseline information at the local and regional scale (ideally from "reference" sites); 3) accurate assessments of the probable effects on key resources of past, present and foreseeable future activities; 4) development of reliable models that relate resource conditions within a dynamic spatial framework; and 5) establishment of levels of acceptable change in the environment. The FEIS did not adequately consider and disclose the synergistic effects of the proposed action.

Response: A cumulative watershed effects analysis has been completed for the FEIS. The methodology includes and synthesis of direct, indirect and cumulative effects and conforms to Regional policy and direction. The analysis revealed that the proposed actions would not result in adverse cumulative watershed effects. Road decommissioning and route restoration is a major component of the proposed actions and is intended to reduce past impacts associated with road construction and unauthorized motorized use.

Irreversible and Irretrievable Determinations

Letter Number	Comment Number	Comment Text
819	81	Please note that the contention on page 417 that the project does not involve an irreversible or irretrievable commitment of resources is incorrect. In fact, the decision to encourage motorized use on high-risk routes has "the potential to have a relatively large impact to Port Orford Cedar plant communities based on plant community composition or the potential to infect currently uninfected watersheds." (DEIS 218). Despite the clear mandates from the LRMP and Smith River NRA Act to protect POC resources and the stated project purpose to implement the findings of the Travel Analysis Process (TAP) the Forest Service appears irreversibly committed to implementing Alternative 6 such that 50 high risk UARs are added to the NFTS providing additional motorized access to uninfected POC watersheds in order to maximize the recreational preferences of a small minority of forest visitors.

Response: The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent. POC mitigation measures are incorporated into all alternatives. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits. The project meets LRMP S&Gs and Smith NRA Act objectives.

The DEIS definitions for Irreversible, worst case, would be the extinction of the species or perhaps interpreted more conservatively would mean the extirpation of the species from an area. Implementation of any of the alternatives would not lead to the extinction or extirpation of Port Orford cedar from the analysis area.

Impacts to Motorized Recreation Opportunities and Access to Dispersed Recreation

Historic, Current and Proposed Access to Dispersed Recreation

Letter Number	Comment Number	Comment Text
824	4	Hunters of all denomination and form utilize their 4-wheel drive vehicle to slowly maneuver the trails in this forest. You must take a hard look at your fact gathering tactics and the results closures would bring. Please take a hard look at your over amount of closers for Class II recreationalists. The forest in question is highly utilized by the populace of Oregon and California for varied uses. Ranging from hunting wild animals to hunting mushrooms and your lack of concern as you have closed roads is disconcerting to the citizens who depend upon access to these woods.
824	6	You must take a hard look at the traditions of the families and businesses that have for generations maintained a living in and around the Smith River National Recreation Area. Motorized vehicles have brought families to picnics in special areas for countless generations you cannot alter the lives of these people and their heritages. Please take a hard look at what your choices are doing to the heritages of these families and businesses. Camping is another issue that you are not evaluating wholly. Take a hard look at the camping that will be eliminated in your choices. This represents countless traditional outings and you must not end the ability to tell family heritages at campfires in the same spot as their forefathers did. Camping is seclusion and camps close to roads with traffic over 5 miles an hour is not camping.
826	8	In addition to the priority dispersed campsites identified in the above table, there are a vast number of other dispersed recreational sites available for use within 300-feet of the NFTS and county roads. During outreach with the public on this issue the need to add a "300-Foot Rule" to allow for the use of these areas for camping, wood gathering, and hunting was identified as having been omitted from the plan despite prior discussions between the County, users, and the Forest. Currently there is no provision in the plan to allow for such uses within 300-feet of NFTS routes. This should be added in order to facilitate lawful and responsible recreating, wood gathering, and hunting in the NRA. In addition to the priority dispersed sites in the above table, the County has geo-located dozens of other unnamed, dispersed sites that would benefit from the incorporation of a 300-foot Rule into the plan and have been historically used for camping, wood gathering, and hunting.
804	2	When the National Rec. Area was first implemented, we were promised that access was going to be increased into our forest. So now when your proposal to close 200 miles of road is on the table is just shows us that we can't trust the promises made by our government and the environmental movement attempting to keep us out of our forest.

Response: The 1990 NRA Act limits motorized travel to designated routes. The 300-foot rule did not apply to the NRA. In addition, Forest Service Policy on Travel Planning. Forest Service Manual 7700-Chapter 7710, Section 7716.1 Content of Designations, effective January 8, 2009, states that "road designations must specify either that they include parking within one vehicle length, or within a specified distance of up to 30 feet, from the edge of the road surface."

In 2005, the Travel Management Rule established and required the use of MVUM to display the designated NFTS open to motorized travel. The current MVUM for the Gasquet Ranger District (Smith River NRA) reflects the status of NFTS roads and motorized trails in the forest's transportation database at the time of publication in 2009. Many UARs on the Smith River NRA are not the result of off-road recreationists, as the terrain in many parts of the Smith River NRA itself limits this, but rather they are old mining roads or Forest Service logging roads that were not tracked in the transportation database in 1990. The public's input was not involved in identifying recreation opportunities or determining the NFTS shown on the 2009 MVUM. With the publication of the 2009 MVUM many of the routes that had been used by recreationist in the past were then identified as UARs and therefore illegal for motorized travel. Unauthorized routes considered for designation on the NFTS are limited to those that currently exist on the ground and have been inventoried.

During the summer of 2012, more than 100 short routes were inventoried and reviewed for inclusion in the project, and recommendations for designation on the NFTS were made based on the recreation opportunity, provided any safety and resource concerns could be mitigated. As a result the project analysis a range of alternatives that provides access to dispersed campsites was developed. Effects to dispersed recreation opportunities are analyzed in the Recreation Section of Chapter 3 of the Final EIS.

The Smith River NRA Act recognized the unique attributes of the Smith River watershed including diverse conifer forests of the Siskiyou Mountains, unique botanical communities of the North Fork, and renowned anadromous fisheries, while also acknowledging the exceptional opportunities for a wide range of recreational opportunities that through careful development and utilization would provide mutually compatible levels of recreation, fisheries, and timber resources. Direction is provided to the forest service to provide for a broad range of recreation uses and provide recreational and interpretive services and facilities (including trails and campgrounds) for the public, provide and maintain adequate public access, including vehicular access roads for general recreation activities, and permit the use of off-road vehicles only on designated routes. However, the Act strongly balances the direction to provide for recreation opportunities by directing the Forest Service to improve the anadromous fishery and water quality, provide for the long-term viability and presence of Port-Orford cedar; protect, preserve and increase oldgrowth forest habitat; and restore landscapes damaged by past human activity, to name a few. This project is consistent with the intent and administrative direction outlined in the SR NRA Act by providing for motorized recreation opportunities through the addition of motorized trails to the NFTS, while also reducing risks to the unique qualities and characteristics of the SR NRA such as botanical communities, water quality, POC, and cultural resources through decommissioning of roads and the implementation of risk reducing mitigations on the proposed NFTS.

Authorizations for the collection of special forest products, such as mushrooms and firewood, are handled under separate permitting authority and are subject to the parameters of the permit.

Consideration of 'Class II' input

Letter Number	Comment Number	Comment Text
824	1	Please take a hard look at the facts of your documents. I do not find Class II input. I do not think a true document can be based on half facts. OHV is Off Highway Vehicle: it does not mean cross-country vehicle. You must take a hard look at the fact-finding within your documents. Class II vehicles are a legitimate use of public lands. You have omitted largely half to three quarters of Oregonians and Californians by closures and gates on roads and trails.

Response: All interested parties are invited to provide input at various stages of this project, and many have. Comment-by-comment and route-by-route analysis was completed based on comments received during the scoping and public comment periods. The significant issues and suggested alternatives identified by the public drove the development of Alternatives 4, 5, and 6, which are alternatives to the Proposed Action (Alternative 3). It is recognized that OHV does not mean cross-country (off-route) travel. It is also recognized that using OHVs, also known in Oregon as Class II vehicles, is a legitimate form of motorized recreation in National Forest System lands. Motorized recreation opportunities are one of the many resources being managed for with this project. The project will provide hundreds of miles of roads

and motorized trails that will provide for a variety of user preferences. Unauthorized routes will be added to the system as motorized trails, including trail systems on Gasquet Mountain and Rattlesnake Mountain.

The Forest Service is required by the Smith River NRA Act and Forest Plan standard and guidelines to reduce risk to Port Orford cedar. Seasonal gate closures are a mitigation used to reduce risk to POC by eliminating motorized travel in the wet season when the risk of the spread of infection to POC is high, while maintaining motorized access during the dry season. For more information on seasonal closures, see Chapter 2 under Resource Risk Mitigations.

Anticipated Motorized Recreation Use Level & OHV Community Engagement

Letter Number	Comment Number	Comment Text
831	9	The CFRs state that millions of forest users come in a motorized vehicle and continue to do so throughout their forest visit. Instead of single mile of existing motorized routes being closed the management of this forest should be creating hundreds of miles of different types of motorized trails, motorized ways, opening hundreds of miles of Level I and Level II roads to high clearance travel vehicles (already existing is thousands of miles of roads that are maintained to some degree). It is the primitive motorized roadway, trail, way, route that the motorized community is looking for.
831	17	It is our belief that no road should be barricaded or gated until the OHV community and others (particularly local motorized residents) have been consulted on the ground and in person. The forest service is not doing enough to include the people who are currently using particular motorized routes before closing them whether for work or outdoor recreation. This type of document will not be seen by the majority of the local and national OHV community but input or the lack of it gained by the few public comments receive does not justify closures of miles of roads. Millions of Americans will be affected by these closures forever but millions of Americans have not nor will be contacted to address this motorized travel plan, which will be implemented. We are asking that no roads, motorized routes, Level I or Level II road be closed whether created by blade or mechanized wheel. Motorized routes need to be increased to meet the growing number of Americans using motorized transportation within national forest boundaries not decreasing the miles available. It should be apparent to the writers of this document that there is millions of acres set aside for non-motorized activities.
831	22	Let it be noted for the record that under Supporting Notice and Resource Reports that not a single motorized group is mentioned. Not one single OHV club, group or economic reports from OHV shop either for sales, repairs or exchanges have been contacted for information for this document. Not a single OHV organization was contacted for their inputs on roads, motorized trail, their usage documented per roads and trails of use. Not a single motorized user of the forest has words written within this document supporting motorized use on public lands. This is wrong! This is supposed to be an unbiased document concerning Motorized Travel Management Plan within the Smith River National Recreation Area and it should be filled to the brim with our documentation whether for work or outdoor recreation. Why have the writers not contacted the motorized user of public lands for written documentation of our current, past and hopefully future use of these lands? We cannot support Alternative 6. We would support Alternative 4 if the eleven paragraphs above would be considered and Alternative 4 would be amended to include each.

Response: It is recognized that millions of visitors to national forests arrive and recreate in motorized vehicles. The SRNF's National Visitor Use Monitoring Reports from 2008 and 2013 identify visitor rates and activities specific to the forest (Chapter 3). To leave open every mile of existing NFTS route, if no administrative or public need has been identified for that route, would not meet the purpose and need of the project.

The forest strives to engage interested and potentially affected publics in a manner that meets or exceeds our legal obligations. Over the 12-year period of the Smith River NRA Roads Analysis Process and subsequent NEPA documents, the Forest Service has provided multiple opportunities for the public to comment on the process, including multiple public meetings and workshops, newspaper articles, public service announcements, and months of public review time. Multiple OHV groups were contacted and

provided comments throughout the process, and two OHV groups, as well as individual OHV enthusiasts, participated in the 2010 collaborative process for the project.

In the preparation of this EIS, the forest exceeded the public involvement requirements legally mandated by the Travel Management Rule and the NEPA process. In addition to the soliciting comments from the public through the Scoping and Draft EIS commenting period required by the NEPA process, the SRNF has hosted four public meetings or workshops prior to the release of the FEIS, where forest staff presented information about the project, the alternatives, the planning process and how to get involved, and discussed both general and route-specific concerns with members of the OHV community in-person to gain a shared understanding of the issues of concern and values at stake. Letters representing OHV groups came from the Blue Ribbon Coalition during the scoping process and from numerous independent OHV users. During the DEIS comment period, in addition to the comments provided by the Pacific Northwest Four Wheel Drive Association, letters also came from: Northwest Trail Riders, Blue Ribbon Coalition, Deschutes County 4 Wheelers, Klamath Falls Four Runners, and independent OHV users. This project includes a range of alternatives developed in response to the issues and route specific information provided by the public.

Diversity of Motorized Recreation Experiences

Letter Number	Comment Number	Comment Text
400	1	I am encouraged by the direction that the Smith River National Recreation Area Travel Management process is taking. Like most Americans, I value the wildlands, watersheds and wildflowers of this special place. I am not able to hike anymore due to cancer. I still want to experience this special area via OHV. I would like to place special attention on keeping the trail system and primitive as possible.
831	25	Most Americans want and ask for a way through the forest slowly as it naturally meanders through the forest terrain in their chosen mode of motorized transportation. The obstacles of the forest and mother earth left in place and very little maintenance done to the wheeled route. This is entirely left out of the alternative provided in this document. Just fast roads, fast/hot routes but the majority of the forest users are there to enjoy the forest at a leisurely pace in a motorize vehicle.

Response: The project will provide hundreds of miles of roads and motorized trails that will provide for a variety of user preferences and experiences. Unauthorized routes will be added to the system as motorized trails, including trail systems on Gasquet Mountain and Rattlesnake Mountain. Creating new, slow tracks for a high-complexity OHV experience is outside the scope of this project because construction of new routes is outside the scope of the project.

Impacts to Motorized Recreation Opportunities

Letter Number	Comment Number	Comment Text
559	1	We do not need to close "off-road" riding trails and areas just to preserve a "special flower".
559	2	Those "special flowers" will continue to grow just as they have been growing for the past hundreds & hundreds of years. Furthermore, we are talking about vehicles and or motorcycles traveling on a road or trail, and the "special flowers" don't grow in the middle of the road or trail, so why the need to shut our beautiful riding areas down??? There are millions of flowers and plants all over the world, are you suggesting we shut down motorized use on all of the roads and trails out there? No, because that would not make any sense.

Letter Number	Comment Number	Comment Text
559	3	So why continue to try and shut down the places my family and I use, love and care for. I'm sure you wouldn't like it if I was trying to shut down the trails & roads that you and your families use, love and care for.

Response: The Forest Service is required to manage resources in compliance of the standards and guidelines in the Forest Plan, the Smith River NRA ACT, and the IRA values that provide guidance to conserve and protect. Several Forest Service Sensitive plants do occur on some of the unauthorized routes (UARs) proposed for addition to the National Forest Transportation System. Forest Service Sensitive plant species are those that have been identified by the Regional Forest for which there is a concern for their viability as evidenced by significant current or predicted downward trends in population numbers. The Forest Service is required to manage these very rare plants to avoid a loss of viability or trend toward Federal Listing. Sensitive plants that are present on UARs proposed for addition to the NFTS, some of which occur in the middle of these routes, have a tolerance for the low level of use that has been occurring on those routes most likely due to passive avoidance, subterranean meristem tissue, and multistem growth, enhanced seedbed conditions, and a reduction in competition from plant species that are less tolerant of the current level of use. The projects aims to protect the viability of the rarest plants in the project area via an adaptive management strategy to monitor motorized impacts as use rates change over time. In keeping with the adaptive management strategy, if a concern for species viability is triggered it will warrant line office involvement and management action that includes either: barricading the affected occurrence, buffering the occurrence with boulders, or barricading the UAR with associated removal from the MVUM if occurrence barriers are not feasible.

Access for Americans with Disabilities

Letter Number	Comment Number	Comment Text
804	4	3. Your road closers proposal also is a violation of the Americans with Disabilities Act by denying access to our backcountry to disabled people and elderly seniors who have mobility issues. 4. I am a sportsman and love to hunt, but the older I get the harder it gets to hike in and drag out a game animal. Roads are a huge plus for me personally and my family and friends who are disabled. I disagree with any and all proposed road closers.
831	14	Every road will enable millions of Americas that are disabled, sick, old and most important those who just don't have time to spend more than an hour or day in the forest and then motor back home on a motorized travel system.
854	1	He and 30 other disabled people are wondering why there is no access for disabled people. Why only catering to hikers and kayakers? His group is considering a class action lawsuit to get more disabled access. There is no access for disabled people to get to Devil's Punchbowl, or in campgrounds. There is no real access to rivers for people in wheelchairs.

Response: Implementation of the Travel Management Rule, Subpart B is forest wide and applies to all forest users equally. Under the Architectural Barriers Act, the Forest Service will follow the Forest Service Outdoor Recreation Accessibility and the Forest Service Trails Accessibility Guidelines. However, facilities that are non-motorized or closed are not subject to these guidelines. Restrictions on motor vehicle use that are applied consistently to everyone are not discriminatory.

Impacts to Non-Motorized Recreation

Quiet Recreation

Letter Number	Comment Number	Comment Text
828	3	Yes, you can get to the backcountry by vehicle – but when you get there, you are not going to be able to hike in peace and safety.
20	1	I can't believe that you would even contemplate opening the Smith River National Recreation Area to a handful of extreme off-road vehicle enthusiasts. I value the wildlands, watersheds and wildflowers of this special place and often kayak quietly down several of the forks of the Smith river. I am concerned that the wreck-recreational preferences of extreme off-road vehicle riders would destroy my ability to enjoy the Smith River National Recreation Area.
243	4	I strongly request that there is no forward movement for motorized vehicles in our forests. We have truly only a fraction of what once was that is undisturbed by noise pollution and environmental pollution.
755	2	Those of us who enjoy the more quiet means of recreation might be more quiet in our requests, but we are here, in numbers.
793	5	Last but not least, like other hikers, I value the peace and quiet that natural places offer. The sights and sounds of ATV's and other obnoxious off-road vehicles are completely antithetical to the original purposes for which National Forests and Parks were designed.
828	8	Roadless characteristics are valued because of the recreational need to experience the natural world and all its subtle sounds that are despoiled by engine noise. And this is no small oversight, as the majority of recreational users are those who seek the sounds of nature.

Response: The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent. The acres available by alternative for quiet recreation activities within the project area by season are described in the Recreation section of Chapter 3.

The impact to quiet recreation opportunities by season is analyzed in respect to recreation opportunities on the SRNRA, and specifically in IRAs that occur on the SRNRA and considered in the decision making process. The results of the analysis are shown in Chapter 3 of the FEIS under the Environmental Consequences subheading within the Recreation and IRA sections.

Non-Motorized Recreation

Letter Number	Comment Number	Comment Text
828	6	During scoping and the alternative presentation, the lack of attention to the needs of non-motorized recreational travelers was pointed out. But this need goes unanswered for the most part. The recreational need to experience the outdoors filled by the sounds of the natural world, rushing of water, songs and calls from above, wind through leaves – the recreational need to travel, immersed in the sights and sounds of the natural world, is overlooked. What we find in this document is the identification of a resource impact to roadless characteristics, without the associated degradation to recreational experience.
828	7	Within the summary of effects table, page 36, an appropriate negative rating of 3 for preferred alternative 6 is given to Inventoried Roadless Area impacts. But the summary chart fails to recognize the associated degraded recreational experience that most users will encounter if vehicles are permitted to intrude directly adjacent to or within roadless areas. The summary chart gives a higher rating for quality recreational experience to alternative 6 (which despoils roadless areas) than it does for alternative 5, which better conserves roadless areas.

Response: The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent.

The Summary of Environmental Consequences table located at the end of Chapter 2 of the EIS summarizes the resource analyses detailed in Chapter 3. Effects to quiet recreation are broken out separately in the summary table of the EIS for the Recreation resource. Effects to primitive and semi-primitive non-motorized, and semi-primitive motorized are IRA values and characteristics that were analyzed and considered in respect to effects to IRAs. The information provided in Summary of Effect Table in the IRA section of Chapter 3 of the EIS summarizes the effects to IRA as defined by IRA values and characteristics. The Summary of Environmental Consequences table is derived from these determinations.

Letter Numbe		Comment Text
255	3	I want my National Forest lands to stay forest: with wildlife, wild plants, clean air, clean water, peace, quiet, hunting, camping and fishing values preservedNOT GIVEN AWAY to a loudmouth, vocal minority that want to ram their off-road vehicles even further through these lands.

Response: The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent.

The Forest Service, as an agency tasked with multiple-use conservation by the Federal Lands Policy and Management Act of 1976 (FLPMA), must provide for and manage motorized recreational access to Forest Service lands, in addition to the many other resources values managed. This motorized access must address both OHV travel and other motorized travel to access non-motorized travel opportunities, such as trailheads and dispersed camping areas. Where possible within the scope of the project and in compliance with law, regulation, and policy, the Forest Service is required to analyze impacts to recreation resources along with all the other resources that we must protect and manage, including quiet recreation resources. The acres available by Alternative for quiet recreation activities within the project area, by season, is described in the Recreation section of Chapter 3 of the EIS, and summarized in the Summary of Environmental Consequences table in Chapter 2.

Letter Number	Comment Number	Comment Text
850	4	The Northwest Trail Riders are an equestrian group whose goal is to assist and encourage the acquisition, construction, maintenance and supervision of bridle paths, horseback trails, staging areas and rights of way in the north coast area. Old roads make excellent bridle paths.

Response: Closed (ML 1) roads that are not available for motorized use will remain legal for equestrian and other non-motorized travel. Routes not designated on the NFTS will continue to be available for non-motorized recreation.

Conflict of Uses

Letter Number	Comment Number	Comment Text
659	1	My family has stopped going to some of our favorite wilderness areas to avoid the prevalence of rowdy, destructive ATV's. They are anything but family friendly. Please do not turn the Six Rivers National Forest into another ATV off road park.
802	1	As an avid forest lands hiker, I am dismayed by the direction that the Smith River National Recreation Area Travel Management process is taking. So often anymore, I find it difficult to find areas where OHV and motor vehicles are not traveling in the same areas I am in.

Letter Number	Comment Number	Comment Text
828	1	Although the National Recreation Area Travel Management Plan should support a range of recreational travel uses, it does not. The analysis, for the most part, fails to consider important recreational trail uses that are in direct conflict with motorized use. Such important recreational use is the enjoyment of hiking without the noise, pollution and danger of vehicles, through the last vestiges of roadless areas in our nation. Recreational travel by foot or by bicycle or by horse along trails seems to have almost no place in this plan, although the report claims to include these uses on page 4, item 1, and again on page 11.
828	2	Provide for a broad range of recreational uses. Provide and maintain adequate public access, including vehicular roads for general recreational activities such as camping, hiking, hunting, fishing.
828	5	Personally, I avoid hiking SRNRA roads or unauthorized routes because I was almost run over by OHV users that were having fun doing what they like to do best, drive recklessly in the backcountry. For most backcountry hikers, being worried about an OHV user barreling around a tight turn on a narrow road pretty much eliminates hiking opportunities on motorized routes.
655	1	As someone who has lived in Del Norte County for 28 years and explored miles of forest service roads, I am well aware that there are many, many roads that go lots of wonderful places, and, if you drive slowly, even my little Toyota car can navigate them. I have also hiked with great pleasure in the wilderness areas where motor vehicles are off limits. While I agree that we need a balance, I do not believe that our forests need to cater to souped up off-road vehicles that want to go tearing through the forests. That kind of driving belongs on a racetrack. I appreciate your consideration of those of us who head up to the mountains to experience the natural environment in all its natural beauty, and who care about the survival of these wild lands.
296	1	I am more than dismayed! Why cater to a small population of people who have little regard for their impact! I regularly hike and camp in the Smith River NRA. Many of the campgrounds I visit are not at all pleasant as people with their ATV's and other motorized toys dominate the space with the noise and dust. This is not compatible with a nature experience. Let the motorized toys use the many, many existing roads and already compromised areas! As I understand it, it is your job to protect the natural values. We have little enough of this kind of land left. Please don't give away anymore!
12	2	This is a terrible idea. I have been nearly run off the road and hit by off road vehicles, and they just destroy everything in their path and the quietude of the forest for the habitat and for the people visiting.

Response: The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent.

This project includes the restoration of unauthorized routes. The intent of this project is in part to manage motorized recreation on the Smith River NRA to prevent resource damage. The action alternatives reinforce the existing prohibition of motorized cross-country travel and restrict motorized travel to designated routes. They are designed to protect and improve water quality, riparian and botanical areas, while simultaneously providing access to dispersed and motorized recreation opportunities as specified in the Purpose and Need for the project. Implementation of the Travel Management process will provide a framework for improved enforcement, engineering, and public education intended to deter and reduce violations. This includes issuance of an MVUM, which will identify NFTS roads and trails open to motorized use and give law enforcement the necessary documentation with which to enforce the proper use of these routes; signing of NFTS roads and motorized trails; and barricading UARs not added to the NFTS. ML 1 roads not open for motorized use will remain legal for equestrian and other non-motorized travel. Unauthorized routes not designated on the NFTS will be available for non-motorized recreation.

Under the Smith River NRA Act of 1990 (16 USC 460bbb et seq.), travel was restricted to designated routes; off-road and off-trail use was prohibited. The acres available under each Alternative for quiet recreation activities within the project area are shown in the Recreation Section of Chapter 3 of the EIS, and will be considered by the Responsible Official in the decision making process. Non-motorized trails

are not part of the scope of this project and will continue to be open and available for non-motorized recreation opportunities.

It is possible that there can be some conflict from competing uses within the vicinity of designated roads and motorized trails, where motorized recreationist and quiet recreationists may be in close proximity. However, both the legal framework of the MVUM that implements this decision and the terrain common across the landscape of the NRA will help contain motorized recreation to legally authorized routes. Quiet recreation activities have no such limitations and can occur near or away from motorized routes, with or without a non-motorized trail; this assumption has been articulated in the Recreation section in Chapter 3 of the FEIS. No OHV parks or play areas are proposed in this project.

Impacts to Resources

Cultural Resources

Letter Number	Comment Number	Comment Text
819	119	Heritage Resources Implementation of Alternative 6 threatens violation of the National Historic Preservation Act while page 345 of the DEIS indicates that Alternative 5 would put the fewest cultural sites at risk and have the least effect on cultural resources.

Response: The Smith River NRA Restoration and Motorized Travel Management project was designed to ensure compliance with federal historic preservation laws, including the National Historic Preservation Act (NHPA). Cultural resources were considered in all aspects of the project. A route-by-route assessment was completed to determine effects to cultural resources. The §106 of the NHPA clearance report for this project concluded that there will be no adverse effect to cultural sites related to any of the alternatives with the application of standard resource protection measures. The eight sites considered at risk in Alternative 6 will be protected utilizing a combination of standard protection measures (i.e. barriers) and monitoring.

Natural Resources

Letter Number	Comment Number	Comment Text
821	2	I was a survey tech for the Gasquet ranger District in the 1970's. I saw on the ground just how temporary many of the logging roads would be. Later, working for the CA Conservation Corps I became involved putting roads to bed, salvaging slide areas with plantings and restoring stream fish habitat. There were a lot of ruts everywhere and road barriers were typically removed with trucks and their winches. Motorcycles have virtually no limits in their ability to try every hill and ravine. Locally there are many people who want only to go where no one has gone, tear up Off road sites and even ford streams with their mudboggers, equipped with air intake snorkels. If it were just elders who couldn't walk the trails, I would feel better.
819	102	Since the DEIS proposes a road and motorized trail system that is not likely to be maintained to standard, we must ask what the consequences for the environment and for human/forest user safety are likely to result from this project.

Letter Number	Comment Number	Comment Text
806	5	What is off road vehicle use? For the most part, it is the adult equivalent of riding go-carts. It is overgrown children using expensive toys. It is a measure of this culture's stupidity and hatred of nature that even with biodiversity crashing the way it is, we still have to defend closing roads to off road vehicle use. To be clear, we are not talking about food, clothing, shelter, or any other necessity of life. We are talking about overgrown children using expensive toys. The ecological health of the bioregion is more important than the ability of some people to play, and when there is a choice, a sane culture would each and every time choose the health of the bioregion over destructive leisure-time activities.
806	13	Now here is my point. Instead of saying, "I was able to drive my go-cart wherever I wanted when I was 19, and now that I am 50 I still want to be able to drive it wherever I want, consequences to the land be damned," members of a sane culture would be attending to the health of the land. Members of a sane culture would be saying, "I used to see dragonflies all through the air. Now I do not see so many. We must do whatever we can to protect the land, for the sake of the land, for the sake of the nonhuman inhabitants, and so that my children and their children and their children will be able to see the dragonflies and newts and songbirds and bats and salmon, as I did when I was a child." In any conflict between the health of the land and playtime, the health of the land must always come first.
829	4	I feel that the option of user-created routes is an open ticket to erosion, slope failure, siltation and destruction, as the average recreational ORV user does not have the education or experience that is necessary to properly plan and install roads in sensitive habitat.
806	4	The stressors on the bioregion will continue to rise, and will rise exponentially with global warming. Just as a patient in critical care in the hospital must not have additional and completely unnecessary and frivolous stresses added to his or her life, we need to not add additional and completely unnecessary and frivolous stresses to the health of the bioregion. And off road vehicle use is as close as one can get to a completely unnecessary and frivolous stress to the health of any bioregion.
197	1	l've rafted down the Smith River and explored many of the remote canyons and ridges of the area. Over the last 15 years, I have seen massive damage done to the wild places by off road vehicles. This must be stopped! Do not allow ORV into any more areas and block off areas so that they may be rehabilitated.
829	10	To allow off road vehicles to travel anywhere they desire is a recipe for disaster.

