Milway, Brittany - FS

From: Bacon, Russell -FS
Sent: Friday, June 24, 2022 1:06 PM
To: jstclair@easternshoshone.org
Cc: jmann@easternshoshone.org; Crossland, Leslie - FS; Johnson, Susan -FS; Woodbridge, Michael -FS; Milway, Brittany - FS; Friel, Breton - FS; Harris, Russell -FS; Markin, Hilary -FS
Subject: Rainbow Family of Living Light 2022 Gathering- Eastern Shoshone Tribe

Chairman St. Clair,

I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

I want to make it clear that the Forest Service views this gathering as an unlawful and unauthorized event. The Forest Service requires a Special Use permit for every public group of 75 or more people conducting a meeting or event on National Forest System lands. The Rainbow Family has consistently refused to comply with the permit process during national gatherings, since they claim to have no leaders and no one member who can speak for the group or sign a permit on behalf of the Family.

We understand there might be concerns about the impacts to cultural and natural resources. Rest assured, we are working to minimize any negative effects to environment as much as possible, including the protection of cultural resources. At present, we are not aware of any cultural or archaeological resources within the known gathering footprint. Multiple staff resources, including law enforcement, will be intensely monitoring the situation.

For more information about the Rainbow Family and their annual gathering on National Forests go to the Medicine Bow-Routt National Forest and Thunder Basin National Grassland website , Medicine Bow-Routt National Forests & Thunder Basin National Grassland - Land & Resources Management (usda.gov)

If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6) (b)(6)

Thank you for your attention.
Russ Bacon

Russ Bacon
Forest Supervisor

Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland

p: 307-745-2400
(b)(6)
russell.bacon@usda.gov

2468 Jackson St
Laramie, WY 82072
www.fs.fed.us

Caring for the land and serving people

Milway, Brittany - FS

From: Bacon, Russell -FS
Sent: Friday, June 24, 2022 1:10 PM
To: serena.wetherelt@cheyennenation.com
Cc: teanna.limpy@cheyennenation.com; gary.lafranier@cheyennenation.com; thpo@cheyennenation.com; Crossland, Leslie - FS; Woodbridge, Michael -FS; Milway, Brittany - FS; Friel, Breton - FS; Harris, Russell -FS; Markin, Hilary -FS; Johnson, Susan -FS
Subject: Rainbow Family of Living Light 2022 Gathering- Northern Cheyenne Tribe

Acting President Wetherelt,

I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

I want to make it clear that the Forest Service views this gathering as an unlawful and unauthorized event. The Forest Service requires a Special Use permit for every public group of 75 or more people conducting a meeting or event on National Forest System lands. The Rainbow Family has consistently refused to comply with the permit process during national gatherings, since they claim to have no leaders and no one member who can speak for the group or sign a permit on behalf of the Family.

We understand there might be concerns about the impacts to cultural and natural resources. Rest assured, we are working to minimize any negative effects to environment as much as possible, including the protection of cultural resources. At present, we are not aware of any cultural or archaeological resources within the known gathering footprint. Multiple staff resources, including law enforcement, will be intensely monitoring the situation.

For more information about the Rainbow Family and their annual gathering on National Forests go to the Medicine Bow-Routt National Forest and Thunder Basin National Grassland website , Medicine Bow-Routt National Forests & Thunder Basin National Grassland - Land & Resources Management (usda.gov)

If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6) (b)(6)

Thank you for your attention.
Russ Bacon

Russ Bacon
Forest Supervisor
Forest Service

Medicine Bow-Routt National Forest and Thunder Basin National Grassland

p: 307-745-2400
(b)(6)
russell.bacon@usda.gov

2468 Jackson St
Laramie, WY 82072
www.fs.fed.us

Caring for the land and serving people

Milway, Brittany - FS

From: Bacon, Russell -FS
Sent: Friday, June 24, 2022 1:02 PM
To: mjbaker@southernute-nsn.gov
Cc: catencio@southernute-nsn.gov; gbriggs@southernute-nsn.gov; sthompson@southernute-nsn.gov; xwatts@southernute-nsn.gov; Johnson, Susan -FS; Woodbridge, Michael -FS; Milway, Brittany - FS; Friel, Breton - FS; Crossland, Leslie - FS; Harris, Russell -FS; Markin, Hilary -FS
Subject: Rainbow Family of Living Light 2022 Gathering- Southern Ute Indian Tribe

Chairman Baker,

I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

I want to make it clear that the Forest Service views this gathering as an unlawful and unauthorized event. The Forest Service requires a Special Use permit for every public group of 75 or more people conducting a meeting or event on National Forest System lands. The Rainbow Family has consistently refused to comply with the permit process during national gatherings, since they claim to have no leaders and no one member who can speak for the group or sign a permit on behalf of the Family.

We understand there might be concerns about the impacts to cultural and natural resources. Rest assured, we are working to minimize any negative effects to environment as much as possible, including the protection of cultural resources. At present, we are not aware of any cultural or archaeological resources within the known gathering footprint. Multiple staff resources, including law enforcement, will be intensely monitoring the situation.

For more information about the Rainbow Family and their annual gathering on National Forests go to the Medicine Bow-Routt National Forest and Thunder Basin National Grassland website , Medicine Bow-Routt National Forests & Thunder Basin National Grassland - Land & Resources Management (usda.gov)

If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6) (b)(6)

Thank you for your attention.

Russ Bacon

Russ Bacon
Forest Supervisor

Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland

p: 307-745-2400
(b)(6)
russell.bacon@usda.gov

2468 Jackson St
Laramie, WY 82072
www.fs.fed.us

Caring for the land and serving people

Milway, Brittany - FS

From: Bacon, Russell -FS
Sent: Friday, June 24, 2022 12:42 PM
To: shaunc@utetribe.com
Cc: betsyc@utetribe.com; Johnson, Susan -FS; Milway, Brittany - FS; Crossland, Leslie - FS; Woodbridge, Michael -FS; Friel, Breton - FS; Harris, Russell -FS; Markin, Hilary -FS
Subject: Rainbow Family of Living Light 2022 Gathering- Ute Tribe of Utah

Chairman Chapoose,

We would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" has started gathering in the Routt National Forest beginning in early July 2022. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

I want to make it clear that the Forest Service views this gathering as an unlawful and unauthorized event. The Forest Service requires a Special Use permit for every public group of 75 or more people conducting a meeting or event on National Forest System lands. The Rainbow Family has consistently refused to comply with the permit process during national gatherings, since they claim to have no leaders and no one member who can speak for the group or sign a permit on behalf of the Family.

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If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6) (b)(6).

Thank you for your attention.

Russ Bacon

Russ Bacon
Forest Supervisor

Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland

p: 307-745-2400
(b)(6)
russell.bacon@usda.gov

2468 Jackson St
Laramie, WY 82072
www.fs.fed.us

Caring for the land and serving people

Milway, Brittany - FS

From: Bacon, Russell -FS
Sent: Friday, June 24, 2022 1:14 PM
To: jordan.dresser@northernarapaho.com
Cc: lee.spoonhunter@northernarapaho.com; (b)(6) crystal.cbearing@northernarapaho.com; Crossland, Leslie - FS; Johnson, Susan -FS; Woodbridge, Michael -FS; Milway, Brittany - FS; Friel, Breton - FS; Harris, Russell -FS; Markin, Hilary -FS
Subject: Rainbow Family of Living Light 2022 Gathering- Northern Arapaho Tribe

Chairman Dresser,

I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

I want to make it clear that the Forest Service views this gathering as an unlawful and unauthorized event. The Forest Service requires a Special Use permit for every public group of 75 or more people conducting a meeting or event on National Forest System lands. The Rainbow Family has consistently refused to comply with the permit process during national gatherings, since they claim to have no leaders and no one member who can speak for the group or sign a permit on behalf of the Family.

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If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6) (b)(6).

Thank you for your attention.
Russ Bacon

Russ Bacon
Forest Supervisor

Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland

p: 307-745-2400
(b)(6)
russell.bacon@usda.gov

2468 Jackson St
Laramie, WY 82072
www.fs.fed.us

Caring for the land and serving people

Milway, Brittany - FS

From: Strahl, Jason - FS
Sent: Thursday, June 16, 2022 10:50 AM
To: mbear@cheyenneandarapaho-nsn.gov
Cc: Milway, Brittany - FS
Subject: 50th Annual Rainbow Gathering on the Medicine Bow-Routt National Forests
Attachments: 2022 Rainbow Gathering.pdf; NatlRainbowIncident_RouttNF_061522.pdf

Hello,

I wanted to bring to your attention that the 50th Annual Rainbow Gathering will be on the Routt National Forest approximately 23 miles north of Hayden, Colorado (see attached news release and map), in between California Park and Slater Park, east of the Elkhead Mountains. Our files show no known archaeological sites in the area and we are working with the Rainbow Gathering people to tread lightly on the area to alleviate any potential environmental damages. If you have questions or concerns please contact Canuto Molina (Patrol Captain), (b)(6) (canuto.molina@usda.gov).

Information web site (includes FAQs): https://www.fs.usda.gov/goto/rainbowgathering
News release: https://www.fs.usda.gov/detail/mbr/news-events/?cid=FSEPRD1034085
Incident Management Team Information email: SM.FS.RainbowIMT@usda.gov
Incident Management Team Information line: 970-364-2201

Jason Strahl
South Zone Archaeologist
Forest Service
Medicine Bow-Routt National Forests &
Thunder Basin National Grassland
p: 970-638-4189
p: 970-870-2148
jason.strahl@usda.gov
925 Weiss Drive
Steamboat Springs, CO 80487
www.fs.fed.us
Caring for the land and serving people

Milway, Brittany - FS

From: Strahl, Jason - FS
Sent: Thursday, June 16, 2022 10:44 AM
To: teanna.limpy@cheyennenation.com
Cc: Milway, Brittany - FS
Subject: 50th Annual Rainbow Gathering on the Medicine Bow-Routt National Forests
Attachments: NatlRainbowIncident_RouttNF_061522.pdf; 2022 Rainbow Gathering.pdf

Hello,

I wanted to bring to your attention that the 50th Annual Rainbow Gathering will be on the Routt National Forest approximately 23 miles north of Hayden, Colorado (see attached news release and map), in between California Park and Slater Park, east of the Elkhead Mountains. Our files show no known archaeological sites in the area and we are working with the Rainbow Gathering people to tread lightly on the area to alleviate any potential environmental damages. If you have questions or concerns please contact Canuto Molina (Patrol Captain), (b)(6) (canuto.molina@usda.gov).

Information web site (includes FAQs): https://www.fs.usda.gov/goto/rainbowgathering
News release: https://www.fs.usda.gov/detail/mbr/news-events/?cid=FSEPRD1034085
Incident Management Team Information email: SM.FS.RainbowIMT@usda.gov
Incident Management Team Information line: 970-364-2201

Jason Strahl
South Zone Archaeologist
Forest Service
Medicine Bow-Routt National Forests &
Thunder Basin National Grassland
p: 970-638-4189
p: 970-870-2148
jason.strahl@usda.gov
925 Weiss Drive
Steamboat Springs, CO 80487
www.fs.fed.us
Caring for the land and serving people

Milway, Brittany - FS

From: Strahl, Jason - FS
Sent: Thursday, June 16, 2022 9:54 AM
To: sthompson@southernute-nsn.gov
Cc: Cassandra Atencio (catencio@southernute-nsn.gov); Xavier Watts (sunagpra@southernute-nsn.gov); Milway, Brittany - FS
Subject: 50th Annual Rainbow Gathering on the Medicine Bow-Routt National Forests
Attachments: NatlRainbowIncident_RouttNF_061522.pdf; 2022 Rainbow Gathering.pdf

Hello,

I wanted to bring to your attention that the 50th Annual Rainbow Gathering will be on the Routt National Forest approximately 23 miles north of Hayden, Colorado (see attached news release and map), in between California Park and Slater Park, east of the Elkhead Mountains. Our files show no known archaeological sites in the area and we are working with the Rainbow Gathering people to tread lightly on the area to alleviate any potential environmental damages. If you have questions or concerns please contact Canuto Molina (Patrol Captain) (b)(6) (canuto.molina@usda.gov).

Jason Strahl
South Zone Archaeologist

Forest Service
Medicine Bow-Routt National Forests &
Thunder Basin National Grassland

p: 970-638-4189
p: 970-870-2148
jason.strahl@usda.gov

925 Weiss Drive
Steamboat Springs, CO 80487
www.fs.fed.us

Caring for the land and serving people

Milway, Brittany - FS

From: Strahl, Jason - FS
Sent: Thursday, June 16, 2022 10:51 AM
To: tknight@utemountain.org
Cc: Milway, Brittany - FS
Subject: 50th Annual Rainbow Gathering on the Medicine Bow-Routt National Forests
Attachments: NatlRainbowIncident_RouttNF_061522.pdf; 2022 Rainbow Gathering.pdf

Hello,

I wanted to bring to your attention that the 50th Annual Rainbow Gathering will be on the Routt National Forest approximately 23 miles north of Hayden, Colorado (see attached news release and map), in between California Park and Slater Park, east of the Elkhead Mountains. Our files show no known archaeological sites in the area and we are working with the Rainbow Gathering people to tread lightly on the area to alleviate any potential environmental damages. If you have questions or concerns please contact Canuto Molina (Patrol Captain), (b)(6) (canuto.molina@usda.gov).

Information web site (includes FAQs): https://www.fs.usda.gov/goto/rainbowgathering
News release: https://www.fs.usda.gov/detail/mbr/news-events/?cid=FSEPRD1034085
Incident Management Team Information email: SM.FS.RainbowIMT@usda.gov
Incident Management Team Information line: 970-364-2201

Jason Strahl
South Zone Archaeologist
Forest Service
Medicine Bow-Routt National Forests &
Thunder Basin National Grassland
p: 970-638-4189
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jason.strahl@usda.gov
925 Weiss Drive
Steamboat Springs, CO 80487
www.fs.fed.us
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June 26, 2022

Laboratory Code:	**RES**
Subcontract Number:	**NA**
Laboratory Report:	**RES 528894-1**
Project # / P.O. #	**None Given**
Project Description:	**Rainbow Gathering IMT Water Samples - Baseline / Adams Park**

Kris Skinner
Us Forest Service
925 Weiss Drive
Steamboat Springs CO 80487

Dear Customer,

Eurofins Reservoirs is an analytical laboratory accredited for the analysis of pathogenic, non-pathogenic and environmental microorganisms by the American Industrial Hygiene Association (AIHA LAP, LLC), Lab ID 101533. The laboratory is currently proficient in the EMPAT program.

Eurofins Reservoirs has analyzed the following sample(s) per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Reported sample results were not blank corrected. Results have been sent to your office.

RES 528894-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Eurofins Reservoirs will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Eurofins Reservoirs. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Jeanne Spencer
President

EUROFINS RESERVOIRS

5801 Logan St. Suite 100, Denver CO, 80221
AIHA EMPAT #101533

TABLE I ANALYSIS: MICROBIAL ANALYSIS OF WATER

RES Job Number:	**RES 528894-1**
Client:	**Us Forest Service**
Client Project Number / P.O.:	**None Given**
Client Project Description:	**Rainbow Gathering IMT Water Samples - Baseline / Adams Park**
Date Samples Received:	**June 25, 2022**
Analysis Type:	**ISO 9308-3:2012 - Fecal Coliforms/E. coli (DW Quant), Water**
Turnaround:	**Priority**
Date Samples Analyzed:	**June 26, 2022**

Lab Sample ID	Fecal Coliforms		*E. coli*	
Client Sample ID	R.L. MPN/100mL	Conc. MPN/100mL	R.L. MPN/100mL	Conc. MPN/100mL
528894 - 1 (Headwaters #1)	1.0	BRL	1.0	BRL
528894 - 2 (Headwaters #2)	1.0	2.0	1.0	2.0
528894 - 3 (Adams Trib)	1.0	BRL	1.0	BRL
528894 - 4 (Adams Creek at CR80)	1.0	1.0	1.0	1.0
528894 - 5 (Elkhed Creek at CR80)	1.0	9.7	1.0	9.7

* Sample analyses have not been blank corrected.
BRL = Below Reporting Limit
NA = Not Analyzed
TNTC = Too Numerous To Count
Minimum Reporting Limit (MRL) = 1 Cell

Analyst / Data QA: Sam L Sam Li

eurofins | Built Environment Reservoirs

RES Job #: 528894

SUBMITTED BY	INVOICE TO	CONTACT INFORMATION	SERIES
Company: Us Forest Service	Company: CASH SALE	Contact: Kris Skinner	-1 Micro Priority
Address: 925 Weiss Drive	Address: 5801 Logan St	Phone: (970) 870-2252	
C/O Rainbow IMT		Fax:	
Steamboat Springs, CO 80487	Denver, CO 80216	Cell: (b)(6)	
Project Number and/or P.O. #: None Given		Final Data Deliverable Email Address:	
Project Description/Location: Rainbow Gathering IMT Water Samples - Baseline / Adams Park		kristopher.skinner@usda.gov (+ 1 ADDNL. CONTACTS)	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM — DTL RUSH PRIORITY STANDARD

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Dust — RUSH PRIORITY STANDARD

Metals — RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT

Organics* — SAME DAY RUSH PRIORITY STANDARD

MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm

Viable Analysis** — PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH

Medical Device Analysis — RUSH STANDARD

Mold Analysis — RUSH PRIORITY STANDARD

****Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.****

Special Instructions:
Please prep samples today, 6/25/2022 for 6/26/2022 analysis

REQUESTED ANALYSIS

PLM - Short Report, Long Report, CARB 435
TEM - AHERA (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, Yamate Level II, ISO 10312, ISO 13794, Chatfield, Drinking Water, Waste Water, Bulk +/-, CARB Modified Ahera
PCM - 7400A, 7400B, OSHA
DUST - Total, Respirable
METALS - Analyte(s) Lead Only (7082, 7420, Waste Water, Foodware), Multi Metals (7303,6020A, 200.8, Waste Water, Foodware, OSHA ID-125G), pH (Liquid or Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan
ORGANICS - Methamphetamine, TSS
VIABLES - Fecal Coliforms/E.coli – Drinking Water (Quantified) (ISO 9308-2:2012)
MEDICAL - Bioburden, LAL
MOLD - Spore Trap, Bulk Mold, Particulate Identification

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

Client Sample ID Number (Sample ID's must be unique)	ASBESTOS	CHEMISTRY	MICROBIOLOGY	Sample Volume (L) / Area	Length(or Aliquots) x Width(or Area per Aliquot)	Matrix Code	# of Containers	Date Collected mm/dd/yy	Time Collected hh:mm	Laboratory Analysis Instructions
1 1 (Headwaters #1)			X	0.125L		W	1	06/24/22	12:30	
2 2 (Headwaters #2)			X	0.125L		W	1	06/24/22	12:35	
3 3 (Adams Trib)			X	0.125L		W	1	06/24/22	13:00	
4 4 (Adams Creek at CR80)			X	0.125L		W	1	06/24/22	13:30	
5 5 (Elkhed Creek at CR80)			X	0.125L		W	1	06/24/22	14:00	

EREI establishes a unique Lab Sample ID, for each sample, by preceding each unique Client Sample ID with the laboratory RES Job Number.
EREI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall consitute an analytical services agreement with payment terms of Cash or Check. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:	Kris Skinner	Kris Skinner	Date/Time: 06/25/2022 13:17:59	Sample Condition: Acceptable
Received By:	Miria Wolf	Miria Wolf	Date/Time: 06/25/2022 13:19:09	Carrier: Hand

Us Forest Service Sample Notes

RES #: 528894
Project Number and/or P.O. #: None Given
Project Description/Location:
Rainbow Gathering IMT Water Samples - Baseline / Adams Park

Client Sample ID	Sample Note	Quantity	Sampler(s)
1 (Headwaters #1)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
2 (Headwaters #2)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
3 (Adams Trib)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
4 (Adams Creek at CR80)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
5 (Elkhed Creek at CR80)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS

eurofins | Built Environment Reservoirs

July 1, 2022

Laboratory Code:	**RES**
Subcontract Number:	**NA**
Laboratory Report:	**RES 529374-1**
Project # / P.O. #	**None Given**
Project Description:	**Rainbow Gathering IMT Water Samples - 6/29/2022 / Adams Park**

Kris Skinner
Us Forest Service
925 Weiss Drive
Steamboat Springs CO 80487

Dear Customer,

Eurofins Reservoirs is an analytical laboratory accredited for the analysis of pathogenic, non-pathogenic and environmental microorganisms by the American Industrial Hygiene Association (AIHA LAP, LLC), Lab ID 101533. The laboratory is currently proficient in the EMPAT program.

Eurofins Reservoirs has analyzed the following sample(s) per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Reported sample results were not blank corrected. Results have been sent to your office.

RES 529374-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Eurofins Reservoirs will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Eurofins Reservoirs. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Jeanne Spencer
President

DATA QA
JH
07/01/2022

EUROFINS RESERVOIRS

5801 Logan St. Suite 100, Denver CO, 80221
AIHA EMPAT #101533

TABLE I ANALYSIS: MICROBIAL ANALYSIS OF WATER

RES Job Number:	**RES 529374-1**
Client:	**Us Forest Service**
Client Project Number / P.O.:	**None Given**
Client Project Description:	**Rainbow Gathering IMT Water Samples - 6/29/2022 / Adams Park**
Date Samples Received:	**June 30, 2022**
Analysis Type:	**ISO 9308-2:2012 - Fecal Coliforms/E. coli (DW Quant), Water**
Turnaround:	**Priority**
Date Samples Analyzed:	**July 1, 2022**

Lab Sample ID	Fecal Coliforms		*E*. coli	
Client Sample ID	R.L. MPN/100mL	Conc. MPN/100mL	R.L. MPN/100mL	Conc. MPN/100mL
529374 - 3 (Adams Trib)	1.0	9.6	1.0	8.5
529374 - 4 (Adams Creek at CR80)	1.0	8.6	1.0	8.6
529374 - 5(Elkhed Creek at CR80)	1.0	9.8	1.0	9.8

* Sample analyses have not been blank corrected.
BRL = Below Reporting Limit
NA = Not Analyzed
TNTC = Too Numerous To Count
Minimum Reporting Limit (MRL) = 1 Cell

Analyst / Data QA: Sam Li

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RES Job #: 529374

SUBMITTED BY	INVOICE TO	CONTACT INFORMATION	SERIES
Company: Us Forest Service	Company: CASH SALE	Contact: Kris Skinner	-1 Micro Priority
Address: 925 Weiss Drive	Address: 5801 Logan St	Phone: (970) 870-2252	
C/O Rainbow IMT		Fax:	
Steamboat Springs, CO 80487	Denver, CO 80216	Cell: (b)(6)	
Project Number and/or P.O. #: None Given		Final Data Deliverable Email Address:	
Project Description/Location: Rainbow Gathering IMT Water Samples - 6/29/2022 / Adams Park		kristopher.skinner@usda.gov (+ 1 ADDNL. CONTACTS)	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM — DTL RUSH PRIORITY STANDARD

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Dust — RUSH PRIORITY STANDARD

Metals — RUSH PRIORITY STANDARD

*PRIOR NOTICE REQUIRED FOR SAME DAY TAT

Organics* — SAME DAY RUSH PRIORITY STANDARD

MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm

Viable Analysis** — PRIORITY STANDARD

**TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH

Medical Device Analysis — RUSH STANDARD

Mold Analysis — RUSH PRIORITY STANDARD

Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.