Response: All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits including: 1) less than 0.1 percent of the serpentine sensitive plant habitats on the NRA are being affected; 2) all routes into the North Fork Botanical Area are being closed, protecting over 20,000 acres of potential habitat; 3) routes to be kept will be upgraded to correct drainage problems, and 4) POC protection measures are common to all action alternatives.

The potential for cumulative effects to global warming due to off-road vehicle use is considered negligible for all alternatives because none of the alternatives would result in a measurable change in the level of use, but rather redirect the pattern of use.

The 1990 NRA Act limits motorized travel to designated routes. Off-road use is illegal. Any areas where such use is occurring will have further mitigations imposed. The potential for cumulative effects is considered negligible for all alternatives because none of the alternatives would result in a measurable change in the level of use, but rather redirect the pattern of use.

The Smith River NRA Roads Analysis was developed in part to identify risks associated with NFTS roads and UARs. Watershed related risks such as erosion, slope failure, and associated impacts are identified and mitigations to stabilize UARs that pose a risk to watershed resources proposed for designation on the NFTS are included in the alternatives. Signing of designated motorized trails and barricading of UARs not proposed for designation is also included in Alternatives 5 and 6, which will reduce the likelihood of unintended illegal motorized travel off the NFTS by clearly defined NFTS where

motorized travel is allowed. Only existing UARs are proposed to be designated on the NFTS. The project does not provide for any NEW motorized trail construction. *Unauthorized routes* refers to motorized trails that are pre-existing and not constructed by the Forest Service.

Letter Number	Comment Number	Comment Text
819	134	Leaving open or designating numerous user created routes in the project area – as either system roads or ORV trails – will exacerbate increasing ORV impacts which must be disclosed and analyzed in NEPA documents, especially as ORVs become more powerful, sophisticated and there is a proliferation of "extreme" off-roading including rock "crawling" (often over Forest Service barriers) and "creeking" in streambeds. Stronger measures are needed to protect the nationally outstanding hydrological, botanical and ecological values, found within the project area.

Response: The majority of UARs on the NRA are not user created routes. Many are old mining roads and some logging roads on previously private land that was later acquired by the Forest Service. Mitigations have been proposed to minimize resource impacts while providing access. The Forest Service would close between 2 to 4 times the miles of UARs that would be added. Adding the UARs that are needed for access would be consistent with Forest Service Rules and Regulations.

The 1990 NRA Act limits motorized travel to designated routes. All alternatives would restrict vehicles to designated routes. Off-road use is illegal. Any areas where such use is occurring will have further mitigations imposed.

Alternatives 5 and 6 include barricading all UARs that are not designated on the NFTS to deter illegal motorized travel and the impacts associated with it.

Impacts of Off-Road Travel on Gasquet Mountain or Gordon Mountain

Letter Number	Comment Number	Comment Text
823	2	I disagree with the placement of motorized trails in Alternative 5 or any of the other alternatives. The motorized trails on Gasquet Mountain and Gordon Mountain are too close to areas of gentle terrain and open, grassy areas, tempting off-highway vehicle (OHV) riders to stray off designated routes. All it takes is one trip through a wet meadow with an OHV to cause long-lasting damage and there is always someone who is going to do that no matter how many signs are put up.

Response: Alternative 5 most closely addresses the concerns of this commenter, while not fully eliminating all motorized trails from Gasquet Mountain and Gordon Mountain, Alternative 5 only proposes 0.5 miles of motorized trails on Gordon Mountain, and 2.3 miles of motorized trail on Gasquet Mountain. All proposed trails include route delineation to reduce the risk of travel off the trail.

Aquatic and Terrestrial Species

Letter Number	Comment Number	Comment Text
819	108	Please Acknowledge and Disclose All the Impacts of Road Use KS Wild's scoping comments of August 1, 2006 contained a peer-reviewed article by Trombulack and Frissell detailing some of the negative impacts of road density and use on terrestrial and aquatic ecosystems. In those scoping comments, we requested that the agency consider options to mitigate or reduce many of the negative effects of roads detailed in the study. The abstract for the article reads as follows: Roads are a widespread and increasing feature of most landscapes. We reviewed the scientific literature on the ecological effects of roads and found support for the general conclusion that they are associated with negative effects on biotic integrity in both terrestrial and aquatic ecosystems. Roads of all kinds have seven general effects: mortality from road construction, mortality from collision with vehicles, modification of animal behavior, alteration of the physical environment, alternative of the chemical environment, spread of exotics, and increased use of areas by humans. Road construction kills sessile and slow-moving organisms, injures organisms adjacent to a road, and alters physical conditions beneath a road. Vehicle collisions affect the demography of many species, both vertebrates and invertebrates; mitigation measures to reduce roadkill have been only partly successful. Roads alter animal behavior by causing changes in home ranges, movement, reproductive success, escape response, and physiological state. Roads change soil density, temperature, soil water content, light levels, dust, surface waters, patterns of runoff, and sedimentation, as well as adding heavy metals (especially lead), salts, organic molecules, ozone, and nutrients to roadside environments. Roads promote the dispersal of exotic species by altering habitats, stressing native species, and providing movement corridors. Roads also promote increased hunting, fishing, passive harassment of animals, and landscape modifications. Not all species and ecosystems are equally affe

Response: The negative impacts of motorized road use on wildlife species was fully disclosed in the EIS, including the potential impact of road use as delineated in the Trobulak and Frissel (2000) paper. All action alternatives will reduce road densities of ML 1, 2 roads and unauthorized routes across the NRA. Reducing road density across the district will reduce fragmentation of habitat as the decommissioned roads revegetate, increase patch size, reduce sedimentation in stream channels, and reduce disturbance and direct mortality. In addition, cross-country travel is prohibited under the Smith River NRA Act of 1990. An overall reduction of road densities across the NRA will benefit wildlife in the short-term through elimination of noise disturbance on closed roads/routes and in the long-term through the reduction of fragmentation and habitat restoration.

NWFP and ESA Compliance with Coho

Letter Number	Comment Number	Comment Text
819	115	The Forest Service's current (DEIS) proposal to add non-system routes to the permanent road system in at-risk Key watersheds that serve as Essential and Critical fish habitat for Coho and as EFH for Chinook runs afoul of both the Endangered Species Act (ESA) and the Aquatic Conservation Strategy (ACS) of the Northwest Forest Plan.

Response: The proposed actions were designed to meet the objectives of, and fully comply with ESA, ACS and the Forest Plan and will not adversely affect listed species. All of the action alternatives would implement the ACS and decrease in road miles on the NFTS within the Smith River Key Watershed. In

addition, the proposed actions under the FEIS were reviewed by the Forest Service and National Marine Fisheries Service and the actions were found to be consistent with the *Watershed and Fisheries Restoration Program* biological assessment (WFR BA; 2015) and corresponding biological opinion from NMFS.

Smith River NRA Act and Improving Fishery

Letter Number	Comment Number	Comment Text
825	3	The Act also directs the Secretary to improve/restore the anadromous fishery and water quality, including (but not limited to) improving fish spawning and rearing habitat, and placing appropriate restrictions or limitations on soil disturbing activities.

Response: All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including roads with pose risks to water quality and fish habitat. The project will implement the ACS as it was designed to improve and restore aquatic resources. The project implements recovery action under the Final Recovery Plan for the Southern Oregon/Northern California Coastal population of coho salmon, including reducing road-stream hydrologic connectivity, decommissioning roads and upgrading roads within the Smith River watershed.

Assumptions and Determination on Listed and Candidate Species

Letter Number	Comment Number	Comment Text
819	107	Foreseeable Impacts to Listed and Candidate Fish Species The National Marine Fisheries Service (NMFS) initially found that the Project was "likely to adversely impact listed species" (DN at P.12). That document must be included as part of the project Administrative Record. However, the FS was subsequently able to convince NMFS to alter that finding. The previous Decision provided two posthoc justifications supporting the altered NMFS finding: "Distance to Critical and essential Fish Habitat" and "the reduction of sediment overall from current levels" (DN at P.12). Careful review of that analysis, however, indicates that the conclusion that sediment will be reduced overall is based on unsupported assumptions, i.e. 1) that the road system adopted by the agency would be maintained to standard; and 2) that the funding necessary to complete "improvements" would be forthcoming. But as noted above, the RAP itself admits that maintenance is currently funded at 10% of need and that more funding for maintenance is not expected. When information from the RAP and proposed action are integrated it becomes clear that what the Forest Service is essentially saying in these documents is that the agency currently has the funds to maintain 35.5 miles of OLM 1, OLM 2 roads and motorized trails, and that this funding level is not likely to change substantially anytime soon. We believe that if NMFS had been informed of these facts – and if they had been supplied Forest Service and other research on road related sediment impacts, NMFS would have held fast to the initial, correct, Likely to Adversely Impact finding. 1 See, for example, "Channel Suspended Sediment and Fisheries: A Synthesis for Quantitative Analysis of Risk and Impact, NA Journal of Fisheries Management, Vol.16, No.4, Nov. 1996. 25 The Not Likely to Adversely Affect (NLAA) finding is based on inaccurate Forest Service assumptions and contentions concerning the management situation with respect to maintenance needs and sediment delivery impacts which are likely to resul

Response: In 2007, consultation with the National Marine Fisheries Service determined that the project was not likely to adversely affect listed fish or Critical Habitat, and in fact is considered to be beneficial. The conservative preliminary finding of likely to adversely affect was not initially made by NMFS, rather it was made by the USFS fisheries biologist for the project prior to consultation with the National Marine Fisheries Service. The NMFS does not make ESA Section 7 determinations, rather NMFS renders either concurrence (informal consultation) or and opinion (formal consultation) on the determination of the USFS biologist.

As part of the ESA §7 Streamlining Consultation (i.e. Level 1) process, a Level 1 project field review that included NMFS and USFS biologists was held to visit sites where proposed road decommissioning and maintenance would occur within proximity to SONCC coho salmon Critical Habitat. This field review with NMFS allowed the USFS fisheries biologist to develop the final determination of *not likely to adversely affect*, and allowed NMFS to concur on that determination with site-specific knowledge of the project.

Since 2007, the forest completed a program level consultation on watershed and fisheries restoration actions that meet SONCC recovery plan objectives. This program level consultation considered previously consulted on actions, such as the 2007 consultation for the original proposed action in order to incorporate more recent status reviews, science and the 2014 SONCC recovery plan. The proposed actions under the FEIS were found to be not only consistent with this *Watershed and Fisheries Restoration Program* biological assessment (WFR BA; 2015) and corresponding biological opinion (NMFS 2015), but also implemented components of the 2014 SONCC recovery plan.

Wildlife

Letter Number	Comment Number	Comment Text
819	109	Previously in this planning process the Six Rivers National Forest contended (without citation or analysis) that "[t]he effects to suitable and Critical habitat [from roads and routes] have already occurred." (EA Appendix C page 40.) This statement completely ignores significant research that attributes motorized impacts to wildlife, including but not limited to, direct harassment, noise disturbance, dust production and increased erosion that are known to result from road and route use through critical and suitable habitat. On August 12, 2002 our organizations provided a copy of the Hayward et al. paper (mentioned on page 131 of the DEIS) to the Forest Supervisor and the District Ranger. We pointed out that the paper concluded that "routine traffic exposure may decrease NSO reproductive success over time" and asked that the Forest Service analyze and codify the impacts of user created routes proposed for addition to the NFTS in Late Successional Reserves and NSO critical habitat. The agency elected not to provide such analysis or codification and continues to largely ignore the peer reviewed findings of the Hayward paper by contending that owls are "habituated" to ORV noise from rarely used UARs and that the "noise associated with motorized use of these routes is considered ambient." (DEIS page 131).

Response: Critical Habitat is designated by USFWS and is a specific, mapped area, not a habitat description. Within Critical Habitat, the USFWS identifies the primary constituent elements (PCE) which are specific elements that provide for a species life-history processes and are essential to the conservation of the species. For the NSO, the PCEs are the specific characteristics that make areas suitable for nesting, roosting, foraging, and dispersal habitat. All PCEs for NSO CH must occur in conjunction with PCE1, Forested types in early-, mid-, or late-seral stages and that support the northern spotted owl (emphasis added). Primary constituent elements of marbled murrelet Critical Habitat units include: 1) individual trees with potential nesting platforms, and 2) forested areas within 0.5 miles of individual trees with potential nesting platforms, and with a canopy height of at least one-half the site-potential tree height. Impacts to Critical Habitat are evaluated based on direct impacts to PCEs, not to the species. Impacts to the species are analyzed separately. As stated in the DEIS, no new road construction or reconstruction will occur under any alternative. Therefore, no additional northern spotted owl or marbled murrelet Critical Habitat will be removed through road construction and no suitable habitat will be removed for any listed species. The DEIS goes on to explain that road decommissioning may impact NSO Critical Habitat PCE4 (dispersal habitat) at culvert removal sites. One-tenth acre of brush and small diameter trees

will be removed in any one area. Impacts to northern spotted owl Critical Habitat units will be negligible. The project will result in a reduction of fragmentation and long-term improvement of primary constituent elements in the Critical Habitat units. Current habitat function in all Critical Habitat Units will be maintained in all treatment areas.

As stated in the DEIS, not all decommissioned roads occur in Critical Habitat Units; therefore, potential acres affected over estimates the potential effects to NSO CHU. The USFWS concurred that there would be no adverse effects to NSO CHU and no effect to MAMU CHU.

The negative impacts of roads are described in detail in the DEIS, which discusses the negative impacts of roads on animal behavior from fragmentation, noise disturbance, and dispersal of exotic species. Findings of Hayward et al. (2011) are specifically referenced in the DEIS.

Management Indicator Species

Letter Number	Comment Number	Comment Text
819	110	Management Indicator Species (MIS) and Survey and Manage Species "Most native terrestrial species located on the forest are adversely affected by road associated factors that can degrade habitat or increase mortality." —DEIS page 118. In our May 2012 scoping comments we urged the Forest Service to address the 9th Circuit opinion in Native Ecosystem Council v. Tidwell, 599 F 3d. 926 (9th Cir 2010) in which that court held that the agency's "proxy on proxy" MIS approach does not provide an assurance of species viability when: 1) population trend monitoring as per 1982 NFMA regulation hasn't been performed, and 2) MIS surveys in the project area fail to located key MIS species. We can find no acknowledgement of this case law in the DEIS or in the agency's treatment of MIS species. We pointed out that the forthcoming NEPA documents must analyze and disclose the potential impacts of the project on Management Indicator Species (MIS) as defined by the Six Rivers LRMP. At a minimum, the Forest Service must address the effects of proposed motorized use on MIS "individual species" such as the NSO, pileated woodpecker, black bear, American Marten, Fisher and Black-tailed deer as well as the Snag Assemblage, the Down Woody Material Assemblage and the Black Oak/White Oak Assemblage. See the LRMP page 97. The Forest Service elected not to disclose, analyze, monitor or codify impacts to any of these species and instead rests on the contention that "the Six Rivers Forest Plan does not require population monitoring or surveys at the project level." Instead of addressing the effects of increasing the size of the NFTS by adding high risk UARs to the maintenance backlog, the analysis contained in the DEIS consists primarily of acknowledging the lack of information about sensitive and indicator species while reaffirming a disinterest in gathering information or data that would allow for meaningful analysis of project impacts on such species. "There is little information available on wildlife species while reaffirming a disinterest

Letter Commen Number Number	Comment Text
	difficult to understand how MIS could fulfill their management function if the Forest Service refuses to collect information about population size, distribution, and trend and analyze and disclose that information in site specific NEPA analysis for this project. To assert that "[c]ollecting population data is not a requirement" for imperiled species and MIS is, essentially, to say that the agency can legally manage the habitat on public lands on the basis of projections of what might, or ought, to be happening with respect to wildlife populations, without regard to what the facts might actually be. This cannot be correct. If the purpose of designating MIS is to use their population changes to assess the "effects of management activities," then the Forest Service must actually attend to those population changes, which cannot be done without "collecting population data." Therefore, assessing population levels, distribution, and trends is in fact critical to assessing not only the effects of management actions, but also to evaluating the accuracy of the habitat capability models which the agency uses to estimate the relationship between habitat and population levels for imperiled and MIS species.

Response: As stated in the DEIS, "Under the Six Rivers Forest Plan, project level analysis of effects to management indicator species involves an analysis of the effects (direct, indirect, and cumulative) to habitat. The Six Rivers Forest Plan does not require population monitoring or surveys at the project level. Project level impacts to habitat are then related to broader scale (generally Forest, and in some cases, bioregional) population and/or habitat trends." No construction or reconstruction will occur under this project; therefore, no changes in the distribution or abundance of habitat available to MIS are anticipated. All action alternatives will reduce road densities of ML 1 and 2 roads, and unauthorized routes across the NRA. Reducing road density across the district will reduce fragmentation of habitat as the decommissioned roads revegetate, increase patch size, reduce sedimentation in stream channels, and reduce disturbance and direct mortality. In addition, cross-country travel is prohibited under the Smith River NRA Act of 1990. An overall reduction of road densities across the NRA will benefit MIS in the long-term through the reduction of fragmentation and habitat restoration. The project will benefit MIS. The Smith River RMTM project was determined to have minimal habitat effects (between 8 to 25 acres, depending on the alternative, across the district at culvert removal sites) with long-term benefits of reducing fragmentation and road density across the district. The project complies with the Six Rivers LRMP in regards to the analysis of effects to MIS.

Botany Science, Date and Determinations

Letter Number	Comment Number	Comment Text
819	61	Our requests for detailed, accurate, site specific analysis of the threats to the world-class botanical resources in the NRA from codified and mapped motorized trails was not reflected in the DEIS analysis which concludes that "because data was not collected at the occurrence level a rigorous qualitative analysis and ranking of the scope and severity to specific occurrences [of rare plants] cannot be performed." (DEIS page 155). This failure to collect (or analyze) data renders the agency's conclusions suspect. Page 294 of the DEIS acknowledges that a "primary goal" of the Smith River NRA legislation was to "emphasize, protect and enhance" the area's "unique biological diversity." Table 76 on page 198 of the DEIS concludes that implementation of Alternative 5 would best protect rare plant species as required by this "primary goal" of Congress. Yet the Forest Service appears to "prefer" implementation of Alternative 6 in order to better maximize the recreational preferences of 1.1% of Six Rivers National Forest visitors. (See DEIS page 371)

Response: The lack of occurrence data noted in the DEIS should not be interpreted as indicating that the analysis of effects to Sensitive plant species was not rigorous. The comment indicates a

misunderstanding of the point made that occurrence data was incomplete and a more meaningful comparison of effects between alternatives was based on actual numbers of plants or ramets of Sensitive plants found within 30 feet of unauthorized routes proposed for addition to the NFTS.

Rare plant survey data collected thus far on routes proposed to be added to the National Forest Transportation System indicate that these species are persisting in the presence of the current low level of use. This survey data indicates that they are more abundant on and immediately adjacent to (within 30 feet) the inventoried unauthorized routes (UARs). The project proposes to monitor use to prevent a loss of viability by establishing management response thresholds that, when triggered, would implement line officer action to prevent addition loss to Sensitive plant species. This would include such actions as barricading the affected occurrence, buffering the occurrence with boulders, or having use restricted or prohibited by order of the forest supervisor.

Sensitive Plant Species

Letter Number	Comment Number	Comment Text
819	87	The Six Rivers National Forest (SRNF) Land and Resource Management Plan (LRMP) requires demographic monitoring on an annual basis using permanent quadrants for species most at risk in order to gather baseline information (LRMP H-2). For Sensitive Plants, the management guidelines in place since 1995 also include development of "Species/Habitat Management Guides" (LRMP IV-83). In spite of this requirement, no botanical investigations or species management guides have been prepared for the 10 species in the project area that have the potential to be affected by the proposed action. It is difficult to understand how the agency can conclude that the impacts of the proposed action will not contribute to a trend towards federal listing for these plants without having conducted any investigations into the species existence and welfare in the planning area. Without substantive monitoring and biological investigations, the Forest Service is simply guessing.
819	89	The Forest Service cannot go forward with potential negative impacts to these species "until such time as the significance of the involved populations as related to total distribution and endangerment can be assessed" (see FSM 2672.4 and FSH 1.21(a) (6). Further, FSM 2670.32 (4) requires the agency to "analyze the significance of adverse effects on the population or its habitat within the planning area of concern and on the species as a whole" and "It is essential to establish population viability objectives when making decisions that would reduce sensitive species numbers" (FSM 2672.1).
819	55	The previous unsupported and undocumented contention on page 45 of the initial EA that motorized use of "non-system routes may affect individuals growing on travel surfaces but will not cause a trend towards listing" was speculative and arbitrary. The contention that permanently designating non-system routes in sensitive plant habitat will not trend plants towards ESA listing was directly contradicted by the acknowledgment that: The direct negative effects to Sensitive species as a result of the proposed action include crushing, uprooting, or otherwise damaging individual plants and recruits. Indirect negative effects pertain to 1) altering habitat beyond its capacity to support Sensitive species which includes soil compaction, reduction of water vapor transport, increases in surface temperature, reduction in soil moisture content, and the mobilization and spread of dust which blocks photosynthesis (Trombulak 2000), 2) loss of habitat niches for recruitment, 3) potential reduction in occurrence size which has implications for the vigor of the occurrence over time, 11 and 4) potential for illegal motorized vehicle use off the road surface affecting Sensitive plant occurrences. – Initial Smith River NRA Road Management and Route Designation EA pages 43-44. The direct negative effects to Sensitive Species from adding UARs as motorized trails that may result in a trend toward listing are also acknowledged on page 178 of the DEIS as: Reductions in photosynthetic capacity, poor reproduction, mortality, increases in bare ground, diminished litter cover, and a reduction in the overall cover and frequency of plant species. These effects are of particular concern with rare plant species, which are typically represented by a limited number of populations and or individuals due to their potential to affect the long-term viability of rare plant populations by increasing mortality and decreasing the vigor and productivity of populations.
819	59	The California Native Plant Society writes of the 17N49 road system in their previous scoping comments: "These areas provide habitat for one of the rarest of Forest Service sensitive plant species (STHO) as well as SISE. How serpentine habitat will be barricaded is hard to conceive as nearly all if not all of the STHO and SISE in this area exist on these roads or directly roadside."

Letter Number	Comment Number	Comment Text
819	82	The Proposed Botanical Resources Monitoring Plan Does Not Qualify as a Monitoring and Species/Habitat Management Guide Ten Forest Service Sensitive CNPS-listed plants are known to occur in the project area (Sensitive Plant Biological Evaluation, December 8, 2006). According to the initial Sensitive Plant Biological Evaluation (BE) the project may affect individuals but is not likely to result in a trend toward Federal listing or loss of viability for <i>Eriogonum pendulum, Gentiana setigera, Lewisia oppositifolia, Silene serpentinicola, Streptanthus howellii,</i> or <i>Viola primulifolia</i> ssp. occidentalis. The determination of "may affect individuals but will not cause trend toward listing" was based on an incomplete analysis, incomplete information, and anecdotal supposition. As stated on page 155 of the DEIS "because data was not collected at the occurrence level a rigorous qualitative analysis and ranking of the scope and severity of threats to specific occurrences cannot be performed." NEPA does not allow an agency to rely on the conclusions and opinions of its staff, without providing both supporting analysis and data. Idaho Sporting Congress v. Thomas, 137 F.3d at 1150. The Six Rivers National Forest (SRNF) must conduct population trend monitoring, population viability analyses, or science-based research on the reasons for rarity of these species, all of which are necessary to make a determination on the significance of potential impacts.
819	58	Page 152 of the DEIS acknowledges that: "There is a potential for both vehicular and pedestrian cross-country travel in areas with relatively flat topography and open vegetation. Such travel could impact unique botanical features within these areas such as rare species in Jeffrey pine woodlands and rocky barrens." Unfortunately the DEIS largely fails to analyze or disclose the potential for increased off-route and off-road ORV abuse of serpentine sites due to the addition of non-system roads to the system and instead assumes that such sites will not be subject to increasing motorized damage over time due to the decision to codify NFTS travel ways adjacent to and through them. The Smith River NRA's NEPA analysis should not pretend that increased illegal off-route and off-road use in serpentine areas will not occur as a result of adding routes to the mapped system.
819	86	According to the initial Sensitive Plant Biological Evaluation (BE), Strepthanthus howellii and Silene serpentinicola do exhibit a tolerance to disturbance by virtue of their presence in disturbed settings, including roadbeds, but there is a threshold beyond which plants are negatively affected. This is evidenced by the relatively fewer number of plants found on the segment of non-system roads proximal to a system road compared to distal road segments, which presumably receive less disturbance While Streptanthus howellii and Silene serpentinicola do occur on some route segments experiencing use, it is not possible to state emphatically that the current level of use is not affecting plants. Nor is it possible to state with any certainty that closing these routes will either benefit the species by removing traffic or negatively affect the species by shrub encroachment. It is conceivable that designating routes with Streptanthus howellii and Silene serpentinicola occurring on travel surfaces would have both negative and beneficial effects to these species and that the beneficial effects would serve to moderate the negative effects. The previous Sensitive Plant Biological Evaluation (BE) acknowledges, It is important to emphasize that surveys associated with this project were not conducted at the occurrence level. If surveys had been performed at the occurrence level, extending beyond proposed routes, the ratio of plants on routes to plants off routes would likely have been lower. Casual observations made on Pine Flat Mountain indicate a number of plants exist outside the surveyed area. There are undoubtedly more plants on High Plateau than is currently known. Consequently, the numbers of plants provided in the following tables do not present a complete picture of the population size of the occurrences, but rather what is known based on limited surveys. [page 11] This statement indicates that the impacts analysis contained in the prior NEPA document was based in large part on speculation rather than factual info

Response: There is one federally listed endangered and five Forest Service Sensitive plant species within the project area. The forest is not required to manage plants listed in the *California Native Plant Society Inventory of Rare Plants* if they are not federally listed or Forest Service Sensitive. Although rare plant surveys were not performed at the population level, surveys were performed within 100 feet of

unauthorized routes (UARs) and impacts were analyzed based on the number of plants that would be affected by motorized use.

Implementation of this project is designed to provide for improved management of motorized recreation on the Smith River NRA by providing an NFTS that is signed and clearly distinguished from routes that are not open to motorized use. This is anticipated to decrease the potential for illegal motorized use and damage to sites and can reduce negative effects to native vegetation and Sensitive plant species. All UARs not added to the NFTS will be barricaded affording protection to the Sensitive plant occurrences growing within 30 feet. Seasonal closures and the restoration of hydrologic function will benefit Sensitive plant species, particularly those that occur in serpentine wetland habitat. Route delineation (barricading the edge of the travel way) will occur to prevent travel off designated UARs onto undesignated routes.

The determination in the biological evaluation is based on the premise that Sensitive plant species can be managed by monitoring impacts and establishing management response actions that would be implemented before a loss of viability (a 20% loss) is reached. This would include such actions as barricading the affected occurrence, buffering the occurrence with boulders, or having use restricted or prohibited by order of the forest supervisor.

Letter Number	Comment Number	Comment Text
819	84	Strepthanthus howellii (Howell's jewelflower, "STHO") is confined to dry, brushy serpentine exposures in the Siskiyou Mountains of Josephine and Curry counties, Oregon and Del Norte County in California. The California Native Plant Society rates it as List 1B.2 – Rare, Threatened, or Endangered in California and elsewhere. It is a Forest Service Region 5 and Region 6 Sensitive Species and is included on the BLM Oregon State Office Sensitive Species List. According to the initial Sensitive Plant Biological Evaluation (BE),"[i]t is the rarest in terms of number of individuals of all Sensitive plants documented in this analysis and, hence, the most at risk" (page 11). The fact that this rare species is confined to serpentine exposures increases its susceptibility to damage from off-road vehicle use adjacent to designated ORV routes contained in the proposed action. All of the California occurrences of the species are located within the Smith River National Recreation Area. Of these, 387 plants or approximately 60% were found on the surface of routes proposed for designation in the proposed action.

Response: Implementation of the project is designed to provide for improved management of motorized recreation on the Smith River NRA. This increased potential to deter illegal use and damage to sites can reduce negative effects to Sensitive plant species such as *Streptanthus howellii*. *Streptanthus howellii* plants that are present on inventoried UARs proposed for addition to the NFTS have a tolerance for the low level of use that has been occurring on those routes, most likely due to passive avoidance, subterranean meristem tissue, and multi-stem growth, enhanced seedbed conditions, and a reduction in competition from plant species that are less tolerant of the current level of use. Sensitive plant populations within 30 feet of UARs added to the NFTS will be managed by monitoring impacts and establishing management response actions that would be implemented before a loss of viability (a 20% loss) is reached. This would include such actions as barricading the affected occurrence, buffering the occurrence with boulders, or having use restricted or prohibited by order of the forest supervisor.

Letter Number	Comment Number	Comment Text
819	85	Silene serpentinicola (serpentine catchfly, "SISE") is a rare herbaceous perennial known only from Del Norte County, California. There are 11 known occurrences, all of which occur on the Smith River National Recreation Area. Sensitive plant surveys for the Smith River are RMRD project found Silene serpentinicola growing either on or adjacent to the travel surface of routes proposed for designation. Of these, 1806 plants or 54% were found near routes proposed for designation. According to the Resource Specific Monitoring Program section of the LRMP, the threshold of concern for sensitive plants is to the 20% decline in the number of individuals over a five-year period (H-2). If 50 to 60% of all known individuals of these two sensitive species are found within the routes proposed for designation in the 19 proposed action, it would appear that the threshold of concern of a 20% decline is likely to occur as a result of the proposed action.

Response: The substantially higher number of *Silene serpentinicola* found within 30 feet of UARs compared to those found from 30 to 100 feet indicates that this species has a tolerance for the low level of use that has been occurring on these routes most likely due to passive avoidance, subterranean meristem tissue, and multi-stem growth, enhanced seedbed conditions, and a reduction in competition from plant species that are less tolerant of the current level of use. Sensitive plant populations within 30 feet of UARs added to the NFTS will be managed by monitoring impacts and establishing management response actions that would be implemented before a loss of viability (a 20% loss) is reached. This would include such actions as barricading the affected occurrence, buffering the occurrence with boulders, or having use restricted or prohibited by order of the forest supervisor.

Federally Listed Plants

Letter Number	Comment Number	Comment Text
819	56	Please note that our May 2012 scoping comments included an attachment consisting of a March 11, 2009 correspondence from Barbara Ullian to District Ranger Mary K. Vandiver documenting significant travel management issues concerning <i>Arabis macdonaldiana</i> that we indicated should be addressed in an EIS. Unfortunately, the DEIS failed to adequately address the site-specific information provided by the public during the scoping process for this project.

Response: Barbara Ullian's comments to Mary Kay Vandiver center around her concern for impacts to *Arabis macdonaldiana* from illegal cross country travel and that use can occur beyond 100 feet of the routes being analyzed.

All alternatives would restrict vehicles to designated routes. Use beyond 100 feet is not proposed and therefore not part of this analysis. If use beyond what is analyzed herein is found to be affecting federally listed endangered or Sensitive plant occurrences it will be mitigated via such actions as barricading the affected occurrence, buffering the occurrence with boulders, or having use restricted or prohibited by order of the forest supervisor.

Noxious Weeds

Letter Number	Comment Number	Comment Text
819	131	Noxious Weeds The DEIS acknowledges that the spread of noxious weeds is hindering the management objectives of the LRMP and that "noxious weeds are a serious environmental concern [because] they threaten natural diversity, habitat for fish and wildlife and native plants, soil stability and ecosystem process." (DEIS page 223). Hence, the intent of the LRMP, the Smith River NRA Act and the project purpose and need is best met by implementation of an action alternative that minimizes the impacts of noxious weeds. Alternative 5 best reduces the threat of noxious weeds on the natural resources the Smith River NRA is charged with protecting because "direct and indirect effects are lowest where the number of miles of open road is less." (DEIS 235). Alyssum has been identified as a high priority by the Forest Service to prevent its spread from the Illinois River watershed. A potential exists for Alyssum to be spread by motorized users from Oregon via several routes that cross the state line into the Smith River watershed (18N14, 316, 19N01, 315). The SRNRA must coordinate with RRSNF, county and state governments to prevent the spread of Alyssum into the SRNRA. The SRNRA must consider a coordinated closure of roads to prevent the spread of Alyssum. The DEIS fails to analyze the dire consequences of the spread of Alyssum into the serpentine landscape of the SRNRA and likely significant adverse impacts to native plants.
819	132	The two Alyssum species were ranked as "A" listed noxious weeds because they have the potential to outcompete native flora on serpentine substrates with a moderate probability of introduction through human activities (Amsberry et al. 2008). In 2008, an Alyssum murale population was found at the base of the Lone Mt/Wimer Road in 2008 (Amsberry et al 2008:5) (Photo 1). Although the plants were removed "more escaped Alyssum may be going undetected due to lack of surveys and a lack of knowledge of other Alyssum plantings near public land." 37 Photo 1. An Alyssum murale population found at the base of the Lone Mt./Wimer road (4402) near O'Brien, Oregon in 2008. This population consisted of 198 seedlings and 21 flowering plants-all were removed after documentation. The road is a primary access route onto the Josephine ophiolite shield (one of largest and most botanically unique masses of serpentine bedrock in North America. (Photo by K. French) In a letter dated December 29, 2009 The California Native Plant Society states: We [California Native Plant Society] are particularly concerned about the potential spread of these invasive species [Alyssum] to the sensitive serpentine areas of Del Norte County, which known for its botanical uniqueness. The Smith River National Recreation Area is particularly at risk due to the network of dirt roads coursing the Oregon-California border. These roads are regularly used by off-highway vehicle (OHV) drivers who access the Smith River National Recreation Area from area in Oregon where roadside populations of Alyssum have already been documented just miles from the California border. Since the seeds are known to spread on vehicle tires and equipment, as well as by water and wind, the continued uncontrolled expansion of infestations is highly likely. [Amsberry et al. 2008]

Response: The SRNF has an active noxious weed removal program. The forest is aware of the threat posed by yellow tuft alyssum, which is currently not known to occur on the SRNF. The forest will continue to monitor for it. Anyone with knowledge regarding its presence within the proclaimed boundary of Forest should contact the forest botanist.

Impacts to Watershed Resources

Letter Number	Comment Number	Comment Text
819	90	Please Address Significant Road Maintenance Issues The initial EA assumed that, "NFS System roads are constructed or maintained to specific Forest Service standards." However, there are miles of old, eroding user-created routes in the planning area not constructed to Forest Service standards, which have been inventoried as "NFS system roads." One example is the Diamond Creek road 18N09. The route known as the McGrew Trail is another. Such roads are potentially hazardous to the outstanding resource values of the Smith River National Recreation Area and to forest visitors.

Response: All roads or motorized trails proposed to be added to the NFTS will meet Forest Service road maintenance standards. Specific project design features are incorporated for those routes not currently meeting road maintenance standards and shall be in place prior to being available for public use. While the McGrew Trail extends onto the Six Rivers NF, it is managed in its entirety by the Rogue-River Siskiyou NF and is beyond the scope of this project. The *Six Rivers Road Maintenance Project*,

authorized in January 2016, applies to all NFTS maintenance levels (ML 1 through 5) managed by the SRNF, including the Smith River NRA, and the Ukonom District of the Klamath National Forest. The *Six Rivers Road Maintenance Project* complements the *Smith River National Recreation Area Restoration and Motorized Travel Management Project*, by preserving investments in NFTS infrastructure to mandated design standards that sustain safe public and administrative access to NFS lands (Highway Safety Act), while preventing resource damage (LRMP, p. IV-49; Clean Water Act; and Endangered Species Act).

Specifically, the *Six Rivers Road Maintenance Project* design criteria, mitigation measures and annual operating allowance thresholds are applicable to road designations included in the *Smith River National Recreation Area Restoration and Motorized Travel Management Project*.

Soils

Letter Number	Comment Number	Comment Text
59	4	Creating and promoting off road use damages water quality, increases erosion, destroys native vegetation and leaves lasting soil degradation.
805	9	In my time as a resident of Southwest Oregon, I am personally familiar with the extreme fragility of the soils and vegetation of this landscape, and to the helplessness of public lands officials in policing ORV route use, even those in relative proximity to urban areas.

Response: Only designated motorized trails and roads that are depicted on the MVUM are available for public use. This EIS does not propose to designate any off road use. The project has numerous project design features, along with the LRMP and the Smith River NRA standards and guidelines that address concerns associated with sensitive soils and vegetation. As it states in the EIS, monitoring and condition surveys would be conducted annually, and corrective actions taken if roads and/or trail routes are out of compliance, including closures. Appendix B outlines the monitoring plans required for implementation for each resource area analyzed. Implementation of the Travel Management process will provide a framework for improved enforcement, mitigations, and public education intended to deter violations. For more information related to enforcement capabilities, see response to comments under Health and Safety.

Letter Number	Comment Number	Comment Text
819	104	Page 246 of the DEIS states that "most routes being evaluated to be added to the NFTS are likely in need of upgrading to NFTS as well as maintenance." The very next page acknowledges that "lack of maintenance also leads to plugging of culverts, ditch lines with sediment or vegetation debris leading to washouts." Yet the Forest Service wants to add 40 miles of UARs to the NFTS that "have a high hazard risk rating with increased risk of soil erosion and potential for sedimentation." Simple economics prohibit this dangerous approach to forest management. The agency must follow the requirements of the Six Rivers LRMP and "manage soil and water resources to protect and enhance long-term productivity of the forest, water quality, associated beneficial uses and aquatic ecosystems."

Response: Erosion Hazard Ratings (EHR) is a broad evaluation of the soils' susceptibility to erosion and the potential for soil displacement (movement off site), as discussed in the Soils section of the FEIS. Roads to be added with high EHR ratings do not necessarily reflect the on the ground conditions. Most UARs were evaluated by field specialists, and those that have existing/potential erosion and sedimentation concerns would be addressed as described in the EIS. The soil resource is one of many

evaluation criteria being analyzed and compared in the DEIS. All action alternatives would meet LRMP soil productivity standards and guidelines. Application of project mitigations/design features identified in Chapter 2 (and Appendix D) is applied where necessary to mitigate risk when designating UARs on the NFTS. When considered along with both active and passive restoration treatments, these actions would improve soil productivity, thereby better meeting LRMP standard and guidelines, and improving water quality. As it states in the Monitoring and Condition Surveys section of Chapter 2, monitoring and condition surveys would be conducted annually, and corrective actions taken, including closures, if roads and motorized trails are out of compliance. The monitoring plans are described in more detail the Appendices of the EIS, and are required for implementation for each resource area analyzed. The motorized trails proposed for addition to the NFTS require less maintenance for resource protection as compared to roads. Impacts to water quality from motorized trails are expected to be minor primarily due to the fact that most are ridge top roads, with existing hardened through past use, and are generally selfmaintaining and do not cross live streams. Most maintenance associated with motorized trails is associated with brushing and minor clearing of the travelway. Where necessary to mitigate the potential for adverse impacts to natural resources appropriate project design features are incorporated into the proposed actions.

Letter Number	Comment Number	Comment Text
819	118	Soils Page 260 of the DEIS indicates that "the potential for impacts to watershed resources associated with adding UARs to the NFTS does exist, especially with respect to those with high erosion hazard ratings." Page 264 indicates that implementation of Alternative 5 (rather than Alternative 6) "has the least impacts to soil resources." Please note that as acknowledged on page 266 the Six Rivers LMP indicates that "the primary management goal is maintenance of long-term soil productivity and high water quality" and that the agency must "manage soil and water resources to protect and enhance long-term productivity of the forest, water quality, associated beneficial uses and aquatic ecosystems." Alternative 6 would not accomplish these goals as it adds high risk routes to the NFTS with no assurance of maintenance funding and with limited (and unfunded) monitoring requirements. Please note that page 293 of the DEIS indicates that the agency is aware that it must establish Riparian Reserve protection for routes located in unstable terrain. Addition of such routes to the NFTS threatens violation of the ACS of the Northwest Forest Plan.

Response: The soil resource is one of many evaluation criteria being analyzed and compared in the EIS. All action alternatives would meet LRMP soil standards and guidelines. UARs proposed for designation on the NFTS where the existing condition presents a high or moderate risk to soil and water resources has an associated project design feature to reduce the risk from motorized use. Application of project design features along with both active and passive restoration treatments, would improve soil productivity, thereby better meeting LRMP standards and guidelines and improving water quality. Most routes that are in Riparian reserves are considered for decommissioning, restoration or upgrading. As stated in Chapter 2, monitoring and condition surveys would be conducted annually and corrective actions taken, including closures, if roads or motorized trails are out of compliance. The monitoring plans are described in more detail in Appendix B of the EIS, and are required for implementation for each resource area analyzed. It is important to note that the appropriated funds shown in the DEIS table only identify a portion of the funds available for implementation and maintenance of the NFTS. Funding is also made available from funds generated from timber sales and commercial road access permits, State OHV Division grants, emergency

repairs through the ERFO program (Emergency Repair for Federally Owned roads), competitive funds such as the Federal Lands Transportation Program, and partnership opportunities. In the past, stimulus funds were made available to the forest, but these dollars are not available on a regular basis. The Transportation Section of Chapter 3 is updated to reflect the diversity funding sources available. For more information on the economic viability of the project's implementation please refer to the response to comments under the heading Economic Viability.

Key Watershed and ACS

Letter Number	Comment Number	Comment Text
819	113	Key Watersheds and the Aquatic Conservation Strategy "Roads within the Smith River NRA are a primary threat to water quality as they are the leading source of management-related sediment impacts to streams." –DEIS page 47. "Watershed restoration should focus on removing and upgrading roads" –Six Rivers LRMP IV-III 30 "Existing permanent roads not necessary for administrative, recreation, resource protection, commercial or public access should be closed after all project work has been completed." –Six Rivers LMRP IV-115 The Six Rivers LRMP states that in Key Watersheds the existing system and non-system road mileages should be reduced (LRMP IV-111). Please note that Key Watersheds serve as refugia crucial for maintaining and recovering habitat for at-risk anadromous salmonids and resident fish species.
819	116	Also, during the last NEPA process, Appendix C (Response to Comments) of the EA failed to acknowledge or respond to the public concerns regarding the continuing impact of mid-slope erosion from the "18 N" and "16 N" road systems in the Key watershed. Instead of addressing this concern, the Forest Service made vague reference to undocumented and undisclosed "long-term access needs" that in no way addresses the findings of the Watershed Analysis, the goals and objectives of the Aquatic Conservation Strategy, or the goals of the National Recreation Area designation. We are still waiting for the agency to address these impediments to attaining the objectives of the ACS.

Response: This project will reduce the amount of the overall miles of the NFTS, and will restore, decommission, or stormproof roads that threaten water quality and downstream beneficial uses. Roads with high risk to fisheries/water quality are either being stormproofed or decommissioned. Consultation in 2007 with the National Marine Fisheries Service determined that the project was not likely to adversely affect listed fish or Critical Habitat. The project was reviewed in 2015 as part of the *Watershed and Fisheries Restoration Program* biological assessment (WFR BA) that covers restoration actions to meet the anadromous fish recovery plans and improve water quality. The NMFS agreed that the project is consistent with this programmatic consultation and in fact is considered to meet recovery goals established in the final SONCC coho recovery plan. The project will reduce road miles and sedimentation across the district.

As part of the Six Rivers NF LRMP, the ACS is the overarching conservation strategy that helps provide the context and sets the stage for this project, as well as directs the analysis methodology. There are four components of the ACS: Riparian Reserves, Key Watersheds, Watershed Analysis, and Watershed Restoration. Implementation of these components operate together to maintain and restore the productivity and resiliency of riparian and aquatic ecosystems. These four ACS components are integral to the development and design of this project, with Watershed Restoration being part of the project Purpose and Need, and the project scope being the entire Smith River basin – a Key Watershed. Therefore, this project does much more than *meet* ACS objectives; rather it is the site-specific manifestation of the ACS on the Smith River basin landscape. Implementation of this project equates to pro-active implementation of the ACS.

Roads on the NRA are number by township; therefore, the 18N and 16N roads are all roads across the entire district in township 18 or 16. It would not meet the P&N to remove all roads in these two areas. Long-term access needs refers all administrative management actions now and in the future (currently unplanned) as well as public access needs. The Alternative Tables in the DEIS identifies every road and route in these townships that were identified for risks to fisheries and aquatic resources, as well as the required mitigations.

Air Quality

Letter Number	Comment Number	Comment Text
41	8	With the HUGE problems being caused by excess CO2 and climate change, IT IS YOUR RESPONSIBILITY TO REDUCE THE USE OF FOSSIL FUELS AND YOU SHOULD CERTAINLY NOT BE PUSHING VEHICLE OFF-ROADING AS "RECREATION". This must stop.
846	14	Air Quality and Naturally Occurring Asbestos As stated in our June 4, 2012 scoping comments for this project, two-stroke engines of all-terrain vehicles allow up to one third of the fuel delivered to the engine to be passed through the engine and into the environment virtually un-burned. A majority of these hydrocarbons are aromatic hydrocarbons, including polyaromatic hydrocarbons, which, as a group, are considered to be the most toxic component of petroleum products. Aromatic hydrocarbons are also associated with chronic and carcinogenic effects. Increased ATV use could increase pollutant emissions in valleys that have frequent inversion conditions and periods of poor air dispersion. The air quality section of Chapter 3 of the DEIS does not address the potential human health effects of OHV use within the NRA. Recommendation: We recommend that the FEIS provide a detailed evaluation of the potential accumulation of hazardous pollutants from the use of OHVs in mountain valleys subject to frequent inversion conditions. We also recommend a discussion of the potential human health effect of exposure to these harmful compounds as a consequence of OHV use within the Smith River NRA.

Response: The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent.

The selected alternative is not expected to have a noticeable influence on the number of OHV use in the project area, and therefore is not expected to have any direct, indirect, or cumulative effects on Air Quality given the low level of OHV use on the forest. The visitation data from Round 2 of the National Visitor Use Monitoring, reflecting data collected from Fiscal Year 2007 through 2011, found that the Six Rivers National Forest had one of the lowest visitor use rates, ranking 114 out of 121 national forests and grasslands. The latest data available for Six Rivers National Visitor Use Monitoring results from 2008 indicate that OHV use was the primary activity for 1.6 percent of visitors, who on average spent approximately 3 hours engaged in this activity. Approximately 53 percent of visitors reside within 50 miles of the forest. Crescent City is the closest municipality to the Project area. As noted in the Society, Culture and Economy section of Chapter 3, Del Norte County is home to approximately 25,000 people. Population increase over the past 10 years has been steady with an average annual increase of 0.5 percent. There is no indication that the local population or visitor use will increase dramatically over the next 10 to 15 years beyond the current population growth trend. As described in the Air Quality section of Chapter 3, the existing condition for air quality on the forest is, except during extreme events such as the 1999 and 2008 wildfires, considered to be in attainment by Federal standards, and it has previously met and currently meets ambient air quality standards. The implementation of any of the alternatives is not expected to affect use levels. Given the low level of OHV use in the project area, the expected population

trends, and the existing condition of air quality, no direct, indirect or cumulative effects are expected to impact Air Quality attainment due to the use of two-stroke engines in the project area.

Port-Orford-Cedar

Letter Number	Comment Number	Comment Text
819	66	It is impossible to overstate the importance to our organizations of retaining healthy populations of this key riparian tree species. The decisions we make now will determine the future of Port Orford Cedar (POC) populations for generations to come. As stated on page 19 of the Siskiyou National Forest's North Fork Smith Watershed Analysis "the consequences of disease introduction are high due to the amount of uninfected Port Orford Cedar at risk both on routes and downstream." As stated on page 206 of the DEIS "failure to limit vehicle use during the wet season on roads and routes near POC stands would have a potentially great impact." This is because in ultramafic riparian reserves, POC are the "major riparian tree species" and their loss "might dramatically change ecosystem dynamics because there are few trees species that would provide similar ecological functions." (DEIS 208).
819	67	There is no question that the proposal to add "high risk" user-created routes in POC habitat is a highly controversial and significant action that threatens the values the NRA was established to protect.

Response: Port-Orford-cedar are an important species for the forest. It has been identified as a species of special management consideration within the Forest Plan, and this analysis is a result of acknowledging this. The commenter is describing the effects of the current condition. The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including in POC areas. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits. Port-Orford-cedar protection measures are common to all action alternatives.

Each route has been individually reviewed and analyzed as to how each proposed management action may affect POC. The intent of this analysis is to minimize the spread of POC root disease while still considering other potential uses of the existing and proposed roads and motorized trails. High-risk routes added to the system will have mitigations to reduce the risk. Some Mitigations may be seasonal restrictions, barricading portions that terminate in POC stands, downgrading roads to ML 1, or improving road surface. The type of mitigation would depend on several factors, such as the nature of the high risk rating, whether infestation was currently present or not, if an alternate route was available, and acres of POC that could potentially be infected if the disease was introduced into a stand.

Actions in Partially Infected Stands

Letter Number	Comment Number	Comment Text
819	72	While the Forest Service acknowledged in the initial EA (page 37) that "vehicular access for both the public and Forest Service personnel is a concern within Port Orford-cedar range due to the potential spread of Port Orford-cedar root disease" We contend that the Forest Service's proposal to write-off partially infected watersheds, including POC pockets upstream and uphill from infected populations violates, the LRMP sections referenced above and indeed, the DEIS does not demonstrate that the Forest Service has complied with these requirements.

Response: The FEIS identifies multiple needs for routes. Routes that currently have infestation along the route are recognized as being vectors for the disease and mitigation efforts are put into each route to reduce spread from infected to non-infected stands. There are two overall strategies for managing POC,

which are reducing the spread of the disease from these existing infested stands and preventing its spread into uninfested stands. Closing roads to prevent access to currently infested stands would do little to reduce the spread of the disease within the stand itself, primarily because movement of the disease from the infected portion to the uninfected portions that grow uphill or upstream of the infection is spread by root-to-root contact, not vehicle access.

Seasonal Gate Mitigation

Letter Number	Comment Number	Comment Text
819	73	The Smith NRA has generally relied on gates and closures to mitigate the potential spread of POC root rot while steadfastly refusing to analyze or disclose the failures and impacts of agency road gating and road closure methodologies. As detailed in our previous comments regarding Sensitive plant species, many BLM and Forest Service Districts have concluded that gates and barricades (especially in serpentine forest types) are ineffective at preventing motorized use. The DEIS provided no (as in zero) evidence to refute the widespread belief that gates and barricades are often ineffective at preventing motorized use. However, the previous post-decisional Response to Comments (Appendix A page 84) acknowledged that "some barriers have been circumvented." Yet in the DEIS the agency again refused to disclose the environmental impacts that have resulted from such circumvention despite our repeated requests that it do so and as NEPA and NFMA (through the LRMP and NRA Management Plans) requires.
819	62	Previously the Smith NRA has erroneously concluded that "[b]arricades have proven to be (sic) effective deterrent to illegal off road travel" (initial EA Appx C page 19) and "gates have proven to be (sic) effective deterrent to wet weather travel" (initial EA Appx C page 1). Such un-documented contentions can be directly contrasted with the findings of the Ashland Resource Area of the Medford District BLM, which concluded on page III-110 of the Deadman's Palm EA that "barricades are seldom 100 percent effective in eliminating autos and trucks, and they don't stop any of the OHV-type of vehicle use. Consequently, even with barricades in place the negative impacts of noise disturbance, increased poaching potential, and the potential for over hunting remain." As the Medford BLM has not posted that EA on-line, a hard copy of the Deadman's Palm EA is available from KS Wild at your request.
819	64	After the close of the first round of public commenting and the issuance of the Decision to implement the project in 2007, the agency belatedly claimed that "[f]rom 2000-2006, installed barriers were 93% effective in keeping vehicle traffic off of these decommissioned roads." (Appendix A at 41). Yet no analysis was provided as to the impacts of the illegal (and foreseeable) breaching of 7% of the barricades on resources such as Port Orford Cedar, hydrology and sediment, wildlife and botany nor is any such analysis forthcoming. We specifically ask that the Forest Service provide evidence – via monitoring reports or other documents – in the FEIS that establishes the efficacy of road closure mechanisms on the Smith River NRA.
819	37	Also note that the DEIS provides almost no information about the content or efficacy of the barely-mentioned Port Orford Cedar "Monitoring Plan." The Forest Service appears poised to simply write off the major riparian tree species in the NRA whose loss "might dramatically change ecosystem dynamics because there are few tree species that would provide similar ecological functions." (DEIS page 208). Page 206 of the DEIS acknowledges that "seasonal gate closure success is dependent on the correct timing of the closure and the ability to restrict access beyond the gate," yet the monitoring plan and the DEIS fail to disclose why the NRA has been unable to maintain effective seasonal gate closures for the past several decades and what the assumption that these closures will suddenly be effective is based upon.

Letter Number	Comment Number	Comment Text
819	75	In our reconstruction of the history of disease spread across a 37 km 2 landscape, the majority of new infections were associated with roads (n = 26; Jules et al. 2002), and stream populations crossed by roads had a four – to five-fold increase in infection risk over the 23 years since the first infection in our study area (1977). We suggest that road closures be a priority management goal in the range of POC. There is no better way to reduce the risk of further spread of the disease. Currently, federal agencies have implemented seasonal road closures in areas with which we are familiar. We believe that the agencies should not rely on seasonal closures for mitigating the spread of P. lateralis; rather these should be used in cases where no other option exists. No studies have been done to test the relative efficacy of seasonal vs. permanent road closures, but it is well known that seasonal road closures do not mean that traffic does not enter the roads. Seasonal road closures, in our opinion, can be a risky strategy for several reasons. First, locking of gates must happen before the first rain, and we know this can be difficult for agency employees that have numerous other tasks to perform. We have known of many gates (with POC closure signs) that were not locked before the rainy season. Second, gates do not necessarily keep Off Road Vehicles (ORV) from driving the road, as gates can be bypassed by these vehicles. Third, we do not yet know the risk of infection during dry seasons, but our opinion is that it can be significant. Water, in the form of puddles and run-off near springs, often are evident into midsummer with the range of POC. In short, seasonal road closures should not be considered as the equivalent of permanent road closures, and they should be viewed as an unproven mitigation measure.
819	74	The agency's reliance on "gating" to prevent spread of POC disease from route 305.118 was misplaced and lacked support or analysis. This is particularly troubling given that the route also traverses just uphill/upstream of the Horton Research Natural Area. We are very disappointed that the Forest Service refuses to consider decommissioning this unneeded route despite the potentially huge impacts to significant environmental resources. Permanent road closure is the only reliable method of reducing the spread of POC root disease, and should be prioritized in all uninfected stands and watersheds. Jules and Kauffman (2003) wrote that: Permanent closure of logging roads is by far the most direct and effective way to stem the spread of P. lateralis. There has never been much disagreement about the efficacy of this management strategy, given the clear association of the disease with road vectors. The general thinking has been that large uninfected and roadless watersheds would remain free of the pathogen, so long as they remain free of roads. Our research findings have been in agreement with this assumption.

Response: It is acknowledged that gates are not 100 percent effective, especially for individuals who are determined to get past them. However, gates do reduce the overall risk, which is compliant with the Forest Plan direction. Monitoring of barricades and gates has shown that these structures are 96 and 90 percent effective, respectively. Effectiveness of barricades and gates on the NRA cannot be compared to the Ashland Resource Area because of very different topography and vegetation. The district topography does not lend itself to allowing OHVs around all barriers. Installing additional gates will reduce legal access beyond that point, and provide additional protection. However, gates are a management tool in reducing risks of infestation to POC stands. The steep topography can be used as an advantage when finding suitable locations for gates or barricades. Monitoring is required, and when needed, barricades would be modified. Extreme measures such as welding gates shut have been implemented in the wet season when it became apparent that the gate was not 100 percent effective in keeping out vehicles.

Illegal acts are not foreseeable events capable of NEPA. In general, criminal actions are not required for NEPA considerations. Therefore, the Travel Management process does not include an analysis of damage due to the speculative nature of illegal activities. The Travel Management process cannot analyze or predict illegal activities. It would be very difficult to disclose or analyze environmental impacts due to circumvention of seasonal gates because of the time between infection and manifestation of the disease varies. Infections along a route could be from the illegal trespass around a gate or from legal access. A certain amount of illegal activities are likely to continue under any scenario for motorized use, however, the goal of this process is to enact a system that would help to curtail illegal use, and provide a

mechanism to allow enforcement citations for any illegal use. Seasonal gates have been shown to be effective, and deter illegal motorized access along routes when they are located in strategic areas.

UAR 305.118 was identified by the Del Norte County Board of Supervisors and Sheriff's Office as valuable access for search and rescue operations in the North Fork. As such, the preferred alternative designates the first portion of Route 305.118 to be added as a motorized trail open for use during the dry season. The remaining portion, which has a Darlingtonia bog and accesses uninfected POC stands would be barricaded and not open to motorized travel.