Special Instructions:
Please hold cooler used to ship samples until further instructions are provided. Thank you.

REQUESTED ANALYSIS

PLM - Short Report, Long Report, CARB 435
TEM - AHERA (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, Yamate Level II, ISO 10312, ISO 13794, Chatfield, Drinking Water, Waste Water, Bulk +/-, CARB Modified Ahera
PCM - 7400A, 7400B, OSHA
DUST - Total, Respirable
METALS - Analyte(s)
Lead Only (7082, 7420, Waste Water, Foodware), Multi Metals (7303,6020A, 200.8, Waste Water, Foodware, OSHA ID-125G), pH (Liquid or Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan
ORGANICS - Methamphetamine, TSS
VIABLES - Fecal Coliforms/E.coli – Drinking Water (Quantified) (ISO 9308-2:2012)
MEDICAL - Bioburden, LAL
MOLD - Spore Trap, Bulk Mold, Particulate Identification

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

LAB NOTES

Sample 4 was compromised during sample collection

Client Sample ID Number (Sample ID's must be unique)	ASBESTOS	CHEMISTRY	MICROBIOLOGY	Sample Volume (L) / Area	Length(or Aliquots) x Width(or Area per Aliquot)	Matrix Code	# of Containers	Date Collected mm/dd/yy	Time Collected hh:mm	Laboratory Analysis Instructions
1 3 (Adams Trib)			X	0.125L		W	1	06/29/22	11:30	
2 4 (Adams Creek at CR80)			X	0.125L		W	1	06/29/22	11:30	
3 5(Elkhed Creek at CR80)			X	0.125L		W	1	06/29/22	15:30	

EREI establishes a unique Lab Sample ID, for each sample, by preceding each unique Client Sample ID with the laboratory RES Job Number.
EREI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall consitute an analytical services agreement with payment terms of Cash or Check. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:		Kris Skinner	Date/Time: 06/30/2022 14:29:49	Sample Condition: Acceptable
Received By:		Jessica Shapiro	Date/Time: 06/30/2022 14:43:24	Carrier: UPS

eurofins | Built Environment Reservoirs

July 5, 2022

Laboratory Code: **RES**
Subcontract Number: **NA**
Laboratory Report: **RES 529499-1**
Project # / P.O. # **None Given**
Project Description: **Rainbow Gathering IMT Water Samples - 6/30/2022 / Adams Park**

Kris Skinner
Us Forest Service
925 Weiss Drive
Steamboat Springs CO 80487

Dear Customer,

Eurofins Reservoirs is an analytical laboratory accredited for the analysis of pathogenic, non-pathogenic and environmental microorganisms by the American Industrial Hygiene Association (AIHA LAP, LLC), Lab ID 101533. The laboratory is currently proficient in the EMPAT program.

Eurofins Reservoirs has analyzed the following sample(s) per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Reported sample results were not blank corrected. Results have been sent to your office.

RES 529499-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Eurofins Reservoirs will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Eurofins Reservoirs. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Jeanne Spencer
President

EUROFINS RESERVOIRS

5801 Logan St. Suite 100, Denver CO, 80221
AIHA EMPAT #101533

TABLE I ANALYSIS: MICROBIAL ANALYSIS OF WATER

RES Job Number:	**RES 529499-1**
Client:	**Us Forest Service**
Client Project Number / P.O.:	**None Given**
Client Project Description:	**Rainbow Gathering IMT Water Samples - 6/30/2022 / Adams Park**
Date Samples Received:	**July 1, 2022**
Analysis Type:	**ISO 9308-2:2012 - Fecal Coliforms/E. coli (DW Quant), Water**
Turnaround:	**Priority**
Date Samples Analyzed:	**July 2, 2022**

Lab Sample ID	Fecal Coliforms		*E*. coli	
	R.L.	Conc.	R.L.	Conc.
Client Sample ID	MPN/100mL	MPN/100mL	MPN/100mL	MPN/100mL
529499 - 3 (Adams Trib)	1.0	19.7	1.0	19.7
529499 - 4 (Adams Creek at CR80)	1.0	22.6	1.0	19.7

* Sample analyses have not been blank corrected.
BRL = Below Reporting Limit
NA = Not Analyzed
TNTC = Too Numerous To Count
Minimum Reporting Limit (MRL) = 1 Cell

Analyst / Data Q.. Sam Li
Sam Li

eurofins | Built Environment Reservoirs

RES Job #: 529499

SUBMITTED BY	INVOICE TO	CONTACT INFORMATION	SERIES
Company: Us Forest Service	Company: CASH SALE	Contact: Kris Skinner	-1 Micro Priority *AFTER HOURS*
Address: 925 Weiss Drive	Address: 5801 Logan St	Phone: (970) 870-2252	
C/O Rainbow IMT		Fax:	
Steamboat Springs, CO 80487	Denver, CO 80216	Cell: (b)(6)	
Project Number and/or P.O. #: None Given		Final Data Deliverable Email Address:	
Project Description/Location: Rainbow Gathering IMT Water Samples - 6/30/2022 / Adams Park		kristopher.skinner@usda.gov (+ 1 ADDNL. CONTACTS)	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM — DTL RUSH PRIORITY STANDARD

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Dust — RUSH PRIORITY STANDARD

Metals — RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT

Organics* — SAME DAY RUSH PRIORITY STANDARD

MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm

Viable Analysis** — PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH

Medical Device Analysis — RUSH STANDARD

Mold Analysis — RUSH PRIORITY STANDARD

****Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.****

Special Instructions:
Please return Forest Service-provided cooler.

REQUESTED ANALYSIS

PLM - Short Report, Long Report, CARB 435
TEM - AHERA (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, Yamate Level II, ISO 10312, ISO 13794, Chatfield, Drinking Water, Waste Water, Bulk +/-, CARB Modified Ahera
PCM - 7400A, 7400B, OSHA
DUST - Total, Respirable
METALS - Analyte(s) Lead Only (7082, 7420, Waste Water, Foodware), Multi Metals (7303,6020A, 200.8, Waste Water, Foodware, OSHA ID-125G), pH (Liquid or Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan
ORGANICS - Methamphetamine, TSS
VIABLES - Fecal Coliforms/E.coli – Drinking Water (Quantified) (ISO 9308-2:2012)
MEDICAL - Bioburden, LAL
MOLD - Spore Trap, Bulk Mold, Particulate Identification

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

Client Sample ID Number (Sample ID's must be unique)	ASBESTOS	CHEMISTRY	MICROBIOLOGY	Sample Volume (L) / Area	Length(or Aliquots) x Width(or Area per Aliquot)	Matrix Code	# of Containers	Date Collected mm/dd/yy	Time Collected hh:mm	Laboratory Analysis Instructions
1 3 (Adams Trib)			X	0.125L		W	1	06/30/22	12:30	
2 4 (Adams Creek at CR80)			X	0.125L		W	1	06/30/22	12:30	

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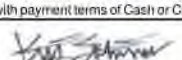
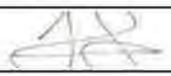
Relinquished By:		Kris Skinner	Date/Time: 07/01/2022 15:39:02	Sample Condition: Acceptable
Received By:		Jessica Shapiro	Date/Time: 07/01/2022 15:46:25	Carrier: Hand

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July 5, 2022

Laboratory Code: **RES**
Subcontract Number: **NA**
Laboratory Report: **RES 529499-1**
Project # / P.O. # **None Given**
Project Description: **Rainbow Gathering IMT Water Samples - 6/30/2022 / Adams Park**

Kris Skinner
Us Forest Service
925 Weiss Drive
Steamboat Springs CO 80487

Dear Customer,

Eurofins Reservoirs is an analytical laboratory accredited for the analysis of pathogenic, non-pathogenic and environmental microorganisms by the American Industrial Hygiene Association (AIHA LAP, LLC), Lab ID 101533. The laboratory is currently proficient in the EMPAT program.

Eurofins Reservoirs has analyzed the following sample(s) per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Reported sample results were not blank corrected. Results have been sent to your office.

RES 529499-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Eurofins Reservoirs will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Eurofins Reservoirs. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Jeanne Spencer
President

EUROFINS RESERVOIRS

5801 Logan St. Suite 100, Denver CO, 80221
AIHA EMPAT #101533

TABLE I ANALYSIS: MICROBIAL ANALYSIS OF WATER

RES Job Number:	**RES 529499-1**
Client:	**Us Forest Service**
Client Project Number / P.O.:	**None Given**
Client Project Description:	**Rainbow Gathering IMT Water Samples - 6/30/2022 / Adams Park**
Date Samples Received:	**July 1, 2022**
Analysis Type:	**ISO 9308-2:2012 - Fecal Coliforms/E. coli (DW Quant), Water**
Turnaround:	**Priority**
Date Samples Analyzed:	**July 2, 2022**

Lab Sample ID	Fecal Coliforms		*E*. coli	
	R.L.	Conc.	R.L.	Conc.
Client Sample ID	MPN/100mL	MPN/100mL	MPN/100mL	MPN/100mL
529499 - 3 (Adams Trib)	1.0	19.7	1.0	19.7
529499 - 4 (Adams Creek at CR80)	1.0	22.6	1.0	19.7

* Sample analyses have not been blank corrected.
BRL = Below Reporting Limit
NA = Not Analyzed
TNTC = Too Numerous To Count
Minimum Reporting Limit (MRL) = 1 Cell

Analyst / Data Q.. Sam Li
Sam Li

eurofins | Built Environment Reservoirs

RES Job #: 529499

SUBMITTED BY		INVOICE TO		CONTACT INFORMATION		SERIES
Company:	Us Forest Service	Company:	CASH SALE	Contact:	Kris Skinner	-1 Micro Priority *AFTER HOURS*
Address:	925 Weiss Drive	Address:	5801 Logan St	Phone:	(970) 870-2252	
	C/O Rainbow IMT			Fax:		
	Steamboat Springs, CO 80487		Denver, CO 80216	Cell:	(b)(6)	
Project Number and/or P.O. #:	None Given			Final Data Deliverable Email Address:		
Project Description/Location:	Rainbow Gathering IMT Water Samples - 6/30/2022 / Adams Park			kristopher.skinner@usda.gov (+ 1 ADDNL. CONTACTS)		

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM — DTL RUSH PRIORITY STANDARD

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Dust — RUSH PRIORITY STANDARD

Metals — RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT

Organics* — SAME DAY RUSH PRIORITY STANDARD

MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm

Viable Analysis** — PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH

Medical Device Analysis — RUSH STANDARD

Mold Analysis — RUSH PRIORITY STANDARD

****Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.****

Special Instructions:
Please return Forest Service-provided cooler.

REQUESTED ANALYSIS

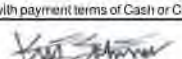
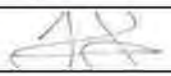
PLM - Short Report, Long Report, CARB 435
TEM - AHERA (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, Yamate Level II, ISO 10312, ISO 13794, Chatfield, Drinking Water, Waste Water, Bulk +/-, CARB Modified Ahera
PCM - 7400A, 7400B, OSHA
DUST - Total, Respirable
METALS - Analyte(s) Lead Only (7082, 7420, Waste Water, Foodware), Multi Metals (7303,6020A, 200.8, Waste Water, Foodware, OSHA ID-125G), pH (Liquid or Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan
ORGANICS - Methamphetamine, TSS
VIABLES - Fecal Coliforms/E.coli – Drinking Water (Quantified) (ISO 9308-2:2012)
MEDICAL - Bioburden, LAL
MOLD - Spore Trap, Bulk Mold, Particulate Identification

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

Client Sample ID Number (Sample ID's must be unique)	ASBESTOS	CHEMISTRY	MICROBIOLOGY	Sample Volume (L) / Area	Length(or Aliquots) x Width(or Area per Aliquot)	Matrix Code	# of Containers	Date Collected mm/dd/yy	Time Collected hh:mm	Laboratory Analysis Instructions
1 3 (Adams Trib)			X	0.125L		W	1	06/30/22	12:30	
2 4 (Adams Creek at CR80)			X	0.125L		W	1	06/30/22	12:30	

EREI establishes a unique Lab Sample ID, for each sample, by preceding each unique Client Sample ID with the laboratory RES Job Number.
EREI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall consitute an analytical services agreement with payment terms of Cash or Check. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:		Kris Skinner	Date/Time: 07/01/2022 15:39:02	Sample Condition: Acceptable
Received By:		Jessica Shapiro	Date/Time: 07/01/2022 15:46:25	Carrier: Hand

eurofins | Built Environment Reservoirs

June 26, 2022

Laboratory Code:	**RES**
Subcontract Number:	**NA**
Laboratory Report:	**RES 528894-1**
Project # / P.O. #	**None Given**
Project Description:	**Rainbow Gathering IMT Water Samples - Baseline / Adams Park**

Kris Skinner
Us Forest Service
925 Weiss Drive
Steamboat Springs CO 80487

Dear Customer,

Eurofins Reservoirs is an analytical laboratory accredited for the analysis of pathogenic, non-pathogenic and environmental microorganisms by the American Industrial Hygiene Association (AIHA LAP, LLC), Lab ID 101533. The laboratory is currently proficient in the EMPAT program.

Eurofins Reservoirs has analyzed the following sample(s) per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Reported sample results were not blank corrected. Results have been sent to your office.

RES 528894-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Eurofins Reservoirs will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Eurofins Reservoirs. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Jeanne Spencer
President

EUROFINS RESERVOIRS

5801 Logan St. Suite 100, Denver CO, 80221
AIHA EMPAT #101533

TABLE I ANALYSIS: MICROBIAL ANALYSIS OF WATER

RES Job Number:	**RES 528894-1**
Client:	**Us Forest Service**
Client Project Number / P.O.:	**None Given**
Client Project Description:	**Rainbow Gathering IMT Water Samples - Baseline / Adams Park**
Date Samples Received:	**June 25, 2022**
Analysis Type:	**ISO 9308-3:2012 - Fecal Coliforms/E. coli (DW Quant), Water**
Turnaround:	**Priority**
Date Samples Analyzed:	**June 26, 2022**

Lab Sample ID	Fecal Coliforms		*E. coli*	
Client Sample ID	R.L. MPN/100mL	Conc. MPN/100mL	R.L. MPN/100mL	Conc. MPN/100mL
528894 - 1 (Headwaters #1)	1.0	BRL	1.0	BRL
528894 - 2 (Headwaters #2)	1.0	2.0	1.0	2.0
528894 - 3 (Adams Trib)	1.0	BRL	1.0	BRL
528894 - 4 (Adams Creek at CR80)	1.0	1.0	1.0	1.0
528894 - 5 (Elkhed Creek at CR80)	1.0	9.7	1.0	9.7

* Sample analyses have not been blank corrected.
BRL = Below Reporting Limit
NA = Not Analyzed
TNTC = Too Numerous To Count
Minimum Reporting Limit (MRL) = 1 Cell

Analyst / Data QA: Sam L Sam Li

eurofins | Built Environment Reservoirs

RES Job #: 528894

SUBMITTED BY	INVOICE TO	CONTACT INFORMATION	SERIES
Company: Us Forest Service	Company: CASH SALE	Contact: Kris Skinner	-1 Micro Priority
Address: 925 Weiss Drive	Address: 5801 Logan St	Phone: (970) 870-2252	
C/O Rainbow IMT		Fax:	
Steamboat Springs, CO 80487	Denver, CO 80216	Cell: (b)(6)	
Project Number and/or P.O. #: None Given		Final Data Deliverable Email Address:	
Project Description/Location: Rainbow Gathering IMT Water Samples - Baseline / Adams Park		kristopher.skinner@usda.gov (+ 1 ADDNL. CONTACTS)	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM — DTL RUSH PRIORITY STANDARD

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Dust — RUSH PRIORITY STANDARD

Metals — RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT

Organics* — SAME DAY RUSH PRIORITY STANDARD

MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm

Viable Analysis** — PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH

Medical Device Analysis — RUSH STANDARD

Mold Analysis — RUSH PRIORITY STANDARD

****Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.****

Special Instructions:
Please prep samples today, 6/25/2022 for 6/26/2022 analysis

REQUESTED ANALYSIS

PLM - Short Report, Long Report, CARB 435
TEM - AHERA (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, Yamate Level II, ISO 10312, ISO 13794, Chatfield, Drinking Water, Waste Water, Bulk +/-, CARB Modified Ahera
PCM - 7400A, 7400B, OSHA
DUST - Total, Respirable
METALS - Analyte(s) Lead Only (7082, 7420, Waste Water, Foodware), Multi Metals (7303,6020A, 200.8, Waste Water, Foodware, OSHA ID-125G), pH (Liquid or Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan
ORGANICS - Methamphetamine, TSS
VIABLES - Fecal Coliforms/E.coli – Drinking Water (Quantified) (ISO 9308-2:2012)
MEDICAL - Bioburden, LAL
MOLD - Spore Trap, Bulk Mold, Particulate Identification

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

Client Sample ID Number (Sample ID's must be unique)	ASBESTOS	CHEMISTRY	MICROBIOLOGY	Sample Volume (L) / Area	Length(or Aliquots) x Width(or Area per Aliquot)	Matrix Code	# of Containers	Date Collected mm/dd/yy	Time Collected hh:mm	Laboratory Analysis Instructions
1 1 (Headwaters #1)			X	0.125L		W	1	06/24/22	12:30	
2 2 (Headwaters #2)			X	0.125L		W	1	06/24/22	12:35	
3 3 (Adams Trib)			X	0.125L		W	1	06/24/22	13:00	
4 4 (Adams Creek at CR80)			X	0.125L		W	1	06/24/22	13:30	
5 5 (Elkhed Creek at CR80)			X	0.125L		W	1	06/24/22	14:00	

EREI establishes a unique Lab Sample ID, for each sample, by preceding each unique Client Sample ID with the laboratory RES Job Number.
EREI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall consitute an analytical services agreement with payment terms of Cash or Check. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:	Kris Skinner	Kris Skinner	Date/Time: 06/25/2022 13:17:59	Sample Condition: Acceptable
Received By:	Miria Wolf	Miria Wolf	Date/Time: 06/25/2022 13:19:09	Carrier: Hand

Us Forest Service Sample Notes

RES #: 528894
Project Number and/or P.O. #: None Given
Project Description/Location:
Rainbow Gathering IMT Water Samples - Baseline / Adams Park

Client Sample ID	Sample Note	Quantity	Sampler(s)
1 (Headwaters #1)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
2 (Headwaters #2)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
3 (Adams Trib)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
4 (Adams Creek at CR80)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS
5 (Elkhed Creek at CR80)	Please disregard dates annotated on bottles - SAMPLE ID IS IMPORTANT.	1	LS

Ute Tribe of Utah

Shaun	Chapoose	Chairman, Uintah and Ouray Tribal Business Committee	shaunc@utetribe.com
Betsy	Chapoose	NAGPRA Representative	betsyc@utetribe.com

Southern Ute Indian Tribe

Melvin J	Baker	Chairman	mjbaker@southernute-nsn.gov
Cassandra	Atencio	NAGPRA Coordinator, Southern Ute Cultural Department	catencio@southernute-nsn.gov
Garrett	Briggs	THPO	gbriggs@southernute-nsn.gov
Shelly	Thompson	Cultural Preservation Director	sthompson@southernute-nsn.gov
Xavier	Watts	Southern Ute Cultural Department	xwatts@southernute-nsn.gov

Eastern Shoshone Tribe

John	St. Clair	Chairman	jstclair@easternshoshone.org
Josh	Mann	THPO	jmann@easternshoshone.org

Northern Cheyenne Tribe

Serena	Wetherelt	Acting President	Serena.Wetherelt@cheyennenation.com
Teanna	Limpy	THPO	Teanna.limpy@cheyennenation.com
Gary	LaFranier	106 Coordinator	gary.lafranier@cheyennenation.com
Alfonso	Spang	THPO	thpo@cheyennenation.com

Northern Arapaho Tribe

Jordan	Dresser	Chairman	Jordan.Dresser@northernarapaho.com
Lee	Spoonhunter	Vice Chairman	lee.spoonhunter@northernarapaho.com
Ben	Ridgley	THPO, Director	benridgley007@gmail.com
Crystal	C'Bearing	NATHPO, Deputy Director	crystal.cbearing@northernarapaho.com

We would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" will be gathering for a month-long stay in the Routt National Forest beginning in early July 2022. We anticipate a large and common camp site to be set up in the Big Red Park Area just north of Steamboat Springs, Colorado. There will be dispersed camping in and around this central location. Expected number of campers is unknown but typical Annual Rainbow Family Gatherings can bring anywhere from 500 to 2,000 people.

We understand there might be concerns about the impacts to cultural and natural resources. Rest assured, we are working to minimize any negative effects to environment as much as possible, including the protection of cultural resources. At present, we are not aware of any cultural or archaeological resources within the known gathering footprint. Multiple staff resources, including law enforcement, will be intensely monitoring the situation.

For more information about the Rainbow Family and their annual gathering on National Forests go to, www.rainbowgatherings.org

If you have questions or concerns, please feel free to reach out to Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6)

Thank you for your attention.

Sincerely,

Russ Bacon

Re: Rainbow Gathering - Routt NF, west of Steamboat Lake

Bacon, Russell -FS <russell.bacon@usda.gov>

Fri 6/24/2022 7:15 AM

To:Johnson, Susan -FS <susan.johnson2@usda.gov>;Crossland, Leslie - FS <Leslie.Crossland@usda.gov>
Cc:Bardsley, Dana -FS <dana.bardsley@usda.gov>;Friel, Breton - FS <breton.friel@usda.gov>

Thanks Susan! We'll work on getting something out today.

Russ

Russ Bacon
Forest Supervisor
Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland
p: 307-745-2400
c: (b)(6)
russell.bacon@usda.gov
2468 Jackson St
Laramie, WY 82072
www.fs.fed.us

Caring for the land and serving people

From: Johnson, Susan -FS <susan.johnson2@usda.gov>
Sent: Thursday, June 23, 2022 11:55 AM
To: Bacon, Russell -FS <russell.bacon@usda.gov>; Crossland, Leslie - FS <Leslie.Crossland@usda.gov>
Cc: Bardsley, Dana -FS <dana.bardsley@usda.gov>; Friel, Breton - FS <breton.friel@usda.gov>
Subject: RE: Rainbow Gathering - Routt NF, west of Steamboat Lake

See attached.