Risk Key and Science

Letter Number	Comment Number	Comment Text
819	76	Reliance upon the Risk Key as described in the 2003 Range Wide Assessment of Port Orford Cedar on Federal Lands is inadequate as described below by Port Orford cedar experts Jules and Kauffman (2004): The Risk Key is, however, inherently flawed because there is no scenario in which the key can lend the following answer: this project is too risky and no mitigation will reduce risk enough to make it worthwhile." While the response says this has been fixed, it is clear from reading the final Risk Key that the focus remains on going through with the project with mitigation regardless of a potentially high risk of disease spread. Indeed, the Risk Key states that if the project can't be redesigned to reduce risk to acceptable levels then "the project may proceed if the analysis supports a finding that the value or need for the proposed activity outweighs the 17 additional risk to POC created by the project." If this Risk Key is going to be effective, it must provide for a scenario where a project is denied because the risk for disease spread is too high. Both of the studies referenced above were included in our May 2012 scoping comments, yet the DEIS fails to respond or address the information provided to agency planners. POC is a major shade tree and large wood source for serpentine streams. Risking PL infestation violates Aquatic Conservation Strategy and Clean Water Act due to increased stream temps. This impact is irreversible and significant.

Response: The risk key was designed to determine the risk of POC root disease spread, not determine the outcome or consequence of its spread. Determining which routes to propose for designation by alternative rests with the Responsible Official and is based on several factors, risk being one of those factors. The analysis of the alternatives will provide the Responsible Official a comparative basis on which to weigh the environmental consequences of the alternatives against one another. The direct, indirect and cumulative effects to POC will be considered by the Responsible Official in the decision making process. The project was designed to be in compliance with the Clean Water Act, the Porter-Cologne Act, the California Regional Water Quality Control Board, and North Coast Region Waiver of Waste Discharge Requirements. The proposed actions and project design features describe measures to promote the attainment of Aquatic Conservation Strategy Objectives. This project will restrict the overall miles of vehicle access open for use, especially in areas with the potential to spread or introduce POC root disease.

Route Specific

Letter Number	Comment Number	Comment Text
819	77	The agency's proposal to encourage, codify, map, and sign user-created routes into Hole and the Ground Mine and Elk Camp Ridge will greatly increase the likelihood of PL spread. Such proposals ignore the values and preferences of most forest visitors and may preclude the ability of future generations to experience and enjoy healthy Port Orford Cedar forest stands.

Response: The 18N51.100 route crosses a draw at one of the headwaters of Still Creek. Port-Orford-cedar does not grow here or anywhere near it for several hundred yards downstream.

Letter Number	Comment Number	Comment Text
819	69	Page 211 acknowledges that routes 17N49.7, 17N49.11 and 305.125 present high risks. Page 214 indicates that roads 18N02.3 and 18N09.100 are high risk. Page 218 concludes that 14N15.1 and 17N49.7 "have the potential to have a relatively large impact to POC plant communities based on plant community composition or the potential to infect [a]currently uninfected watershed." It is foreseeable that the Forest Service decision to dedicate these routes and roads to motorized travel will directly harm POC. The agency's reliance on seasonal gates as a foolproof solution has been proven ineffective time and time again in the NRA such that over 3,000 acres of POC have already been irreversibly infested. (DEIS page 199)
819	71	The DEIS continues the practice of avoiding analysis or documentation as to the interaction of these variables with increased (or continued) motorized use on the road. Nor did the agency attempt to compare the influence of road decommissioning or road use on the interaction of these variables on the spread of the root disease. Instead, the Forest Service continues to write-off the entire road length regardless of the site-specific 15 conditions and variables that "resulted" in the retention of many stands of live, healthy POC stands despite the fact that the road has been infected "for many years." NEPA requires the Forest Service to conduct the missing analysis. Please note that the Six Rivers LRMP (page IV-129) requires that: 20-6 Port-Orford-cedar will be managed as a long-term component of plant associations where it is present. 20-7 Strategies for reducing the risk to Port-Orford-cedar from infection of the root disease will be integrated into all levels of planning and analysis (NEPA documents, watershed analysis, Late-Successional Reserve assessments, wild and scenic river management plans, transportation planning, recreation planning and other activities or strategies) in all watersheds where it is present. Transportation plans will evaluate the risk or spread of Port-Orford-cedar root disease through road upgrades, seasonal closures, maintenance, and decommissioning or obliteration. As acknowledged on page 11 of the DEIS the Smith River NRA Management Plan requires that agency planners: Provide for the long-term viability and presence of Port-Orford-cedar and ensure its continued present economic and noneconomic uses through implementation of management strategies developed by the Forest Service.

Response: Numerous project design features are designed to mitigate the introduction and spread of POC root disease. The risk to introduction and spread of POC root disease will be reduced because of implementing this project. The preferred alternative addresses these routes as follows. Portions of 17N49.7 and 17N49.11 with uninfested POC are proposed to be permanently barricaded. Regulating access on 305.125 through route delineation would reduce the risk to POC and minimize additional illegal cross county travel that would cause other additional resource damage. This is a similar situation with 18N02.3. Route 14N15.1 is proposed to be permanently barricaded, and the segment of 18N09.100 that accesses the creek containing uninfested POC is proposed to be permanently barricaded.

Letter Number	Comment Number	Comment Text
819	55	Page 217 of the DEIS indicates that "system road 15N13 has the greatest risk by accessing the non-infected Goose Creek Watershed. Yet the road is retained for motorized use.

Response: Road 15N13 was identified by the county as a need in order to facilitate search and rescue. The preferred alternative proposes designating this route as an OML 1 road with a permanent gate closure to allow for emergency access.

19N01

Letter Number	Comment Number	Comment Text
819	70	Please note that the proposal to retain 19N01 on the system for motorized use appears to rely on the agency's preference to simply give up on reducing or slowing PL infection in the watershed. This is arbitrary and capricious. In Appendix A (page 5) of the initial EA the Forest Service acknowledged that: The POC risk was based on the fact that 19N01 is already infected along its entire length, and has been for many years. The presence of uninfected POC in this infected area can be attributed to numerous variables related to specific locations of POC, such as degree of root contact and distance between trees (stand density), POC proximity to streams or wetlands, [and the] amount of overland flow of infected water that can contact roots.

Response: The risk ratings were based on the potential for the road to spread the disease to an uninfected, unprotected area. As stated in the EA, 19N01 occurs in a heavily infected area. In addition, 19N01 is accessed by county roads on both ends of the road. The headwaters to several streams that flow from 19N01 are also accessed by county roads. Several portions of the road, along with the north end of 19N01 pass through non-Forest Service property.

Photo Comments

Barbara Ullian's four photos submitted during the public comment period to the EA in 2007 are described therein as illustrating OHVs *creeking* in the South Kalmiopsis Inventoried Roadless Area (IRA), which is not on the Six Rivers National Forest, and "how extreme OHV vehicle use can impact Port Orford cedar, fish habitat and botanical values and how OHV routes can have impacts far beyond road corridors". The use shown in the photographs is not legal and is not proposed in any of the action alternatives; therefore, it is not an action that can be analyzed with predictable effects.

To clarify, gates and berms are used to regulate motorized use of a road or motorized trail, typically not as a management action to deter illegal motorized travel in streams. No gate closure or berm is 100 percent effective, but they are intended to reduce and deter violations. The effectiveness of gates and berms depends on monitoring (see Chapter 1, Monitoring and Condition Surveys) and involves identifying resource concerns and providing a mechanism to fix the problem in a timely manner to minimize resource damage. Future effectiveness will rely partly on ensuring the gate location is such to minimize driving around the gate as much as possible. Modifications to gates and placement, i.e. moving to a more effective location or reinforcing perimeters, may be necessary when consistent problem areas are identified. The Smith River NRA currently has 1 law enforcement officer, 3 fire prevention patrols who serve as forest protection officers (FPOs) and have citation authority, and 1 permanent recreation officer. All monitor use and compliance. The district also staffs a permanent road manager position and typically, two seasonal recreation staff serve spring through fall, all of whom will also monitor use and compliance. The SRNF also has a cooperative agreement with the Del Norte County Sheriff's Office that, per the agreement, provides for the Sheriff's Office patrol of "roads designated and maintained by the Forest Service within the Cooperator's (Sheriff's) jurisdiction." It is anticipated that law enforcement will continue to apply for and receive grant dollars (green sticker funding) from the State of California Off-Highway Motor Vehicle Recreation Division Grants Program. These state funds are earmarked specifically for enforcement of off-highway vehicle laws and regulations on the various forests, and are

performed primarily by FPOs. The Law Enforcement Program has been consistently successful in securing these sources of funding in the past. Implementation of the Project will provide a framework for improved enforcement, engineering, and public education intended to deter and reduce violations. This includes issuance of a MVUM, which will identify NFTS roads and trails open to motorized use and give law enforcement the necessary documentation with which to enforce the proper use of these routes; signing of motorized recreation routes; decommissioning roads removed from system; barricading UARs; and seasonal gate closures. The photos submitted during this comment process are responded to on a photo-by-photo basis in the response-to-comments.

The photos attached to the DEIS comments did not have specific comments associate with each of them; therefore, much was left to Forest staff to infer the issue the commenter was intending to communicate. A photo-by-photo response is provided though.

Letter Number	Comment Number	Comment Text
819	137	We will be submitting 17 attachments (primarily photos) to the general Forest Service mailbox for this project.
819	30	Please note that we have repeatedly provided agency planners with photo-documentation of non-functional berms and POC gates in the Smith River NRA (see photo attachments 1-5), and hereby ask the Forest Service to include this information in the administrative record for this project. It is essential that the decision maker explain how and why closure mechanisms will prove effective given that they have been repeatedly breached in the past.
819	63	Tragically, the difficulty of keeping agency gates locked and vandalism-free has been in the news: http://seattletimes.nwsource.com/html/travel/2003517023 webkimfamily09.html. The Smith River NRA would truly be unique in the National Forest Service if it is the sole District in the system that has not been plagued by vandalism of locked gates. Such a curious and undocumented contention strains the agency's credibility. Attached photos illustrate breached POC gates in the Smith River NRA.
819	65	We again bring to the agency's attention the images of off-road ORV resource damage submitted by Friends of Del Norte and Barbara Ullian in their comments on the initial EA. With very limited finances available to adequately patrol the Recreation Area, it is reasonably foreseeable that these abuses will continue and accumulate as the agency increases the size of the NFTS. Friends of Del Norte submitted a Triplicate article, dated Feb. 8, 2007, in their comments on the initial EA that highlights the lack of enforcement capability to control abuse of resources within the vastness of the Recreation Area, and the rise in damage that has been incurred. In that article US Forest Service Officer Steve White stated: "We definitely have some crime issues that impact the quality of our resources and the quality of the time our recreationers enjoyThe sense of remoteness does really play into the people feeling more free (to commit crimes), and the shear vastness of the parks and forests prevent thorough policing." Page 206 of the DEIS acknowledges that "seasonal gate closure success is dependent on the correct timing of the closure and the ability to restrict access beyond the gate." The Smith River NRA has not been able to demonstrate success at restricting motorized access via gates, berms or boulders. Nevertheless the analysis contained in the DEIS rests upon the assumption that these methods will become effective once the ROD is signed. Our organizations have submitted photos of non-functional POC gates as well as breached berm and boulder closures to the District Ranger, the Forest Supervisor and the "collaborative" group on multiple occasions. None of these site-specific photos are addressed in the DEIS.

Letter Number	Photo Number	Route/Road Number	Photo Name (Provided)	Reviewer Description	Response
819	1	17N49	17N49 Berm	Berm on closed road with man standing on it. Appears berm is 6' tall and has been driven over.	The Forest cannot guarantee 100% of OHV operators will comply 100% of the time. However, implementation of the Travel Management process will provide a framework for improved enforcement, mitigations, and public education intended to deter and reduce violations. However, what is important to note is that the breached berm in the picture leads to an undrivable section of an old road.
819	2	305.19.00	305.19.00 Wimer	Berm, appears to have been driven over.	The title of this photo does not coincide with any inventoried unauthorized routes considered within the scope of this analysis.
819	3	?	Non-functional POC gate	Open gate.	The photo shows an open gate. It is not clear that the gate is a POC gate, nor that it is not functional, but rather that it is open. It is also not apparent as to what time of the year this photo was taken. Port-Orford-cedar gates are open seasonally to allow motorized access during the dry season.
819	4	?	POC gate open, shot	Open gate.	The photo shows an open Forest Service gate; however, it is not clear that the gate is a POC gate. Nor is it clear from the photo that the gate, while showing evidence of being shot, is not functional. It is also not apparent as to what time of the year this photo was taken. Port-Orford-cedar gates are open seasonally to allow motorized access during the dry season.
819	5	?	POC gate shot up	Post where gate locks has been shot through. Gate is open.	The photo shows an open Forest Service gate; however, it is not clear that the gate is a POC gate. Nor is it clear from the photo that the gate, while showing evidence of being shot, is not functional. It is also not apparent as to what time of the year this photo was taken. Port-Orford-cedar gates are open seasonally to allow motorized access during the dry season.
819	6	?	McGrew Run	OHV >50" on a trailer being pulled down the road.	The analysis of effects accounts for the addition of motorized trails for vehicles 50" or greater. The McGrew Trail is managed by the Siskiyou National Forest.
819	7	?	Not a dirt bike	OHV >50" on a trailer being pulled down the road.	The analysis of effects accounts for the addition of motorized trails for vehicles 50 inches or greater.
819	8	305.118	H2O fen POC	Slump/slide into route with Fen & Darlingtonia, water running down route.	The site shown in the photograph occurs on the segment of 305.118 (milepost 0.80 to 1.56) that is identified in the Preferred Alternative (Alt 6) to be restored through barricading and the installation of waterbars and rolling dips.
819	9	305.118	Fen POC on 305.118	Slump/slide into route with Fen & Darlingtonia, water running down route.	The site shown in the photograph occurs on the segment of 305.118 (milepost 0.80 to 1.56) that is identified in the Preferred Alternative (Alt 6) to be restored through barricading and the installation of waterbars and rolling dips.
819	10	305.118	Fen & PL on 305.118	Small POC trees on side of route, showing yellow/brown discoloration on needles.	All action alternatives that propose designating this route as a Motorized Trail include POC mitigations which include seasonal gate closure at the beginning of the route, drainage work on the travelway surface and barricading and putting in waterbars or rolling dips on the last half of the route from the 0.80 mile post to 1.56 mile post.
819	11	305.118	H2O=PL 305.118	Water running directly down route and then channel cuts across the route and exits route.	All action alternatives that propose designating this route as a Motorized Trail include POC mitigations which include seasonal gate closure at the beginning of the route, drainage work on the travelway surface and barricading and putting in waterbars or rolling dips on the last half of the route from the 0.80 mile post to 1.56 mile post.

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Comments

Letter Number	Photo Number	Route/Road Number	Photo Name (Provided)	Reviewer Description	Response
819	12	?	Bear Basin Boulders	Boulder blocking vehicle access has been moved allowing for vehicle access.	The Forest cannot guarantee that closures are 100% effective, however, the implementation of the project will provide a framework for improved enforcement, engineering, and public education intended to deter and reduce violations. This includes issuance of a Motor Vehicle Use Map which will identify NFTS roads and trails open to motorized use; give Law Enforcement the necessary documentation with which to enforce the proper use of these routes; signing of motorized recreation routes; decommissioning roads removed from system; barricading UARs not designated on the NFTS. There are civils fines currently in place for damage caused by motorized resources. Two examples are CFR 261.15(h)- (\$250 in N. District of CA.), and 261.12(c)- (\$100 in N. District of CA.). The Smith River NRA currently has 1 Law Enforcement Officer, 3 Fire Prevention Patrol who serve as Forest Protection Officers (FPOs) and have citation authority, and 1 permanent Recreation Officer. All monitor use and compliance. In addition, a permanent Road Manager position is slated to be staffed within the next few months and approximately 2 seasonal recreation staff are typically hired to serve spring through fall, all of whom will also monitor use and compliance. The Forest also has a Cooperative Agreement with the Del Norte County Sheriff's Office that, per the agreement, provides for the Sheriff's Office patrol of "roads designated and maintained by the Forest Service within the Cooperator's (Sheriff's) jurisdiction."
819	13	305.109	Pine Flat Rutting	Pooling of water and rutting of route shown.	Action alternatives that propose adding this route to the NFTS as a motorized trail also include mitigations to address drainage problems associated with the travelway.
819	14	305.109	Rutting near 305.109	Pooling of water and rutting of route shown.	Action alternatives that propose adding this route to the NFTS as a motorized trail also include mitigations to address drainage problems associated with the travelway.
819	15	17N49	ORV Meadow 17N49	View shows looking at UAR 17N49.100A	The view shown is looking at the inventoried UAR 17N49.100A, which is proposed for restoration and barricading in all of the action alternatives.

Impacts to Specially Designated Areas

IRA, SRNRA and Impacts

Commenters are concerned that the unique qualities of the Smith River National Recreation Area and Inventoried Roadless Area characteristics will be compromised if more motorized trails are designated within their boundaries. The commenters question the need and validity of designating motorized trails within the Smith River NRA and Inventoried Roadless Areas located within the project area, and are concerned that recreation preferences will outweigh the need to conserve the qualities for which the Smith River NRA was established and the IRA characteristics, including to but not limited to sensitive plants.

The following responses are preceded by the comments grouped into three main topics where the concerns are similar. Responses discuss existing MVUM development, management of NFTS roads and motorize trails, sensitive plants and compliance with the Forest Plan, Travel Management Rule, Redesignation of the NFTS, and compliance with the Smith River NRA Act, Roadless Rule and IRAs.

Existing MVUM Development and Management of NFTS Roads and Motorized Trails

Letter – Comment Number	Comment
1-6; 41-6; 476-5; 521-5; 615-6; 620-4; 790-5; 790-6; 791-5; 605-8; 620-1; 759-6; 805-7; 338-3, 819-57	The Smith River National Recreation Area and the Six Rivers National Forest offer hundreds of miles of existing Forest Service roads where motorized recreation is an appropriate and harmless activity. Additional user-created routes should not be added to the current system.

Existing MVUM development

Response: In 1990, the Smith River NRA limited motorized travel to designated routes on the NFTS, whereas other districts and forests were open to cross-country motorized travel. At that time, there was no codified legal mechanism for displaying the designated NFTS to the public. Visitor use maps and USGS maps displayed information related to roads and motorized trails, which were not based on information stored in the Forest Service transportation database. In 2005, the Travel Management Rule established and required the use of Motor Vehicle Use Maps (MVUM) to display the designated NFTS open to motorized travel. The current MVUM for the Smith River NRA reflects the status of NFTS roads and motorized trails in the forest's transportation database at the time of publication in 2009. Many UARs on the Smith River NRA are not the result of off-road recreationists, as the terrain in many parts of the Smith River NRA itself limits this, but rather they are old mining roads or Forest Service logging roads that were not tracked in the transportation database in 1990. The public's input was not involved in identifying recreation opportunities or determining the NFTS shown on the 2009 MVUM. The information displayed in the current MVUM differs in respect to recreational opportunities from what had been displayed in map products the public had relied on for knowledge of trails and roads available for motorized use prior to the publication of the MVUM. With the publication of the 2009 MVUM many of the routes that had been used by recreationist in the past were then codified as UARs and therefore illegal for motorized travel. Unauthorized routes considered for designation on the NFTS are limited to those that currently exist on the ground and have been inventoried.

Management of NFTS Roads and Motorized Trails

Response: Whether a route is a road or motorized trail depends on how it is managed (e.g., surface type), along that route. The assumptions provided in the IRA analysis are intended to frame the difference in general terms, but do not describe Forest Service classification policy – in other words, the traveler's intentions do not determine whether they are on a road or a trail; however, certain travel purposes are more commonly seen on roads than on trails, and vice versa. Forest Service direction defines a trail as "a route 50 inches or less in width or a route over 50 inches wide that is managed as a trail" (36 CFR 212.1; FSH 2309.11, Chapter - Zero Code). A road is defined as "a motor vehicle route over 50 inches wide, unless identified and managed as a trail" (36 CFR 212.1). The Forest Service *Trails Management Handbook*, FSH 2309.11, defines trail management terminology and provides further management prescriptions for trail (development) class, depending on the managed use for a given trail. Though travelers may use any mode of travel on a motorized trail other than the managed use, the Forest Service assigns one managed use to each trail and designs and/or maintains the trail according to those standards.

Motorized trails managed for vehicles greater than 50 inches wide differ from roads in the design criteria and standards; these differences are more pronounced for Class 2 and Class 3 motorized trails (FSH 2309.11, Ch. 20; FSH 7709.56, Ch. 40). For many motorized trails proposed for designation on the Smith River NRA that are greater than 0.25-miles long, we anticipate that they will fall into Class 2 or Class 3 based on their slope. Regardless of a motorized trail's class, we anticipate that trail maintenance will be less frequent or intensive than is done on roads, and will focus primarily on hazards removal and resource protection.

Sensitive Plants and Compliance with the Forest Plan

Letter – Comment Number	Comment
1-3; 20-1; 41-2; 64-3; 476-2; 521-4; 615-3; 605-2; 759-2; 791-3; 840-1; 338-1; 369-2; 590-3; 521-4; 419-1; 790-1; 793-3; 805-5; 829-2; 837-10	I am concerned that the recreational preferences of a handful of extreme off-road vehicle enthusiasts appear to outweigh the need to protect at-risk botanical treasures and irreplaceable roadless areas.
50-2; 50-4; 243-5; 255-9; 263-5; 263-7; 369-1; 590-2; 751-6; 791-2; 805-3; 829-9; 834-1; 837-9	I am dismayed by the direction that the Smith River National Recreation Area Travel Management process is taking. Like most Americans I value the wildlands, watersheds and wildflowers of this special place. There is no need to convert plant communities to mud pits. Protection, preservation and diversity for the long range should be your primary goal.
1-7; 20-2; 20-4; 41-7; 59-2; 64-4; 79-2; 139-3; 182-2; 338-4; 369; 476-6; 521-6; 603-1; 605-9; 615-7; 620-5; 755-1; 791-6; 790-7; 805-6; 813-1; 840-2; 419-4; 837-8; 369-4; 829-5; 590-5; 581-4	The Smith River National Recreation Area and the Six Rivers National Forest offer hundreds of miles of existing Forest Service roads where motorized recreation is an appropriate and harmless activity. There is simply no need to sacrifice wildlands and rare plants in order to establish additional "motorized trails" in these special places.
1-4; 41-4; 64-2; 79-1; 79-2; 139-1; 255-4; 263-3; 400-2; 419-2; 590-4; 521-1; 605-3; 615-4; 620-2; 759-2; 790-2; 837-11; 829-8	It is my understanding that the Forest Service is proposing to add user-created routes through roadless areas and botanical hotspots to the Forest Service road system.
23-1; 793-4; 197-2; 339-2; 434-1; 476-1; 484-1; 825-3	Don't undermine the Forest Service policy to "maintain viable populations of all native and desired non-native wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System lands" (FSM 2670.22). The Forest Service needs to protect our natural resources.

Response: Of particular controversy is the proposed designation of motorized trails and its effect on sensitive plants. The Six Rivers Forest Plan standard and guideline for the management of sensitive plants

requires that the Forest Service actions may not lead to a loss of species viability. A loss of viability determination would occur if 20 percent or greater of a species were found to decline over a 5-year period. (USDA Forest Service 1995. Six Rivers National Forest Land and Resource Management Plan. Pp V-18). Implementation of this project is designed to provide for improved management of motorized recreation on the Smith River National Recreation Area (SRNRA) through the implementation of mitigation measures aimed to reduce risk to resources associated with the NFTS. Some examples include *route delineation*, which is the placement of physical barriers to travel, in close proximity to the motorized trail prism, designed to keep vehicular traffic on the designated travelway, and barricading UARs that are not designated which will prevent unintended illegal use on these UARs. It is anticipated that these mitigation measures would decrease unintentional illegal use and damage to sites, which in turn would reduce negative effects to native vegetation and Sensitive plant species.

Sensitive plants that are present on UARs proposed for addition to the NFTS have a tolerance for the low level of use that has been occurring on those routes most likely due to passive avoidance, subterranean meristem tissue, and multi-stem growth, enhanced seedbed conditions, and a reduction in competition from plant species that are less tolerant of the current level of use. (Brewer 2011, Brown et. al. 2000, Cook 1979, Larcher 1995, Stohlgen and Rundel 1986, Zober 1992) The projects aims to protect the viability of the rarest plants in the project area via monitoring. Sensitive plant populations within 100 feet of UARs added to the NFTS will be managed via monitoring to determine if a decline in Sensitive plant populations has occurred. Once baseline and initial monitoring is complete, the intent is to continue monitoring every 5 years, as per the LRMP, until the species are no longer considered Sensitive. If a decline of any Sensitive plant population is found to have occurred that indicates a trend toward loss of viability, the UARs with the declining species that were added to the NFTS will be removed from the Motor Vehicle Use Map and barricaded until such time that Sensitive plant populations are found to have recovered.

The majority of UARs on the NRA are not user created routes. They are old mining roads—old logging roads from previously private land that was later acquired by the Forest Service, etc. Although construction standards have changed and improved, many of these old roads were engineered. Many of these roads access popular recreation sites. Mitigations have been proposed to minimize resource impacts while providing access. The Forest Service would close between 2 to 4 times the miles of UARs that would be added. Adding the UARs that are needed for access would be consistent with Forest Service rules and regulations.

The roads and routes being considered in this analysis are open and drivable. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent, including in sensitive plant habitat. Routes will only be added to the system provided resource risks can be mitigated. All action alternatives would result in resource protection benefits including: 1) less than 0.1 percent of the serpentine sensitive plant habitats on the NRA are being affected and 2) all routes into the North Fork Botanical Area are being closed, protecting over 20,000 acres of potential habitat.

The NRA Act requires the forest improve the anadromous fishery and water quality (water resources), improve spawning and rearing habitat (aquatic biota), and place appropriate restriction or limitation on soil disturbing activities (soil).

Recreation Use – Cross-Country Travel

It is anticipated that the likelihood of illegal cross-country motorized travel will be reduced through the implementation of the project, as it would provide for a diversity of motorized recreation opportunity in coordination with a framework for improved enforcement through public education intended to deter violations, issuance of a revised Motor Vehicle Use Map that will identify NFTS roads and trails open to motorized use; signing of motorized recreation routes; seasonal gate closures; barricading UARs not added to the NFTS and decommissioned roads removed from system. All action alternatives will reduce roads/routes miles across the NRA by between 21 and 47 percent.

Travel Management Rule, Redesignation of the NFTS, and Compliance

Letter – Comment Number	Comment
581-1; 819-6; 819-40; 819-44; 819-48a/48b; 825-2	Follow the Roadless Rule, the Smith River NRA Act and the NEPA.
1-2; 41-1; 59-1; ; 476-1; 476- 3; 521-3; 615-2; 605-2; 581-2; 805-8; 819-42/43; 819-49; 819-53; 828-11; 840-1	There is no reason to add user-created routes through roadless areas. It seems like a bad-idea to add user-created routes through roadless areas.

Travel Management Rule and Redesignation of the NFTS

Response: One of the purposes of this project is to implement the recommendations identified in the Travel Analysis Process (TAP), consistent with Subpart A of the Travel Management Rule (36 CFR 212), which identified administrative access needs, as well as motorized recreation opportunities through a public process, and risks associated with each road or UAR. With the use of the information provided in the TAP, road and route specific actions and mitigations were crafted to provide recreational opportunities and administrative access while also investing in mitigations to reduce risks identified on routes. Unauthorized routes that are proposed to be added to the NFTS meet the mandate of the agency to provide suitable recreational opportunities while managing natural resources compliant with Forest Plan standards and guidelines and other applicable law, policy, and regulation. This is often achieved with mitigations designed to reduce moderate and high risks.

The forest is pursuing the revision of the designation of the NFTS through the development of an Environmental Impact Statement pursuant to the National Environmental Policy Act. The public was invited to submit comments on the proposed action during the scoping period in April 2012. Comments submitted during the scoping period were analyzed to identify significant issues. Alternatives to the proposed action were considered and developed that address the significant issues that were within the scope of the project, compliant with law, regulation, and policy, within the agency's purview to implement, and met the purpose and need of the project. The public was invited to provide comment on the DEIS, and will be given the opportunity to review the FEIS and draft Record of Decision and participate in the Objection process (36 CFR 218 subparts A and B). Three significant issues, including Impacts to Access and Recreation Opportunity, Impacts to Inventoried Roadless Areas, and Impacts to Resources, drove the development of three action alternatives, which include a modified version of the modification of the proposed action. These alternatives respond uniquely to roadless area consideration for features and values. Alternative 4 proposes designation of 66 miles of motorized trails on the Smith

River NRA, including 9.4 miles in IRAs, compared to Alternative 5 that proposes 7.4 miles of motorized trails excluding designations in IRAs altogether. Alternative 6 responds uniquely by proposing 47 miles of motorized trail designation with 3.1 miles occurring within two IRAs.

Compliance with the Smith River NRA Act

Response: The purpose of the Smith River NRA Act is to ensure "the preservation, protection, enhancement, and interpretation for present and future generations of the Smith River watershed's outstanding wild and scenic rivers, ecological diversity, and recreation opportunities while providing for the wise use and sustained productivity of its natural resources". In Parts 1, 2, and 4 of §5 of the Act, direction is provided to the forest service to provide for a broad range of recreation uses and provide recreational and interpretive services and facilities (including trails and campgrounds) for the public, provide and maintain adequate public access, including vehicular access roads for general recreation activities, and permit the use of off-road vehicles only on designated routes. The Act strongly balances the direction to provide for recreation opportunities by directing the Forest Service to improve the anadromous fishery and water quality, provide for the long-term viability and presence of Port-Orfordcedar; protect, preserve and increase old-growth forest habitat; and restore landscapes damaged by past human activity. This project is consistent with the intent and administrative direction outlined in the SR NRA Act by providing for motorized recreation opportunities through the designation of motorized trails to the NFTS, while also reducing risks to the unique qualities and characteristics of the SR NRA such as botanical communities, water quality, POC, and cultural resources through decommissioning of roads and the implementation of risk reducing mitigations on the proposed NFTS.

The Smith River National Recreation Area Act incorporated in the Six Rivers National Forest Plan guides management of the Smith River NRA, which also includes portions of eight Inventoried Roadless Areas. Management Direction contained in the Smith River NRA Management Plan related to motorized recreation includes direction for all areas and directs the forest to provide and maintain adequate public access, including vehicular roads for general recreational activities such as camping, hiking, hunting and fishing. Specific to the North Fork Management Area, the management plan states that the NRA shall provide and maintain facilities for information services and recreation activities, which are compatible with the Wild, Scenic, or Recreational River designations, including hiking, camping, white water boating, off-highway vehicle use on designated trails, and hunting.

Compliance with Roadless Rule

The Roadless Area Conservation Rule (36 CFR 294), referred to as the 'Roadless Rule' identifies values or features that often characterize IRAs, such as "diversity of plant and animal communities; habitat for threatened, endangered, proposed, candidate, and sensitive species...; and semi-primitive motorized classes of dispersed recreation". In the response to comments on the Roadless Rule (FR 3251), a trail is defined as "established for travel by foot, stock, or trail vehicle, and can be over, or under, 50 inches wide." The response to comments on the Roadless Rule in the Federal Register further clarifies that the Roadless Rule was not intended to prohibit the authorized construction, reconstruction, or maintenance of

motorized or non-motorized trails that are classified and managed as trails pursuant to existing statutory and regulatory authority and agency direction (FSM 2350). The action alternatives considered offer a range of options that are being analyzed in the FEIS, which include Alternative 4 that would offer a sum total of 13 additional miles motorized recreation opportunities and restore 20 miles of UARs in IRAs, while Alternative 5 would decrease motorized recreation opportunities in IRAs by 19 miles and restore 39 miles of UARs in IRAs. Lastly, Alternative 6, the preferred alternative includes a total of 4 additional miles of motorized recreation opportunity and 29 miles of restoration on UARs in IRAs. Designation of these routes as motorized trails will meet the intent of the Rule as it will provide authorized OHV access and does not involve new road construction or reconstruction. Inventoried Roadless Areas within the project area account for approximately 147,000 acres. UARs proposed for designation on the NFTS occur at the boundaries of IRAs and do not transect the heart of any of the IRAs.

The Roadless Rule allows for authorized OHV use. It is important to understand that all the roads considered for addition and use are not *new* but currently open and drivable, and have been so for many decades. The roads and routes being considered in this analysis are open and drivable. No new road construction or increased use would occur under this proposed action. The project as proposed would reduce road mileage across the district by between 21 and 47 percent, including in IRA, sensitive plant habitat, and POC areas.

Designation of these routes will not constitute a substantial impact to Roadless or wilderness characteristics in that, under the preferred alternative, 3 miles of UARs will be added to the system but 29 miles of UARs will be restored in the IRAs. The project will restore seven times more UARs than will be designated. The project will reduce the road density in the IRAs.

Wild and Scenic Rivers

Letter Number	Comment Number	Comment Text
819	106	The proposal to adopt an inadequately maintained system will result in significant environmental and human safety risks and violates the following legal requirements: * The Proposed Action violates the Clean Water Act and the Northcoast Basin Plan: Specifically the Basin Plan, State and Federal Anti-degradation policies each and all require that "whenever existing water quality is better than the water quality objectives established herein, such existing (water) quality shall be maintained" (Northcoast Basin Plan at 3-2.00 and Appendix 6 and 6B). Because inadequate maintenance is an inevitable consequence of the proposed action and because inadequate maintenance will lead to sediment delivery to streams, the proposed action will not maintain the existing high quality of the Smith River and its tributaries. * The Proposed Action violates the Wild & Scenic Rivers Act (WSRA): The intentional retention of a system that cannot be adequately maintained can reasonably be expected to result in degradation of the values for which the Smith River and its tributaries were declared to be part of the federal Wild & Scenic Rivers System. The primary designation value is anadromous fisheries; there is no scientific controversy concerning the negative impact of system related sediment on 24 anadromous fisheries through chronic delivery of fine sediment to the Smith River and its tributaries, it violates the WSRA.

Response: The proposed actions are intended to adopt a road system that will minimize adverse impacts to water quality through road decommissioning and stormproofing. The project as proposed would reduce road mileage across the district by between 21 and 47 percent, and reduce road density in all 5th-field

watersheds. The proposed actions are in compliance with the Clean Water Act, the Basin Plan and the North Coast Waiver.

Consultation with the National Marine Fisheries Service determined that the project was not likely to adversely affect listed fish, and in fact is considered beneficial.

L.E. Horton RNA and Rare Plant Assemblages

305.118

Letter Number	Comment Number	Comment Text
819	7	An unfortunate example of the willingness to place high value natural resources at risk to meet a non-existent "need" for motorized access is the proposal to add route 305.118 to the NFTS. As pointed out in our 2012 scoping comments, this route is currently impassible to motor vehicle traffic and has been so for quite some time. Yet neither the DEIS or the Scoping Report reflect the fact that the route is and has been impassible to motorized travel. Additionally, the length of the route traverses numerous seeps, subsurface flows (in the cut banks), springs and riparian features. Port-Orford-cedar is found along the route. The potential for codified and mapped motorized use of this route to spread POC root rot disease is extremely high, and the consequences could be irreversible and significant.
819	8	Additionally, this is a dead-end spur route that provides very limited motorized recreational opportunities and none of the loop routes requested by motorized advocates. Indeed, many forest visitors currently walk the route. Additionally, the seeps, 3 springs and watercourses that are impacted by the route flow into the Horton Research Natural Area. Why is the agency willing to place the route's unique botanical, hydrological and cedar resources at-risk to re-open a currently impassible route for which there exists no real need? We asked that question in our 2012 scoping comments and we ask it again now. Page 3 of the DEIS indicates that unauthorized routes can only be added to the NFTS when they have a high recreational value and do not pose resource concerns that cannot be "readily mitigated." Route 305.118 clearly does not meet that criteria. The recreational value it provides can be enjoyed by all who are willing to walk the route and the resource concerns of opening it to motorized travel are significant and (in the case of Port Orford Cedar) irreversible.
819	51	The botanical "analysis" of impacts to roadless values on page 323 of the DEIS simply ignores the information and photos submitted by the public regarding 305.118. See photo attachments 8-11.
819	74	The agency's reliance on "gating" to prevent spread of POC disease from route 305.118 was misplaced and lacked support or analysis. This is particularly troubling given that the route also traverses just uphill/upstream of the Horton Research Natural Area. We are very disappointed that the Forest Service refuses to consider decommissioning this unneeded route despite the potentially huge impacts to significant environmental resources. Permanent road closure is the only reliable method of reducing the spread of POC root disease, and should be prioritized in all uninfected stands and watersheds. Jules and Kauffman (2003) wrote that: Permanent closure of logging roads is by far the most direct and effective way to stem the spread of P. lateralis. There has never been much disagreement about the efficacy of this management strategy, given the clear association of the disease with road vectors. The general thinking has been that large uninfected and roadless watersheds would remain free of the pathogen, so long as they remain free of roads. Our research findings have been in agreement with this assumption.
828	10	It is insincere to claim no impact to designated botanical areas because motorized trails are outside such areas, but then place motorized use on Route 305.118, which parallels the boundary of L.E. Horton Area and crosses drainages into the area.
819	54	The contention on page 330 of the DEIS that the routes under consideration for addition to the NFTS within IRAs "are part of the existing condition" is simply not accurate. As reflected by photos submitted to the agency by our organizations, full size off road vehicles cannot currently utilize sections of 305.118 proposed for permanent motorized use.

Letter Number	Comment Number	Comment Text
819	80	In A Field Guide to Serpentine Plant Associations and Sensitive Plants in Northwestern California (USDA, Pacific Southwest Region R5-ECOL-TP006) Forest Service scientists write that: Port Orford cedar is commonly found in association with many rare species. The L.E. Horton Research Natural Area Ecological Survey (Keeler-Wolf 1986) and results of rare plant surveys in bogs commonly found surrounded by Port Orford cedar plant communities revealed Siskiyou Indian Paintbrush (<i>Castilleja miniata</i>) California pitcher plan (<i>Darlingtonia californica</i>), Waldo gentia (<i>Gentiana setigera</i>), great burned (<i>Sanguisorba officianalis</i>) and western bog violet growing in association with one another. Loss of Port Orford cedar, as the primary associating conifer, could lead to the cumulative loss of the rare species associated with wetland communities. The distinctiveness of serpentine environments and the high concentration of rare flora warrant special management considerations.

Response: This route was identified by Del Norte County and the Sheriff's office as important access to the North Fork of the Smith River for search and rescue teams. In response to the competing needs for emergency access and careful management of resource values, Alternatives 4 and 6 would designate and seasonally gate the first 0.80 miles as motorized trail, while the segment from milepost 0.8 to 1.56 on which the Darlingtonia bog shown in the referenced in comments by Barbara Ullian as photographs 8, 9, 10, and 11 occurs and much of the uninfected POC along this route grow, is not proposed for designation on the NFTS and is proposed to be barricaded. The UARs that cross the L.E. Horton Research Area would barricade at the beginning of the route

Health and Safety

Fire Events and Suppression

Letter Number	Comment Number	Comment Text
50	3	Furthermore, allowing increased activity of this type increases the possibility of accidental wildfires, at expense to us all.
804	1	My reasons against any road closers 1. Restricts ability of wildland firefighting and search and rescue to perform their jobs to save our forest and all the people who get lost in the forest and need to be rescued.
824	5	The lack of management resulted in devastation due to fires already. The approach of: closures and hands off management is not working. You must take a hard look at the closures and open these ways, routes and trails back up to motorized vehicles. Slow moving traffic over time creates a firebreak and access for suppression of fire and weeds.

Response: The NRA fire personnel evaluated the entire road system during the RAP and reviewed it again during this process to determine access needs in relation to such factors as fire-fighter safety, cost efficiency (quicker, easier access), proximity to private land, fuels treatment areas, difficulty of the terrain, etc. The primary access roads/routes to specific areas were identified which will allow prompt and successful initial attack. All emergency access, including fire suppression, search and rescue, and law enforcement actions, is legally authorized to go wherever needed, whether it is designated on the transportation system or not. This provision, found in 36 CFR 261.13, lists the many exceptions to the prohibitions.

Letter Number	Comment Number	Comment Text
819	112	On a more general level, the SNEP Report, the ICBEMP report and the Roadless Area Conservation Rule EIS all indicate that most human-caused fires (the majority of ignition sources in many areas) are located near roads, so roads are places where more fires are started than are stopped. Previously, the Smith NRA initial EA contended (page 56) that "roads can be an impediment to fire spread at low fire intensity levels by acting as fuel breaks" while failing to acknowledge that the fire-evolved, fire-dependent forests of the Smith NRA are in dire need of "fire spread at low fire intensity levels" and that roads (or fuel breaks in general) are simply not effective against high intensity fires under extreme conditions which are the kind of fires that the Forest Service should in fact be concerned about. Please respond to the peer-reviewed findings contained in the article Fuelbreaks for Wildland Fire Management: A Moat or a Drawbridge for Ecosystem Fire Restoration by Dr. Timothy Ingalsbee.

Response: As stated in the EIS, although some authors such as Inglesbee question the use of fuelbreaks in the article *Fuelbreaks for Wildland Fire Management: A Moat or a Drawbridge for Ecosystem Fire Restoration*, others have found that fuel breaks have been effective (Agee, Skinner 2005: Jimerson and Jones 2000) including fuel breaks constructed on Six Rivers. Agee (2000) concluded that "a well-designed fuel break will alter the behavior of wildland fire entering the fuel-altered zone. Both surface and crown fire behavior may be reduced. Shaded fuel breaks must be created in the context of the landscape within which they are placed. Landscape-level treatments such as prescribed fire can use shaded fuel breaks as anchor points, and extend the zone of altered fire behavior to larger proportions of the landscape. Therefore, reducing surface fuels, increasing the height to the live crown base, and opening canopies should result in (a) lower fire intensity, (b) less probability of torching, and (c) lower probability of independent crown fire."

Letter Number	Comment Number	Comment Text
819	136	Significant road access is provided to Smith River RNA forests via the Level 3, 4, and 5 roads that are not at issue in this analysis process. Even if existing Level 3, 4, and 5 roads did not provide significant access to these watersheds independent of the status of Level 1 and 2 roads, there is compelling peer-reviewed literature indicating that the agency can and has engaged in effective fire suppression and fire management activities in unroaded landscapes. Attached to our May 2012 scoping comments was a PDF of Volume 2 of the Spring 2001 issue of Fire Management. The peer-reviewed articles in this issue of Fire Management clearly establish that agencies do not need to retain user-created routes in roadless areas in order implement effective fire management strategies. As stated on page 298 of the DEIS "no major ridgetop or main access roads on the NFTS are proposed to be decommissioned from the NFTS or downgraded." Hence, additional highrisk user-created motorized trails are not needed to provide effective fire suppression/exclusion. We again bring to your attention the conclusions on page 341 of the March 4, 2006 Draft Environmental Impact Statement (DEIS) for Oil and Gas Leasing and Roads Management for the Santa Fe National Forest that calls for significant road decommissioning in that Forest: The proposed road decommissioning would not create large isolated parcels of land, and an adequate number of open and closed roads would remain available for use when needed. There would continue to be an adequate road density in wildland-urban interface areas surrounding private lands, communities, water systems, and other infrastructure. It is important to note that the majority of the roads targeted for decommissioning are user-created and are not vital access roads. Many of the roads proposed for decommissioning are short spurs, duplicative, in poor condition, or are on steep slopes that would not likely be used by fire crew trucks and engines. Therefore, it would be unlikely that a fire would reach catastroph

Letter Number	Comment Number	Comment Text
		occurred within 33 feet of a road edge (Johnson, 1963). Other studies showed similar results, reinforcing the correlation between roads and wildfire (Show et al 1941; California Division of Forestry and USDA Forest Service, 1968). Given the importance of roads to the fire suppression campaign, it is surprising that these studies, over 30 years old, are the most recent analyses of the road problem in fire control. Their results, if not conclusive on their own, indicate a possible causal relationship between human-caused wildfire and roads, and support the need for further research on the subject. Analysis of the 2000 wildfire season, for example, noted that all of the fire starts in the Skalkaho Valley Complex were in roaded and developed areas, which accounted for 93% of the total area burned (Morrisson et al 2000). Increased attention to data of this kind is needed to adequately assess the extent of the impact of roads on wildfires. Please note that page 294 of the DEIS acknowledges that "human ignitions [near roads] have accounted for the largest number of ignitions of wildfire for the past 34 years of fire history on the Smith River National Recreation Area."

Response: We reviewed the spring 2001 issue of Fire Management you provided and although the article is specific to fighting fire in Roadless Areas, we found that the issues raised in the article were similar to the criteria used by the NRA fire personnel to evaluate the road system, which led to removal of roads across the district. The NRA fire personnel evaluated the road system during the Smith River NRA RAP and reviewed it again during this TM process to determine access needs in relation to such factors as firefighter safety, cost efficiency (quicker, easier access), proximity to private land, fuels treatment areas, difficulty of the terrain, etc. All action alternatives will reduce road density across the district. The terrain on the NRA is steep, rocky, and very brushy. Cross-country travel is very difficult. The NRA fire personnel evaluated the road system during the RAP and reviewed it again during this process to determine access needs in relation to a variety of factors to safely and efficiently respond to wildland fire. Roads proposed to be kept are the primary access roads (regardless of OML) to specific areas. Duplicate roads would be removed wherever possible. Closing high-need roads would limit access for resources such as engines and hand crews. This could increase the time it takes to respond to an unwanted wildfire and lead to larger fires, decreasing fire fighter safety and increasing resource damage. It could also require the use of more resources than if better access allowed prompt and successful initial attack. This could contribute to a larger fire size and higher operation costs. As stated in the EIS, recent fire records show human caused fires tend to cluster along major highways, county roads, OML 3, 4, and 5 roads, and near communities and developed campgrounds. Human causes have accounted for the largest number of ignitions of wildfire for the past 34 years of fire history on the Smith River NRA; however, lightning occurs frequently throughout the forest, often with multiple ignitions from the same storm, and is responsible by far for the greatest number of acres burned for the past 34 years (EIS). Access is needed to safely and efficiently respond to wild land fires on the NRA.

Search and Rescue Operations

Letter Number	Comment Number	Comment Text
804	1	My reasons against any road closers 1. Restricts ability of wildland firefighting, and search and rescue to perform their jobs to save our forest and all the people who get lost in the forest and need to be rescued.
855	3	Need to keep routes open for search and rescue operations.

Letter Number	Comment Number	Comment Text
806	7	All that said, I would like to rebut two of the especially absurd arguments often used by the off-road vehicle crowd. A representative example of the first is by Dean Wilson, the Sheriff in Del Norte County. Wilson has a well-earned reputation for using his position as the armed leader of this county's sheriff's department to further his own political and social agenda. His frequent use of his armed position for political purposes is as intimidating as it is socially destructive. Now to his argument: Wilson has, as reported by The Triplicate, "often said that closing any of the roads in the Six Rivers National Forest would endanger public safety by making it more difficult for search and rescue operations or for targeting off-the-grid criminal activities." His statement is close to 180 degrees from reality. The truth is that roads and motorized activity can facilitate criminal activities and provide access to otherwise remote wild areas for the purposes of illegal dumping, methamphetamine production, marijuana gardens, fish and wildlife and tree poaching, wildfire arson, and illegal target shooting. Closing roads would decrease criminal activity and increase public safety. And so far as search and rescue operations, on the chance that any of these closed roads are needed for one of these operations, the Forest Service would most likely immediately reopen the road for that purpose.
806	8	The sad part is that Dean Wilson knows all of this, but he nonetheless continues to push for more illegal access. I need to remark further that opening up more remote access will facilitate more visitors becoming lost, or having ORV accidents in the back country, or running out of fuel, or some other problem that necessitates search and rescue operations. So, far from increasing public safety, opening up more roads will decrease public safety, including for search and rescue personnel. An example of the second position I would like to rebut is a comment by Jim Pofahl, president of the off-road vehicle club North Coast Cliffhangers, who said, "Just because they didn't recognize the [unauthorized routes, or UARs] doesn't mean that the public didn't recognize them as a road to get somewhere, and if you take that away from them how do you get to the campsite that you've been going to since you were 19 years old?"

Response: As part of the Travel Management process, the forest is required to coordinate with local governments. As part of this process, the forest has sought input from the Del Norte County Sheriff's office on safety issues that the forest should consider in the revision of the NFTS. The NRA fire prevention staff evaluated the entire road system during the Smith River RAP and reviewed it again in the preparation of this TM EIS to determine access needs in relation to such factors as fire-fighter safety, cost efficiency (quicker, easier access), proximity to private land, fuels treatment areas, difficulty of the terrain, and fire start history by location. The primary access roads and UARs to specific areas were identified which will allow prompt and successful initial attack for fire suppression. All emergency access, including fire suppression, search and rescue, and law enforcement actions, is legally authorized to go wherever needed, whether it is designated on the transportation system or not. This provision, found in 36 CFR 261.13, lists the many exceptions to the prohibitions. By providing a more clearly defined NFTS, it is anticipated that the likelihood of motorists getting lost on the NFTS to the point of requiring Search and Rescue assistance would be reduced. A route-by-route review and response to Del Norte County's Search and Rescue recommendation is provided.

Illegal Activities

Legitimizing Illegal Activities

Letter Number	Comment Number	Comment Text
805	10	If the Six Rivers staff allows ORV use as called for in the current proposal, especially that which teaches the pernicious lesson that lawless off-trail use will be retroactively legitimized, then this corrosive ORV use will further metastasize.

Letter Number	Comment Number	Comment Text
605	5	In Six Rivers NF and other adjacent NF areas, I have witnessed and observed the ORV intrusion of the last decade especially. By roading anywhere, your agency has been a part of the problem of illegal and destructive use.
805	1	I write to urge you to adopt a travel/motorized recreation plan for the Smith River National Recreation Area that addresses the incessant and intense damage inflicted by off-road vehicles. I am deeply disturbed that the Six Rivers NF staff appear prepared to retroactively legalize the blatant violations of ORV enthusiasts, and effectively reward their impunity with new official map designations for gashes on the landscape they have created.
843	1	I am disappointed in your web site in that it is hard to find the most current management plans so I can do a timely comment. As a resident of Illinois Valley, I live close to the Gasquet District. I also see firsthand the destruction OHV use on our public lands from erosion, invasive species, and the all-out destruction of plants. OHV users should not be rewarded with new road routes created by OHV users. I have lived in the area for 40 years and the damage from off road use has just multiplied. Plus there is little enforcement. Our national forest lands should not be turn into motorized amusement park.
263	2	I am deeply disturbed that the Six Rivers NF staff appear prepared to retroactively legalize the blatant violations of ORV enthusiasts, and effectively reward their impunity with new official map designations for gashes on the landscape they have created.
263	4	Moreover, the NRA and the adjacent lands of the Six Rivers National Forest already provide hundreds of miles of marked roads, more than any human being could sanely request as a reasonable recreational allocation. For the Forest Service to hand over and legitimize more gashes in the Earth, marked officially as 'roads,' would constitute a gross dereliction of Forest Service duty to reasonably balance public values, and to enforce the policies administering that balance against those who would drive over it with impunity.
263	7	If the Six Rivers staff allows ORV use as called for in the current proposal, especially that which teaches the pernicious lesson that lawless off-trail use will be retroactively legitimized, then this corrosive ORV use will further metastasize. Forest Staff will discover a new network of rogue trails inviting another recreational plan a decade from now, if its authority to control ORV use is not demarcated today.
263	8	The new plan must not legitimize illegal routes deep into the backcountry, far from classified system roads and therefore unlikely to receive monitoring or attention from the Forest Service.

Response: The 2009 MVUM displays the designated NFTS open for motorized use. In 1990, the Smith River NRA limited motorized travel to designated routes on the NFTS, whereas other districts and forests were open to cross-country motorized travel. In 2005, the Travel Management Rule established and required the use of Motor Vehicle Use Maps (MVUM) to display the designated NFTS open to motorized travel. The current MVUM for the Gasquet Ranger District (Smith River NRA) reflects the status of NFTS roads and motorized trails in the forest's transportation database at the time of publication in 2009. Many UARs on the Smith River NRA are not the result of off-road recreationists, as the terrain in many parts of the Smith River NRA itself limits this, but rather they are old mining roads or logging roads on lands that were previously privately owned.

Project Effects on Illegal Activities

Letter Number	Comment Number	Comment Text
805	10	Forest Staff will discover a new network of rogue trails inviting another recreational plan a decade from now, if its authority to control ORV use is not demarcated today.
805	11	Allowing an atmosphere of lax supervision and impunity tends to encourage the worst in human behavior, in forest recreation as in any other realm of humanity. ORV use should be directed onto a finite number of clearly marked and mapped routes that can be policed and enforced with reasonable frequency given the staff time available. The plan must establish a clear, unambiguous, blanket prohibition on any off-route, cross-country travel with civil fines commensurate with the level of resource damage this causes, and sufficient to meaningfully deter willful violators.

Letter Number	Comment Number	Comment Text
605	5	In Six Rivers NF and other adjacent NF areas, I have witnessed and observed the ORV intrusion of the last decade especially. By roading anywhere, your agency has been a part of the problem of illegal and destructive use.
819	123	NEPA requires the Forest Service to disclose and analyze the environmental impacts of foreseeable increased illegal off-road use as a consequence of the Proposed Action designating routes as "motorized trails." The NEPA document must adequately analyze and disclose the management implications and impacts to resources from the maintenance backload for ML 1 and 2 roads and for user-created routes.
819	126	Failure to Analyze and Disclose Impacts of Foreseeable Illegal Off-Road Use It is essential that the Forest Service analyze and disclose the foreseeable connected action of illegal off-road use that will be facilitated by the Proposed Action as required by NEPA. The agency has contended that "off road use is illegal on the NRA; therefore it is not a reasonably foreseeable future action that can be analyzed with predictable cumulative effects." This is a cop-out. Off-road use has been prohibited by the Smith NRA Act since 1990, yet it proliferates across the landscape. This is an indisputable fact. Please note that in our Pappas Flat comments (below) we provide specific examples of illegal off-road use that are both foreseeable and predictable.
255	11	The Smith River federal lands already have way more roads tangled through the woods than are needed, than can be maintained and that can be law enforcement patrolled. These roads really aide various outlaw individuals like drug cartels, dopers and cross country off-road vandals. Laxity on these folks degrades the forests for the vast majority of Americans.
263	8	Allowing an atmosphere of lax supervision and impunity tends to encourage the worst in human behavior, in forest recreation as in any other realm of humanity. ORV use should be directed onto a finite number of clearly marked and mapped routes that can be policed and enforced with reasonable frequency given the staff time available. The plan must establish a clear, unambiguous, blanket prohibition on any off-route, cross-country travel with civil fines commensurate with the level of resource damage this causes, and sufficient to meaningfully deter willful violators. The plan must also set about the critical task of either repairing or closing and revegetating the backlog of old, unmaintained roads and trails. This is the first task to achieve before the Forest Service even considers opening new routes or watersheds and magnifies its enforcement challenges beyond its already deficient management capacity. Although I am certain that the majority of ORV users do not willfully destroy forest resources, there is a non-negligible fraction of truly impudent ORV users who play with utter disregard for soil and vegetation.
826	10	For good reason the proposed plan is very concerned with the preservation of water quality within the various watersheds of the Smith River. However, the Forest may create unintended consequences in its plan for closing roads by way of the inadvertent promotion illicit outdoor marijuana cultivation, which is occurring across the United States at an increasing rate (Frye, Bob. "Pot farms in forests a growing problem." Pittsburg Tribune Published August 26, 2013.) Based on discussions with staff of regional resource agencies it would seem to be naive to believe that barricading or otherwise closing off access would have any practicable effect upon these criminal activities. The ability to set up a "grow" in a secluded, difficult to access area is quite often viewed as a desirable feature for illicit outdoor marijuana cultivation as it makes the detection and apprehension of such criminal activity challenging for law enforcement personnel while also creating potentially dangerous situations for hikers, kayakers, mountain bikers, etc. who venture into these roadless areas. Perhaps most significant, to the goal of preserving water quality, outdoor marijuana cultivation is highly dependent on access to significant amounts of water which has led to stream diversions, sedimentation, point source pollution, and other adverse impacts on water quality in areas, not far from Del Norte County, where marijuana cultivation has been increasing at an alarming rate (Trinity County, Humboldt County, etc.). As such, barricading and decommissioning roads (which will surely not deter the criminally inclined) should be reserved as a last resort for roads rather than the default option, which appears to be the case under most presented alternatives in the plan.

Response: It is assumed that any of the action alternatives provide designated motorized recreation opportunities that are clearly defined parts of the NFTS (e.g., signing designated roads and motorized trails, while barricading closed and decommissioned roads, and UARs not added to the NFTS), and that this would reduce the likelihood of intentional or unintentional illegal cross-country motorized travel. Any type of barricade, closure device, or gate should not be assumed 100 percent effective at preventing illegal cross-country travel. However, these devices are an effective deterrent to unintended illegal cross-country travel, meaning travel that occurs off the NFTS because the designated NFTS is not clearly defined on the

ground. By providing a more clearly defined NFTS. Illegal acts are neither reasonably foreseeable events capable of NEPA analysis and are beyond the scope of this proposed action.

The Travel Management process cannot analyze or predict illegal activities. However, one goal of this Travel Management process is to provide an NFTS network that would be signed adequately and help curtail illegal use, and provide a mechanism to allow enforcement citations for any illegal use. All action alternatives include physical deterrents to motorized travel off the NFTS, some of which were developed in response to known sites specific issues. The analysis of the no action alternative, Alternative 1, reflects the environmental consequences associated with doing nothing. Known risks to resources will be factored into the analysis and reflected in the environmental consequence resource sections of Chapter 3.