For your consideration...you may use the suggested communication in an email to be sent to each tribal leader and others (THPO,NAGPRA POC) or you may chose to write a letter and send it in an email to each tribal leader and others (THPO,NAGPRA POC).

Each tribe (Ute Tribe, Southern Ute, Eastern Shoshone, Northern Arapaho, Northern Cheyenne) should receive their own semi-personalized notification.

Please call if you have questions.

Susan Johnson
Regional Tribal Relations Program Manager
Forest Service
Rocky Mountain Region
State and Private Forestry and Tribal Relations
c: (b)(6)
susan.johnson2@usda.gov
Pronouns: she, her
1617 Cole Blvd., Bldg. 17
Golden, CO 80401

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Caring for the land and serving people

From: Bacon, Russell -FS <russell.bacon@usda.gov>
Sent: Thursday, June 16, 2022 2:48 PM
To: Johnson, Susan -FS <susan.johnson2@usda.gov>; Crossland, Leslie - FS <Leslie.Crossland@usda.gov>
Cc: Bardsley, Dana -FS <dana.bardsley@usda.gov>; Friel, Breton - FS <breton.friel@usda.gov>
Subject: RE: Rainbow Gathering - Routt NF, west of Steamboat Lake

Susan, thanks for this reminder. Would you be willing to help us identify the right affiliated tribes and some draft language? I'm cc:ing Dana and Brett to loop them in.

Russ Bacon
Forest Supervisor
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Laramie, WY 82072
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Caring for the land and serving people

From: Johnson, Susan -FS <susan.johnson2@usda.gov>
Sent: Thursday, June 16, 2022 8:30 AM
To: Bacon, Russell -FS <russell.bacon@usda.gov>; Crossland, Leslie - FS <Leslie.Crossland@usda.gov>
Subject: Rainbow Gathering - Routt NF, west of Steamboat Lake

Good Morning – reading about the Rainbow update in the news. In years past, we have alerted affiliated tribes of the event for their awareness. One year, when the gathering was slated for the Black Hills, tribes organized and insisted the gathering avoid the black hills as a sacred landscape. As a result of tribal communication and issuing "not welcome to our sacred black hills" messaging about 50% of expected attendance didn't show which was significant. Not suggesting that'll happen again but tribes do care about the impacts on their traditional and cultural estate and archaeology.
I suggest a simple notification email is crafted and sent to the tribal chairs and THPO's from the inbox of FSup or DR. Assure the tribes that there are zero known cultural resources within the known gathering footprint and all measures will be employed to protect the natural environment from fire, human waste, and illegal camping and firewood harvesting (or whatever).
Let me know how I can assist. Thank you for your consideration - Susan
Rainbow Family Gathering, Routt County
Forest Service lands and we don't have any way to stop 20,000 to 30,000 people from doing what they're going to do." The Rainbow Family Gathering is expected to bring people from all over the country to the area that is close to the Wyoming boarder and north of both Slater and California parks....

Happenings at the Gathering

There are many wonderful things that happen at a gathering, but I'll list a few highlights. Remember the concept of "Rainbow Time", and that any semi-scheduled event will start when it starts, and not necessarily by the clock.

July 3rd, Cyberspace Circle

At Info on the 3rd at "Rainbow Noon" here is a circle to discuss cyberspace issues, and how to use this resource in a Rainbow appropriate way.

July 4th, Circle for Peace

Join us for a silent circling of people to pray for world peace. The circle for peace starts at sunrise at main circle, and ends around Rainbow noon after a period of OHMing, and the Kiddie Village Parade!

Talent Show at Granola Funk

For many years there has been a talent show at the Granola Funk Theater. The last few years have been recorded, and tracks are available at this Rainbow Music page.

Susan Johnson
Regional Tribal Relations Program Manager
Forest Service
Rocky Mountain Region
State and Private Forestry and Tribal Relations
c: (b)(6)
susan.johnson2@usda.gov
Pronouns: she, her
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Golden, CO 80401
www.fs.fed.us

Caring for the land and serving people

Re: Rainbow Family of Living Light 2022 Gathering- Eastern Shoshone Tribe

John St.Clair <jstclair@easternshoshone.org>

Fri 6/24/2022 1:33 PM

To:Bacon, Russell -FS <russell.bacon@usda.gov>

Thanks for the heads-up.

On Fri, Jun 24, 2022, 1:05 PM Bacon, Russell -FS <russell.bacon@usda.gov> wrote:

> Chairman St. Clair,
>
> I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.
>
> I want to make it clear that the Forest Service views this gathering as an unlawful and unauthorized event. The Forest Service requires a Special Use permit for every public group of 75 or more people conducting a meeting or event on National Forest System lands. The Rainbow Family has consistently refused to comply with the permit process during national gatherings, since they claim to have no leaders and no one member who can speak for the group or sign a permit on behalf of the Family.
>
> We understand there might be concerns about the impacts to cultural and natural resources. Rest assured, we are working to minimize any negative effects to environment as much as possible, including the protection of cultural resources. At present, we are not aware of any cultural or archaeological resources within the known gathering footprint. Multiple staff resources, including law enforcement, will be intensely monitoring the situation.
>
> For more information about the Rainbow Family and their annual gathering on National Forests go to the Medicine Bow-Routt National Forest and Thunder Basin National Grassland website , Medicine Bow-Routt National Forests & Thunder Basin National Grassland - Land & Resources Management (usda.gov)
>
> If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6)
>
> Thank you for your attention.
> Russ Bacon
>
> Forest Service Shield
>
> **Russ Bacon**
> **Forest Supervisor**
> **Forest Service**
> **Medicine Bow-Routt National Forest and Thunder Basin National Grassland**

p: 307-745-2400
c: (b)(6)
russell.bacon@usda.gov

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USDA Logo Forest Service Twitter USDA Facebook

Caring for the land and serving people

Rainbow Family of Living Light 2022 Gathering- Northern Arapaho Tribe

Bacon, Russell -FS <russell.bacon@usda.gov>

Fri 6/24/2022 1:15 PM

To:jordan.dresser@northernarapaho.com <jordan.dresser@northernarapaho.com>
Cc:lee.spoonhunter@northernarapaho.com <lee.spoonhunter@northernarapaho.com>;benridgely007@gmail.com <benridgely007@gmail.com>;crystal.cbearing@northernarapaho.com <crystal.cbearing@northernarapaho.com>;Crossland, Leslie - FS <Leslie.Crossland@usda.gov>;Johnson, Susan -FS <susan.johnson2@usda.gov>;Woodbridge, Michael -FS <michael.woodbridge@usda.gov>;Milway, Brittany - FS <brittany.milway@usda.gov>;Friel, Breton - FS <breton.friel@usda.gov>;Harris, Russell -FS <russell.harris@usda.gov>;Markin, Hilary -FS <hilary.r.markin@usda.gov>

Chairman Dresser,

I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

I want to make it clear that the Forest Service views this gathering as an unlawful and unauthorized event. The Forest Service requires a Special Use permit for every public group of 75 or more people conducting a meeting or event on National Forest System lands. The Rainbow Family has consistently refused to comply with the permit process during national gatherings, since they claim to have no leaders and no one member who can speak for the group or sign a permit on behalf of the Family.

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For more information about the Rainbow Family and their annual gathering on National Forests go to the Medicine Bow-Routt National Forest and Thunder Basin National Grassland website ,
Medicine Bow-Routt National Forests & Thunder Basin National Grassland - Land & Resources Management (usda.gov)

If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland
at russell.bacon@usda.gov or (b)(6)

Thank you for your attention.
Russ Bacon

Russ Bacon
Forest Supervisor
Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland

p: 307-745-2400
c: (b)(6)
russell.bacon@usda.gov

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Rainbow Family of Living Light 2022 Gathering- Northern Cheyenne Tribe

Bacon, Russell -FS <russell.bacon@usda.gov>

Fri 6/24/2022 1:09 PM

To:serena.wetherelt@cheyennenation.com <serena.wetherelt@cheyennenation.com>
Cc:teanna.limpy@cheyennenation.com <teanna.limpy@cheyennenation.com>;gary.lafranier@cheyennenation.com <gary.lafranier@cheyennenation.com>;thpo@cheyennenation.com <thpo@cheyennenation.com>;Crossland, Leslie - FS <Leslie.Crossland@usda.gov>;Woodbridge, Michael -FS <michael.woodbridge@usda.gov>;Milway, Brittany - FS <brittany.milway@usda.gov>;Friel, Breton - FS <breton.friel@usda.gov>;Harris, Russell -FS <russell.harris@usda.gov>;Markin, Hilary -FS <hilary.r.markin@usda.gov>;Johnson, Susan -FS <susan.johnson2@usda.gov>

Acting President Wetherelt,

I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

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Medicine Bow-Routt National Forests & Thunder Basin National Grassland - Land & Resources Management (usda.gov)

If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland
at russell.bacon@usda.gov or (b)(6)

Thank you for your attention.
Russ Bacon

Russ Bacon
Forest Supervisor
Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland

p: 307-745-2400
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russell.bacon@usda.gov

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Caring for the land and serving people

Rainbow Family of Living Light 2022 Gathering- Southern Ute Indian Tribe

Bacon, Russell -FS <russell.bacon@usda.gov>

Fri 6/24/2022 1:01 PM

To:mjbaker@southernute-nsn.gov <mjbaker@southernute-nsn.gov>
Cc:catencio@southernute-nsn.gov <catencio@southernute-nsn.gov>;gbriggs@southernute-nsn.gov <gbriggs@southernute-nsn.gov>;sthompson@southernute-nsn.gov <sthompson@southernute-nsn.gov>;xwatts@southernute-nsn.gov <xwatts@southernute-nsn.gov>;Johnson, Susan -FS <susan.johnson2@usda.gov>;Woodbridge, Michael -FS <michael.woodbridge@usda.gov>;Milway, Brittany - FS <brittany.milway@usda.gov>;Friel, Breton - FS <breton.friel@usda.gov>;Crossland, Leslie - FS <Leslie.Crossland@usda.gov>;Harris, Russell -FS <russell.harris@usda.gov>; Markin, Hilary -FS <hilary.r.markin@usda.gov>

Chairman Baker,

I would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" started gathering in the Routt National Forest last week. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

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If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6)

Thank you for your attention.

Russ Bacon

Russ Bacon
Forest Supervisor

Forest Service
Medicine Bow-Routt National Forest and Thunder Basin National Grassland

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russell.bacon@usda.gov

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Rainbow Family of Living Light 2022 Gathering- Ute Tribe of Utah

Bacon, Russell -FS <russell.bacon@usda.gov>

Fri 6/24/2022 12:41 PM

To:shaunc@utetribe.com <shaunc@utetribe.com>
Cc:betsyc@utetribe.com <betsyc@utetribe.com>;Johnson, Susan -FS <susan.johnson2@usda.gov>;Milway, Brittany - FS <brittany.milway@usda.gov>;Crossland, Leslie - FS <Leslie.Crossland@usda.gov>;Woodbridge, Michael -FS <michael.woodbridge@usda.gov>;Friel, Breton - FS <breton.friel@usda.gov>;Harris, Russell -FS <russell.harris@usda.gov>; Markin, Hilary -FS <hilary.r.markin@usda.gov>

Chairman Chapoose,

We would like to alert you to an event that is unfolding on the Routt National Forest in Northern Colorado. In recognition of your connection to this landscape please be advised that an organization referred to as the 'Rainbow Family" has started gathering in the Routt National Forest beginning in early July 2022. We anticipate a large and common camp site to be set up in the Adams Park Area north of Hayden, Colorado. There will be dispersed camping in and around this central location. Current estimates indicate there are approximately 1200 campers on site. The expected number of campers at the peak of the gathering is difficult to project, but current projections indicate a potential range between 5,000-15,000 individuals.

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If you have questions or concerns, please feel free to reach out to me, Russ Bacon, Forest Supervisor, Medicine Bow-Routt National Forest and Thunder Basin National Grassland at russell.bacon@usda.gov or (b)(6)

Thank you for your attention.

Russ Bacon

Russ Bacon
Forest Supervisor
Forest Service

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Caring for the land and serving people

Integrated Management Plan
for the
California Park Special Interest Area

Last Update: September 30, 2003

Table of Contents

Introduction

California and Slater Parks are large, high-mountain parks located in the northwest portion of the Routt National Forest, approximately 25 miles North of Hayden, Colorado. The Forest Service designated the California Park and Slater Park areas as a Special Interest Management Prescription Area in the 1997 Routt National Forest Land and Resource Management Plan (USDA Forest Service 1998a). The 1997 Forest Plan designated Special Interest Area's (SIA) because of the important characteristics of particular areas on the National Forest. SIA's were designated because of special biological, geological, scenic and historical values. Several SIA's, such as the Windy Ridge SIA, were designated primarily because of important archaeological sites located in the area. The California Park SIA (CPSIA) was designated primarily because of the important biological diversity of the area.

The 27,877 acre California Park Special Interest Area (CPSIA) received this designation as a result of the areas geological, historical, scenic, and zoological values including the high diversity of threatened, endangered, and sensitive plant and animal species present in the area (USDA Forest Service 1998b). This emphasis on the biological values of the CPSIA is clarified in the Final Environmental Impact Statement of the Forest Plan and was further refined through the development of this management plan in partnership with the California Park Working Group and the Forest Service Interdisciplinary Team.

The Forest Plan direction for this management area states, "**Management Implementation Guidelines will be developed for each SIA to ensure protection of the values for which the area was identified**". Since many of the values for which this area was identified may conflict with existing land uses, it was determined that the development of an Integrated Management Plan would best facilitate the development of the Management Implementation Guidelines and allow for an ecosystem based management approach to addressing the many Special Interest Area values in the area, while striving to meet the multiple use goals for the Forest. The California Park SIA will be managed to protect and enhance the special interest values for which the area was identified.

The California Park Working Group (CPWG) was initiated in response to the need for the development of an integrated management plan to protect the values of the Special Interest Area. The first meeting of the CPWG was held on July 13 1999. The working group is open to the public and has involved Forest Service personnel and individuals from the Colorado Division of Wildlife, Colorado Natural Areas Program, Trout Unlimited, Rocky Mountain Elk Foundation, Native Plant Society, Colorado Natural Heritage Program, Meeker Plant Center, private landowners, Forest range permittees and interested members of the public. The working group met approximately every month from July 1999 to December 2000. The initial process focused on the clarification of the Special Interest Area values. The working group then developed a mission statement and identified the desired future condition.

The subsequent tasks of the working group involved the discussion of each of the individual special interest area values and the identification of the specific existing condition, desired future condition, as well as possible management actions that could move that value towards it's specific desired condition.

The development of this management plan has been complex process, as the factors limiting or impacting some of the special interest area values are interconnected with larger problems. One example of this relates to the vegetation condition in the park. Early on, elk were identified as significantly contributing to the vegetation impacts in the area. Since one goal of the plan was to

explore how to maintain livestock grazing without impacting the sensitive species in the area, it was determined that elk numbers must be reduced to alleviate vegetative impacts and allow for creatively managed domestic grazers to use the area without impacting the values of the area. This lead to proposals that influenced travel managements and two subsequent roads analysis projects complete with extensive public scoping were initiated and completed for both the Elkhead Mountain and Slater Creek Geographic Areas. Exploring the interconnected problems in a working group setting to the many individual and integrated goals of the Special Interest Area has been an important aspect of developing this plan.

Achieving and maintaining the Desired Future Condition of the CPSIA will require a continued focused effort by the Forest Service and members of the California Park Working Group. This integrated management plan will serve as a guide, by establishing management implementation guidelines and proposed actions, for moving from the existing condition to the Desired Future Condition (DFC). As management actions are implemented and monitored, and as new information is collected, adaptive management will be used to ensure that desired conditions are within the capability of the land. Through the project specific implementation of management actions designed to move the CPSIA towards the DFC, follow-up project monitoring and continued annual meetings of the CPWG and Forest Service interdisciplinary team, this management plan will continue to be updated as needed.

This management plan is not a decision document but rather it is a planning document. This plan was developed to provide additional specific guidance in the CPSIA to ensure that the Special Interest Area values are appropriately managed and protected. The implementation of specific management actions will require appropriate analysis as required by the National Environmental Policy Act (NEPA), appropriate public scoping and a decision document prior to implementation.

California Park Special Interest Area Values

Biological Values

- **Greater Sage-grouse and Columbian Sharp-tailed Grouse**
- **Greater Sandhill Crane**
- **Boreal Toad**
- **Colorado River Cutthroat Trout**
- **Slater Park Macro Preliminary Conservation Planning Area**
- **Limber Pine**

Geological Values

- **Sulphur Springs**
- **Land Forms and Soils**
- **Paleontological Resources**

Historical Values

- **Prehistoric Archaeological Values**
- **Homesteads and Cabins**
- **Historic Stock Driveways and Domestic Livestock Grazing**

Scenic Values

- **Unusual High Elevation Shrub-steppe Park**
- **Aspen Forests**

Note: Detailed descriptions of Special Interest Area values begin on page 34.

Figure 1. Routt National Forest California Park Special Interest Area Vicinity Map

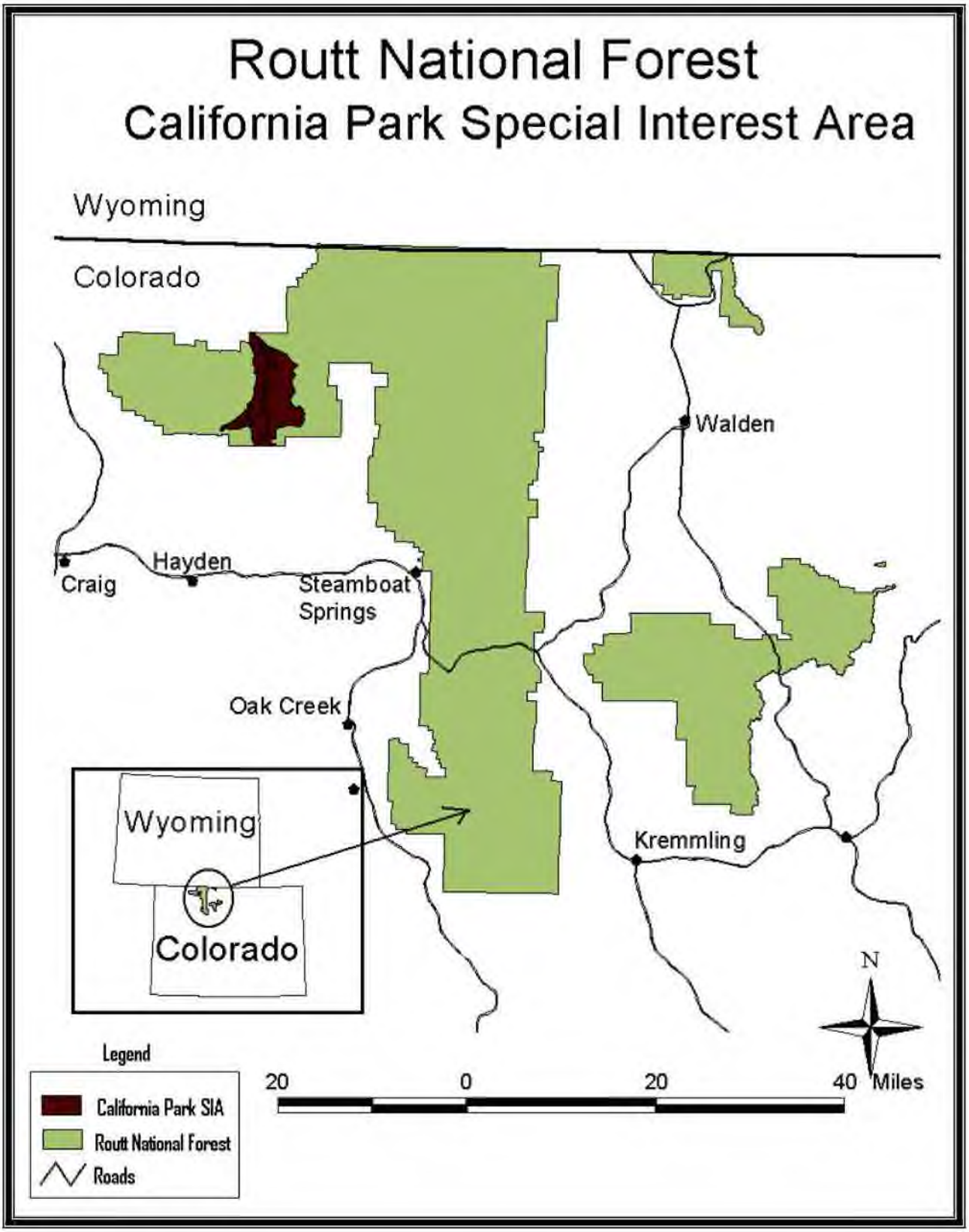
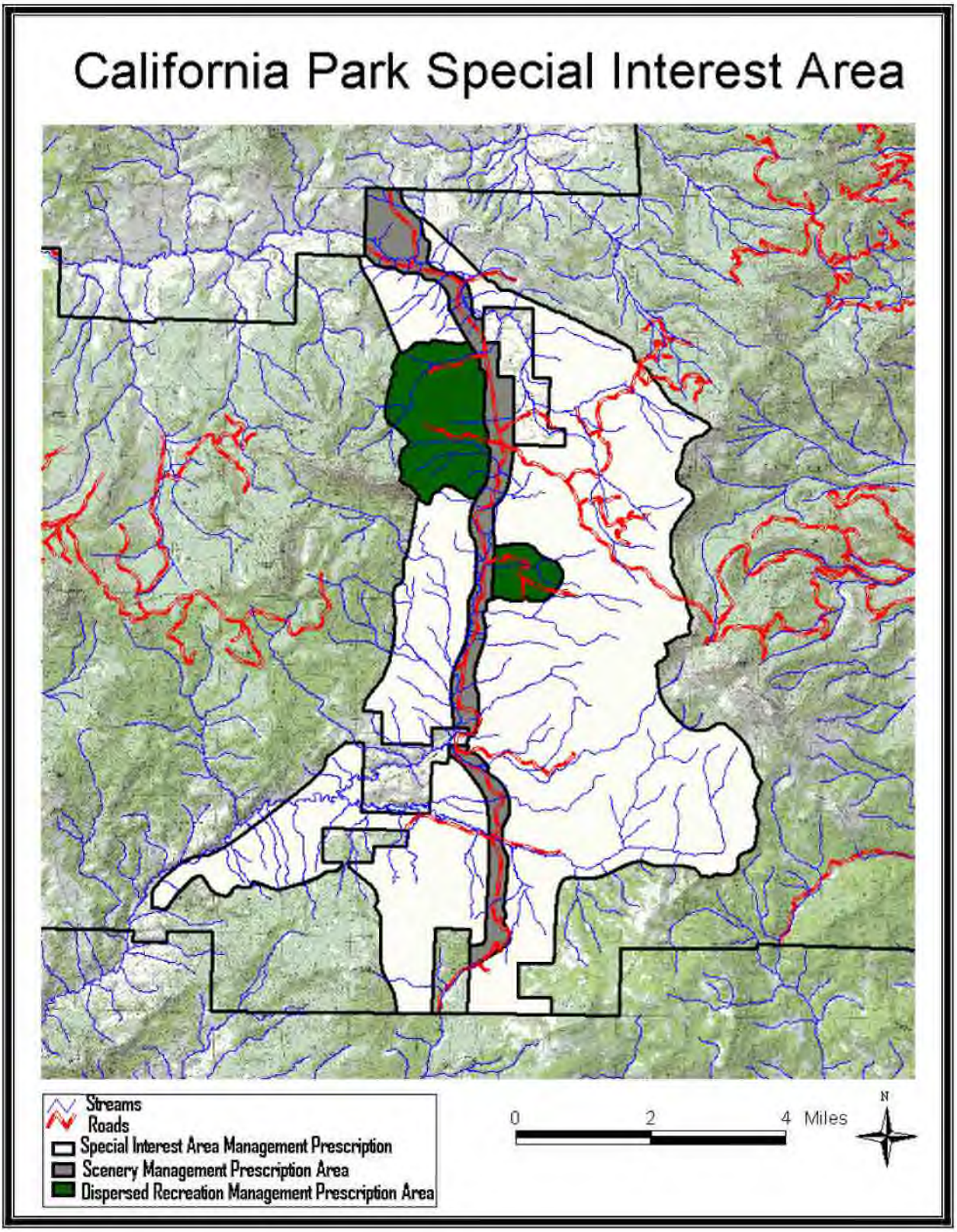


Figure 2. California Park Special Interest Area



Mission Statement

Within the California Park Special Interest Area, restore and maintain a healthy and properly functioning ecosystem, using an integrated approach to emphasize biodiversity conservation and compatibility with the values designated for the Special Interest Area.