Enforcement Capabilities

Letter Number	Comment Number	Comment Text
821	3	Our tea party sheriff is not going to patrol these roads to help make law-abiding hikers safe. Our county supervisors are not going to authorize funding to maintain USFS roads. That will be Your Job and taxpayers will have to pay! Kind of ironic for these folks that don't believe in taxes!
833	4	What we need is careful strong protection management planning and enforcement of this public trust not planned abuse
819	94	We believe that the Forest Service may be incapable of accomplishing the needed mitigations and law enforcement necessary to protect resources from significant impacts that are the direct result of keeping so many proposed roads open to vehicles.
819	95	Please provide documentation regarding the capability for adequate law enforcement.
805	13	Although I am certain that the majority of ORV users do not willfully destroy forest resources, there is a non-negligible fraction of truly impudent ORV users who play with utter disregard for soil and vegetation. Six Rivers staff must be willing to cite and ticket violators on sight, in order to segregate the criminals from the responsible recreationists whose reputation is unjustly tarnished by the former. The new plan should also include rewards for photographic documentation of off-route violations, so that citations may remain a substantial deterrent even for those violators who avoid the scarce and occasional USFS ranger.
255	5	Keep vehicles on established roads; roads that Forest Service can afford to maintain and patrol better than they have.
805	10	The new plan must not legitimize illegal routes deep into the backcountry, far from classified system roads and therefore unlikely to receive monitoring or attention from the Forest Service.
		April 2011 Comments Incorporated by reference:
		Re motorized trail use: we feel there is a critical need for increased enforcement and monitoring re illegal use of closed routes and off-route travel – particularly at specific sites. Pine Flat is a prime example. We support increased investment in signage, education, enforcement, and monitoring re safe and legal motorized use of routes. As we discussed during the collaboration, these investments are essential to managing motorized trail use.
825	5	As discussed during the collaboration, we believe site-specific standards and thresholds need to be established whereby if there are violations of these standards and thresholds – then the Smith River NRA must be able to take corrective action. Therefore, there will be consequences where there is continued illegal activity. We recommend that "action" include closing and curtailing use in those areas where illegal use and environmental damage is occurring. Thus, we can agree to motorized use in specific areas, but we require there be 1) additional resources secured and used to implement monitoring and enforcement; and 2) consequences (including closure), if there is continued illegal activity as determined by monitoring and enforcement at sensitive sites.
263	8	Six Rivers staff must be willing to cite and ticket violators on sight, in order to segregate the criminals from the responsible recreationists whose reputation is unjustly tarnished by the former. The new plan should also include rewards for photographic documentation of off-route violations, so that citations may remain a substantial deterrent even for those violators who avoid the scarce and occasional USFS ranger.

Response: It is anticipated that by providing for motorized recreation opportunities that are clearly defined through signing roads and motorized trails, while also barricading UARs, closed and

decommissioned roads that unintended illegal use will be deterred. In addition, the Gasquet Ranger District has a law enforcement officer, 3 fire prevention patrols, and a road manager who serve as forest protection officers (FPOs) and have citation authority, and 1 permanent Recreation Officer, and typically two seasonal recreation technicians are employed in the spring through the fall, all of whom will also monitor use and compliance. The forest also has a Cooperative Agreement with the Del Norte County Sheriff's Office that, that provides for the Sheriff's Office patrol of "roads designated and maintained by the Forest Service within the Cooperator's (Sheriff's) jurisdiction." Civil fines are currently in place for damage caused by motorized resources. Two examples are CFR 261.15(h) – \$250 in the Northern District of California, and 261.12(c) – \$100 in the Northern District of California. For more information on Resource Monitoring, see Appendix B of the EIS.

Naturally Occurring Asbestos

Letter Number	Comment Number	Comment Text
846	15	The DEIS states that asbestos-bearing ultramafic rock occurs throughout the Smith River NRA, including many of the unauthorized routes proposed for addition to the NFTS. EPA notes that the Forest performed laboratory testing on material taken from the road surface of 27 of these unauthorized routes and found that the majority of these routes contained NOA and six of the 27 contained concentrations in excess of 0.25 percent (p. 279). Asbestos levels even less than 0.25 percent in soil can generate airborne asbestos at hazardous levels. The DEIS states that there are no plans to conduct additional laboratory work to determine the content of asbestos on the unauthorized routes that have not yet been tested. EPA notes that the DEIS states that for all routes with the potential to contain NOA, the Forest will inform the public of the risk of potential exposure on these roadways, impose reduced speed limits in these areas, and provide signage to these effects along these routes. Recommendations: EPA recommends that the FEIS expand upon the NOA analysis provided in the DEIS. For those routes where laboratory testing has found the roadway to contain NOA, or for routes suspected to contain NOA, we recommend that background asbestos concentrations in the air be determined, based on proper sampling protocols, and disclosed in the FEIS. We refer you to EPA Region 9's asbestos web page at http://www.epa.gov/region9/toxic/noa/ and the California Air Resources Board's (CARB) asbestos web page at http://www.arb.ca.gov/toxics/asbestos/asbestos.htm for useful information on NOA, including air monitoring.
806	10	Many mining UARs are either of native surfaces or paved with mine waste, containing high levels of asbestos and heavy metals. Further, several ORV deaths have occurred in the last decade on/off these UARs, specifically in the North Fork Smith area.
823	4	I think the only way you're going to keep an irresponsible OHV rider from straying off designated routes is to have either thick vegetation and/or very steep slopes on both sides of the trail. Then there is the problem of airborne asbestosI think it is highly unlikely that OHV riders will observe posted speed limits to keep the dust down. The snarl of motorized trails proposed for the Gasquet Mountain area in alternatives 3, 4, and 6 look like they could eventually turn into one big dust bowl with heavy OHV use.

Response: Forest staff is aware of the presence of ultramafic bedrock, both in natural outcrops and as used in the past for road surfacing in many areas and on many routes in the project area. The forest has tested and confirmed the presence of chrysotile asbestos in some areas where ultramafic rock occurs. While asbestos may be present wherever ultramafic rocks are situated, its distribution may be highly variable even in samples taken in close proximity to one another. The known risks associated with naturally occurring asbestos (NOA) are described and information is provided for the user to assess and mitigate the hazards while recreating, however there are no known deaths due to NOA exposure that have been identified by anyone consulted in the preparation of the EIS.

As stated in the EIS, the SRNF will provide information to the public on the potential for the presence of NOA in areas underlain by ultramafic bedrock. This approach has been established by the regional forester's letter to forests on February 11, 2009, in which he directs forests to make the public aware of the potential risk of NOA and its presence on national forest lands as well as provide guidance on how visitors can reduce their exposure to the substance. Asbestos sampling conducted to date has proved inconclusive regarding the distribution of asbestos concentrations on proposed routes, with substantial variation between closely spaced samples, reflecting an observed scattered distribution of asbestosbearing outcrops. It is anticipated that additional sampling, including background airborne asbestos concentration sampling, would not provide additional meaningful data regarding the levels of asbestos exposure that might be encountered during motorized recreation, or the degree of risk associated with that exposure. As US EPA has acknowledged, per the Regional Forester's letter of direction, "the scientific assessment and identification of actual public health risks associated with NOA is a complex and time intensive process. Until such studies are performed, the Region will not have definitive information regarding actual employee and public health risks posed by NOA on national forest lands." At present, the science regarding the public health risk from recreational exposure to naturally occurring chrysotile asbestos, as is found in the project area, is not conclusive. It is beyond the scope of this EIS to conduct new scientific studies to definitively determine the level of risk present and the associated protective measures necessary to eliminate that risk. Rather, the SRNF can best serve and protect the public by providing 1) information sufficient to inform people of the potential presence of asbestos; 2) resources to provide access to further information on the topic; and 3) guidance on best practices to reduce or eliminate exposure. In so doing, the forest has met the obligation to inform the public of potential hazards, while allowing the public to make informed decisions regarding the level of risk they are willing to accept, to the degree that present scientific knowledge and existing data regarding asbestos presence and associated hazards will allow.

Letter Number	Comment Number	Comment Text
846	19	Furthermore, we recommend that the FEIS discuss: The potential for releases of asbestos minerals to soils and surface waters from ground disturbing activities, such as road decommissioning and restoration work, as well as from OHV use upon these routes. The potential for indirect exposure to others outside the project area from "track out" from contaminated vehicles, equipment, and clothing transported off the project site. Measures that would be implemented to protect human health during project work, including OSHA requirements that would apply to workers, and measures to prevent track out (e.g., vehicle wash rack). Measures to prevent releases of asbestos minerals from disturbed areas and roads to soils and surface waters. And air monitoring measures during the project, including those for asbestos.

Response: While some naturally occurring asbestos may be released to soils and surface waters when project-related activities are implemented or during public recreational use, there is no reason to believe that such releases would detectably increase the level of hazard associated with NOA. The only known health hazard associated with NOA is related to inhalation of fugitive dust, and NOA that is contained in soil or suspended in water presents no known health hazard. If NOA released during ground disturbance were to become airborne, either in situ or after transport off-site, it could then pose a health hazard. However, the on-site release of asbestos is already analyzed in the EIS re project activities and

recreational use. While it is possible that some quantity of asbestos-bearing dust could be transported offsite following visits to portions of the project area where ultramafic geology predominates and NOA may be present in surface materials, risk of exposure to inhalation of such dust can be mitigated by informing the public of the potential presence of NOA and of ways to reduce that risk, including ways to reduce the quantity of dust carried out of the area and clean-up methods that will reduce the risk of indirect dust exposure. Relevant information useful in mitigating exposure may be found in the Region 5 web resources to which the public is directed. In addition to directing the readership to the appropriate websites, a list of the suggested mitigations is included in the EIS. Appropriate mitigations to reduce health hazards from asbestos exposure are mandated by OSHA and other regulatory bodies, including the California Air Resources Board (CARB). The CARB Asbestos Toxic Control Measures (ATCMs) for construction would apply to project activities such as road decommissioning. In general, these measures include dust abatement and control, vehicle speed limits, and dust track-out prevention and removal. OSHA provides no regulations specific to NOA, but suggests that local regulations, such as the provisions of the CARB ATCMs for wetting of excavations and materials, should be effective in controlling exposure (29 CFR Parts 1910, 1915, and 192, OSHA final rule, Occupational Exposure to Asbestos, 1994). Additionally, the Six Rivers National Forest has a job hazard analysis (JHA) specific to hazardous dust exposure that includes much of the known information regarding NOA and exposure hazards, and specifies a number of abatement actions that would apply to any Forest Service employees' job-related activities in areas with potential for NOA. If personal air monitoring is recommended or required for project work under safety regulations such as OSHA or the CARB ATCMs, then the requirements and applicable regulations will be included in any project implementation guidelines, such as contract clauses and job hazard analyses. As stated above, there is no known health hazard from asbestos in soil and water. There is an EPA standard for asbestos concentrations in drinking water; however, it is not anticipated that project activities or motorized travel will release asbestos in sufficient quantity to raise asbestos levels in any known drinking water source above EPA thresholds. Consequently, no measures to prevent release to soil and water are deemed necessary, except where there is likelihood that such releases could generate airborne dust to present an inhalation hazard, such as on paved roadways adjacent to construction sites. CARB ATCM provisions to prevent dust track-out on paved roads will be followed to minimize this possibility. The EIS discusses these points.

Letter Number	Comment Number	Comment Text
846	16	We recommend that the FEIS contain more detailed maps of the location of known and probable NOA. While the DEIS contains such a map at page 280, it is of a low resolution and would not serve to sufficiently inform a potential recreational user of the location and extent of probable NOA hazards.

Response: The included map displaying the distribution of ultramafic bedrock is small-scale (1:250,000) and of relatively low resolution. The geologic data displayed are a compilation of all known geologic mapping in the area, performed at a variety of scales, and represent the best available mapping for the region. The scale of mapping in general does not provide useful detail at scales greater than 1:24,000 at best, and no better than 1:250,000 in some areas. Nor is the EIS itself intended to provide visitor

information regarding travel routes and any associated hazards. Rather, once the travel system is finalized, visitor information will be made available in the form of an MVUM, and other relevant information, including NOA maps, will be made available at visitor service locations. Per the Regional Forester's direction of February 11, 2009, public awareness of the presence, distribution potential hazards and best practices to reduce exposure to NOA is to be enhanced by making available a NOA fact sheet and maps of known or potential NOA distribution on the various Forest Service administrative units. This information is available at all Forest Service visitor information locations in the Region, and on the Regional website. A reference to the web address to access this information (www.fs.fed.us/r5/noa/) will be included in the FEIS. The NOA maps provided at these locations for the Six Rivers National Forest display the same data regarding ultramafic geology that are displayed in the map in the EIS. Future signage and information directed at the recreating public will also refer to these sources so that the public may be informed on the topic.

Implementation

Monitoring

Letter Number	Comment Number	Comment Text
819	33	Curiously, page 6 of the Scoping Report states that "monitoring plans that apply to the proposed action and all the alternatives considered in detail will be more fully developed in the EIS." This is in fact not the case. Rather, the monitoring "plans" are if anything less developed in the DEIS. However, page 565 of the DEIS confirms that at most 20% of the high risk routes to water resources will be monitored annually for at most the first 10 years of implementation and that "monitoring is predicated on available funding."

Response: The POC and botany monitoring plans located in Appendix B of the EIS is revised to reflect a more robust monitoring regime to comply with the parameters outlined in the EIS.

Botany

Letter Number	Comment Number	Comment Text
819	35	Unfortunately, the Botanical Resources Monitoring Plan is even more arbitrary and capricious. Despite the fact that one of the "primary goals" of Congress in establishing the Smith River NRA was "to emphasize, protect and enhance the unique biological diversity" of the NRA, the proposed action Botanical Resources Monitoring Plan simply writes off up to 10% loss of rare and endemic plants to ORV damage as a "green condition" indicating that resource objectives are being met on designated routes. Does the agency contend that the foreseeable loss of up to 10% of rare and endemic plants to user-created routes really emphasizes protection and enhancement of the area's unique biological diversity? Such an approach threatens violation of the California Native Plant Protection Act. Further, page 67 of the Scoping Notice indicates that the proposed action will allow for loss of up to 20% of rare plants over a 5-year period. Why is the codification of extreme motorized recreation in the NRA more important to the Forest Service than the protection of the unique and irreplaceable botanical legacy for which the NRA was designated? Why is the agency advocating for the loss of up to 19% of rare plants located near user-created routes in the NRA? Why would the proposed "monitoring" end after a mere 9 years? The DEIS addresses none of these questions despite their being raised in the scoping period for this project. Yet page 16 of the DEIS acknowledges that "monitoring is critical for evaluating the effectiveness of management designs and the accuracy of analysis assumptions and conclusions."

Letter Number	Comment Number	Comment Text
819	31	It appears that the Forest Service is contending that it can evade the intent and requirements of the Smith NRA Act to preserve, protect, and enhance botanical and 5 hydrological values through "monitoring" of the inevitable and foreseeable damage that codified motorized use of "high risk" routes will facilitate.

Response: The project proposes to monitor use to prevent a trend toward a loss of viability. Sensitive plant populations within 100 feet of UARs added to the NFTS will be managed via monitoring to determine if a decline in Sensitive plant populations has occurred. If a decline of any Sensitive plant population is found to have occurred that indicates a trend toward a loss of viability, the UARs with the declining species that were added to the NFTS will be removed from the Motor Vehicle Use Map until such time that Sensitive plant populations are found to have recovered.

Noxious Weeds

Letter Number	Comment Number	Comment Text
819	36	Please note that the Noxious Weed Monitoring Program would only be administered for "up to four years." Most of the project will not even have been implemented within that timeframe. Unless noxious weeds are continuously monitored and problematic populations are addressed, motorized access is likely to exacerbate botanical resources in the NRA.

Response: The noxious weed monitoring plan specifies, "Monitoring will commence at the end on one full growing season following the addition of the routes to the National Forest Transportation System. Monitoring will include hand removal and will occur prior to invasive plant species producing seed."

Water Quality and ACS Objectives

Letter Number	Comment Number	Comment Text
819	32	Please note that page 64 of the Scoping Notice indicates that the agency intends to monitor only up to 20% of the routes that present a "high risk" to water resources over the next 10 years, and even that minimal amount of monitoring is contingent on funding that has not been secured. Presumably, no "moderate" risk routes will be monitored at all. In other words, the Forest Service is proposing to add routes it knows present a "high risk" to aquatic values and monitor less than 1 in 5 of the routes over the next 10 years if funding is provided. Such an approach is wholly inadequate and does not ensure that hydrological resources will be preserved, protected, and enhanced as required by the Smith River NRA Act. Further, such an approach will not lead to the attainment of the Aquatic Conservation Strategy (ACS) objectives of the Northwest Forest Plan or compliance with the requirements of the Water Quality Board.
819	31	It appears that the Forest Service is contending that it can evade the intent and requirements of the Smith NRA Act to preserve, protect, and enhance botanical and 5 hydrological values through "monitoring" of the inevitable and foreseeable damage that codified motorized use of "high risk" routes will facilitate.

Response: While the monitoring plan refers to "high risk" routes, it should be noted that any high-risk route proposed for addition to the NFTS would have the appropriate project design features implemented prior to being open for public use. These project design features (such as water bars installed to restore proper drainage patterns to reduce the potential for sedimentation) must be sufficient to reduce the risk from high to moderate or low levels. One of the primary reasons for monitoring is to verify and insure that the project design features are adequate in keeping the risk to water quality to a *low* level. Implementing these project design features meets the requirements of the North Coast Water Quality

Control plan. Reducing sedimentation from roads is an important Watershed Restoration treatment in implementing the ACS, and therefore helps to attain the ACS objectives. Sufficient project design features have been defined that will insure there are no adverse impacts to water quality because of these route designations.

Water quality

Letter Number	Comment Number	Comment Text
819	34	How will the Forest Service demonstrate compliance with state and federal requirements pertaining to the protection of water quality if the Forest Service has no information on its activities and how those activities are affecting water quality?

Response: The USFS Region 5 Best Management Practices (BMPs) are included as an Appendix to the EIS. The BMPs are measures that have been certified by the North Coast Regional Water Quality Control Board and approved by the US Environmental Protection Agency (EPA) as effective measures of protecting water quality impacts from non-point source of pollution. The BMPs discussed in the EIS included but are not limited to water quality monitoring of OHV use, control of road drainage, road operation and maintenance, and road decommissioning and storage. The BMPs are designed to minimize impacts to water quality during project implementation.

Recreation

Letter Number	Comment Number	Comment Text
819	38	Lastly, please note that the Recreation Monitoring Plan (DEIS page 567) calls for monitoring (depending on hypothetical funding) only 20% of motorized trails per year despite the fact that "most routes being evaluated to be added to the NFTS are likely in need of upgrading to NFTS standards as well as maintenance" (DEIS 246) and that "motorized routes may have unavoidable effects on streams, no matter how well they are located, designed or maintained." (DEIS 106). Monitoring 1 out of 5 such routes annually (should funding be available) is arbitrary and capricious and will not meet the requirements of the Smith National Recreation Act or the Northwest Forest Plan.

Response: The Travel Management EIS monitoring plan for motorized trails is directed by the forest's LRMP (p. V-20, Recreation Program), and the 20 percent annual monitoring requirement is currently a part of the recreation annual base program with annual accomplishment targets assigned by USFS Region 5 staff. As such, it is neither arbitrary nor capricious. The statement on page 246 is based on an assumption that since UARs are not already on the NFTS, that some resource protection work would be done in the implementation phase to bring them up to NFTS standards. This work is listed in the *Proposed Actions* column of the alternative tables in Appendix A. The effectiveness of the design features is among what will be evaluated in annual monitoring effort.

The statement the commenter referenced from page 106 of the DEIS states "The effects of any of the action alternatives are expected to not adversely affect threatened, endangered and sensitive fish, critical habitat, and essential fish habitat and in fact would be beneficial to threatened, endangered and sensitive fish, critical habitat and essential fish habitat." Although there may be a direct effect from motorized routes, mitigation is in place to protect fish.

Economic Viability

Letter – Co	mment Number	Comment Text
615-5; 620-3; 8;590-4; 41-5	19-3; 476-4; 581-3; 837-12; 20-3; 829- ; 64-1; 521-2; 605- 0-4; 791-4; 840-2	I would prefer not to have my tax dollars subsidize extreme off-road vehicle recreation in sensitive areas on our public lands.
139-2;1-5;338-5;419-3;476-4; 581-3; 605-4; 615-5; 620-3; 759- 3; 837-12; 1-5; 338-5; 419-3; 476-4; 581-3; 605-4; 615-5; 620- 3; 759-3; 837-12; 20-3; 829-8; 590-4; 41-5; 605-4; 521-2		Given the immense road maintenance backlog that the Forest already has this does not seem wise to me.
Letter Number	Comment Number	Comment Text
239	1	I am dismayed by the direction that the Smith River National Recreation Area Travel Management process is taking. I value the wildlands, watersheds and wildflowers of this special place and am concerned that the recreational preferences of a handful of extreme OHV enthusiasts will outweigh the need to protect at-risk botanical treasures and irreplaceable roadless areas. It is my understanding that the Forest Service is proposing to add user-created routes through roadless areas and botanical hotspots to the Forest Service road system. Given the immense road maintenance backlog that the Forest already has this does not seem wise to me. I urge you to not use MY tax dollars to subsidize extreme OHV recreation in sensitive areas on OUR public lands. The Smith River National Recreation Area and the Six Rivers National Forest already offer hundreds of miles of EXISTING roads where motorized recreation is an appropriate and harmless activity. There is simply no need to sacrifice wildlands and rare plants in order to establish additional "motorized trails" in these special places.
369	3	It is my understanding that the Forest Service is proposing to add user-created routes through roadless areas and botanical hotspots to the Forest Service road system. Given the immense road maintenance backlog that the Forest already has this does not seem wise to me. I would prefer not to have my tax dollars subsidize extreme off-road vehicle recreation in sensitive areas on our public lands.
819	23	Please note that page 390 of the DEIS acknowledges that "current appropriated road maintenance funding is insufficient to cover current annual road maintenance needs" and that "current and projected funding does not cover deferred maintenance, which means that the deferred maintenance backlog grows annually."
819	27	It also appears that the DEIS justifies this approach by relying extensively on "mitigation" of high risk routes that requires funding that the Forest Service does not have access to and monitoring of a small segment of high risk routes (again dependent on hypothetical funding). Indeed, the agency's preferred alternative appears designed to increase, rather than decrease, the extreme NFTS maintenance backlog in the National Recreational Area.
819	95	Please provide budget and timetable that illustrate what work is anticipated and will in fact occur in the near future.
819	96	Please Do Not Adopt a Road and Motorized Trail System That the Forest Service Cannot Afford to Maintain Can the Forest Service afford to maintain the road system in the proposed action to prescribed agency standards? The Smith River NRA Roads Analysis (RAP) indicates that the Forest Service cannot afford to maintain the existing system to standard. According to the RAP: "Road maintenance funding has declined in the last decade and is expected to continue to decline. Maintenance funding allotted to the NRA varies from year to year based on projects on other Districts on the Forest. For example, in 2003 the NRA received \$58,000, and in 2004 received \$87,000. This funding covers all road levels, but the majority is spent on Levels 3, 4, and 5 to meet maintenance standards. The NRA receives less than 10% of annual maintenance funding needed. Limited amounts of funding can be spent on Level 1 and 2, and is usually focused on safety and resource repair needs." (SR NRA RAP at P.5) * "The disparity between the amount of maintenance funds needed for the current road system and the amount available is expected to continue. Therefore, the Forest Service is looking for opportunities to reduce road maintenance costs through the elimination of unneeded roads, reduction in maintenance levels to appropriate minimums, and reduction of maintenance requirements." (SR RAP at P.5).
819	98	Page 384 of the DEIS indicates that the annual cost to adequately maintain the Smith River NRA NFTS is \$709,000 and that the District has been allocated \$50,000 total for FY 14 resulting in a \$659,000 road maintenance shortfall. Hence, the proposal to implement Alternative 6 and add an additional \$27,000 in annual maintenance obligations is unwise. In contrast, implementation of Alternative 5 would decrease the NRA's maintenance obligation by \$44,700 a year. (DEIS page 384). Given that page 4 of the DEIS indicates that part of the project purpose and need is to reduce NFTS maintenance costs, the agency must implement

Letter – Comment Number		Comment Text
		Alternative 5. To further increase the agency's road maintenance backlog will frustrate attainment of the very purpose of this planning effort. As acknowledged on page 384 of the DEIS "adding new facilities to the NFTS will increase the amount of deferred maintenance and increase the maintenance cycle." Page 388 of the DEIS reveals that "motorized trails may require considerable hand work and more time to maintain than the equivalent mile of road." Yet the Forest Service is proposing to add 8 out of 9 highly controversial motorized trails through botanical hotspots and Inventoried Roadless Areas.
819	99	36 CFR 212.55 clearly requires consideration of the need for maintenance and administration of the designated NFTS. Yet here it appears that the agency is committed to increasing its maintenance backlog regardless of the consequences to natural resources or visitor safety.
819	101	Page 401 of the DEIS reveals that annual maintenance of motorized trails alone under Alternative 6 would cost approximately \$42,800. This is over 80% of the NRA's total maintenance budget, and would leave less than \$8,000 maintenance dollars to maintain the NFTS roads that are actually needed for administrative and public access rather than just for the motorized play desires of a small segment of forest visitors.
819	103	Please note that page 3 of the DEIS indicates that UARs can only be added when they don't have resource concerns that cannot be "readily mitigated." The Smith River NRA cannot "readily mitigate" the resource concerns on the existing NFTS given the \$113,000,000 deferred maintenance backlog on the Six Rivers National Forest. Therefore, it is arbitrary and capricious to assume that the agency will have the funding necessary to "readily mitigate" damage from additional NFTS motorized trails. Page 47 of the DEIS acknowledges as much: "the risks roads pose to water quality is increased by 23 the fact that road maintenance funding has been declining while the road maintenance needs of our road system continues to increase." Consequently, "there is a need to restructure our current level of road miles to a more affordable level to better maintain and protect water quality and fish habitat." Please note that these statements directly undermine the incorrect contention on page 6 of the Scoping Report that economic feasibility of road maintenance is not a significant issue for this project.
819	105	We conclude from the preponderance of empirical research and from experience on the ground that the proposal to adopt a system that cannot be maintained to standard (due to the disparity between available and likely funding and the system's maintenance needs) will result in sediment mobilization and delivery to streams. Furthermore, adoption of the system will result in significant human safety risks and injury resulting directly and indirectly from the failure to maintain the system to standard.
829	8	It is my understanding that the Forest Service is proposing to add user-created routes through roadless areas and botanical hotspots to the Forest Service road system. Given the immense road maintenance backlog that the Forest already has this does not seem wise to me. I would prefer not to have my tax dollars subsidize extreme off-road vehicle recreation in sensitive areas on our public lands.
833	1	The Forest Service needs to unlink its funding dependence on OHV funds which influences preference for OHV demands on the forest for their over use, harming wildlands, wild animals, watersheds and wildflowers of the public's Six River's National Forest. The conflict of interest shows in current proposals for changes to the Smith River National Recreation Area Restoration & Motorized Travel Management Planning of April 2014. Much more openness to motorized impact than restorative action is evident in your preferred alternative. Your preferred alternative shows this bias toward increase use of damaging OHV, that get bigger and bigger and damage more and more, rather than assertive stewardship of the natural environment. Alternative 5 is the least damaging choice I support.
846	3	While EPA approves of the goals of this project, we have serious concerns regarding the feasibility of implementation in light of the budgetary constraints described in the DEIS. Under existing conditions, the Smith River NRA has an annual road and trail maintenance deficit of approximately \$650,000. Some project alternatives could increase and others decrease this annual shortfall. According to the DEIS, the one-time implementation expense of the action alternatives ranges from \$6.3 to \$7.3 million dollars; however, the DEIS does not describe how funding for these activities would be secured. In the absence of sufficient funding, the full effects of project implementation, both adverse and beneficial, as disclosed in the DEIS, may not come to fruition. In addition, the DEIS does not disclose which project components would be implemented and which would be deferred should project funding fall short of the identified need. Without this information, it is difficult to determine what the environmental consequences of the proposed actions will truly be.
846	8	All action alternatives discussed in the DEIS have clear benefits to water quality, aquatic resources, wildlife, and other resources as compared to the no action alternative. EPA strongly supports the implementation of an action alternative; however, we have significant concerns regarding the feasibility of project implementation given the stated budgetary constraints and annual maintenance deficit, as discussed in the "Transportation Facilities" section of Chapter 3. Page 47 of the DEIS indicates that road maintenance funding for the Six Rivers National Forest

Letter – Comment Number		Comment Text
		has experienced a long term declining trend, while annual maintenance demands have continued to increase. The Smith River National Recreation Area averages an approximate \$650,000 deficit of the necessary funds for annual routine maintenance. As a consequence, nearly 50 percent of stream crossings in the NRA are in need of routine maintenance. The maintenance backlog within the NRA has significant short and long-term consequences for water quality, including an increase in sediment load in NRA watersheds, impacts on wildlife, and the potential for an increased mass wasting hazard (p. 72). Recommendation: The FEIS should include a short discussion of the effect of the National Forest Transportation System maintenance backlog on each major resource area discussed in Chapter 3 and the extent to which each Alternative's described environmental outcomes are dependent upon the elimination of this backlog.
846	9	Furthermore, monitoring and mitigation activities with the potential to affect environmental outcomes are also predicated upon funding availability (for example water resource monitoring, page 565).
846	10	Recommendations: The FEIS should discuss the likelihood that sufficient funding will be made available for project implementation. The FEIS should also discuss which project components would be given priority for implementation and the extent to which this would affect environmental outcomes should sufficient funds be absent in future budgets. It would be helpful to include a short description of the most likely project build-out scenario in light of budgetary constraints.
846	11	Page 40 of the DEIS states as an assumption inherent to this NEPA analysis that "The [NFTS] will be maintained to standard and all additions or changes to the NFTS will meet standards prior to availability for public use," EPA questions the validity of this assumption in light of the enormous maintenance backlog and the improbability that this backlog will be eliminated in the near future. Recommendation: The FEIS should discuss the basis for this assumption and whether it is reasonable in light of the facts provided with regard to trail and roadway conditions and maintenance backlog. EPA notes that Alternative 5 is the least costly action alternative described with regard to both implementation expense and annual maintenance costs. Recommendation: The FEIS should discuss the extent to which the relative expense of the various action alternatives affects the likelihood of the environmental outcomes described for each.
846	12	Off highway vehicle use can adversely affect water quality, sensitive fish habitat, and other aquatic resources by compacting soil, disturbing or eliminating vegetative cover, decreasing water infiltration, and increasing surface runoff and erosion. These effects are magnified on steep slopes or in erosive, unstable soils. In addition, under-maintained roadways pose a significant risk to water quality and aquatic resources due to blocked culverts, erosion, rilling, and increased mass wasting hazard. The incorporation of unauthorized routes into the NFTS will increase the maintenance burden on the Smith River NRA. In light of the budgetary constraints discussed above, it seems probable that the motorized routes added to the NFTS may be under-maintained in the future; minimizing the total miles of NFTS routes would serve to minimize this future impact. Recommendations: The FEIS should discuss the likelihood that unauthorized routes added to the NFTS would be under-maintained following project implementation and the effect this may have upon water quality. The Forest should consider alternatives that minimize the potential impact of roadways and motorized routes upon water quality, aquatic species, and watershed health.

Responses: The following response is grouped into four main topic areas brought up in the comment letters:

Why use tax dollars to provide motorized recreation opportunities?

Providing safe motor vehicle access to the National Forest for public use is a fundamental part of the USFS mission. Access to landscapes, natural resources, facilities, and trailheads to wilderness areas along with driving for pleasure are primary uses of USFS NFTS. Congress funds the USFS to manage routes and provide safe administrative and public access.

Deferred Maintenance and Anticipated Maintenance Costs

The purpose of the deferred and annual maintenance figures is to capture the costs of the NFTS at a national level, so that National Forests can communicate the maintenance funding needs versus funding levels to Congress at a national level. The deferred and annual maintenance figures were generated using a national formula based on random sampling (less than 0.2 percent miles of system roads nationwide for

2009) and standard maintenance prescriptions. It is a useful tool for tracking national trends and producing auditable outputs, but was never intended for use at the forest level (need some citation). The nationally calculated cost figures for ML 2 and 3 roads are based on several assumptions, which include but are not limited to the following: high cost aggregate surfacing should be replaced and maintained on most level 3 roads; culverts have fixed and relatively limited life spans; ML 2 roads require high numbers of cross drain culverts; and roadside vegetation and debris should be regularly removed from every road. These assumptions are not specific to the SRNF, and do not apply to many of the forest's roads. The deferred maintenance for the Smith River NRA, in large part includes the types of maintenance activities that affect drivability (brushing, surfacing, pothole repair, etc.). Given the conditions on the ground and current maintenance and environmental objectives, the maintenance figures for ML 2 and 3 roads are considered unreasonably high, which artificially inflates the forest's annual and deferred maintenance figures. In this project, roads with a high level of maintenance required, for example have a high number of stream-crossings, are proposed for decommissioning in Alternatives 5 and 6. In contrast, roads with a low level of maintenance required, for example ridge roads with no stream crossings are proposed to be kept or designated on the NFTS and require less maintenance.

In response to public comments, the cost per mile of motorized trail was reassessed from the figure used in the DEIS, which was based on motorized trail maintenance costs of the Pilot Creek motorized trail network. The Pilot Creek trail maintenance relies on the use of hand crews because these are largely single-track trails on steep terrain that require hand crew work, which has a higher cost per mile than work performed using small equipment. Given that, the motorized trails proposed for designation in Alternative 6 are largely on gentle slopes and accessible by small equipment, it is not expected that hand-crew work will be needed for motorized trail maintenance. Motorized trail maintenance costs are less per mile to maintain over the long term as there are typically less drainage structures to maintain, however, the cost for the initial implementation of some of the mitigations may be higher as they may be implemented by hand. Therefore, the annualized maintenance cost is expected to be on average \$500 per mile. It is important to note that the amount listed would be needed to perform all potential maintenance actions every year. This cost does not take into account site-specific conditions. Not all actions are needed on every road/trail each year. Therefore, the cost estimates utilized for the purposes of this analysis overestimate actual maintenance costs.

The costing models assess all road maintenance needs as the same and do not reflect the consideration that was given to the on-going maintenance needs when crafting the proposed action and Alternatives 5 and 6. In the long-term, the forest anticipates that the maintenance costs will be less than the No Action alternative and Alternative 4. In crafting the proposed action, and Alternatives 5 and 6, roads and UARS that had a high level of stream crossing and therefore would be expensive to maintain were identified for decommissioning or restoration, while less maintenance intensive that would be more affordable to maintain was proposed for maintaining or designating on the NFTS. Investments, such as stormproofing, which make roads more resilient to storm damage is also an action that is proposed in all action alternatives that, in the long-term, would reduce the amount of maintenance required due to large storm events.

Funding Sources and Strategy

The SRNF will implement the project over the next 10 to 15 years. Having NEPA decision on this project would position the Smith River NRA to compete for supplemental funding from both external and internal sources for the restoration, decommissioning, stormproofing and monitoring work that is being proposed, which contribute directly to protecting water quality from road-related sediment sources. It is important to note that the appropriated funds shown in the DEIS table only identify a portion of the funds available for implementation and maintenance of the NFTS. Funding is also made available from funds generated from timber sales and commercial road access permits, State OHV Division grants, emergency repairs through the ERFO program (Emergency Repair for Federally Owned roads), competitive funds such as the Federal Lands Transportation Program, and partnership opportunities. State OHV division grants are also used to fund water quality and botanical resource mitigations required prior to route designation on the NFTS, OHV law enforcement, and decommissioning of roads. In the past, stimulus funds were made available to the forest, but these dollars are not available on a regular basis. Actions considered in alternatives must comply with the Forest Plan standards and guidelines irrespective of the funds used to implement the project. The completion of this project will allow the forest and partners to compete for grant funds, which are only available for projects where there is an existing NEPA decision. The Transportation section of Chapter 3 is updated in the FEIS to reflect the diversity funding sources available.

History of Implementation on Similar Projects

Since 1999, the SRNF has received and implemented over \$6.7 million in funding for road decommissioning and stormproofing under similar NEPA decisions across the forest. This work has saved millions of cubic yards of potential sediment from entering anadromous streams and it is expected that the implementation of the proposed actions will have the similar success in protecting water quality. As stated in the Monitoring and Condition Surveys section of Chapter 2, monitoring and condition surveys would be conducted annually, and corrective actions taken if roads or motorized trails are out of compliance, including closures. The monitoring plans are described in more detail in the EIS appendices, and are required for implementation for each resource area analyzed. The forest anticipates there will be a deferred maintenance backlog in the future; however, the forest's annual road maintenance strategy prioritizes public safety and resource risk reduction associated with the NFTS. The forest plans to implement this project over the next 10 to 15 years, and expects that the effects of the project will be consistent with the analysis shown in Chapter 3 of the EIS.

The statement that the maintenance cycle or frequency at which a road or motorized trail is maintained is erroneous and is corrected in the FEIS.

Partnerships

Letter Number	Comment Number	Comment Text	
825	6	Regarding implementation funding, SRA encourages application through the State OHV Division. We would be pleased to work cooperatively with Forest Service staff and other stakeholders on the development of grant proposals, which would seek funding for a vigorous monitoring and education campaign involving volunteers who are recruited and trained to assist Forest staff. This suggestion was also made by the California Wilderness Coalition in their April 2011 scoping comments.	

Response: Thank you for your support. Developing new partnerships and strengthening existing partnerships contributes to the forest's ability to compete successfully for additional grant funds.

Opinion or Position Statement

Letter Number	Comment Number	Comment Text	
127	1	Hi, please make the top priority the needs of the Off-Highway Vehicle community, thank you for you consideration, Robert Jump (Lifetime member of the Blue Ribbon Coalition)	
825	7	Thank you again for your outstanding diligence and assistance with implementation of the Travel Management Rule.	
830	1	BRC appreciates and publicly thanks the various stakeholders who in 2010-2011 participated in various meetings facilitated by the U.S. Institute for Environmental Conflict Resolution to create a collaborative atmosphere whereby public input could be used to enhance OHV opportunities on the NRA.	
831	24	Every road is an asset for fire crews, fire breaks, place for water run off to occur, emergence crews to access the forest, hunters to retrieve game, loggers to access trees, miners looking for treasures, animal grazers to tend their flocks/heads, humans to access the forest easily, wild animal picture taking (which really is wildlife harassment) The benefits of leaving all existing roads, motorized ways, motorized trails man made far outreach the benefits of closing them forever.	
806	11	Finally, I want to point out the absurdity of Pofahl's comment (and the pro-ORV argument his comment exemplifies): just because something was considered acceptable in the past doesn't mean it must remain acceptable. Morals change. Laws change. At one point it was acceptable (to white people) for white people in this region to steal land from the Tolowa. Does that mean it shou continue? It's just nuts to believe that simply because someone felt entitled to perpetrate some destructive behavior such as ORV use in the forests when he was 19 that he should continue to be allowed to perpetrate such behavior when he is older. This also of course makes my point about now the argument over this misuse of the land is basically between those who think that the health of the land is primary versus those who are essentially overgrown children who want to continue to botally with the expensive and destructive toys they played with in their youth.	
806	12	I want to turn his statement around. When I first moved to Del Norte fifteen years ago, I would routinely see a dozen rough-skinned newts at a time in shallow waters. Old timers have told me of seeing hundreds at a time. Now I see them rarely. Only fifteen years ago, I would routinely see a hundred dragonflies in the air at one time. Now I see one or two. Years ago, I saw some tiny streams so full of tadpoles that the tadpoles were out of space and pushing each other out of the stream. Now of course I don't see so many. Bat populations have collapsed. Migratory songbird populations have dropped. And on and on.	
481	1	Are you out of your minds? We need to be taking vehicles out of the forest, not sending more in.	
197	4	In summary: I want you to pick the option that keeps the most land wild and OVR free.	
793	2	I have read the summary of your Alternative 3, modified proposed action. I do appreciate the difficulty of navigating the opposing demands of passionate off-road enthusiasts and the equally passionate protectors of sensitive public wildlands.	
825	1	We believe motor vehicle recreation and dispersed use can and should be balanced with reducing the risk to both cultural and ecological resources.	
762	1	My heart sinks to think that future generations will not experience the beauty of this area due to the selfish acts of a few who feel that this earth is here at their disposal.	
255	12	No on more off-road use on the Smith River National Recreation Area.	
12	3	DON'T ALLOW THIS	
559	3	So why continue to try and shut down the places my family and I use, love and care for. I'm sure you wouldn't like it if I was trying to shut down the trails & roads that you and your families use, love and care for.	
819	52	Page 331 of the DEIS indicates that implementation of Alternative 6 "would favor semiprimitive motorized recreation opportunities over non-motorized opportunities." This is a true and accurate statement. Alternative 6 favors the interests of the 1.1% of Six Rivers Forest visitors for whom ORV use is their primary activity (DEIS page 371) over the millions of Americans who value the roadless character of the last remaining 2% of our existing wildlands. The Blue Ribbon Coalition's advocacy for the 11,200 annual motorized trail visits is impressive in its ability to get the Forest Service to discount the values and desires of the 212,800 non-motorized visits. (DEIS page 371).	

Letter Number	Comment Number	Comment Text	
819	45	The Forest Service has also downplayed the significant impacts of motorized use in IRAs by referencing the "historic" nature of the "mining routes" that the agency intends to designate as motorized trails. Yet Smith River NRA Motorized Travel Management EA previously acknowledged that "[m]ining roads continue to erode in places where roads were constructed down a slope or across a drainage." These are the types of impacts that the Roadless Rule, and the Smith National Recreational Area Act, were designed to avoid rather than to facilitate and codify.	
819	24	It is undisputed that the existing network of user-created routes, in addition to a number of poorly-designed system roads, are a major cause of chronic sedimentation problems in streams, cause damage to rare and endemic plant populations, contribute to the loss of roadless wildland recreational opportunities, and spread of Phytophthora lateralis (PL). This planning process is the appropriate mechanism for alleviating the negative impacts associated with roads and motorized routes.	
830	3	BRC also supports and specifically incorporates by reference herein the list of UAR segments and other site-specific proposals submitted by Del Norte County. These modifications represent important routes to dispersed campsites, historical uses, or are needed as routes used by the county search and rescue.	
830	9	While the general approach of Alternative 6 is preferable to other alternatives, there are specific issues and routes that have been overlooked or otherwise improperly omitted from the list of routes that will be designated for continuing and/or necessary vehicle access. We have reviewed the Del Norte County submissions, and rather than unnecessarily repeating those comments will specifically note our support for them and incorporate those comments by reference herein.	
850	6	Today the Del Norte County Board of Supervisors approved a letter with their comments about the above travel plan. The Northwest Trail Riders support their decision.	
851	3	Today the Del Norte County Board of Supervisors approved a letter with comments regarding the above travel plan. I support their decision. I am a concerned citizen and resident of 55 years in Del Norte County. We raised our children here and spent much time exploring the backcountry.	
819	1	The Klamath Siskiyou Wildlands Center (KS Wild), the Environmental Protection Information Center the Klamath Forest Alliance, Friends of the Kalmiopsis, Siskiyou Land Conservancy, WildEarth Guardians, Friends of Del Norte, the California Native Plant Society, and The Wilderness Society would like to support efforts to reduce road maintenance costs, protect and restore aquatic and terrestrial ecosystems, and reduce the spread of Port Orford cedar root disease through road and route decommissioning in the Smith River National Recreation Area – unfortunately we are concerned that the preferred alternative in the DEIS will not adequately accomplish these objectives	
759	4	Perhaps the Forest Service prefers off-road vehicles to hikers for example. The damage caused by off-road vehicles may make it easier to eventually log the forest, right?	
831	10	Sharing the routes is not the issue on most motorized trail beds. Hot, fast tracks for OHVs are fun for only a small portion of forest users.	
135	1	Hey Guys, I see you are planning to open more Off Road User trails in your area. Thank You, Please keep our forest open to Family's to Recreate on and use reasonably. We need to get future generations into our woods and Off Road Recreation is the best!	
811	1	Please understand what road closures mean to ATV's, Jeeps. 4wd motor cycles, deer hunters, ANYONE who enjoys use of our public forests. Roads are our access to OUR lands, enjoying the best of what Nature has to offer. How will our children understand the forests and what is needed if there is a KEEP OUT sign on the roads? They are the future stewards of the land.	
831	13	No roads should be ever closed or decommissioned. Every road leads someone where the motorized public chooses and wishes to go. The reason are many but each road, motorized way, motorized trail whether created by blade or wheel; leads a motorized user on an adventure that will enable them to enjoy their national forest	
50	1	These areas are national botanical treasures and it is shortsighted to put them in harm's way.	
590	1	I am very concerned that we need to protect native plants and wildflowers.	
197	3	Remember, this is not about giving people access. People are welcome to visit any of these wonderful places; it is their noisy, polluting, damaging vehicles that are not welcome.	
833	3	Please review your actions without increasing the OHV special interest group demands, after all they also want the forest healthy and beautiful to ride in. The Smith River National Recreation Area and the Six Rivers National Forest already offer hundreds of miles of existing Forest Service roads where motorized recreation is allowed.	

Letter Number	Comment Number	Comment Text	
846	1	The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for The Smith River National Recreation Area Restoration and Motorized Travel Management Project. Our review is provided pursuant to the National Environmental Policy Act, the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act. EPA supports the Forest Service's effort to address increased motorized vehicle use on national forest lands and the related issues of resource damage, user conflicts, maintenance, monitoring and enforcement. We support the transition from unmanaged motorized recreation to managed recreational travel on designated travel routes. Managed recreational travel is essential in ensuring ecosystem sustainability, protecting forest resources, and providing equitable accommodation for both motorized and non-motorized recreation use.	
825	4	Regarding the April 2014 DEIS, the Smith River Alliance (SRA) recommends the implementation of Alternative 5. While we are comfortable with parts of other Alternatives as presented in the DEIS, Alternative 5 most closely reflects our mission to provide long-term protection, restoration and stewardship for Smith River watershed resources.	
846	4	We have rated all project alternatives proposed in the DEIS as Environmental Concerns.	
806	2	The first is that the bioregion has been deeply stressed over the last 180 years, since conquest by the dominant culture. These stresses include reduction in salmon numbers, reduction in megafauna, including many predator species, precipitous drops in populations of small vertebrates such as frogs, salamanders, newts, and of course migratory songbirds, equally precipitous drops in populations of small invertebrates such as dragonflies and native pollinators, and so on.	
806	3	An additional stress is the removal of Indigenous humans living traditionally, and their replacemen by industrial humans. This latter is of course the cause of the other stresses, as industrial humans have brought with them extractive industries such as mining, logging, and commercial fishing. These activities have led to other destructive activities such as roadbuilding, and germane to this discussion, off road vehicle use.	
846	2	EPA commends the Forest Service for its efforts to address the many challenges inherent in developing a balanced motorized travel management plan that responds to recreational and resource management demands.	
739	1	I am writing to comment on the Smith River National Recreation Area Travel Management proposalt is true that recreation in National Forests can be prioritized when considering the management of these beautiful public lands. However, the scenic beauty that draws recreationists also needs to be heavily weighed in these management decisions.	
830	2	BRC has reviewed the DEIS and supports many underlying tenets of preferred Alternative 6, which include to add a number of short inventoried unauthorized routes (UARs) to popular dispersed recreation sites to the NFTS and designates parking and mixed-use along road 17N49. BRC also supports the addition of 16 miles of motorized access on NFTS, the designation of mixed-use on 0. miles of road 17N49, the addition of 50 routes to dispersed sites, the designation of parking at 4 sites along 17N49, the stormproofing of 122 miles of roads and motorized trails, seasonal wet weather road closures as appropriate on roads and motorized trails, and the reclassification of 6 acres from semi-primitive non-motorized to semi-primitive motorized in the ROS which requires a Forest Plan Amendment.	
830	7	The DEIS represents progress from the unacceptable prior situation and toward a workable means of allowing reasonable yet sustainable access to the project area. However, several key shortcomings or areas of possible confusion remain. The Forest Service can work within the procedural and substantive framework of the DEIS to address these concerns in a Modified Alternative 6 as outlined in these comments. We look forward to working with the agency and other stakeholders in achieving this outcome.	
819	100	Page 402 of the DEIS indicates that implementation of Alternative 5 best achieves the project objectives of "public safety" and "transportation system affordability." Consequently, choosing Alternative 5 would be preferable to Alternative 6.	
806	1	I have lived in Del Norte for 15 years. I have had avascular necrosis in both ankles, which means I am one of those people who cannot hike in the back country, one of those people for whom off-road vehicle proponents often claim to speak. Below are my comments on the Smith River NRA Restoration and Motorized Travel Management Project. My preference would be that as many "roads" as possible be decommissioned and returned to as close as possible to a natural state, for many reasons.	
827	1	The Department of the Interior has received and reviewed the subject document and has no comments to offer. Thank you for the opportunity to review this project.	

Letter Number	Comment Number	Comment Text	
806	9	But the UARs have been recognized. Many are recognized as unsafe and hazardous, because they're not designated for ORVS. They are too steep, narrow, unstable, and unmaintained. They're not patrolled and they have no easy to access for rescue. Many old UARs were built strictly for mining under the (dreadful) 1872 Mining Act. Many were closed, and then were re-opened illegally under the ORV-industry-frontman Don Amador's guise of "public access for public lands."	
161	1	I am strongly against the 4x4 motorcycle etc. that would tear up the forests and disturb wildlife habitat. We should be advocating for quiet and undisturbed places for wildlife habitat at a time when so much is lost in declinetoo many people encroaching in on too few places left for the wild.	
23	1	This landscape has been inexpressibly dear to me for over 60 years. I am appalled that you would even consider a course of action that would put it at the mercy of this kind of destructive activity. My brother put himself on the line as a wildland firefighter with the Six Rivers N.F. He worked to protect these places and cherishes them still.	
204	1	After reading over the proposals, I see none as having everything that should be available but that Alternative # 5 comes closest. I am in favor of closing more if not all to motorized travel but realize that the political will to do what is the most needed and best is lacking. So, unfortunately compromise of the environment to favor human desires is making an ugly presence again. I would hope further modification(s) in the final plan will be made to eliminate more or all roads and make none that are new.	
235	1	I value and use the Smith River area for kayaking, hiking and back packing. Off road users need to stay on the existing roads. Please don't contribute to the degradation of this wonderful resource. Thank you for considering my concerns.	
823	1	I prefer Alternative 5 because it will have the least detrimental impact on forest resources. I believe the area should be managed primarily to improve and protect the fishery, botanical, and wildlife resources. Recreational uses should be those that cause little impact.	
345	1	I am a business owner of Naturespirit Herbs, a Southern Oregon based company. We wildcraft medicinal plants from the unique and botanically rich lands in our area.	
493	1	It is very important to protect the great DIVERSITY that we still have. It is very threatened, and worthy of our care. Our lives depend on it, not just animals and plants.	
59	3	There are plenty of existing unmaintained roads for "off road vehicles."	
59	5	I think you can do better. I am guessing if you were listening to your scientists, you would do better.	
819	39	Please note the recent Travel Management Decisions from both the Klamath National Forest and the Shasta-Trinity National Forest elected not to encourage and codify motorized use within Inventoried Roadless Areas (IRAs). Those decision documents were attached to our May 2012 scoping comments.	
830	4	Unfortunately, Alternative 6 does not fully capture the tone and direction from the aforementioned stakeholder group meetings where county government and the OHV community asked to be embraced either as genuine partners via the county coordination process or as a valued user group. Fortunately, the elements necessary to address these shortcomings are well within the "decision space" created by the planning process and DEIS. We urge the agency to finish the DEIS solution in progress by adopting a final Modified Alternative 6 as outlined in these comments and those of Del Norte County.	
819	16	It appears that the agency's preferred alternative places the preferences and desires of the motorized off-road vehicle lobby above the "high risk" to the botanical and hydrological forest resources the Forest is charged by Congress to preserve, protect and enhance.	

Letter Number	Comment Number	Comment Text	
825	5	Work on implementation of the Travel Management Rule for the Smith River National Recreation Area has been underway for several years. Accordingly, SRA wishes to incorporate by reference our earlier correspondence and submittals including scoping comments in April 2011 and specific recommendations and observations provided for many of the routes discussed during the collaborative process. SRA is interested in continuing to work collaboratively with all stakeholders and Forest Service staff to improve the funding for public education, engagement, monitoring, and enforcement related to implementation of the Travel Management Rule. "We appreciate staff's extensive work on this Scoping Document — as well as the months of work supporting the collaborative stakeholder process. The Smith River Alliance (SRA) and other environmental stakeholder groups were involved in many site inspections of specific routes and we	
		also submitted recommendations in September that were included in the "Outcomes" document prepared by facilitator Austin McInerny following the final (October 6) collaborative session. We support the recommendations included in the October 6 collaboration "Outcomes" document, which informs the subject Scoping Document. My comments below are consistent with these earlier recommendations.	
		April 2011 Comments Incorporated by reference: Of course, we look forward to progress on the restoration components. Thank you for your work with the diverse stakeholders to move this Project forward.	
830	4	Unfortunately, Alternative 6 does not fully capture the tone and direction from the aforementioned stakeholder group meetings where county government and the OHV community asked to be embraced either as genuine partners via the county coordination process or as a valued user group Fortunately, the elements necessary to address these shortcomings are well within the "decision space" created by the planning process and DEIS. We urge the agency to finish the DEIS solution in progress by adopting a final Modified Alternative 6 as outlined in these comments and those of Del Norte County.	
339	1	I would like to remind you that the Smith is the last undammed river and a jewel, a river like no other. For that reason alone, it should not be impacted beyond the very light impacts for camping fishing and swimming.	
195	1	Love the Smith River! It is extraordinarily beautiful and so clear – a rarity – why it must be protected Motorized vehicles will clearly eventually muddy the watershed, ruin the unique botanical ecosystem.	
806	4	The stressors on the bioregion will continue to rise, and will rise exponentially with global warming. Just as a patient in critical care in the hospital must not have additional and completely unnecessary and frivolous stresses added to his or her life, we need to not add additional and completely unnecessary and frivolous stresses to the health of the bioregion. And off road vehicle use is as close as one can get to a completely unnecessary and frivolous stress to the health of any bioregion.	
369	7	More and more people no longer tolerate practices with zero integrity and zero compassion. Be an upstander, not a bystander! Meaning you stand up for Justice. Animal Rights is a (Social) Justice Issue. Stand up for Animals, and for Zero Tolerance for Human Cruelty towards All Animals.	
263	1	I write to urge you to adopt a travel/motorized recreation plan for the Smith River National Recreation Area that redresses the incessant and intense damage inflicted by off-road vehicles.	
805	8	there is also no compelling need or cause to allow ORV use in inventoried roadless areas that by right ought to be formal Wilderness	
790	1	I strongly oppose any effort that opens "high risk" off-road vehicle routes in the Smith River Natic Recreation Area Travel Management area. The interests of a handful of extreme off-road vehicle enthusiasts should not outweigh the need to protect at-risk botanical treasures and irreplaceable roadless areas and the current plan puts those botanical treasures at severe risk.	
819	15	We remain extremely perplexed as to why the Forest Service continues to propose the additic user-created routes to the NFTS that pose "high" and "moderate" risks to important natural va Please note, the DEIS reflects a "preferred action" in which a number of user created routes a proposed for motorized use despite the "low" need for the routes and the "moderate" or (much often) "high" risk to irreplaceable environmental values. Please further note, many of the alleg "high need" user-created routes are not needed for any administrative or recreational purpose than catering to the segment of forest visitors who primarily value the National Recreation Are place to engage in extreme off-road travel.	