Desired Future Condition

The physical, chemical, and biological values and integrity for which the CPSIA was identified would be protected and maintained. Habitats would be managed and restored to quality native communities. Habitat conditions would be suitable for maintaining and increasing viable populations of Columbian sharp-tailed grouse (*Tympanuchus phasianellus columbianus*), greater sage-grouse (*Centrocercus urophasianus*), greater sandhill cranes (*Grus canadensis tabida*), boreal toads (*Bufo boreas boreas*), and Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*). Plant communities in the CPSIA would contain a diversity and high density of desirable vegetation including deciduous and non-deciduous shrubs, grasses, and forbs that are native to the particular plant community. The forage quality would be of high value. Invasive and noxious plant species would be managed to protect and enhance the quality and diversity of desirable native plant communities. The open parklands within the SIA would have a 15-35% sagebrush canopy maintained in a mosaic, interspersed with bunchgrasses and forbs native to the sagebrush type. The potential and quality of streams and riparian areas in the CPSIA are limited because of the nature of local geology and soils; however, these areas would be maintained and restored to a properly functioning status within these natural constraints. Stream banks would be stable with sediment and water loading in balance. Riparian vegetation would be dominated by vigorous perennial vegetation of desirable species. The Elkhead watershed would have channels that would be narrower and deeper than found in 1999. In some locations, primarily lower Elkhead, Slater and First Creeks, measures would be taken to reduce the impacts of grazing by both wildlife and livestock. Large herbivores (elk, deer, moose, cattle and sheep) would not negatively impact any of the SIA values or habitats.

Vegetation, terrestrial and aquatic habitats, soil productivity, and water quality would appear natural. Natural processes such as fire and insect and disease outbreaks would generally be allowed to influence forest vegetation where compatible with the SIA values. Vegetation manipulation would only be used to maintain or restore natural conditions, to protect threatened, endangered, and sensitive species, or to protect other values for which the SIA was identified. Rangeland and riparian communities would occur in a mix of seral stages, but predominantly in upper mid-seral to late-seral stages of development.

Attractive and unique features of the CPSIA would be unaltered, providing for an increased opportunity for interpretation and education about historical, cultural, biological, and physical resources of the area. There would be opportunities for interpretation and education emphasizing the protection and conservation of threatened, endangered and sensitive species, sensitive habitats, and overall biological diversity within the CPSIA. Recreational management would focus on interpretation, education, inspirational activities, and protection of CPSIA values. Facilities would be present to the extent needed to maintain the area or facilitate visitor use of the area. Where appropriate, management emphasis may include developing and interpreting areas of unusual characteristics for public education and recreation. All cultural and paleontological resources in the CPSIA would be identified, recorded, evaluated for significance, and assessed for effects.

Forest Plan Consistency Review

The California Park Special Interest Area is located within both the Elkhead Mountain and Slater Creek Geographic Areas as designated in the 1997 Land and Resource Management Plan for the Routt National Forest (Forest Plan). The Forest Plan establishes general goals and desired future conditions for the geographic areas and then more specific desired conditions for the management prescription areas. Forest Plan Standard and Guidelines guide management actions and can be general, applying to the entire forest or specific to Geographic and Management Prescription areas. Goals, desired future conditions and Forest Plan Standards and Guidelines for the CPSIA at the Geographic Area level and for the Management Prescription Area are identified in this section.

The Elkhead Mountain Geographic Area
The CPSIA (2.1 prescription area) is 25% of this geographic area and includes 17,730 acres.
Geographic Area Desired Condition

- The geographic area desired condition is to maintain the aspen, spruce/fir, shrub, and grass/forb communities as the dominant cover types. The area will be characterized by large aspen stands. Shrub and shrub-steppe communities will continue to provide habitat for wildlife.
- The areas seen from Forest roads 110 and 150, sites within the CPSIA will have a natural scenic appearance.
- The geographic area will provide year-round motorized and non-motorized recreation opportunities, with the heaviest use in fall and winter.
- A low motorized travelway density will provide access primarily for timber and grazing uses and for dispersed recreation.

The Slater Creek Geographic Area
The CPSIA (2.1 prescription area) is 8% of this geographic area and includes 5,221 acres.
Geographic Area Desired Condition

- The geographic area desired condition is to maintain the spruce/fir, aspen, and lodgepole pine as the dominant cover types.
- The Little Snake River drainage will continue to provide habitat for Colorado River cutthroat trout.
- The geographic area will provide year-round motorized and non-motorized recreation opportunities, with the heaviest use in fall and winter.
- High quality dispersed motorized and non-motorized recreation opportunities will be available year round.
- A low to medium density system of forest roads will provide access primarily for timber and grazing uses and for dispersed recreation across most of the area.

Unique Features of the Slater Creek Geographic Area

- The Slater Park Macro Preliminary Conservation Planning Area.

Forest Plan Standards and Guidelines for Special Interest Areas

General

Standard
1. Protect and manage the biological diversity, geological, historical, paleontological, or other values for which the SIA was identified.

Minerals

Standard
1. Withdraw SIAs from entry for locatable minerals in conformance with Section 204 of Federal Land Policy and Management Act of 1976 (PL 94-579) when withdrawal is necessary to protect the values for which the area was identified.
2. Allow oil and gas leasing with controlled surface-use stipulation, unless further restricted by other conditions in the SIA.

Range

Guideline
1. Allow livestock grazing if it does not conflict with, or negatively impact, the values for which the area was identified.

Vegetation

Standard
1. Use only those vegetation management practices necessary to meet specific resource objectives of maintaining or restoring the values for which the SIA was identified. Timber harvest is not scheduled and does not contribute towards the allowable sale quantity.

Fire and Fuels

Standard
1. Use direct control, perimeter control, or prescription control as the wildland fire management strategy in this Management Area.

Guideline
1. Wildland fire will be allowed to naturally influence vegetative communities, except when incompatible with maintaining and protecting the values for which the SIA was identified. Wildland fire control measures may be used to protect SIA values.

Recreation

Standard
1. Allow recreational use emphasizing interpretation and education when it does not threaten the values for which the area was identified.

Guidelines
1. Manage for an ROS class of semi-primitive nonmotorized, semiprimitive motorized, or roaded natural.
2. Use restrictions or closures available under 36CFR 219, Subpart B, when necessary to protect the area from actual or potential damage due to public use.

Visuals

Guideline
1. Meet the adopted visual quality objective of retention.

Special Uses

Standard
1. Authorize scientific activity or other activities that are compatible with the SIA's values through special-use permits. The permits will have terms that protect or enhance the area.

Transportation

Guidelines
1. Construct new roads only when consistent with SIA values, such as interpretation or education, or to meet other resource objectives that will not negatively impact SIA values.
2. Minimize and mitigate resource damage occurring from existing roads or trails.

History of the California Park Area

Prehistoric Overview

The prehistoric occupation of the Routt National Forest (RNF) appears to have been fairly continuous, if not intensive, from at least 11,000 years before present (B.P.) until historic contact with the Ute and Arapaho.

The earliest evidence of human activity in north-central Colorado comes from the Paleoindian period, commonly defined as lasting from approximately 11,500 to 8,000 years B.P. Paleoindian lifeways are thought to have been largely dependent on big game hunting, especially during the late Pleistocene and early Holocene when megafauna still existed.

The Archaic period spans the time period from approximately 8,000 to 2,000 or 1500 B.P. Archaic lifeways are poorly understood, but are believed to have been highly adapted to the environmental conditions of a particular region. Hunting and gathering remained the exclusive method of subsistence.

The Late Prehistoric period witnessed the introduction of the bow and arrow into hunting tool kits, as well as the limited use of ceramic vessels, into the mountains of northern Colorado. Many desert side-notched ("Ute") arrow points, as well as Plains-style arrow points, have been located on the RNF. Ceramic sherds are not common, but a few sherds of utility ware have been found on the forest.

The Ute occupied the RNF for at least 300 to 400 years, and may have migrated to this area as early as A.D. 1300, based on linguistic evidence (Miller 1986). The Arapaho, Shoshone, Cheyenne, and possibly Kiowa, utilized the mountains of this area to a lesser extent until the 1700s. After 1810, the Ute and Arapaho competed over hunting territory (Hughes 1977:36). In 1879 the White River, Yampatika, and other Ute bands were forcibly removed from their traditional lands and placed on the Northern Ute Reservation in Utah.

American Indian use of California Park is evident in the archaeological sites already identified in the area. In addition, Ute traditional tribal knowledge identifies California Park as a location for gathering native edible plants.

Historic Overview

Historical themes in the California Park region include the fur trade, early exploration, homesteading, commercial timber operations, mining, grazing, and recreation and tourism (Mehls 1984).

Trapping

For the mountains of north-central Colorado, the historic period begins in the early to mid-1800s, when Euroamerican explorers first began to venture into the area. Unfortunately, most of the earliest Euroamericans in the area were explorers and trappers who left little trace of their visits. Because of the demand for pelts in the early 1800s, several men explored the country around the Green and Yampa River valleys for beaver and game. By the mid-1800s the beaver and big game population had been severely impacted by the trapping industry. The paucity of resources, in addition to a decreased European demand for imported fur, caused the fur trade to decline, and in 1844 Fort Crockett in Utah was abandoned. A few trappers, however, clung to their way of life in northwestern Colorado as late as 1878. Ben Lackey was an early trapper in the area and the one to give California Park its name.

Early Exploration

Exploration and mapping for the U.S. government, in connection with the Louisiana Purchase, or simply for adventure, brought a wider range of people to the west. Although the region was opened for exploration after the Louisiana Purchase of 1803, many of the earliest explorers in northwestern Colorado did not arrive until the early 1830s.

The discovery of gold in 1859 near Denver brought flocks of Easterners to the state. This, in turn, brought more intense exploration of the parks and valleys surrounding what is now the RNF. In 1871, Dr. Ferdinand V. Hayden was hired by the United States Geological Survey (USGS) to provide detailed descriptions of the geology, topography, flora and fauna of Middle Park. Some of Hayden's maps provide important information about place names in the area circa 1877. Hayden's party concluded that North Park, the Yampa Valley, Egeria Park and the Little Snake River Valley all had agricultural potential.

Settlement

Settlement in the area occurred in the late 1800s to the early 1900s. Most of the first settlers were trappers, followed by homesteaders and ranchers. Edward House's ranch is shown on the 1882 General Land Office plat just south of Elk Head Creek and another unnamed ranch is nearby. Historic maps depict many unnamed cabins and ranches in the park during the late 1800s and early 1900s.

A Mr. Adams was a hide hunter operating in Slater Park in 1886. Settlers lynched him and his German partner because of their devastating hunting practices. Herbert Jones was a homesteader in 1910. He opened a small country store and operated the Elk Head Post Office south of California Park. Mr. Jokodowski was a bachelor-homesteader that wintered in California Park in 1907. Neighbors remember him communicating across the park with flashing lanterns though by 1917 telephone lines were in the area. The remains of his cabin burned down several years ago.

Another homesteader in the area was Ed Knowles. His cabin still remains south of the California Park Guard Station. Brothers Dan, Chris, and Ira Stukey operated several sawmills and gold mines in the county and Stukey Creek was named after them.

Early homesteaders are reported to have grown hay (timothy) in the California Park Area.

Mining

The discovery of gold at Hahns Peak brought miners to Routt County as early as the 1860s. Unlike Hahns Peak and other areas in the general region, California Park was of limited interest to early miners exploring for precious metals. Instead, coal deposits were more heavily explored. Anthracite Ridge contains high grade coal versus the lower grade bituminous coal deposits found further west. Bob Perry opened a mine in 1925 for the development of anthracite coal. The mine was only in operation for three years employing ten people before it had to close, largely because of transportation problems. On the east side of Pilot Knob, the Block Mine was started in 1902 by Fred May and Thomas R. Ducey. The mine was in operation until the 1940s producing a cubed half anthracite and half bituminous coal extraction.

Recreation

Recreational use has a long history in the California Park area. Theodore Roosevelt frequented the area during the 1890s as part of his many hunting expeditions. He popularized the 28,000 acres as a famed hunting spot during that era.

National Forest

President Theodore Roosevelt designated the Park Range Forest Preserve in 1905, three years later he changed the name to the Routt National Forest. Right from the beginning the Forest Rangers had to manage hunting, ranching, logging, mining, and farming in California Park. A guard station was built south of First Creek to house the rangers working so far from the towns. This guard station is marked on 1919 and 1921 maps. By 1932, the old California Park Guard Station was no longer on the map but a new one is shown a few miles north of the old site. The later site is marked on the 1932 Forest map and subsequent maps, indicating that the location of the guard station was moved between 1921 and 1932.

Grazing

Livestock ranching proved to be the most important long-term economic activity in the north-central portion of Colorado. Although the imminent failure of the mines prompted many early settlers to begin raising livestock, it was some time before crops and methods suitable to the basins and high alpine meadows of northern Colorado were developed (Mehls 1984a). The short growing season and variable precipitation patterns of the region dictated that the most successful agricultural product was hay--not only for cattle, but also for the horses and mules utilized in the region's mining camps.

Once the Union Pacific opened lines in southern Wyoming, cowboys were able to ship cattle westward to untouched grazing lands. Soon after, ranchers moved herds to the Little Snake, Yampa, and White River valleys, as well as into North Park. During the heyday of ranching in the 1880s, 1890s, and early 1900s, the ranges were open and ranchers followed a pattern of seasonal land use, letting their herds roam free in the high mountain valleys and meadows during the summer and bringing them back to lower elevations during the winter (Athearn 1982).

The initial success of beef producers in north-central Colorado was tempered by several important factors. Cattle ranchers feared the introduction of sheep in the early 1900s, because of the inevitable competition for grazing lands. Sheep were already in southern Colorado and the San Luis Valley in the 1860s, but it was not until 1890 or 1891 that the first sheep came into northwestern Colorado, driven by sheep rancher Johnny Wilkes from Wyoming.

Additional pressure was put on the sheep and cattle industries after the establishment of the National Forests in 1905. Much of the land that previously had been grazed was withdrawn as timber reserve land and, in addition, herders and ranchers were required to apply for grazing permits. The permits decreased the unregulated grazing, but still allow substantial grazing numbers. In 1907, Wyoming sheep were allowed to graze on the RNF. Up until 1925, eighty percent of the sheep on the Routt were from Wyoming because there were no resident sheepmen in northwestern Colorado.

The California Park and Slater Park basins were used for summer grazing thousands of cattle by many of the large cattle outfits. California Park served as a round up area. The Beef Trail was started around 1870 and thousands of cattle were trailed from the Little Snake River Valley through Slater Park, California Park, Steamboat Springs, Yampa, and Toponas, all the way to Wolcott for shipping every

year. Livestock grazing use was unregulated until the Forest Service began issuing permits in 1905. In 1917, the first sheep were grazed in California Park and the 1921 General Land Office plat shows the Bears Ears and Sand Mountain Sheep Trail, and the Hahns Peak and Slater Park Trail crossing the park. Sheep were first officially permitted on National Forest around California Park in 1923. Ultimately, the Forest Service realized that its lands were inundated with livestock and in the 1920s began to seriously monitor the effects of grazing on the land.

The earliest records of permitted use date from the mid to late 1920s. Eight allotments were originally designated within the area now part of the California Park SIA. Management of the permits since 1923 has decreased the allotments to 7 and has substantially reduced stocking numbers of cattle and slightly reduced numbers of permitted sheep.

Summary of Historic Permitted Livestock Use

California Park Unit

Year	Stocking Rate	Season
1925	1200 c/c	6/1 – 10/31
1926-27	2600 c/c	7/1 – 9/30
1928-32	1200 c/c	7/1 – 9/30
1933-39	450 c/c	7/1 – 9/30
1940-42	385 c/c	7/11 – 9/30
1943-45	385 c/c	7/1 – 9/20
1946-48	385 c/c	7/6 – 9/25
1949	256 c/c	7/6 – 9/25
1950-66	125 c/c	7/6 – 9/25
1967-89	265 c/c	7/6 – 9/25
1990-present	*400 c/c	7/6 – 9/25

* Additional numbers of livestock permitted attributed to private land that was acquired by the Forest Service in a land exchange.

Stukey Creek Unit

Year	Stocking Rate	Season
1928-38	no records of permitted numbers or season	
1939	1100 e/l	7/1 – 9/30
1940-44	1160 e/l	7/1 – 9/20
1945-46	1160 e/l	7/11 – 9/20
1947-49	1100 e/l	7/11 – 9/20
1950-present	990 e/l	7/11 – 9/20

Saddle Mountain Unit

Year	Stocking Rate	Season
1928-38	no records of permitted numbers or season	
1939	1200 e/l	7/1 – 9/30
1940-69	1200 e/l	7/1 – 9/20
1970-present	1000 e/l	7/1 – 9/20

Meaden Peak Unit

Year	Stocking Rate	Season
1928-39	1250 e/l	7/1 – 9/30
1940-45	1250 e/l	7/1 – 9/20
1946-75	1250 e/l	7/6 – 9/15
1976-78	1100 e/l	7/6 – 9/15
1979-present	1000 e/l	7/6 – 9/15

Sand Mountain Unit

Year	Stocking Rate	Season
1928-38	no records of permitted numbers or season	
1939-44	1170 e/l	7/1 – 9/20
1945-49	1000 e/l	7/1 – 9/15
1950-present	1000 e/l	7/16 – 9/20

East Quaker Unit

Year	Stocking Rate	Season
1928-39	1200 e/l	6/16 – 9/30
1940-47	1200 e/l	6/25 – 9/15
1948-49	1097 e/l	6/26 – 9/15
1950-present	1000 e/l	7/6 – 9/20

Note: actual use rarely on before 7/1

First Creek Unit

Year	Stocking Rate	Season
1928-38	no records of permitted numbers or season	
1939	1170 e/l	7/1 – 9/30
1940-44	1250 e/l	7/1 – 9/20
1945-49	1080 e/l	7/1 – 9/20

NOTE: This unit was combined into Sand Mountain and East Quaker Units in 1950. The total stocking on the allotment complex was reduced by 1 band, formerly permitted on the First Creek Unit.

Armstrong Creek Unit

Year	Stocking Rate	Season
1924-1927	no records of permitted numbers or season	
1928-39	1250 e/l	7/1 – 9/30
1940-42	1250 e/l	7/1 – 9/20
1943-44	1250 e/l	7/6 – 9/15
1945	1250 e/l	7/6 – 9/20
1946	1250 e/l	7/1 – 9/5
1947-present	1250 e/l	7/6 – 9/20

History of Vegetation Treatments

Manipulation of the rangelands began in 1940 in California Park for the purpose of decreasing shrub cover and increasing palatable grass forage for livestock. These manipulations consisted primarily of reseeding and herbicidal spraying, and were continued until the late 1980's. Most of the projects focused on reducing mulesear (*Wyethia amplexicaulus*) and sagebrush (*Artemisia tridentata and A. cana*) to increase the grass component and forage quality for livestock. A summary of the projects follows:

Year	Acres	Project
1940	115	Reseeding
1951	100	Proposal to reseed with smooth brome, timothy, and intermediate wheatgrass.; in Sec.22, T.9N., R.87W., south of First Creek.
1952	245	Sprayed with 2,4,5-T primarily to reduce wyethia, but also killed big and silver sagebrush in California Park.
1953	333	Sprayed with 2,4,5-T; in California Park.
1954	550	Sprayed with 2,4,5-T in California Park; mostly in Cal Park Unit, but some acres in Meaden Peak and Saddle Mtn Units, with a few acres in Armstrong Creek, East Quaker, and Stukey Creek Units.
1957	285	Aerial sprayed with 2,4-D primarily for wyethia and sagebrush; in First Creek vicinity.
	112	Aerial sprayed with 2,4-D primarily for wyethia, sagebrush, and snowberry; in Stukey Creek vicinity.
	694	Aerial sprayed with 2,4-D primarily for sagebrush, and a little wyethia; in Jokodowski Mesa vicinity.
	368	Aerial sprayed with 2,4-D primarily for wyethia; in Saddle Mountain vicinity.
1962	1320	Aerial sprayed with 2,4-D primarily for wyethia and sagebrush.
1963	1152	Aerial sprayed with 2,4-D primarily for wyethia and sagebrush.
1964	1405	Aerial sprayed with 2,4-D primarily for wyethia and sagebrush.
1981	40	Mechanical treatment (mowing, flailing, ripping, reseeding, fertilizing) of wyethia; E. Armstrong Crk
1982	884	Aerial sprayed with 2,4-D primarily wyethia
1987	175	Ground sprayed with 2,4-D primarily wyethia

See Appendix H for a description of recent vegetation management projects.

Repeat Photography of Historic Photo Points

First Creek - 1907

First Creek – 1998

In the 91 years that passed between the taking of these two photographs several changes in vegetation can be observed. Willow density has decreased resulting in higher stream velocities and stream widening. Sagebrush cover has decreased as well. The aspen clone in the upper right portion of the 1998 photograph has expanded to some degree. The 1998 photograph was taken by Allan C. Jones

Elkhead Range Exclosure 1951

Elkhead Range Exclosure 1998

The most striking change that has occurred in this rangeland exclosure over the 47 years between the two photographs is the decline of upland bunch grasses (Thurber fescue). The 1998 photograph was taken by Allan C. Jones.

Existing Condition

Rangeland Vegetation

Historically, in the late 1800's and early 1900's, sheep and cattle grazed the California Park area intensively. A major stock driveway known as the Beef Trail was used to move livestock between Wyoming and the Yampa Valley by way of California Park. Livestock numbering in the tens of thousands utilized this travel way with some the stock remaining in California Park for the summer.

In the early 1900's several homesteads were established in the park. With these homesteads came attempts to manipulate the existing vegetation. Forage crops such as timothy were planted and sagebrush was cleared. This and later attempts by the Forest Service to treat Wyethia amplexicaulis (mules ear) with herbicide has removed some of the native vegetation. An increase of non-natives like smooth brome and timothy is evident in the park along with less desirable natives like tarweed and Wyethia.

The current grazing activity (elk, cattle and sheep) is in the process of being analyzed to determine the impacts to vegetation in riparian and upland sites. There are currently six sheep allotments and two cattle allotments, all or portions of which are contained within the CPSIA. The California Park cattle allotment is permitted for 400 cows with calves; the Stewardship allotment is permitted for 350 cows with calves. The sheep allotments are permitted for 1000 ewes with lambs. Livestock enter the allotments during the first week of July and leave by the end of September.

The combination of elk use in May and June followed by sheep and cattle has impacted some areas of riparian and upland vegetation. Monitoring done during the summer of 2003 revealed that browsing on willows is prevalent along First Creek and Elkhead Creek below CR 150. The majority of this use is not occurring during the summer but during the fall and spring and can likely be attributed to elk. Increased sedimentation, bank trampling, stream widening and decreased riparian plant vigor are occurring in some areas. This can be attributed to several factors. The soils in California Park are highly erosive and soil movement and erosion are common in both riparian and upland areas. Cracking and sloughing of upland soils can be readily seen. Beaver activity in First Creek and Elkhead Creek is extensive and dams are numerous. Each spring the run-off washes many of the dams out scouring the drainage and leaving cut banks and areas of bare soil. Bank trampling from elk, cattle, and sheep compounds the problem of establishing vegetation on the banks. These impacts can deteriorate habitats for Colorado River cutthroat trout, boreal toads, northern leopard frogs, Columbian sharp-tailed grouse and sandhill cranes.

Upland sites consist of two main vegetation types; sagebrush/bunchgrass plant communities and aspen/forb communities. These areas provide forage and cover for wildlife and forage for livestock. Monitoring conducted during the summer of 2003 showed some areas of heavy use in both of these vegetation types. Areas of primarily south facing slopes where snow melts earlier had numerous elk pellets and heavy use on vegetation. Later in the season domestic livestock may continue to graze these same areas. Sheep and cattle use overlaps in some areas of the park. There are no fences to separate the different allotments. Although this is beneficial from an aesthetic standpoint, it can result in over utilization of forage when animals stray outside the boundaries of one allotment into another. It is likely that overuse by livestock and elk in some areas has contributed to decreases in desirable forbs and aspen regeneration. Similarly, overuse in the sagebrush communities can be detrimental to Columbian sharp-

tailed grouse habitat.

An environmental assessment is scheduled to address the impacts of grazing by wildlife and livestock. This document will address alternatives to management of grazing in California to move vegetation towards desired condition and protect the Special Interest Area values.

Most of the aspen is typed as aspen/tall forb (after Mueggler 1988) since no one or two species dominate an entire stand. Instead, 6-8 species are common throughout, shifting in relative abundance across the area in a mosaic pattern. Although most of the aspen stands were lumped under this type, the palatable tall forbs are rarely abundant. Horsemint, groundsel, meadowrue, granium, thermopsis, wildrye, and brome frequently dominate the understory, while ligusticum, cow parsnip, and sweet anise are rarely abundant. These observations are in marked contrast to the paced transects done on the allotments in the past, when ligusticum, cow parsnip, and sweet anise comprised 20-30 (and sometimes 40) hits per transect. Most of the aspen not typed as aspen/tall forb is the aspen/bracken fern type. Where bracken fern occurs it dominates all other understory species; however, these patches are small.

Aspen stands in the area have the potential to be either relatively stable or in a successional stage to climax as conifer stands (Mueggler, 1988). It appears that both situations are occurring in the area. In the successional aspen stands, as conifer cover increases, herbaceous and shrub cover often decreases. This becomes most pronounced when the conifer overstory is 15% or more of the overstory basal area (Meuggler, 1988).

Although the aspen understory is changed, percent ground cover is good. The open parks, on the other hand, have a high percentage of bare ground. This occurs at all elevations, but is especially prevalent in slumpy areas and old burns at the higher elevations. Almost every allotment has areas of significant trailing.

Shrub-steppe shrub species such as sagebrush, snowberry, and rabbitbrush are still in overall abundance in the parklands. However, these shrubs are lacking or nonexistent in some areas that were heavily sprayed historically, but appear to be returning naturally. Upland shrub species like chokecherry, serviceberry, maple, and oak are rarely encountered. When seen, these plants are old, decadent, and severely hedged.

In the riparian areas, willows are few and the dominant herbaceous vegetation is sedge rostrata and bluejoint reedgrass. Few, if any, forbs are noted in riparian areas. The only exception is Canada thistle which is prevalent in both riparian and upland sites. Willow species include booth, drummond, whiplash, scouler and geyer. Alder is found at higher elevations.

Data from existing and historic vegetation monitoring transects are on file in the Rangeland Management Department of the Steamboat Springs Forest Service Office.

Allotment Inspection Notes:

Allotment inspections were conducted in 1996 by Forest Service range personnel to verify and/or correct vegetation typing made or revised in the late 1950s and early 1960s. The 6 sheep allotments (Saddle Mountain, Meaden Peak, Armstrong Creek, Sand Mountain, East Quaker, and Stukey Creek) were

inspected. The California Park cattle allotment was not inspected. The new type maps are based on community types (existing vegetation) rather than habitat types (potential vegetation).
In general, community types observed in 1996 did not correlate well with the old type maps; little similarity was noted between existing conditions and the types designated by the old maps. Comparison between historical data and existing conditions indicates a shift in aspen understory from highly palatable forbs (ligusticum, sweet anise, and cow parsnip) to forbs of lower palatability (coneflower, horsemint, meadowrue, groundsel), and to grasses such as wildrye, brome, timothy, and needlegrass. Aspen regeneration was also found to be uncommon.

Elk were seen on every allotment evaluated, and the inspections indicate that elk populations are rising throughout the area. On some of the allotments the grazing pressure from elk in early summer is so great that they have left little forage for use by sheep later in the summer. Although there are no quantitative measurements of the amount of grazing that occurs from elk, elk are contributing significant grazing pressure to many of the units in the California Park Allotment Complex.

Saddle Mountain Unit

Many elk were observed during inspection of this allotment. Initially all evidence of grazing was thought to be sheep-related, but it was later thought that much of it could have been due to elk, especially in the area west of Circle Creek. Streams on the allotment were mostly dry. The area north of Saddle Mountain had much more cow parsnip, ligusticum, and sweet anise than the aspen range to the south, and the old typing of sweet anise/brome or ligusticum/meadowrue could be considered valid. It did not appear that sheep graze the top of Saddle Mountain, especially the western side. The area was not inspected to verify the typing, but the difficulty of accessing the area through the dense spruce-fir leads one to believe the sheep do not go there. It may be used by a band to the west, however; past inspection notes make reference to trespass there. Circle Creek and the surrounding area in Section 34 is in poor condition. Bare ground, tarweed (*Madia glomerata*), and mulesear are prevalent. Part of this is due to slumping from the northeast. This slumpy area is typed as mulesear/tarweed on the map. Areas of Elkhead Creek throughout the allotment exhibit unstable banks.

Meaden Peak Unit

The large pond in Section 26 has decadent and hedged chokecherry *(Prunus virginiana)* and serviceberry (*Amelancheir alnifolia*) bushes on the slopes surrounding it. Trailing is evident at this pond. The only other place those shrubs are noted is in the SENW Section 2, north of Knowles Creek. Again, the willows are hedged and decadent. Booth, drummond, and whiplash willow (*Salix spp.*) were found at the lower elevations and were replaced by alder at higher elevations. Coneflower is uncommon in this allotment, and the grass component is higher here than on Saddle Mountain or Stukey Creek Allotments. A small park in the SWNE of Section 1 has oatgrass spp. and Thurber fescue in the drier parts; this is the only place on the allotment these species were seen. Tall, palatable forbs are less prevalent than on Saddle Mountain Unit. Cow parsnip and ligusticum were seen only in one area, just north and east of the California Park Guard Station. Sweet anise was also noted between Torso and Knowles Creek in the western part of Section 2.

Armstrong Creek Unit

The aspen north of Armstrong Creek are becoming encroached with conifer. Although the

forage base in this area is not absent, it is likely that as encroachment continues it will reduce available forage on the allotment. This area is mapped as Potr/Ptaq and Abla-Potr/Tall Forb. The previous inspection showed this area as 10-HER-LIG, which is no longer accurate. An area of significant trailing and erosion was noted in the NENE of Section 13 at Armstrong Creek. Higher elevation parks have poor species composition and significant bare ground. Bare ground, poor species composition, and erosion were prevalent here. This allotment had more bracken fern than Stukey Creek, Saddle Mountain, or Meaden Peak. It was dense in some areas, but also was mixed with other species of the tall forb guild. Although capacity estimates should be reduced on sites mapped as Potr/Ptaq, the area is still utilized by sheep and does have some forage for livestock.

Sand Mountain Unit

This allotment was difficult to access and the topography of the allotment makes sheep movement rather difficult as well. The allotment is dissected by fairly steep stream courses, and First Creek forms a definite barrier between the southern 1/5th of the allotment and the northern portion. Open parks with bare ground and scattered scouler willow were common (Sections 19 and 20, north of First Creek). The grass component on this allotment was higher than on any of the other allotments inspected, although it did not warrant a type change from Potr/Tall Forb. The southwest corner of this allotment is the old Beef Trail used to take cattle out of the park around the turn of the century. There is a road along the southeastern border of the allotment, which was apparently a oil exploration road. This road and the drill pad are sown to crested wheat and are heavily grazed. It appeared to currently be used as a sheep trail, but it is unknown if bands other than the Sand Mountain band use it.

East Quaker Unit

The main road through California Park cuts through the middle of this allotment and it is one of the only sheep allotments in the park which is accessible to motorized vehicles. Many hunters and camps were seen. The southern boundary of the allotment is not fenced. It is the forest boundary and abuts private land. It was unknown if there is an agreement for the sheep to utilize the private land, but they certainly are. The topography is relatively flat with water close to or on the boundary. Conifer encroachment on the eastern half of the allotment has progressed significantly since the last analysis, however a timber sale was in progress in Section 35 at the time of the inspection. Conifer encroachment and the reduction of quality aspen and palatable understory species should continue to be assesed using newly available aerial photos and ground monitoring. Three areas in the allotment still show the effects of past disturbances. One is the timber sale on the western side of the allotment. Old allotment maps indicate this area was closed to grazing. There is no documentation in the folder to indicate when this occurred or if it is still closed to grazing. Regeneration is patchy and the soils here are very mobile here. Most of the old timber sale roads have slipped off the sides of the hills. Canada thistle predominates in the sale area. A second disturbance, believed to be an old fire, is on the eastern boundary of the allotment. This may have been salvage logged as well. Regeneration is coming in, but the area is predominantly grass at this time. The third area is a small opening in the SWNE of Section 35, where iron scraps and old cut logs are present. Although the type of activity was not identified, it was thought that the poor composition (hairy golden aster and timothy) is due to past activity rather than current livestock grazing. The riparian area in Section 34 (northwest of the California Park road) was in poor condition. Canada thistle was abundant, and an area at the headwaters

was trampled and completely bare of vegetation.

Stukey Creek Unit

Due to time limitations, this inspection was limited to the eastern half of the allotment. The only area west of Stukey Creek inspected was the NW 1/4 of Section 6, T9N, R87W.

Aspen stands contain mostly grasses, principally wildrye and varying amounts of timothy and mountain brome. These grassier sites could be typed out as Potr/Elgl or lumped with the Aspen/Tall forb type. Palatable forbs are relatively scarce under aspen stands. Canada thistle is present scattered through many of the aspen stands and is in greater quantity than expected on such a productive site with good ground cover. Present species composition may be the result of heavy selective grazing pressure on those plant species preferred by sheep. Although young subalpine fir trees were seen under some of the aspen stands, in general, the conifer encroachment is not widespread. Most of the openings around the ponds had downed aspen trunks indicating that these once had an aspen overstory. No aspen regeneration was seen in or near mature aspen stands in the allotment.

Willows are scarce on this allotment. Most woody vegetation is alder and occurs along the creeks, but not around most ponds. Most of the willow and alder occur on parts of Sugar and Stukey Creeks, however, the plants are mostly old and decadent and have been heavily hedged. Riparian areas around ponds are dominated primarily by sedges. Canada thistle is also often abundant both in the moist pondside zone and on the slumpy areas around ponds. Most of the slump ponds inspected had little or no use of the wet sedge area, but the dry slopes around them showed signs of heavy grazing and trampling by sheep. There are few riparian forbs and the dry terraces adjacent to the creeks have a good deal of bare ground and poor species composition. Diversity is low, with timothy, tarweed, and thistle dominating most areas. The open shrub parks also have very poor ground cover, dominated mostly by timothy, tarweed, and cinquefoil. Snowberry (*Symphoricarpos spp.*) plants are also heavily hedged.

The riparian areas and much of the aspen is in fair conditon. Ground cover and production are good, but species composition/diversity is poor to fair. Silver sagebrush sites, forb/grass openings around ponds and the terraces and aspen edge areas along Stukey Creek and Sugar Creek are in poor condition. High forage value native forbs and grasses and, to some extent, willows appear to have been greatly reduced in abundance and vigor. In general, most of this allotment is unsuitable for grazing, or suitable at a very low stocking rate.

Of the allotments inspected, East Quaker and Saddle Mountain had the highest amount of palatable tall forbs. The Armstrong Creek and Stukey Creek Allotments appear to be the least suitable for grazing as forage quality has severely declined on these units. The Sand Mountain unit appears to have non-uniform grazing pressure, as some of the terrain makes it difficult to maintain regular sheep movements.

Soil Resource Condition

The information and assessment for the California Park Special Interest Area is based on soil and geologic information and field observation and monitoring. The monitoring includes, soil health

assessment, measuring infiltration, erosion bridges, soil respiration, and riparian surveys that were done in conjunction with the stream surveys.

The landforms in this area are the reflection of the different geology (especially surficial geology). The majority of this area is in the moderate mass movement potential class. The landforms in this area are a direct result of past geologic movement. This gives the appearance of mobile real estate.

The dominant geologic types are landslide deposits, residuum from Lance Formation, and residuum form the Lewis shale. (Note: detail geology maps and soil maps are on file at the Steamboat Springs office of the Forest Service). The Lewis shale is marine shale that support large amount of fossils. The dominant types of movement are rotational slides and earth flows. Earth flows are particularly extensive with the Lewis shale. Land sliding tends to destroy the strength of the material involved, but some can acquire strength. This is depends on the material involved. If the material involved is compose of coarser and fine segment including large fragments of durable rock types, the resulting aggregate may have good strength. If on the other hand the material is mostly fine grained such as siltstone and shale, the resultant material may remain weak. The point of the above discussion is to point out that the California Park has both examples of week and strong landside material. The volcanic geology in the Park provides a source of material that is strong and the shale is at the opposite end.

The soils are mostly fine-loamy to fine textures that have been reworked. The soils have a high erodibility factor meaning that they are sensitive to erosion if there is not enough effective ground cover. No matter what the activity is, the end result is that the Forest plan directs us to maintain effective ground cover.

Historical grazing that was occurring at the turn of the century has impacted the soils in the California Park SIA. The result is that some of this area will not be able to support some of the vegetation communities that occurred prior to the livestock grazing impacts. There has been some restoration work done to break up some of the compacted landscape. In 2001 a winged subsoiler was used, and some of the preliminary results show that the infiltration and respiration are significantly higher than the untreated lands.

Parts of First Creek, Armstrong Creek and Elkhead Creek areas were rated functional at risk from a soil health standpoint. The rating is based on amount of compaction, slow infiltration, and the lack of effective ground cover.

Watershed Condition

Elkhead Creek Watershed

Assessment of the existing condition for the California Park watershed included field observations, Proper Functioning Condition surveys (BLM, 1993), photos, stream mapping, and stream surveys. Stream surveys include permanent and cumulative cross-sections, pebble counts, and longitudinal profiles.

The California Park area lies in the Elkhead Creek sixth level watershed. While none of the streams in the area are listed as impaired on the 303(d) List (CDH, 1998a), First Creek is on the Monitoring and

Evaluation List for potential impairment due to sediment. Monitoring of physical parameters was initiated during the summer of 1998 in accordance with the Colorado Provisional Guidelines for determining sediment impacts (CDH, 1998b).

Streams in the California Park area reflect the geology and soils of the area, the effects of beaver, and management impacts. Bedrock geology consists primarily of volcanic dikes and outcroppings that form the ridgetops and high points. These high points overlay sedimentary layers comprised primarily of interbedded shales and sandstones. Due to the nature of the shales and sandstones, mass movement potential is high in the park resulting in large areas of 'mobile real estate.' The mobile real estate often impinges on stream channels delivering large quantities of sediment to the stream system, and causing continuous adjustment of the channels. Adjustments include lateral migration and/or downcutting. Similar to the effects of mass movement, beaver dams can also cause lateral channel migration, downcutting through sediments deposited in old beaver dams, and affect riparian condition by reducing the shrub component. Beavers can also benefit streams by creating ponds that slow down stream velocities and bank erosion, provide fish habitat, and banks that promote riparian vegetation growth. The effects of past and present beaver activity can be seen in all of the stream systems.

There is speculation that historical grazing practices and vegetative treatments have significantly effected the upland vegetation, increasing bare soil, and resulting in increased water runoff and channel instability. Stream channels develop the width, depth, and gradient necessary to transport the water and sediment supplied by the watershed. Altering the natural hydrologic regime through increased water yield would 'blowout' the stream channels causing channel instability.

Parts of Elkhead Creek, First Creek, Knowles Creek, Jokodowski Creek, and Armstrong Creek were found to be Functional at Risk based on Proper Functioning Condition surveys. The functional at risk ratings were due to a variety of factors including narrowing riparian areas, the effects of mass movements and beaver, and the effects of grazing by both wildlife and livestock. The effects of grazing were most evident in lower Elkhead Creek above the volcanic dike, and lower First Creek.

While lower Elkhead is considered to be functional at risk, there are a few isolated reaches that appear to be on an upward trend. These areas occur where 1) grazing access is limited resulting in a healthy riparian area, or 2) point bars have been able to revegetate resulting in a narrowing of the channel. A narrower channel is more efficient at transporting sediment, and as a result sediment deposition is lower in these reaches.

Greenline surveys on lower First Creek had a rating of 4.81 or poor-moderate. This greenline rating suggests that inadequate riparian vegetation is present to protect the streambanks from erosion during peak flows. The weighted bank erosion hazard index was high, with 85 % of the surveyed reach having high-very high bank erosion potential.

On lower Elkhead Creek, below the confluence with First Creek, the recovering reach continues to decrease width-depth ratios which improves sediment transport. However, the greenline survey had a rating of 1.92 or very poor indicating that riparian vegetation to help stabilize streambanks is low. This is due largely in part to the entrenched nature of this reach. Even though the stream is starting to recover, the elevation of the water table is still too low to support riparian vegetation along the greenline.

The degraded reaches of Elkhead below the surveyed 'recovering reach' still have high to extreme bank erosion hazard over 80% of the reach. This constitutes the majority of lower Elkhead Creek between First Creek and above the volcanic dike.

1999 PFC Status of California Park SIA Elkhead Creek Watershed:

Stream	Reach	Date	Rating	Trend	Miles Surveyed
Elkhead Cr	2	7/2/1999	Functional at Risk	Downward	1.6
	3	8/31/1999	Functional at Risk	Downward	1.4
	4	9/3/1999	Functional at Risk	Not Apparent	1.1
	5	10/28/1999	PFC		0.4
	7	6/30/1999	Functional at Risk	Not Apparent	2.0
	8	6/30/1999	Functional at Risk	Upward	1.5
First Cr	1	9/2/1999	Functional at Risk	Downward	1.9
	2	10/27/1999	Functional at Risk	Downward	2.0
	2a	9/2/1999	PFC		1.2
	3	6/29/1999	Functional at Risk	Not Apparent	1.5
Jokodowski Cr	1	7/1/1999	Functional at Risk	Not Apparent	1.6
	2	10/26/1999	Functional at Risk	Upward	0.7
Second Cr	1	6/29/1999	PFC		1.1
Armstrong Cr	1	10/28/1999	Functional at Risk	Downward	1.2
Knowles Cr	1	9/1/1999	Functional at Risk	Downward	1.3
Sugar Cr	1	10/26/1999	PFC		0.7
Torso Cr	1	9/1/1999	PFC		1.2
Circle Cr	1	7/1/1999	PFC		2.1
				Total Miles Surveyed	24.6

Summary of miles of stream by PFC rating:

- PFC: 6.8 miles
- Functional at risk, upward: 2.1 miles
- Functional at risk, not apparent: 6.2 miles
- Functional at risk, downward: 9.5 miles

Slater Park Watershed

Slater Park lies in the Slater Creek (140500030301) sixth level planning watershed. Slater Creek is a tributary to the Little Snake River. None of the streams in the Slater Park area are listed as impaired on the Colorado 303(d) list (CDH, 2002).

Soils and bedrock geology in Slater Park are similar to California Park, but mass wasting is not as prevalent; beaver are also an integral part of stream dynamics. Slater Creek above NFSR 154 is generally in dynamic equilibrium. Some isolated areas of instability exist, but overall the stream

appears to be in balance with the landscape setting.

Below NFSR 154, Slater Creek does not appear to be in dynamic equilibrium. Using the BLM's Proper Functioning Condition (BLM, 1993), Slater Creek below NFSR 154 was rated functional at risk. The key factors of concern are lack of adequate vegetative cover to dissipate flood flows, high width-depth ratios, and presence of upland species adjacent to the greenline. Greenline surveys (Winward, 2000) in 2002 had a rating of 6.4 indicating that on average, the greenline species present provided moderate protection during flood flows. The bank erosion hazard index surveys indicated 65% of the reach has low erosion hazard potential, while 30% of the reach had very high erosion potential. The remaining five percent of the reach had moderate erosion potential.

A blowout on NFSR 154 in the last five years where the stream cut through a meander and across the roadbed contributed a significant amount of sediment and bedload to the stream system, which is further affecting the dynamic equilibrium in lower Slater Creek. A watershed improvement project was implemented in 2001 to return the stream to its natural meander pattern. This will help to restore stream dynamics, but movement of the sediment delivered to the stream channel from this blowout will be a long-term recovery process. Entrainment calculations indicate that the channel is aggrading below the road blowout. This would be expected given the quantity of sediment delivered to the stream channel.

The desired condition would be to restore dynamic equilibrium and improve riparian conditions in lower Slater Creek. Restoring dynamic equilibrium would include lowering the width-depth ratio, which would help Slater Creek transport the excess sediment and bedload. Key in restoring dynamic equilibrium and lowering the width-depth ratios would be to increase the percent of the greenline with healthy riparian species that have strong rootmasses. Healthy greenline vegetation would also help to reduce the bank erosion hazard index.

PFC data for the Slater Creek watershed is on file (1999 baseline) in the hydrology office of the Steamboat Forest Service office, but not yet summarized into a table such as the one presented in the Elkhead watershed section. This table will be added to this document in a later revision.

Fisheries

The CPSIA is composed of two main watersheds: the Elkhead and Slater creek watersheds. Two species of trout occur in both watersheds: brook trout and Colorado River cutthroat trout (CRCT). Other species of fish known to occur in the CPSIA include: mottled sculpin (*Cottus bairdi*), mountain sucker (*Catastomus platyrhynchus*), speckled dace (*Rhinichthys osculus*) and white sucker (*Catostomus commersoni*). The recreational fishing resource in the CPSIA could be considered moderate to poor, but important to local recreationists as well as out of state fishermen during the hunting season. There are two 'lakes' and numerous beaver ponds in the CPSIA that support fish populations. One lake referred to as 'Quaker lake' has reportedly produced brook trout at over 5 pounds in weight. The second lake is referred to as 'Lost lake' and is a secret of locals. No trout have ever been caught out of Lost lake so don't bother trying to find it. Low summer flows in recent years has resulted in portions of both Elkhead and Slater creeks going dry. Beaver ponds are very important to the trout populations in the CPSIA and provide critical trout habitat in both summer and winter periods.

CRCT have a fairly strong population in Elkhead Creek, the main watershed in the CPSIA, and also

occupy most areas of Slater Creek. The population of CRCT in the Elkhead Creek watershed could be considered a metapopulation[1]. Streams include Elkhead Creek and its tributaries: Armstrong Creek, Circle Creek, First Creek, Jokodowski Creek, Stuckey Creek and Torso Creek. Brook trout are present in the Elkhead Creek and Slater Creek watersheds and are considered a threat to the CRCT populations in both systems. Although recreational fishing can sometimes be detrimental to CRCT populations, the existing level of fishing currently occurring in the CPSIA is not considered a threat to these populations. Cutthroat trout habitat quality varies within the CPSIA. Some areas, primarily upper stream reaches, are in good condition and other areas are in bad condition. Areas that are currently in poor condition are not recovering properly and will need direct management action to reverse the trend. Many of theses reaches are too wide with severe bank erosion. The CPSIA naturally has highly erodible soils, creating the potential for severe erosion when these soils are disturbed. This potential is compounded by many impacts in the CPSIA including roads, trails, campsites near the creeks, high elk numbers, and sheep and cattle grazing. The CPSIA also has a moderate amount of beaver activity. Beavers are important in maintaining riparian areas and high water tables. The lowering of the water table due to down cutting of channels, heavy grazing of riparian vegetation by elk and livestock, and trampling of streambanks by ungulates are resulting in the deterioration of riparian willow communities. This is contributing to an increase in water temperatures and sedimentation of the creeks. Poor habitat quality and brook trout competition are the major factors influencing the CRCT metapopulation in Elkhead Creek. CRCT populations in Slater Creek are experiencing many of the same influences as Elkhead Creek.

Colorado River cutthroat trout genetic purity testing has been done for Armstrong Creek, Circle Creek, Elkhead Creek and First Creek with purity ratings of A- for the populations in these creeks. Torso Creek has a purity rating of B-. Populations in other streams in the Elkhead Creek watershed as well as the streams in the Slater Creek watershed have unknown purity ratings because either they have not been tested or results have not come in yet.

Brook trout have been removed in Armstrong Creek, Circle Creek and Torso Creek since 1997. These efforts have been very successful, especially in Armstrong Creek because brook trout are not present in Armstrong Creek anymore. Circle Creek and Torso Creek still have fairly large numbers of brook trout present. The Torso Creek and Lower Elkhead drainages were stocked as recently as 1993 with brook trout.

Wildlife

The California Park SIA contains the highest known levels of wildlife biodiversity on the Routt National Forest. This area also has the greatest richness of Forest Service Region 2 sensitive species on the Routt National Forest. This diversity is largely due to the unique presence of the high elevation parks (typical of lower elevational areas) in proximity to aspen, lodgepole pine and spruce-fir forest types. This heterogeneity of vegetation types provides the diversity of habitat requirements that make the California Park SIA a hotspot of biodiversity.

[1] A metapopulation is a collection of 5 localized populations that are geographically distinct yet are genetically interconnected through natural movement of individual fish among populations as defined in the Conservation Agreement and Strategy for Colorado River Cutthroat Trout (*Oncorhynchus clarki pleuriticus*) in the States of Colorado, Utah and Wyoming, April 2001.

The CPSIA contains all three species of grouse native to northwest Colorado. This includes the Coulmbian sharp-tailed grouse (*Tympanuchus phasianellus columbianus*), the greater sage- grouse (*Centrocercus urophasianus*) and the blue grouse (*Dendragapus obscurus*). The CPSIA is the only area of National Forest lands in Colorado where greater sage grouse and Columbian sharp-tailed grouse occur. This makes the SIA a very important destination for upland game bird hunters to typically have poor access to sage and sharptail grouse due to limited access of the primarily private land habitats. The presence of these grouse in the CPSIA is a truly unique feature and important value of the SIA.

The CPSIA is considered the 'stronghold' nesting area for the northwest Colorado population of greater sandhill cranes (*Gurs canadensis tabida*). The CPSIA population contains the highest nesting density of cranes in northwestern Colorado and has proven to be critical in recovering this species from a state endangered status to a state listed species of concern. The CPSIA is estimated to have been used by sandhill cranes for thousands of years as a nesting area and migratory stop. Fully understanding why the greater sandhill crane is considered a special value of the CPSIA is best stated by Aldo Leopold. "Our ability to perceive quality in nature begins, as in art, with the pretty. It expands through successive stages of the beautiful to values yet uncaptured by language. The quality of cranes lies, I think, in this higher gamut, as yet beyond the reach of words." "When we hear his call we hear no mere bird. He is the symbol of our untamable past, of that incredible sweep of millennia which underlies and conditions the daily affairs of birds and men." "And so they live and have their being – these cranes – not in the constricted present, but in the wider reaches of evolutionary time." "The sadness discernible in some marshes arises, perhaps, from their once having harbored cranes. Now they stand humbled, adrift in history."

In addition to upland bird diversity, the CPSIA also has the greatest herpofauna diversity on the Routt National Forest with 4 species of amphibians and 2 species of reptiles. Amphibian species include: boreal toad (*Bufo boreas boreas*), northern leopard frog (*Rana pipiens*), chorus frog (*Pseudacris triseriata*), and the tiger salamander (*Ambystoma tigrinum*). Reptile species include the western terrestrial garter snake (*Thamnophis elegans*) and the smooth green snake (*Opheodrys vernalis*). Of the herpofauna present 4 species are classified as Forest Service region 2 sensitive species: northern leopard frog, tiger salamander, smooth green snake and the boreal toad. The boreal toad is also a state endangered species and a candidate for listing under the Endangered Species Act.

Other unique and sensitive wildlife species include: purple martin (*Progne subis*), long-eared owl (*Asio otus*), northern goshawk (*Accipiter gentilis*), golden eagle (*Aquila chrysaetos*), northern harrier (*Circus cyaneus*) , osprey (*Pandion haliaetus*), American marten (*Martes americiana*), bobcat (*Felis rufus*) and records indicate a wolverine (*Gulo gulo*) was reported in 1980.

Big game species known to inhabit the CPSIA include: elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*), pronghorn antelope (*Antilocarpa americiana*), black bear (*Ursus americiana*), mountain lion (*Felis concolor*) and occasionally moose (*Alces alces*). California Park is an important elk calving area and it is known for its high concentration of elk throughout the summer and fall. Elk do not winter in the CPSIA, because of snow accumulations. The elk population in the CPSIA is possibly the largest population on the Routt National Forest. The elk population is so large that impacts to vegetation are occurring in upland, riparian and aspen vegetation types. This is proving to be a considerable problem for rangeland management and these impacts are affecting many of the special values unique to the California Park SIA. Reductions in elk numbers are needed to alleviate impacts to sage and sharp-tailed

grouse habitat, sandhill crane habitat, boreal toad habitat, cutthroat trout habitat, aspen regeneration, soils and erosion, and range allotment suitability.

Elk hunting in the CPSIA brings hunters from all over the United States for an opportunity to hunt elk. However, low hunter success has been problematic. One of the main problems resulting in poor hunting success is the increased use of motorized vehicles and the increased access to good elk habitats. This recent increase in hunting pressure has forced the elk to respond by traveling from National Forest Lands onto nearby private lands where they are then inaccessible to public land hunters.

Recently the Routt National Forest has partnered with the Rocky Mountain Elk Foundation, Colorado Division of Wildlife and the Habitat Partnership Program to improve hunter success and satisfaction and thus help reduce the elk herd. The Colorado Division of Wildlife (CDOW) agreed to increase hunting pressure on nearby private lands during the early hunting seasons while also limiting licenses on public lands in the CPSIA during this same time. The Forest Service also placed seasonal closures to motorized vehicles on many critical trails in the area, to attempt to reduce motorized access to elk habitats. An informational brochure outlining the problem, potential solutions, and the solicitation of public comment was also created and distributed. Thousands of copies of the brochure were distributed to hunters using the CPSIA by mail and by informational displays in the CPSIA in 2000, 2001 and 2002. A public meeting was also held in 2000. Two 'roads analyses' were completed for the Elkhead Mountain Geographic Area and for the Slater Creek Geographic Areas (Appendices F and G, respectively). The roads analysis documents were completed to identify and prioritize purposes and needs for roads in the area. These analyses provide a foundation for identifying problems and needs associated with roads and travel management. Identified problems may include impacts to soil, water, or wildlife. It was also necessary to identify roads needed for resource management, public use, and recreational needs. The road analyses are useful in identifying projects that improve land management, protect critical habitats of special value species, and promote improved elk hunter success. The elk management project strives to keep elk on the Forest during the hunting season to improve hunter success and satisfaction while also helping to reduce the elk population in the area and associated impacts to the areas Special Interest Values.

There are currently six sheep allotments and two cattle allotments, all or portions of which are contained within the CPSIA. The California Park cattle allotment is permitted for 400 cows with calves; the Stewardship allotment is permitted for 350 cows with calves. The sheep allotments are permitted for 1000 ewes with lambs. Livestock enter the allotments during the first week of July and leave by the end of September. The current grazing activity (elk, cattle and sheep) is in the process of being analyzed to determine the impacts to vegetation in riparian and upland sites. An environmental assessment for the California Park Allottment Management Plan (AMP) will be completed during the winter of 2003/2004 and will address the specific the impacts of grazing by wildlife and livestock. This AMP will address alternatives to management of grazing in California to move vegetation towards desired condition and protect the Special Interest Area values. When the AMP is completed it will provide more detail on the effects of wild and domestic grazers to the vegetation and sensitive species in the CPSIA. Upon completion, the AMP will be added as an Appendix to this Management Plan.

Many of the impacts form elk, cattle and sheep grazing are a result of cumulative impacts resulting from historic unregulated domestic livestock overgrazing activities coupled with existing wild ungulate (primarily elk) grazing pressure and historic impacts from chemical treatments designed to reduce

sagebrush and wyethia densities. While the current domestic grazing pressure is reduced from historic numbers; the riparian, upland and forested rangelands have been unable to recover from past disturbances with the current approach to domestic grazing and increasing wild ungulate grazing pressure. An innovative approach to managing the grazing allotments in the CPSIA is needed to move the area towards the DFC and protect the Special Interest Area Values.

Considering the extent and intensity of past and current human land uses that have occurred in the CPSIA, it is interesting to question how so many wildlife species, including sensitive and endangered species, continue to occur in the area. With such a history and improved management it is likely that the CPSIA will continue to be a hotspot for sensitive species and biodiversity on the Routt National Forest.

Recreation

The California Park area affords quality dispersed recreation opportunities in a scenic natural setting. The Recreation Opportunity Spectrum (ROS) is primarily 'roaded natural' along the main road corridors of FDR 150 and FDR 42, transitioning to 'semi-primitive' along the perimeter of the area. In addition to the 2.1 Special Interest Area forest plan prescription in California Park, there is a 4.2 Scenery prescription in a narrow corridor along the FDR150, and two 4.3 Dispersed Recreation prescriptions: one in the Adams Creek area, and one in a small pocket around the California Park Guard Station (Figure 2, page 8).

Spring and summer recreation use is currently low. Those individuals who travel a little farther to recreate here, rather than visit more popular areas of the forest closer to population centers, are seeking out the scenery and uncrowded conditions this area provides. Generally low levels of activities such as camping, fishing, hiking, bicycling, horseback riding, ATV and trail motorcycle use, photography, driving for pleasure and viewing scenery occur from July till early-October. Interest in this area by summertime forest visitors is gradually increasing, as the more popular recreation destinations on the forest continue to exhibit increasing use.

Recreational use increases dramatically during the late summer and fall hunting seasons (mid-August through mid-November). During this time period, large numbers of big game hunters drive, camp, operate ATVs, hunt, fish, and ride horses throughout the area.

One of the two trailheads for FDT 1144 lies within the Special Interest Area. There are dozens of dispersed campsites that currently exist along roads and trails that are occupied every year during big game hunting seasons, and new campsites continue to be developed. Off-road and off-trail motorized vehicle violations are common during hunting season, often resulting in resource and vegetative damage.

There are two permitted hunting outfitter/guides operating within or adjacent to the management area. All Seasons Ranch provides guided hunting and two drop camps in the upper First Creek drainage. First Creek Ranch provides game packing services, based from a private inholding south of First Creek, and west of FDR150.

A moderate to high amount of winter use occurs along the groomed snowmobile routes and throughout

the open parks and secondary road corridors. The Northwest Colorado Snowmobile Club is permitted to mark, maintain and groom Forest Development Road (FDR) 150, from the north Forest boundary to the California Park Trailhead and along FDT 1144. FDR 42 is marked, maintained and groomed by the Steamboat Lake Snow Club and Steamboat Lake Outfitters.

The California Park Guard Station is a historic administrative site located in the middle of California Park. There is an ongoing national effort to make Forest Service administrative buildings available for public recreational use to help offset the increasing maintenance costs on these aging buildings. The California Park Guard Station is currently being considered for nightly rentals to the public, along with other guard stations on the district.

Heritage

The RNF cultural distribution maps document cultural assessments for 23 projects between 1987 and 2003 in the California Park Special Interest Area (CPSIA). Approximately ten percent of the CPSIA has been surveyed for cultural resources.

Twenty-two cultural resources have been recorded in California Park, including the California Park Guard Station, Knowles Cabin, California Park Road/Old Beef Trail, California Park – Elkhead Road, Slater Road, Smith Fence, a tent frame, a sawmill, five aspen carving sites, a historic trash scatter, four flaked stone isolated finds, and four flaked stone sites.

In addition, many unrecorded sites are known from historic maps. The 1882 maps show Edward House's Ranch and four unnamed ranches. The 1919, 1921, 1932, 1933, and 1940 maps show additional unrecorded historic sites, such as a sawmill, residences, roads, trails, and ditches. The 1919 GLO and the 1921 Forest map show the old location of the California Park Guard Station. The 1921 map also shows a cabin on Jokowdowski Creek (likely the one that burned down several years ago). Neither has yet been recorded.

Unidentified cultural resources certainly exist in the CPSIA. The cultural resources recorded in California Park have been previously evaluated as not eligible to the National Register of Historic Places. Some of these properties may be re-evaluated as eligible in the future with additional historical information. Cultural resources that are not eligible to the NRHP may still have value to visitors and may be eligible to State or local historic registers.

Paleontological Resources

The CPSIA is predominantly Lewis Shale, but also consists of the Browns Park Formation, the Williams Fork Formation, the Lance Formation, and the Iles Formation. The Williams Fork Formation is considered highly fossiliferous with the potential for significant fossil localities. Vertebrate and invertebrate fossils have been located in the Williams Fork Formation outside the RNF. The Lewis Shale Formation is not highly fossiliferous, but it can still contain significant paleontological remains. Vertebrate and invertebrate fossils have been found in Lewis Shale outside the RNF. The Browns Park Formation is not highly fossiliferous, but at least five fossil localities have been identified, including three south of Maybell containing mammalian fossils.

Special Interest Area Values

Greater Sage Grouse and Columbian Sharp-tailed Grouse

The California Park Special Interest Area contains all three species of grouse native to northwestern Colorado: the Coulmbian sharp-tailed grouse (CSTG, *Tympanuchus phasianellus columbianus*), the greater sage- grouse (*Centrocercus urophasianus*) and the blue grouse (*Dendragapus obscurus*). The CSTG and sage grouse are listed as Region 2 sensitive species and both species have experienced dramatic declines across their historic range. Columbian sharp-tailed grouse were petitioned for listing under the Endangered Species Act, but determined not warranted in October 2000. The California Park SIA contains lek (breeding) sites, and brood-rearing and summering areas for both sage and sharp-tailed grouse. The CPSIA also provides an important dispersal corridor for grouse moving between habitats north and south of the Forest. The CPSIA is one of the only known Forest Lands in Colorado where sharp-tailed and sage grouse occur, and is likely the highest elevation that Columbian sharp-tailed grouse currently occur in their entire distribution.

Native Columbian sharp-tailed grouse and greater sage-grouse spring and summer habitats are often sympatric; therefore the desired conditions for both these species in the CPSIA are similar. Figure 3 depicts summer sage and sharp-tailed grouse breeding habitats. The habitat map was created with the use of a Geographic Information System and habitat model parameters identified by the Colorado Division of Wildlife grouse habitat experts.

Sage Grouse

Sage grouse historically inhabited sagebrush communities in most parts of northwestern Colorado, including the California Park and Slater park vicinities. Sage grouse have declined markedly in recent years in much of the area surrounding the CPSIA (Routt and Moffat Counties). Sage grouse are a sagebrush obligate species, relying year-round on sagebrush for food and cover. The decline and degradation of many sagebrush rangelands across the west have attributed to much of their species' decline. Sage grouse have 5 seasons/ habitats that are physiologically important to them. These include lekking (breeding), nesting, early brood-rearing, late brood-rearing, and winter. Sage grouse do make seasonal movements exceeding 30 miles between summer and winter ranges when required habitats are not immediately available to them. This often occurs at higher elevations or in drier areas.

Sage grouse need patches of contiguous sagebrush approximately 300 acres in size. Vegetation management should emphasize a diverse age structure of sagebrush plants, dominated primarily by medium height plants (40-80 cm), with a 15-35% live canopy cover occurring in a mosaic pattern with small openings that may encourage the formation of new lek sites as populations increase. These stands of sagebrush should have a vigorous diverse understory of grasses and forbs beneficial to grouse. Maintenance of residual stubble and herbaceous cover >15 cm during nesting season in May and June is important for increasing sage grouse survival and recruitment into the population by as much as 30%. Improvements to and protection of wet meadows and riparian areas will also benefit sage grouse by improving brood rearing habitat and chick survival.

Currently, sage grouse appear to use California Park lightly, primarily in the summer and fall months. No known sage grouse leks occur in California Park although suitable habitat exists. Use is greater in the Slater park area, and occurs during spring - fall. An inactive lek site is located in Slater Park, with

other active leks occurring on Non-Forest Lands further to the north and west. It is unlikely that the sage grouse remain in California or Slater Park in the winter due to snow depth. Sage grouse have not been documented on the spring dancing lek in Slater Park since 1992, however in 1994 a female sage grouse was documented nesting in close proximity to the lek and two males were observed in the surrounding area. Adult sage grouse have been observed in the Parks during summer and fall periods in recent years. Sage grouse have historically occupied the CPSIA in larger abundances than they do currently, and the disappearance of activity on the breeding site in Slater Park is discouraging. The CPSIA has the potential to support a viable breeding population of sage grouse as long as the habitat is managed in their best interest. Once the sage grouse plan is completed its guidelines will be considered for incorporation into the CPSIA management plan and may be attached as an appendix to this management plan.

Sharp-tailed Grouse

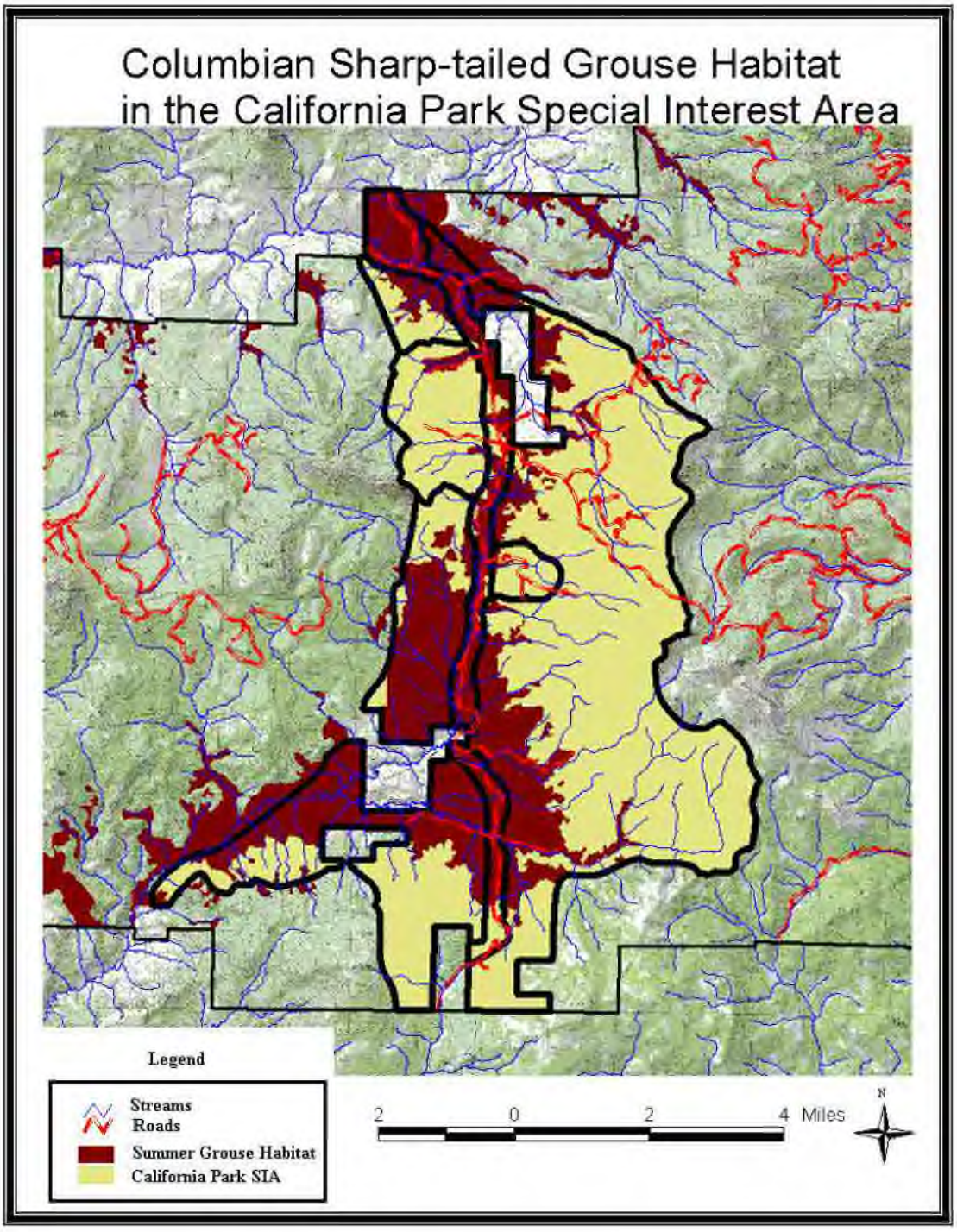
Columbian sharp-tailed grouse inhabit suitable shrub-steppe communities in northwestern Colorado, including the California Park and Slater park vicinities. Their populations and distribution declined markedly in the mid-1900's, due primarily to loss and degradation of important habitats. Recently, however, their populations have increased in Colorado (Routt and Moffat Counties). Columbian sharp-tailed grouse have 4 seasons/habitats that are physiologically important for their reproduction and survival. These include lekking (breeding), nesting, brood-rearing, and winter. Sharp-tailed grouse show a great deal of flexibility in the specific habitat types and species composition that provide suitable habitat for their occupation. The proportion of shrub cover used during spring – fall can vary from 0 - 40%, and be dominated by a variety of shrubs or grasses. Columbian sharp-tailed grouse seek out areas that are elevated and open for lekking, while using shrub rangelands and bunchgrass/forb areas for nesting and brood-rearing. What is important to CSTG for determining suitable nesting and summering areas is the height and density of cover, regardless of whether it is herbaceous or shrub. They prefer vegetation that is approximately 20-30 cm tall by early summer, with vegetation <15 cm being of no value to them. The diversity and forb component of the vegetation is also important to the grouse for food and cover. During winter sharp-tailed grouse rely on tall shrub habitat to provide food and protection. In Colorado these habitats are primarily composed of serviceberry and chokecherry, although they will also use aspen and willow. CSTG do not normally migrate during winter and require these winter shrub habitats to be nearby their summer ranges, however they have been documented moving up to 25 miles seasonally in Colorado.

Currently there are four known CSTG leks in the CPSIA. One of the leks is in Slater Park and the other 3 are in California Park. All of the leks have been used annually over the last several years, and 2 of them have been documented as historical leks being used as early as the 1960's. Annual spring lek counts indicate a very small but stable population, with 4 to 20 males being observed on individual leks during spring counts. It has been determined that the California Park population of CSTG do not winter in the CPSIA, but rather move to lower elevational winter habitats on adjacent private land. The CPSIA is most important for breeding, nesting, and brood-rearing. This population of CSTG is the only known population on National Forest lands in Colorado, thus the CPSIA remains a popular hunting area for sharp-tailed grouse during the fall.

Some areas in the eastern part of California Park have been identified as currently unsuitable grouse habitat, although they were likely suitable habitat historically. The area has little to no foraging, nesting, or brooding habitat for sharp-tailed grouse. The following species were identified as important

components for CSTG habitat, but were lacking from the identified area: American vetch (*Vicia americana*), creamy peavine (*Lathyrus leucanthus*), sulphur buckwheat (*Eriogonum umbellatum*), thurber fescue (*Festuca thurberi*), mountain brome (*Bromus marginatus*), basin wild rye (*Leymus cinereus*) silver sagebrush, mountain big sagebrush, and snowberry. Improvement of this area would provide more habitat for sharp-tailed grouse in the CPSIA and possibly increase population numbers.

Figure 3. Columbian Sharp-tailed and Sage Grouse Habitats in the California Park Area



Management Implementation Guidelines – Sage and Columbian Sharp-tailed grouse

The CPSIA Integrated Management Plan tiers to the Forest Plan and incorporates appropriate portions of the Northwest Colorado Columbian Sharp-tailed Grouse Conservation Plan (CDOW 2001) Additional information and management actions that may improve sage and sharp-tailed grouse habitats is included in the conservation plan (Appendix A.). The greater sage-grouse and CSTG have similar needs and utilize similar spring, summer and fall habitats. Since the conservation plan for sage grouse in northwestern Colorado is not complete, the Northwest Colorado Columbian Sharp-tailed Grouse Conservation Plan (CDOW 2001) will guide management actions for both sage and sharp-tailed grouse conservation within suitable habitat of the CPSIA.

Goals

- Achieve and maintain parklands in the CPSIA in a natural state that provide quality nesting and brood-rearing habitats and support a viable spring – fall population of sage and CSTG.
- Achieve and maintain an average of 6 CSTG and 1 greater sage-grouse breeding (lek) sites that have an average spring attendance ≥ 15 males per lek within the California Park Special Interest Area.
- Restore and maintain vegetative cover at levels that meet the objectives and/or guidelines recommended in the CSTG or greater sage grouse conservation plans.
- Maintain grazing management practices that achieve and maintain desired ecological conditions throughout the range.
- Maintain grazing management practices that allow for flexibility and adaptability to habitat conditions.

Management Implementation Guidelines

- Maintain parklands within the SIA in a mosaic of 15-35% sagebrush canopy predominantly in mid-seral stage (most plants being 16-31 inches tall), interspersed with deciduous shrubs, grasses (primarily bunchgrasses), and a variety of forbs native to the sagebrush type (Boisvert 2001).
- Maintain grass and forb canopies within the sagebrush type to be > 20%, with no less than 8% cover of desirable forbs, and an average of approximately 20 different plant species per acre.
- Retain a residual stubble height of > 6 inches in the spring, with perennial herbaceous cover averaging > 8-12 inches during the nesting and brood-rearing seasons.
- Promote riparian conditions that are dominated by vigorous perennial vegetation of desirable species and include abundant willow and alder native to the area.
- Retain open suitable habitat for breeding at active and historic lek sites in the CPSIA.
- Eliminate potential impacts and threats to sage and CSTG during the breeding and nesting periods.

Opportunities

- Conduct annual spring surveys and counts of sage and sharp-tailed grouse leks in the CPSIA.
- Implement the recommended management strategies outlined in the Northwest Colorado Columbian Sharp-tailed Grouse Conservation Plan that are applicable to the CPSIA. (or the conservation plan for greater sage-grouse in northwest Colorado – when completed).
- Design and implement grazing strategies to reduce impacts in the sagebrush type and provide adequate residual grass and forb cover in grouse breeding, nesting and brood rearing areas.
- Reduce wild and domestic ungulate grazing impacts on native tall shrub species in the CPSIA, including serviceberry, chokecherry, willow, and alder.

- Reduce wild and domestic ungulate impacts to sage grouse and CSTG during the breeding and nesting periods.
- Identify key grouse areas within the CPSIA and assess the capability of those sites for establishment of desired plant species and vegetative structure.
- Establish areas for testing soil and vegetation treatments to determine potential success of larger scale projects such as removing tarweed.
- Where possible, restore native grasses and forbs that have decreased within the SIA and are beneficial to grouse. These include, but are not limited to, such species as basin wildrye, Thurber fescue, Idaho fescue, mountain brome, sulphur flower, American vetch, creamy peavine, pale agoseris, and blue flax.
- Collect and redistribute locally native sagebrush seed on areas identified in the CPSIA as lacking adequate sagebrush cover.
- Control and manage invasive plant species to protect and enhance the quality of desirable native plant communities.
- Identify segments of streams that are "at risk" and develop strategies to move towards PFC.
- Manage and control existing noxious weeds within sage grouse and CSTG habitats.

Greater Sandhill Cranes

The sandhill crane is thought to be one of the oldest living species of birds in North America. The Rocky Mountain population of greater sandhill cranes is a migratory species that nests in undisturbed willow-lined drainages surrounded by open meadows and parks throughout the Rocky Mountains during summer; and open, flat, marshy river drainages in Mexico and New Mexico during winter. The greater sandhill once bred widely in meadows and marshes throughout the West, however substantial losses and degredation of this habitat type, and over-hunting of the crane during the early 1900's caused large declines in their population numbers and distribution. In Colorado they had been reduced to only 25 breeding pairs by the 1950's. In 1953 there were only 3 nesting pair in the California Park area (pers. communication with John L. Sundberg). This prompted the state of Colorado to list them as an endangered species in 1973, and Region 2 of the Forest Service to list them as a sensitive species. Since then, intensive efforts have been made to recover their populations within the state, including the U.S. Forest Service's participation in closing California Park to grazing and motorized use until July 1 of each year. The greater sandhill crane has now been downlisted to a Colorado state species of concern but remainsl a Forest Service Region 2 sensitive species. The California Park area is considered an 'indicator area' for the larger state population by the Colorado Division of Wildlife.

The sandhill crane uses both California and Slater Parks for nesting and brood-rearing, with birds arriving in the area in early May and leaving in late August. California Park is a critical area to the sandhill crane population, and it provides the highest concentration of nests in Colorado. It was also thought to be the "stronghold" of the bird during its recovery. Slater Park also supports nesting, but the habitat does not appear to be as suitable as California Park. Since cranes nest on the ground, rarely renest, and their size makes them quite conspicuous, quality nesting habitat is crucial for their success. They require thick, mature willow stands along drainages and beaver ponds that allow them cover and water, providing protection from predators. Colorado Division of Wildlife studies indicate that nest success in the CPSIA have been fairly good (>60%) and that nesting cover is suitable. However, anything that can increase willow cover and stimulate and maintain beaver populations will likely help the cranes. Sandhill crane chick survival to fledging is dependent on healthy aspen/forb and sagebrush/forb communities, and appears to be more of a limiting factor to crane productivity than nest success in the CPSIA.

Although the Forest limits grazing in California Park until after July 1, sheep do come onto State Land Board lands near Elkhead Creek prior to this and may have some impact on nesting cranes. Sandhill cranes are very intolerant of disturbance during the nesting season, and will probably only continue to do well in areas where disturbances are minimized prior to July 1. The protection of the cranes during nesting in the CPSIA is thought to be benefiting their nest success, and their protection from disturbances during the nesting season is crucial. Although their success has been significant, little is known about the suitability of the nesting and chick rearing habitats within the CPSIA, and whether these could be improved to further increase crane productivity.

Fully understanding why the greater sandhill crane is considered a special value of the CPSIA is best stated by Aldo Leopold. "Our ability to perceive quality in nature begins, as in art, with the pretty. It expands through successive stages of the beautiful to values yet uncaptured by language. The quality of cranes lies, I think, in this higher gamut, as yet beyond the reach of words." "When we hear his call we hear no mere bird. He is the symbol of our untamable past, of that incredible sweep of millennia which underlies and conditions the daily affairs of birds and men." "And so they live and have their being – these cranes – not in the constricted present, but in the wider reaches of evolutionary time." "The

sadness discernible in some marshes arises, perhaps, from their once having harbored cranes. Now they stand humbled, adrift in history."

Management Implementation Guidelines – Greater Sandhill Crane

The CPSIA Integrated Management Plan tiers to the Forest Plan and where appropriate will include recommendations for sandhill crane management as identified in the Greater Sandhill Crane Habitat Management Plan (Appendix B). This Management Plan will also consider management recommendations in the CDOW Greater Sandhill Crane Fledging Success and Recruitment in Northwest Colorado Reports.

Goals

- Maintain a high nesting density (approximately 23 pairs) of sandhill cranes, and the CPSIA's significance as a "stronghold" for sandhill crane populations in Colorado.
- Achieve and maintain healthy riparian, sagebrush, and aspen forests in to provide suitable nesting and rearing habitats which support a high density of sandhill cranes in the CPSIA.

Management Implementation Guidelines

- Protect currently occupied nesting sites and adjacent rearing habitats.
- Maintain high sandhill crane nesting density in California Park, and increase Slater Park nest densities to their maximum potential.
- Manage riparian nesting habitats and parkland and aspen forest chick rearing habitats for the benefit of the greater sandhill crane.
- Restrict camping within 100 ft of riparian areas unless otherwise designated.
- Maintain spring closure of FDR 150 unless more detailed monitoring evaluations indicate that the closure is not necessary.

Opportunities

- Implement the recommended management strategies for sandhill cranes, which are presented in the Greater Sandhill Crane Habitat Management Plan (Appendix B) and CDOW Reports.
- Assess, restore and maintain riparian-wetland areas in proper functioning condition.
- Determine disturbance impacts to nesting cranes within the CPSIA, but outside of the annual road closure period.
- Evaluate the need to maintain annual FDR 150 road closure from May 1 to July 1.
    - Maintain road closure agreement with Routt County Road Department as needed.
- Evaluate the differences between Slater and California Park that may contribute to the lower crane densities found in Slater Park, determine whether there is potential for habitat improvements that could increase nest densities in Slater Park.
    - Consider moving the gate at the north end of California Park to the north end of Slater Park if early spring disturbance in Slater Park is determined to be a factor resulting in the low nesting density currently occurring in the Slater Park area.
- Determine critical brood-rearing habitats in the CPSIA and evaluate the habitat quality and associated chick survival.
- Assess ungulate impacts to occupied nesting sites and to nearby upland and aspen brood-rearing habitats, and adjust management where needed.
- Improve upland and aspen habitats used for brood-rearing.
- Control and manage invasive plant species to protect and enhance the quality of desirable native

plant communities.

- Determine impacts to nesting cranes from grazing on State Land Board lands before July 1.
- Work with partners to maintain off-Forest staging grounds important to the Routt National Forest sandhill crane population.
- Map all known and historic crane nesting and brood-rearing areas.
- Apply for funding for a helicopter population monitoring flight.
    - May be an opportunity to combine with other project work (grouse, fire, beetles) to reduce needed funds.

Boreal Toads

The boreal toad is listed as an endangered species in the state of Colorado, a sensitive species in Region 2 of the Forest Service, and as warranted but precluded from listing under the federal Endangered Species Act. The southern Rocky Mountain boreal toad inhabits forest habitats between 7,500 and 12,000 feet. There are 3 seasons/habitats that are significant to the boreal toad. These include breeding, summer, and winter. Breeding takes place in shallow slow water of lakes, ponds, marshes, or streams and generally occurs in late May and early June, coinciding with snowmelt. Young toads are restricted in distribution and movements by the presence of water, while adult toads can move considerable distances to and from the breeding site making use of wet meadows and forested areas. Although once common in mountainous areas of Colorado, the boreal toad has suffered from dramatic population declines over the last 15-20 years. Causes of these declines are largely unknown, although climatic changes, loss of habitat, and decreased habitat quality, and diseases are considered as possibilities. One breeding site has recently tested positive for the chytrid fungus. It is unknown how the presence of this fungus will affect the population but declines are expected.

The protection and management of boreal toads in the California Park SIA is one of the primary objectives of land management within this SIA. Extensive surveys for boreal toads in the CPSIA located 2 separate areas of their occurrence in California Park. Young toads and tadpoles have been observed on First Creek and its tributaries, although a specific breeding site has not been identified. A specific breeding site of boreal toads has been located on Elkhead Creek near the confluence of Torso Creek. Successful reproduction occurred at this site in 2000, 2001, 2002 and 2003. A permanent exclosure was constructed around ½ mile of the creek in 2001 to protect the site and adjacent riparian and upland toad habitats. Some of the tadpoles produced in the Torso Creek site have been collected and transported to a CDOW endangered aquatic species hatchery for captive breeding. No populations of toads have been found in Slater Park in recent years.

Because of the status of boreal toads and their vulnerability to disturbances and impacts from livestock and recreation, their protection within the CPSIA has become critical. Degradation of stream habitats can greatly affect boreal toad reproduction and survival. Both recreation and grazing can cause loss of quality riparian vegetation, decrease bank cover and stability, increase erosion and sedimentation, and reduce water quality. These activities can also cause direct mortality to toads by trampling. It is essential to protect boreal toad populations from extinction with in the CPSIA by actively protecting the breeding sites, and to manage other riparian habitats, particularly along Elkhead and First Creeks.

Management Implementation Guidelines – Boreal Toad

This Integrated Management Plan tiers to the recommendations in the Boreal Toad Conservation Plan and Agreement (Appendix C)

Goals

- Achieve and maintain a viable metapopulation[2] of boreal toads and high quality boreal toad habitat within the California Park SIA.
    - Maintain at least two breeding sites within the CPSIA.
    - Maintain at least 25 male boreal toads present at each breeding site each spring.
- Maintain riparian-wetland areas in Proper Functioning Condition.

Management Implementation Guidelines

- Protect currently occupied habitat.
- Reduce potential impacts and threats to boreal toads and breeding areas.
- Design and implement grazing strategies to eliminate potential impacts to breeding sites and adjacent upland boreal toad habitat.
- Restrict camping within 100 ft of riparian areas unless otherwise designated.

Opportunities

- Implement the recommended management strategies for boreal toad habitat, which are presented in the Boreal Toad Conservation Plan and Agreement.
- Conduct annual monitoring of known populations and surveys of all potential habitats.
- Minimize incidences of trampling by livestock.
- Develop projects that improve boreal toad habitat.
- Close campsites and trails in boreal toad breeding habitat occupied within the last 10 years.
- Apply seasonal fishing closures when it impacts occupied boreal toad habitat.
- Maintain vegetative cover requirements necessary to meet the recovery needs of the boreal toad.
- Assess impacts to boreal toad habitats by elk.
- Reintroduce captive-reared boreal toads into the California Park SIA to supplement the existing population and attempt to establish a second known breeding site.
- Conduct population viability analysis in cooperation with the CDOW (pg 19, BTCPA).
- Convert the California Park gravel pit into a wetland suitable as a boreal toad breeding site.

[2] As defined in the Boreal Toad Conservation Plan and Agreement

Colorado River Cutthroat Trout

The Colorado River cutthroat trout (CRCT) is listed as a species of concern by the state of Colorado, a sensitive species by Region 2 of the Forest Service, and was petitioned for listing under the federal Endangered Species Act. The Colorado River cutthroat trout is native to tributaries in the upper Colorado River basin and they thrive in cold, clean water environments.

Colorado River cutthroat trout evolved in isolation from rainbow and other trout. For this reason, the subspecies is vulnerable to hybridization with rainbow trout and to replacement by brook trout and brown trout (Behnke 1992). Introductions of non-native salmonids may have had the greatest effect to Colorado River cutthroat trout and may affect them in different ways. Rainbow trout and non-native subspecies of cutthroat trout readily hybridize with Colorado River cutthroat trout and produce fertile offspring. More populations of Colorado River cutthroat trout may have been lost through hybridization than any other cause (Behnke and Zarn 1976). Brook trout usually oust most subspecies of inland cutthroat trout especially at lower elevations and in low gradient streams (Fausch 1989.) Competition is often suspected as the mechanism leading to replacement, but this has never been demonstrated (Fausch 1988). Water temperature can affect the outcome of competitive interactions between brook trout and Colorado River cutthroat trout and this may confer a competitive advantage to brook trout at lower elevations (Young 1995).

Behnke (1979) stated that Colorado River cutthroat trout occupy less than one percent of their historical range. Their current range in the Yampa and Little Snake Rivers is primarily on National Forest Lands. Martinez (1988) reported that of 37 populations in northwestern Colorado sampled from 1978 to 1987, 12 apparently declined in genetic purity, three were replaced by brook trout, and one population disappeared, possibly because of over harvest.

CRCT have a fairly strong population in Elkhead Creek, the main watershed in the CPSIA, and also occupy most areas of Slater Creek. The population of CRCT in the Elkhead Creek watershed could be considered a metapopulation[3]. Streams include Elkhead Creek and its tributaries, Armstrong Creek, Circle Creek, First Creek, Jokodowski Creek, Stuckey Creek and Torso Creek. Brook trout are present in the Elkhead Creek and Slater Creek watersheds and are considered a threat to the CRCT populations in both systems. Although recreational fishing can sometimes be detrimental to CRCT populations, the existing level of fishing currently occurring in the CPSIA is not considered a threat to these populations. Cutthroat trout habitat quality varies within the CPSIA. Some areas, primarily upper stream reaches, are in good condition and other areas are in bad condition. Areas that are currently in poor condition are not recovering properly and will need direct management action to reverse the trend. Many of theses reaches are too wide with severe bank erosion. The CPSIA naturally has highly erodible soils, creating the potential for severe erosion when these soils are disturbed. This potential is compounded by many impacts in the CPSIA including roads, trails, campsites near the creeks, high elk numbers, and sheep and cattle grazing. The CPSIA also has a moderate amount of beaver activity. Beavers are important in maintaining riparian areas and high water tables. The lowering of the water table due to down cutting of channels, heavy grazing of riparian vegetation by elk and livestock, and trampling of streambanks by

[3] A metapopulation is a collection of 5 localized populations that are geographically distinct yet are genetically interconnected through natural movement of individual fish among populations as defined in the Conservation Agreement and Strategy for Colorado River Cutthroat Trout (*Oncorhynchus clarki pleuriticus*) in the States of Colorado, Utah and Wyoming, April 2001..

ungulates are resulting in the deterioration of riparian willow communities. This is contributing to an increase in water temperatures and sedimentation of the creeks. Poor habitat quality and brook trout competition are the major factors influencing the CRCT metapopulation in Elkhead Creek. CRCT populations in Slater Creek are experiencing many of the same influences as Elkhead Creek.

Purity testing has been done for Armstrong Creek, Circle Creek, Elkhead Creek and First Creek with purity ratings of A- for the populations in these creeks. Torso Creek has a purity rating of B-. Populations in other streams in the Elkhead Creek watershed as well as the streams in the Slater Creek watershed have unknown purity ratings because either they have not been tested or results have not come in yet.

Brook trout have been removed in Armstrong Creek, Circle Creek and Torso Creek since 1997. These efforts have been very successful, especially in Armstrong Creek because brook trout are not present in Armstrong Creek anymore. Circle Creek and Torso Creek still have fairly large numbers of brook trout present. The Torso Creek and lower Elkhead drainages were stocked as recently as 1993 with brook trout.

In order to achieve the management goals for CRCT, it will be necessary to improve habitat conditions and to protect the existing population of CRCT. Improving the riparian condition will help reduce erosion and sediment input into CRCT habitat, stabilize stream banks, increase shading, facilitate lower water temperatures, maintain high water table, and aid in narrowing and deepening the channel.

Management Implementation Guidelines – Colorado River Cutthroat Trout

The CPSIA Integrated Management Plan tiers to the Aquatic Wildlife Management Plan Yampa River Basin, Colorado and the Conservation Agreement and Strategy for Colorado River Cutthroat Trout (*Oncorhynchus clarki pleuriticus*) in the States of Colorado, Utah and Wyoming, April 2001 (Appendices D and E, respectively).

Goals

- Achieve and maintain high quality habitat for Colorado River cutthroat trout within the California Park SIA.
- Achieve and maintain a viable, self-sustaining metapopulation of Colorado River cutthroat trout in the Elkhead Creek and Slater Creek (upstream from Slater Creek Falls) watersheds.
- Improve water quality by improving riparian and upland conditions; increasing bank stability, bank vegetative cover, channel deepening, and decreasing erosion and sedimentation.

Management Implementation Guidelines

- Eliminate or reduce brook trout populations within Elkhead Creek and Slater Creek watersheds within 5 years as measured by annual electrofishing efforts.
- Improve riparian conditions as measured by PFC surveys within 5 years.
- Design grazing management to restore and maintain the riparian area in proper functioning condition.
- Improve substrate composition as measured by Wolman Pebble Counts within 5 years.

Opportunities

- Determine the purity of all CRCT stream populations within the CPSIA in cooperation with the Colorado Division of Wildlife.
- Identify spring spawning habitat and determine if ungulate grazing and recreational activities are impacting this vital habitat.
- Annually remove brook trout in the Elkhead Creek watershed by electrofishing or gill netting.
- Design and implement a brook trout removal project in Slater Creek with cooperation from the Colorado Division of Wildlife.
- Work cooperatively with the Colorado Division of Wildlife in implementing the Aquatic Wildlife Management Plan Yampa River Basin, Colorado.
- In the year 2006, when the Conservation Plan is up for re-authorization, approach the CRCT Task Force to have the Elkhead Creek watershed declared a metapopulation and for the Task Force to recognize the efforts in moving towards a metapopulation in Slater Creek.
- Improve the culvert crossing on FDR 150 at First Creek.
  - i Close and rehabilitate road and camping area at FDR 150 culvert crossing on First Creek.
    - á Completed in 2001.
- Close and rehabilitate FDR 151 east of FDR 150.
  - i Repair stream crossing on FDR 154 at Slater Creek, replacing stream in original channel.
    - á Completed in 2002 and 2003.
  - i Improve stream crossing on FDR 156 at Slater Creek.
    - á Completed in 2003.
- Determine if area specific fishing regulations need to be implemented to reduce fishing pressure and protect the existing population.
- Minimize impacts to beaver activity in Elkhead and Slater Creek watersheds.

- Field evaluation of fish populations in conjunction with the CDOW.

Slater Park Macro Preliminary Conservation Planning Area

The Slater Park Macro Preliminary Conservation Planning Area (SPMPCPA) is 1 of 3 macro sites identified by the Colorado Natural Heritage Program for the Routt National Forest. The area is 16,609 acres in size, of which a portion lies within the CPSIA. The SPMPCPA boundary was delineated to identify significant natural communities and the breeding habitat of wetland and upland birds and amphibians in need of protection and specific management. The CPSIA management plan provides the additional guidance needed for appropriately managing the SPMPCPA within the CPSIA

Preliminary Conservation Planning Areas are evaluated based on biodiversity significance ranks and protection and management urgency levels. The rankings for the SPMPCPA are as follows:

Biodiversity significance rank 2 - very high significance. Species and plant communities that influence the biodiversity significance rank include: boreal toad (*Bufo boreas boreas*), greater sandhill crane (*Grus canadensis tabida*), *Picea pungens / Alnus incana*, *Salix boothii /* mesic *graminoid*, *Salix wolfii / mesic* forb, *Carex aquatilis* wetland.

Management urgency level 2 - essential within 5 years to prevent loss. New management needed for livestock. The entire park should be managed as an ecosystem.

Protection urgency level 3 - definable threat / opportunity, but not within 5 years. Threats could be from previous Forest Plan (1983) management prescription. Breeding population of boreal toads should be considered for special area designation in Forest Plan revision (1997 Forest Plan).

Management Implementation Guidelines – Slater Park Macro Preliminary Conservation Planning Area

Goals

- Maintain the biodiversity significance of the SPMPCPA and reduce the protection and management urgency levels.

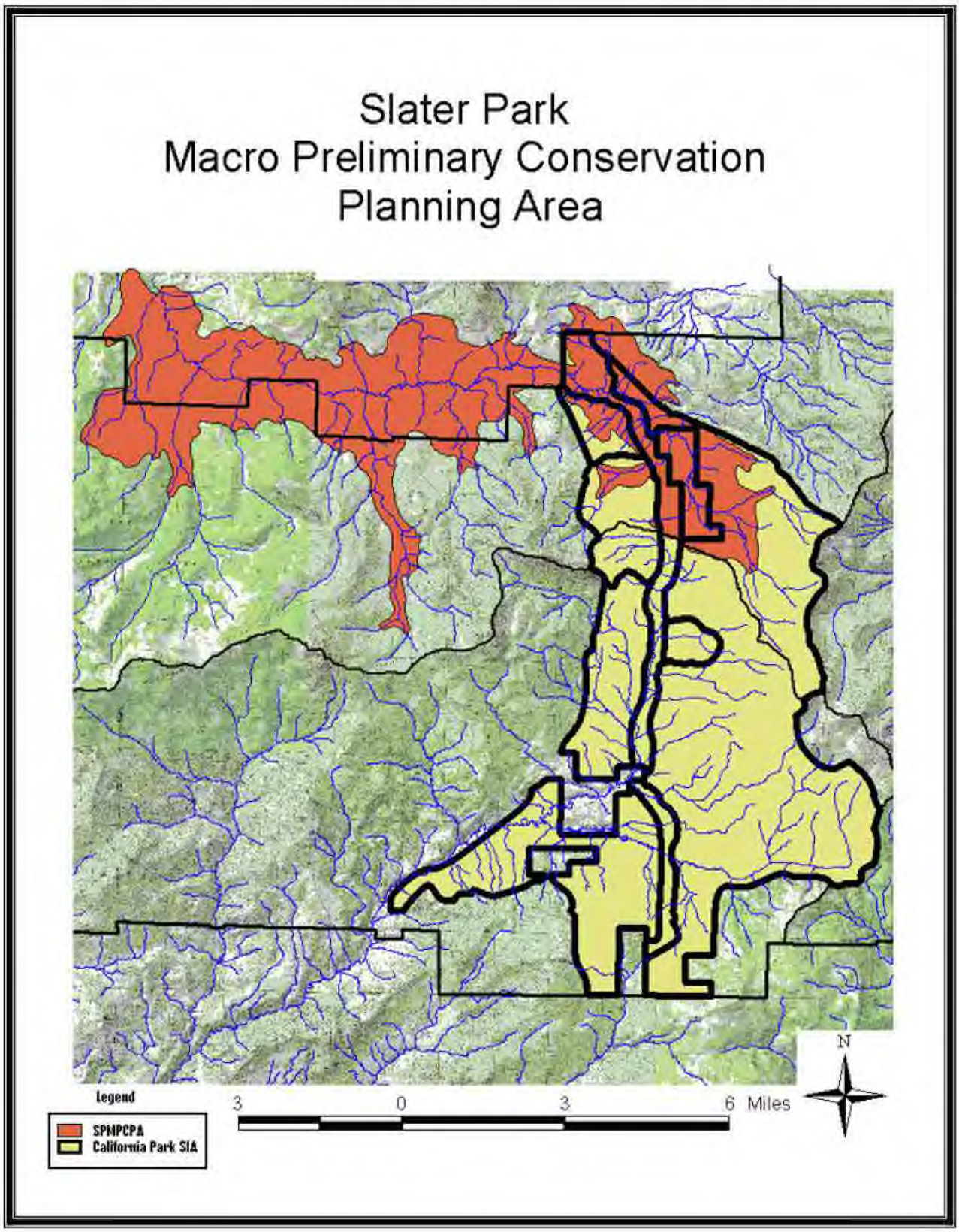
Management Implementation Guidelines

- Protect and manage the SPMPCPA Biodiversity species within the CPSIA.

Opportunities

- Determine when the initial assessment was conducted by the Colorado Natural Heritage Program.
- Work with the Colorado Natural Heritage Program to identify specific areas of importance (locations of plant associations) and concern.
- Develop strategies to improve protection and management of the SPMPCPA.
- Update Range Allotment Management Plans within the SPMPCPA.

Figure 4. Slater Park Macro Preliminary Conservation Planning Area



Limber Pine

Limber Pine is an uncommon coniferous tree species on the Routt National Forest. Many of the remaining limber pine are considered ecological relics, existing in small populations across the Forest.

Limber pine are recognized for their ability to grow on some of the most exposed and inhospitable sites on the RNF. The name "limber" is derived from the tremendous flexibility of its branches, which can almost be bent back over themselves without breaking. This adaptation has ensured the survival of this species, which grows in an environment so hostile, that the high winds and snowfall would snap the branches off of most any other tree. They can be found in many elevations and soil types in the west, but commonly grow on ridgetops and rocky areas at higher elevations in Colorado. Limber pines don't reach maturity until about 300 years and are extremely long lived, reaching 1,000 years of age or more. Due to exposure to wind, snow and extreme cold, they grow in gnarled and twisted forms, and are relatively short, rarely exceeding 50 feet.

Limber pines, like other pines, produce seed contained in cones. Large seed crops may only be produced every 2 to 4 years. The seeds are eaten by birds and small mammals, which provide them with an important source of nutrition. These animals often gather and cache the seeds, for later use, when food is scarce.

Management Implementation Guidelines – Limber Pine

Goals

- Maintain and interpret relic limber pine in the CPSIA.

Management Implementation Guidelines

- Promote public understanding of the CPSIA limber pine population.
- Avoid management actions that may impact the CPSIA limber pine population.

Opportunities

- Map known locations of limber pine in the CPSIA.
- Assess the current condition of the CPSIA limber pine population.
- Protect declining or impacted limber pine
- Assess regeneration success in limber pine
- Develop interpretative information highlighting limber pine.
- Gather information on limber pine on the RNF necessary to evaluate the significance of the CPSIA limber pine population.

Geological Values

The geology of the CPSIA has a number of unique features including sulphur springs, lava dikes, large areas of mobile soils, and high concentrations paleontological resources. The geologic values of the CPSIA not only contribute to the uniqueness of the CPSIA they are also important in influencing the biological diversity found in the area.

One unique geological value of the CPSIA includes the presence of sulphur springs. While sulphur springs are uncommon on the Routt National Forest, at least 6 sulphur springs occur in the CPSIA. Several of the sulphur springs are reported to have been historically hot. The sulphur springs are generally small, inconspicuous and highly disturbed by domestic and wild ungulates which use the springs as a sources for minerals.

It has been proposed that if it were not for the presence of a lava dike in the lower portions of the Elkhead Creek drainage, that the upland parks in the CPSIA would of eroded away thousands of years ago. Lava dikes have also been observed in the Slater park portion of the CPSIA near Forest trail 1147. The soils in the CPSIA are highly mobile and it is not uncommon to observe several slumps and landslides through out the CPSIA. These areas of 'mobile real estate' provide an opportunity to see and interpret these areas of highly mobile soils. The mobile soils in the CPSIA also present a challenge to managing the vegetation and roads in the area as disturbances to these soils can cause the soils to slump.

The CPSIA is known to have numerous paleontological resources including fossils and buffalo skulls. Giant clams have been found in the park along with other fossils including ancient fish that indicate that the area was once an inland sea. While some fossils have been found in the CPSIA, there is still much to be learned about the areas prehistoric past. Identification and assessment of paleontological resources on federal lands is called for under the Routt National Forest Land and Resource Management Plan in Appendix B: National and Regional Policies; Section 110 of the National Historic Preservation Act of 1966 [P.L. 89-665 (October 15, 1966)]; Executive Order 11593 [30 CFR 8921(May 13, 1971)]; and Executive Order 13287 [68 CFR 10635 (March 5, 2003)]. Ideally, all paleontological resources in the CPSIA would be identified, recorded, evaluated for significance, and assessed for effects. Recommendations could then be provided for proactive management of significant fossil localities, including scientific research, stabilization, and interpretation.

Management Implementation Guidelines – Geological Values

To preserve, manage, study, and interpret geological resources they must first be located, recorded, and evaluated for significance. Geographic Information Systems (GIS) and remote sensing can be used to focus in on surficial formations likely to contain important fossils or geologic features. During the recording process, paleontologists should also assess locality condition and potential threats, and recommend future actions to preserve, manage, study, and interpret significant paleontological resources.

Goals

- Interpret and educate the public on the land forms and soils in the CPSIA.
- Improve the soil resource that has been impacted by historic over-grazing uses.
- Identify, preserve, manage, study, and interpret paleontological resources in the CPSIA.
- Promote public understanding of the CPSIA paleontological resources.

Management Implementation Guidelines

- Promote public understanding of the geological values in the CPSIA.
- Design and implement management actions to avoid impacts the CPSIA paleontological resources.
- Eliminate potential impacts and threats to important paleontological resources.

Opportunities

- Identify and map all locations of sulphur springs in the CPSIA.
- Evaluate the impacts of ungulates to the sulphur springs in the CPSIA.
- Assess opportunities for enhancement and interpretation of the CPSIA sulphur springs
- Map and classify all highly mobile soils.
- Map and classify soils that have been impacted by historic grazing practices.
- Identify areas where soil improvement and revegetation can occur.
- Identify areas where 'mobile real-estate' soil movement is occurring.
- Develop an interpretative sign and pull-out that explains the land forms, soils and "mobile real-estate" in the CPSIA.
- Create a predictive GIS model to identify areas where formations that may contain significant fossils that could be exposed on the ground surface.
- Conduct field surveys in these areas to identify, record, and evaluate fossils. Assess locality condition and potential threats, and recommend future actions to preserve, manage, study, and interpret significant paleontological resources.
- Assess site condition and potential threats, and develop recommend future actions to preserve, manage, study, and interpret significant paleontological resources.
    - Develop management recommendations to preserve, manage, and interpret the CPSIA paleontological resources.
- Consider interpreting paleontological sites in the CPSIA.

Historical Values

The California Park Special Interest Area was designated in part due to the historical values in the area. The CPSIA historical values include: prehistoric archaeological sites, historic stock driveway and associated domestic livestock grazing, and homesteads and cabins.

Prehistoric Archaeology

The prehistoric occupation of the Routt National Forest (RNF) appears to have been fairly continuous, if not intensive, from at least 11,000 years before present (B.P.) until historic contact with the Ute and Arapaho.

The earliest evidence of human activity in north-central Colorado comes from the Paleoindian period, commonly defined as lasting from approximately 11,500 to 8,000 years B.P. Paleoindian lifeways are thought to have been largely dependent on big game hunting, especially during the late Pleistocene and early Holocene when megafauna still existed.

The Archaic period spans the time period from approximately 8,000 to 2,000 or 1500 B.P. Archaic lifeways are poorly understood, but are believed to have been highly adapted to the environmental conditions of a particular region. Hunting and gathering remained the exclusive method of subsistence.

The Late Prehistoric period witnessed the introduction of the bow and arrow into hunting tool kits, as well as the limited use of ceramic vessels, into the mountains of northern Colorado. Many desert side-notched ("Ute") arrow points, as well as Plains-style arrow points, have been located on the RNF. Ceramic sherds are not common, but a few sherds of utility ware have been found on the forest.

The Ute occupied the RNF for at least 300 to 400 years, and may have migrated to this area as early as A.D. 1300, based on linguistic evidence (Miller 1986). The Arapaho, Shoshone, Cheyenne, and possibly Kiowa, utilized the mountains of this area to a lesser extent until the 1700s. After 1810, the Ute and Arapaho competed over hunting territory (Hughes 1977:36). In 1879 the White River, Yampatika, and other Ute bands were forcibly removed from their traditional lands and placed on the Northern Ute Reservation in Utah.

American Indian use of California Park is evident in the archaeological sites already identified in the area. In addition, Ute traditional tribal knowledge identifies California Park as a location for gathering native edible (Yampa) and medicinal (Osha) plants. The significance of the CPSIA to Native Americans is still unclear. Additional investigation and field surveys are needed.

Historic Stock Driveways and Domestic Livestock Grazing

Livestock ranching proved to be the most important long-term economic activity in the north-central portion of Colorado. Although the imminent failure of the mines prompted many early settlers to begin raising livestock, it was some time before crops and methods suitable to the basins and high alpine meadows of northern Colorado were developed (Mehls 1984a). The short growing season and variable precipitation patterns of the region dictated that the most successful agricultural product was hay, not only for cattle, but also for the horses and mules utilized in the region's mining camps.

Once the Union Pacific opened lines in southern Wyoming, cowboys were able to ship cattle westward to untouched grazing lands. Soon after, ranchers moved herds to the Little Snake, Yampa, and White River valleys, as well as into North Park. During the heyday of ranching in the 1880s, 1890s, and early 1900s, the ranges were open and ranchers followed a pattern of seasonal land use, letting their herds roam free in the high mountain valleys and meadows during the summer and bringing them back to lower elevations during the winter (Athearn 1982).

The initial success of beef producers in north-central Colorado was tempered by several important factors. Cattle ranchers feared the introduction of sheep in the early 1900s, because of the inevitable competition for grazing lands. Sheep were already in southern Colorado and the San Luis Valley in the 1860s, but it was not until 1890 or 1891 that the first sheep came into northwestern Colorado, driven by sheep rancher Johnny Wilkes from Wyoming.

Additional pressure was put on the sheep and cattle industries after the establishment of the National Forests in 1905. Much of the land that previously had been grazed was withdrawn as timber reserve land and, in addition, herders and ranchers were required to apply for grazing permits. The permits decreased the unregulated grazing, but still allow substantial grazing numbers. In 1907, Wyoming sheep were allowed to graze on the RNF. Up until 1925, eighty percent of the sheep on the Routt were from Wyoming because there were no resident sheepmen in northwestern Colorado.

The California Park and Slater Park basins were used for summer grazing thousands of cattle by many of the large cattle outfits. California Park served as a round up area. The Beef Trail was started around 1870 and thousands of cattle were trailed from the Little Snake River Valley through Slater Park, California Park, Steamboat Springs, Yampa, and Toponas, all the way to Wolcott for shipping every year. Livestock grazing use was unregulated until the Forest Service began issuing permits in 1905. In 1917, the first sheep were grazed in California Park and the 1921 General Land Office plat shows the Bears Ears and Sand Mountain Sheep Trail, and the Hahns Peak and Slater Park Trail crossing the park. Sheep were first officially permitted on National Forest around California Park in 1923. Ultimately, the Forest Service realized that its lands were inundated with livestock and in the 1920s began to seriously monitor the effects of grazing on the land.

The earliest records of permitted use date from the mid to late 1920s. Eight allotments were originally designated within the area now part of the California Park SIA. Management of the permits since 1923 has decreased the allotments to 7 and has substantially reduced stocking numbers of cattle and slightly reduced numbers of permitted sheep.

Homesteads and Cabins

Settlement in the area occurred in the late 1800s to the early 1900s. Most of the first settlers were trappers, followed by homesteaders and ranchers. Edward House's ranch is shown on the 1882 General Land Office plat just south of Elk Head Creek and another unnamed ranch is nearby. Historic maps depict many unnamed cabins and ranches in the park during the late 1800s and early 1900s.

A Mr. Adams was a hide hunter operating in Slater Park in 1886. Settlers lynched him and his German partner because of their devastating hunting practices. Herbert Jones was a homesteader in 1910. He

opened a small country store and operated the Elk Head Post Office south of California Park. Mr. Jokodowski was a bachelor-homesteader that wintered in California Park in 1907. Neighbors remember him communicating across the park with flashing lanterns though by 1917 telephone lines were in the area. The remains of his cabin burned down several years ago.

Another homesteader in the area was Ed Knowles. His cabin still remains south of the California Park Guard Station. Brothers Dan, Chris, and Ira Stukey operated several sawmills and gold mines in the county and Stukey Creek was named after them. Early homesteaders are reported to have grown hay (timothy) in the California Park Area. The historic hay farming that occurred at the homesteads in the CPSIA has influenced the existing vegetation that is observed today. Keeping the historical use of the area in mind is important in understanding the existing condition of the area.

Knowles Cabin - 2003

These historical values are some of the resources identified by the CPSIA designation requiring the management guidelines ensure protection of these values. Ideally, all cultural resources in the CPSIA would be identified, recorded, evaluated for significance, and assessed for effects. Recommendations could then be provided for proactive management of significant sites, including scientific research, stabilization, maintenance, rehabilitation, and interpretation. Identification and assessment of cultural resources on federal lands is called for under the Routt National Forest Land and Resource Management Plan in Appendix B: National and Regional Policies; Section 110 of the National Historic Preservation Act of 1966 [P.L. 89-665 (October 15, 1966)]; Executive Order 11593 [30 CFR 8921(May 13, 1971)]; and Executive Order 13287 [68 CFR 10635 (March 5, 2003)].

Management Implementation Guidelines – Historical Values

To preserve, manage, study, and interpret cultural resources they must first be located, recorded, and evaluated for significance. Prior to field survey, historical research should be conducted to provide a context to assist in identifying and evaluating historical sites. Cultural resources shown on historic maps or reported by others, such as the old California Park