Letter Number	Comment Number	Comment Text	
819	117	Page 295 of the DEIS acknowledges that a primary goal of Congress in creating the Smith River NRA was to "emphasize, protect and enhance" forest resources including "anadromous fisheries and the wild and scenic" values of the Smith River Key Watershed. Page 46 of the DEIS clearly identifies roads in the NRA as a "primary threat to water quality" and page 47 notes that "the risk roads pose to water quality is increased by the fact that road maintenance funding has been declining while the road maintenance needs of our road system continues to increase." Hence, page 47 concludes "therefore there is a need to restructure our current level of road miles to a more affordable level to better maintain and protect water quality and fish habitat." Yet the agency's preferred alternative would not accomplish this. Indeed, Alternative 6 would add 42 miles of UARs to the Forest Service's NFTS that would further strain the agency's overtaxed road maintenance budget and increase the maintenance backlog. Those additions include routes with a moderate and/or high risk to water quality and involve 17 road/stream crossings. (DEIS 55). Whereas Alternative 5 "predicts the least impacts to water quality because it proposes more road decommissioning and restoration of unauthorized routes." Please note that the claim on page 64 of the DEIS that the preferred alternative would result in "no net gain" in open road miles within the Key Watershed is incorrect. As stated in the abstract, the press statement, and the DEIS that the Forest Service released for this project, the preferred alternative "would result in an overall increase of 16 miles of motorized access." Please do not increase NFTS road miles (and the subsequent road maintenance backlog) in this Key Watershed for salmon.	
819	131	Noxious Weeds The DEIS acknowledges that the spread of noxious weeds is hindering the management objectives of the LRMP and that "noxious weeds are a serious environmental conc [because] they threaten natural diversity, habitat for fish and wildlife and native plants, soil stabili and ecosystem process." (DEIS page 223). Hence, the intent of the LRMP, the Smith River NRA Act and the project purpose and need is best met by implementation of an action alternative that minimizes the impacts of noxious weeds. Alternative 5 best reduces the threat of noxious weeds the natural resources the Smith River NRA is charged with protecting because "direct and indirect effects are lowest where the number of miles of open road is less."	
819	14	We believe that the values that most Americans find in roadless wildlands, rare botanical areas, Port Orford cedar stands, riparian areas, serpentine barrens and meadow habitat are not reflected in the agency's preferred alternative (alternative 6) that is primarily based upon the preferences of some members of a collaborative group whose stated purpose was to determine how to add high risk controversial user created routes to the Smith River NRA NFTS. Alternative 6 favors the interests of the 1.1% of Six Rivers Forest visitors for whom ORV use is their primary activity (DEIS page 371) over the millions of Americans who value the roadless character of the last remaining 2% of our nation's existing wildlands.	
204	1	After reading over the proposals, I see none as having everything that should be available but that Alternative # 5 comes closest. I am in favor of closing more if not all to motorized travel but realize that the political will to do what is the most needed and best is lacking. So, unfortunately compromise of the environment to favor human desires is making an ugly presence again. I would hope further modification(s) in the final plan will be made to eliminate more or all roads and make none that are new.	
255	12	No on more off-road use on the Smith River National Recreation Area.	
831	13	No roads should be ever closed or decommissioned. Every road leads someone where the motorized public chooses and wishes to go. The reason are many but each road, motorized way, motorized trail whether created by blade or wheel; leads a motorized user on an adventure that will enable them to enjoy their national forest	

Response: Thank you for your comments on the *Smith River NRA Restoration and Motorized Travel Management Project*. Comments and opinions about the project are appreciated as this gives the Responsible Official a sense of views and beliefs about a proposed course of action. While such information can be used by the decision maker in arriving at a decision, it cannot be used to improve the environmental analysis or documentation.

Summary of Alternatives Table

Letter Number	Comment Number	Comment Text	
846	20	Table 10 on page 36 of the DEIS ranks the project alternatives with regard to their impact upon each resource area. The table provides a rank from 1-5, wherein 1 indicates the greatest impact upon the specified resource to 5 indicates the least impact. However, the potential impact upon the various resources listed is detrimental in some cases and beneficial in many others. For this reason, we find this ranking system to be confusing and difficult to decipher. Recommendation: For greater clarity, we recommend that this table be revised to differentiate beneficial and detrimental impacts.	

Response: The summary of alternatives table is updated in the EIS to reflect the results of the analysis by resource by displaying the indicator results by alternative.

Maps

16N19

Letter Number	Comment Number	Comment Text	
282	1	Any of your 'alternatives' are pretty much OK by me. They all include the trunk of 16N19 as an OML 2 road. My problem lies in your incorrect inventory of it in the system roads system. This had long been a problem. I have written confirmation from Don Pass that the mapping would be corrected to show 16N19 continues to the property line/gate at its terminus with McClendon Property. After a lot of wrangling with George Fry not being able to find the USFS easement over HW3 property, Tyrone Kelley wrote me a letter stating that 16N19 would terminate at the HW3 property line. I have spoken to this at your public comment fielding meetings. The mapping has never been updated. It shows 16N19 ending several miles short with a trailing squiggle that does not exist. This mileage should be added to the 7.5 miles of 16N19 on inventory as OML 2 and brought up to whatever level of mitigation that the plan (whichever of the 'alternatives') calls for 16N19.	

Response: A review of the administrative record on 16N19 finds that the road was mapped incorrect when it veers to the east in the last segment. The administrative record shows that 16N19 does terminate at the boundary of the HW3 property. This error is corrected in the project data and corporate road data.

Errors

Letter Number	Comment Number	Comment Text	
855	2	Accuracy of map of Alternative 6 in the Northwest corner at issues.	
826	14	There are numerous errors and inconsistencies in the plan, which render providing meaningful comments challenging. In particular, mapping inconsistencies in which various routes are proposed for "restoration" under the Decommissioning & Restoration Actions map. In many of these cases on the Proposed National Forest Transportation System map, the routes are designated with a possibly inconsistent classification or level, which creates confusion on the reviewer's part. For example, in most cases it appears that restoration means full closure, in other cases restoration is indicated to result in a Motorized Trail, and in some cases Motorized Trails are designated to be barricaded in Table 168, in yet another case a UAR scheduled for restoration appears as a ML 2 road on the final map (14N15.1, see table below). When asked about these inconsistencies the response from representatives from the Forest was that when there is an identified inconsistency the tables in the plan prevail over the maps. This is not acceptable to the County as it creates confusion and a sense of misleading information being presented. It is not appropriate for the Forest to proceed with the adoption of the plan until such a time that all maps and tables are reviewed by the Forest and all inconsistencies are corrected so that it is clear to the reviewer what is being proposed. Table 5 presents a very limited sampling of these routes, which need to be clarified.	

Response: In an effort to address any questions the public may have had during the comment period, the team leader was made available and visited with those who requested more information. Map corrections are identified in the *Changes between the Draft and Final* section of this document.

Commenter Names, Organizations, and Letter Number

Letters from Organizations

Last Name	First Name	Organization Name	Letter Number
Amador	Don	Blue Ribbon Coalition, Inc.	830
Beyerle	Karl	Del Norte Resource Advisory Committee	852
Black	Mike	ADH Environmental	829
Drake	Mona	Deschutes County 4 Wheelers	824
Drake	Randell	Pacific Northwest Four Wheel Drive Association	831
Gardner	Elaine	Northwest Trail Riders	850
Goforth	Kathleen	United States Environmental Protection Agency	846
Matlock	Sharon	PacifiCorp	803
Meek	Janet	Klamath Falls Four Runners	818
Sanderson Port	Patricia	US Department of the Interior: Office of Environmental Policy and Compliance	827
Self	Antoinette	County of Del Norte Board of Supervisors	826
Sexton	George	Klamath Siskiyou Wildlands Center	819
Werschkull	Grant	Smith River Alliance	825

Letters from Individuals

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A.	Nando	260
A.	Nando	280
Abrams	Al	674
Ahmad	Ismail	35
Al-Tukhaim	Mary	61
Albury	Judy	681
Aleman	Corina	186
Aleman	Corina	207
Alexander	Natalie	611
Alker	Marcus	236
Allan	Kathleen	537
Allen	Catherine	763
Allen	Dana	589
Allen	Don	841
Allis-Sicherer	Ineke	200
Ames	Allen	529
Amick	Brenda	710
Andersen	Sandra	840
Anderson	Karen	736
Anderson	Richard	847
Anderton	Phillip	402
Anderton	Phillip	422
Andres	Dustin	399
Andretta	Jeaneen	475
Andrew Chianis	Antonia	363
Andries	Anneke	616
Angell	J	72
Angell	J	183
Angus	Billy	651
Anon	Sue Pappalardo	820
Anthony	Candace	34
Arapoudis	Sandra	266
Arias	Teresa	645
Aubrey	Heidi	438
Auerbach	Stephen	437
Austin-Kennett	Danielle	109
В	Mykka	372
Babbitt	Susan	28
Bachhuber	Stephen	747
bacon	jennifer	81
Baker	James	779
Baker	Karen	16
Baker	Sandra	202
Baker	Vickey	677

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Baldwin	Theresa	390
Barbara Comnes	Brian	276
Barca	Erin	468
Bassler	David	774
Beausoleil	Claudia	185
Bechmann	Elisabeth	367
Beck	Margaret	126
Belachew	Daniel	1
Benedict	C.	648
Benesovsky	Mary	458
Bennett	Gregory	321
Bennett	Ron	451
bennett	ross	627
Benton	Patricia	469
Berg	Н	358
Berger	David	143
Bergsma	Debi	420
Berlant	Emily	99
Berta	Charlotte	159
Bertano	Silvia	70
Bertrand	Wendy	833
Bev Woodsong	Paul	71
Beverly	J	373
Beverly Fety	James	65
Bezy	Robert	309
Bienick	Michelle	243
Birtel	Tracey	713
Bischoff	Carol	395
Bissell	Kathy	228
Black	Karen	488
Black	Patricia	655
Blevins	William	816
Bob	Carolyn	481
Bodden	William	413
Boersma	Cindy	319
Boomhower	Deborah	634
Boone	Foster	97
Bostock	Vic	514
Bouchard	Aaron	719
Bowen	Р	21
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Bowman	Jason	470
Bowron	Alice	242
Bozzola	Eliette	30
Bradley	Ralph	790
Breen	Margo	165

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Bress	Daniela	417
Broshot	Nancy	754
Browning	Cassandra	472
Bruce	Eugene	792
Bruner	Cheryl	563
Brunton	James	115
Buckley	Lynne	162
Buddenhagen	Mary	169
Buddenhagen	Mary	192
Burghart	Barbara	439
Bush	Theresa	329
Buslot	Chantal	362
Buslot	Chantal	381
Butcher	Sara	795
Butler	Chris	264
Butler	Doug	11
bx	kx	492
Byers	Brett	305
C. Ford and Dr. Richard B. Marks	Mr.	151
Cain	Jon	765
Calamai	Barbara	725
Calkin	Kelly	810
Calvert	Stacey	494
Canning	Stephen	233
Capobianco	Anthony	108
Carlson-Leavitt	Joyce	370
Carlstroem	Matthew	298
Carr	Gaile	509
Carvajal	Mauricio	642
Cathey	Gynette	517
Cattell	June	661
Chandramo	Elizabeth	544
Chapin	Marcy	138
Chase	Janet	246
Chieco	Helen	412
Chittim	Veroune	649
Christiansen	Harold	746
Chudy	Cathryn	74
Cin	Ama	527
Clark	Jason	389
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clausen	nina	18
Clay	Ted	531
Cobban	Ann	411
Cody	Mary	7
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Cole	Dori	562
Coleman	Edith	561
Collier	Michael	558
Collier	Michael	576
Collinet	Albert	291
Collins	Brenda	171
Commons	Kelly	691
Condon	Dale	821
Cooper	Eileen	828
Cooper	Romain	844
Cornelius	Michele	507
Correia	Claudia	513
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covault	jonnel	310
Cross	Heather	549
Cross	Merridy	482
Cruz	John	574
Cruz	Kay	78
D'amore	Oceanah	312
Dailey	John	660
Danielson	Amy	84
Davidson	Jane	565
Davie	Dennis	205
Dean	Michael	782
Deborah Anthes	Russell	473
Debraal	Karen	442
Decker	Dee	311
Delahay	Misty	32
Delaunay	Deborah	161
Delgado	Dru	140
DelGiudice	Barbara	471
Delles	Susan	781
Dennis Fiedler	Rita	297
DeSalvo	Melda	641
Devar	Clemen	526
Diener	B.	40
Dillon	Sheila	599
DiPietro	Laura	635
Dolan	J.D.	119
Donahue	Nona	453
Donelson	Bruce	209
Donnell	Bruce	220
Dorner	Catherine	170
Dorner	Catherine	193
Dotson	Michael	476
Douglas	Dianne	426

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Doyle	Sean	160
Drabic	AniMaeChi	146
Drescher	Linda	302
Drumright	Chris	715
Drumright	Chris	718
Duggan	Jack	484
Dunham	Frances	789
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East	Larry	344
Easter	Laurie	316
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Elepano	Amy	407
Eliason	Alan	783
Embry	Judith	77
Engelbrecht	Mrs.	707
Evans	Bronwen	663
Evans	Dinda	365
Eye	David	380
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Fall	Fred	668
Falletta	Paul	10
Faulks	Lea	617
Faure	Peter	85
Favre	Thierry	496
Fazzari	Angela	479
Feichtl	James	534
Filice	Edward	289
Finney	Rory	431
Fisher-Smith	Dot	27
Flann	Nicholas	197
Foley	Jolene	547
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Forman	Fay	388
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Frances Alderson	Vicky	348 620
	George	
Francesca	Paola	551 279
Francis	Larry	
Freeberg	Harry	791
Freeberg	Jim Diahard	666
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Froehlich	Andrew	350
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G	Michael	222
Ganley	Roxanne	116
Garcia	Aaron	6
Garcia	Dave	838
Garcia	Mary	540
Garvey	Lydia	672
Garvey	Lydia	697
GAYE	Alysia	287
Gehring	Wendy	796
Gerding	Jenny	519
Gibbons	Brian	541
Giesen	Erika	477
Gillespie	Sharon	392
Gingras	Brian	43
Goes	Jim	38
Goff	Dr.	614
Goldstein	Steven	631
Golick	Jan	105
Gomez	Katie	525
Goodman	Ellen	709
Goodman	Greg	700
Goodman	Michael	250
Goodwin	Jayne	717
Gouveia	Joseph	756
Gowen	Megan	731
Grabsch	Dagmar	219
Gracia	Conchi	364
Grames	Patricia	686
Green	Jacqueline	353
Green	Morris	772
Gregory	Alan	401
Griffith	John	670
Grobe	Nicola	248
Grank	Mona	130
Guilbault	Aubrey	533
Gulyas	Lindsey	428
Guthrie	Elizabeth	490
Guzman	Alex	456
Hadden	Marion	176
Hall	Rose	366
Hall	Rose	383
Hamilton	Christine	767

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Hamilton	Donna	68
Hammond	Christina	793
Hannagan	Brian	22
Hansen	Dameon	760
Hanson	Kathy	394
Hanson	Larry	339
Hanus	Jeffry	598
Harde	Pragati	712
Harkrider	John	223
Harrington	Sue	47
Harris	Andy	322
Harrison	Randy	495
Hart	Denice	64
Harvey	Robert	66
Hayes	Maura	581
Heatherstone	Kristi	326
Heckman	Wayne	147
Hedger	Lloyd	308
Heinlein	Richard	455
Heintz	Nancy	357
Herberg	John	29
Herberg	John	45
Herbert	P.	82
Herrick	James	854
Hershiser	James	378
Hervert	Carla	184
Herzog	Jonas	67
Heyerman	Barbara	4
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Heyerman	Opie	196
Hildebrand	Valerie	69
Hilden Hill	BJ Frank	604 716
Hill	Frank	729
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	John	528
Hoffman	David	338
Hofford	William	139
Holland	George	676
Hollyfield	Ann	608
Hollyfield	Ann	832
Holmquist	Kirsten	749
Hood	Naomi	807
Hope	Jane	46
Hopkins	Jeff	259
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Horn	Lisa	493
Howell	Marybeth	296
Hoyer	Eric	328
Huber	Monika	592
Hubner	Helmut	273
Hughes	Gary	252
Hughes	Mark	626
Hunter	Ryan	750
Hutton	Doug	212
Hyatt	Donald	382
Ignatovich	Cynthia	812
Ira Rubin	Brady	449
Irons	Bridget	386
lvie	Trish	377
Jackson	Elizabeth	189
Jackson	Maureen	489
Janet Kramer	David	128
Janicki	Ellaine	410
Jarvis	Scott	733
Jefferson	Gabriele	427
Jenkins	Phyllis	714
Jennings	T.J.	845
Jensen	Derrick	806
Jerskey	Paul	619
John Kalayjian	Linda	811
Johnson	Edwin	685
Johnson	Hillary	771
Johnson	Stephen	738
Johnston	Philip	178
Jones	Marie	156
Jones	Marie	175
Josephine von Hippel	Peter	775
Joshua	Susan	247
Jr	Henry	100
Kamil	Jeremy	75
Kaminker	Matthew	743
Karwatzki	Heike-Ingeborg	572
Kasza	Teresa	813
Kauth	Joseph	693
Kegler	John	48
Kegler	Lori	31
Kegler	Susannah	63
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Kelly	Erin	524
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Kelly	Wayne	550
Kelly	Wayne	571
Kelz	Lisa	277
Kendal	Melanie	542
Kenner	Kate	462
Kenneth Ampel	Carol	23
Kerr	Andrew	272
Kerr	Andrew	786
Kerr	Karli	690
Kessler	Greg	658
Keyes	Jack	788
Kiley	Rita	762
Kimball	Jon	173
Kinsey	William	804
Kisinyo-Locher	Clara	349
Kleiman	Christine	406
Klopp	Basey	360
Knablin	Richard	505
Kochmeister	Jan	443
Koestler	Monika	9
Kowalewski	Joyce	292
Krach	Judy	583
Krach	Judy	600
Kraemer	Melissa	239
Krause	Doug	110
Krauss	John	849
Kresh	Eric	594
Krumper	Michael	757
Kruzik	Tom	418
kuykendall	dustin	559
Lambert	Mara	609
Lambert	Mara	814
LaMorte	R	374
Landau	Doug	502
Landers	Gary	802
Landt	Rick	59
Lanette Eagar	Jim	689
Langley	Judith	773
Lanka	Mike	306
Lapointe	Kenneth	217
Laughlin	Alison	300
Laurie	Molly	226
Lazar	Burton	483
Lear	Kirsten	632
LeBlanc	Candy	231
Lee	Jackie	798

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Lee	Trisha	12
Leekwijck	Natalie	270
Leibold	Dara	535
Lelli	Elisabetta	106
Lenardson	Denise	304
Lenardson	Denise	325
Lent	Max	448
Lentz	Hugh	256
LeRoy	Jack	400
Lescher	George	355
Lesmond	Sue	511
Leszczynski	M	190
Levey	Alice	419
Levin	Beth	150
Levine	David	133
Lian	Joseph	543
Lifton	Fred	447
Lim	Yee	214
Limburg	Lars	73
Lindley	Conny	478
Lindquist	Erin	726
Lindsay	Kathi	794
Lindsey	Joshua	368
Lips	Stu	722
Lish	Chris	837
Lishawa	Shane	103
Litjens	Jessica	557
Little	Ronald	621
Litton	Ruth	49
Logan	Leslie	397
Long	Herbert	57
Low	Grant	15
Lucas	Steve	163
Lund	Matthew	54
Luz	Eden	460
Lyons	Gilly	787
Lytle	Denise	42
MacArthur	June	17
Madley	Benjamin	652
Madrazo	Angeles	341
Maize	Dave	213
Major	Jonathan	271
Maker		671
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Mander		
Mannan	Nicole	340
Mannion	Cynthia	343

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Mannion	Cynthia	359
Margulis	Jason	553
Markus	Patricia	198
Marsden	Steve	523
Martin	C.	740
Martin	Dianne	230
Martz	Charles	695
Mason	Arne	134
Mason	Barbara	149
Materi	Sandra	432
Matranga	Georgeanne	683
Mauvais	Steven	485
Maza	Tasunka	327
McAllister	Joan	536
McCollim	Patty	369
McCreary	Jan	644
McCutcheon	Meghan	440
McGillivary	M	421
McGough	Alice	465
McGregor	Dallion	164
McLaughlin	Michael	605
McQueen	Suzanne	403
Mecke	Ernst	688
Meehan	Roger	538
Mefford	Amanda	461
Melgarejo	Marisol	257
Menighetti	Laura	285
Mercer	Michele	429
Mesa	Annie	122
Messerschmitt	Susan	98
Meyer	Jane	815
Meyer	Nancy	753
Meyer	Twyla	613
Miettinen	Anne	415
Mikasi	Ayani	508
Miller	Jennifer	218
Miller	Ken	113
Miller	Ken	237
Mills	Shirley	89
Milne	Martha	444
Mitchell	Eileen	851
Mlynczak	Raymond	554
Modjeki	Jan	215
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Moffet	Jeff	135
Mollen	Phyllis	742

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Montgomery	Edith	254
Moore	Vera	766
Moraiti	Vicky	177
Moran	Judy	703
Morley	Dennis	454
Morris	Teresa	741
Moszyk	John	667
Mount	Jean	96
Moy	Jeanine	761
Mrkvicka	Edward	678
Mulas	Enzo	566
Mulcare	James	221
Mulcare	James	379
Mumby	Robert	497
Nacrelli	Michael	25
Nagel	Lawrence	142
Nagel	Lawrence	769
Navidad	Susan	503
Neff	Grace	675
Neihart	Janet	606
Nelson	Christie	50
Nelson	Rochelle	706
Neste	George	136
Neste	Lisa	647
Nettleton	John	552
Neus	Marleen	797
Newman	Natalia	596
Nichols	Nancy	79
Nicodemus	Sharon	501
Nicolazzo	Fabio	245
Nix	Kathy	352
Noel	Letitia	582
Noland	John	457
Norman-Jones	Susan	800
Norup	Paul	711
Nuessle	Charlotte	405
Null	Ciry	153
Null	Hugh	434
O'Brien	Donald	102
O'Neal	Maureen	323
O'Rielly	Julie	346
Oakey	Victoria	278
Oggiono	Nanette	602
Olivier	Larry	515
Olson	Allen	556
Olson	David	241

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Ouby	Onsb	694
Padilla	Melania	459
Paglia	Claudia	347
Palmer	Carol	391
Panayi	Christopher	630
Paoluzzi	Sara	601
Paoluzzi	Sara	633
Pappalardo	Sue	823
Pappalardo	Susan (Sue)	822
Pappano	Allie	732
Parker	Robert	579
Parque	Gideon	785
Parshall	Sandra	19
Pascal	Vercknocke	307
Pasqua	John	696
Patten	Jasmine	586
Paulson	Robert	834
Pavlovska	Eleonora	539
Pavlovska	Eleonora	597
Paxton	Dia	504
Pearson	Simon	436
Peil	Tom	235
Peranio-Paz	Giana	375
Perry	Mary	33
Peter Ware	Diane	625
Peterson	Sean	687
Phelan	Linda	334
Phillips	Stuart	144
Piasecka	Ewa	283
Picchetti	Gloria	396
Pierce	Melody	587
Pietrowski-Ciullo	Evelyn	450
Pinque	Meryl	299
Pintagro	Thomas	612
Pitchford	Victoria	595
Platter	Daniel	615
Poese		430
	David	
Pollock	Janelle	107
Potter	Dave	255
Powell	Gary	777
Powne	Charles	354
Prehn	Tyler	414
Preszler	Keith	680
Prinz	Johni	545
Pugliese	Norman	26
Queener-Plourde	Sarah	817

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Quillian	Phoebe	708
R	Ana	467
Rabikovich	Slava	654
Ralph	Carol	755
Randall	David	629
Range	Morgaine	92
Ranstrom	James	315
Ray	Chris	474
Raymer	Terry	569
Reed	Jennifer	253
Reeder	Erich	751
Reeves	Ella	290
Reeves	Lenore	384
Rein	Kari	345
Renneke	Joe	37
Repova	Jana	155
Rice	Ashlee	51
Richert	Victoria	673
Richkus	John	191
Riha	John	154
Ring	Geraldine	744
Ringgaard	Line	653
Robinson	Janet	180
Robinson	Joyce	52
Rodefer	Marilyn	836
Roelof	Georgia	167
Rogers	Ruth	656
Rohrbaugh	Stacey	567
Roland	Jelica	111
Roper	Dan	121
Ross	David	210
Rossi	Daniela	734
Rougemont	Nicole	123
Rubin	Spencer	249
Ruiz	Kathleen	376
Ruiz	Raul	568
Rush	Charlene	643
Ruwe	Ben	720
Ryzin	Mark	759
Sable	Rosalie	216
Sahnow	Charlotte	784
Sales	Linda	158
Salgado	Natasha	727
Saunders	Leigh	275
Savoie	Suzanne	331
Savonen	Carol	799

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Schaefer	Sandra	124
Scherer	Michele	336
Scheve	Dave	853
Schmidt	Irene	41
Schneebeli	Christine	117
Schneider	Daniela	112
Schollhorn	Maria	141
Schulz	Terry	555
Schwartz	Gloria	333
Schwartz	Joyce	463
Sciver	Michael	199
Scoles	Barbara	132
Scott	Drake	387
Scott	J.	624
Scott	Mary	603
Scott	Vanessa	114
Seckendorf	Michael	735
seeburger	john	580
Seldon	Wendy	684
Self	Carolyn	58
Serra	Ruth	62
Shallman	Elsy	618
Sharfman	William	172
Shaughnessy	Diane	607
Shaughnessy	Diane	623
Sheehy	Steve	227
Sheppard	Sandra	425
Sheridan	Gabriel	650
Sherwin	Reid	303
Shipley	Donna	752
Shipley	Doug	487
Shockey	Kirsten	179
Shomer	Forest	152
Showerman	Linda	371
Shubert	Sharyn	232
Sibakov	Katja	87
Siler	Bret	261
Siler	Bret	764
Silvey	Kevin	682
Simbrow	Jennifer	80
Simmons	Adriene	187
Simon	Carrie	168
Simon	Philip	737
Simpson	Robert	423
Sims	Sandra	240
Singer	D.	317

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Skibinski	Emily	548
Skinner	Caroline	590
Sky	Gwendolyn	498
Slavin	Krista	575
Smallberries	John	776
Smith	Jen	516
Smith	Kellie	174
Smith	Lindi	510
Smith	Susan	780
Snitkin	Barry	20
Sodfried	Bianca	88
Soldic	Ivana	646
Solomon	Laurie	739
Somera	Pam	104
Sonenshine	Scott	194
Sorensen	Lise-Lotte	120
Spar	Jon	204
Spath	Marian	5
Spencer	Nancy	532
Squance	Lynn	530
Starr	Kayla	274
Stasny	Kathleen	145
Stefano	Courtney	665
Steininger	Lorenz	36
Steitz	Jim	263
Steitz	Jim	284
Steitz	Jim	805
Sterling	Kristin	118
Stern	Matt	137
Stickney	Karen	520
Stierlen	Lorelei	320
Stone	Jeff	332
Stone	Jessie	698
Stout	Steven	201
Stratton	Judi	768
Stratton	Judi	835
Stuebing	Tamara	125
Stufflebeam	J	342
Such	Renee	801
Sullivan	Sean	229
Sully	John	486
Sumrall	Amber	506
Svorenova	Maria	39
Sylvester	June	211
Szymanski	Ron	408
Tanager	Casey	809

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Taudvin	Diane	3
Taylor	Kamia	335
Taylor	Lauren	424
Tedesco-Kerrick	Terry	56
Terrell	Shanin	294
Themistersnoid@aol.com	Anon	127
Thiemann	Eva	93
Thomas	Debbie	295
Thomas	Ron	356
Thompson	Julie	324
Thompson	Maggie	208
Thomson	Wil	705
Tibbot	Ann	288
Tichenor	Steve	591
Tidwell	Stephanie	435
Tiefer	Hillary	610
Tinker	Caroline	839
Tirado	Luis	393
Tomczak	Bartlomiej	577
Torres	Tatiana	464
Torsander	Camilla	622
Tran	Danielle	269
Trauba	Jeff	445
Tromble	Lee	848
Trufan	Hal	361
Tufts	Jeffrey	692
Turner	Kernan	593
Uglesich	Peter	778
Uhtoff	Pat	224
Usahanun	Waltraud	76
Vaile	Joseph	265
Vaile	Joseph	286
Vaile	Sarah	281
Valenta	Mila	433
Van Wicklen	Betty	83
Varga	John	8
vazquez	andrea	662
Vazquez	Patricia	267
Veraldi	Anne	728
Vieira	Barbara	564
Vileisis	Ann	416
Viner	Helen	758
Viviane	Nervo	90
Vlasiadis	Andreas	518
Volmar	Doris	748
VrMeer	Janice	659

Last Name	First Name	Letter Number
Waber	David	206
Wadland	Sue	234
Wadland	Sue	238
Wadland	Sue	251
Wadland	Sue	293
Wadland	Sue	313
Wagner	Donald	404
Wagner	Kimberly	301
Wakefield	Marie	446
Walderra	Heidi	584
Walker	Wandalea	636
Waller	Julia	480
Walter	Mr.	639
Walter-Schemahorn	Angela	157
Walters	Jacqlynn	770
Wanderley	Amabilia	24
Ward	Sheila	701
Ward	William	628
Waring	Sherman	318
Waters	Michelle	188
Watola	Danuta	640
Weaver	Randy	500
Weaver	Ronald	55
Weber	Robert	699
Wei	Annie	588
Wei	Annie	657
weih	jeffrey	745
wetzel	nathan	95
Whorton	Brooke	704
Wienert	Mark	570
Wiley	Kimberly	730
Wiley	Mark	44
Wilhelm	Martha	466
Williams	John	2
Williams	Sara	679
Williamson	Debbie	203
Willis	Dave	398
Wilson	David	724
Windh	Dean	94
Winkle	Jenny	512
Winnett	Jason	560
Winnett	Jason	578
Winter	Edward	842
Wise	India	441
Witt	Lore	14
Wood	Wendell	225

Last Name	First Name	Letter Number
Wood	Wendell	330
Wood	Wendell	499
Woodall	Sandra	166
Woodriff	Elaine	409
Woolley	John	91
Wright	Pam	53
Yorkowitz	Allan	337
Young	Shelly	351
Yuen	Yip	244
Zabini	Alessandro	258
Zarafonetis	Lisa	86
Zenti	Jeannine	638
Zenti	Jeannine	723
Zook	Suzanne	573
Zucker	Marguery	131

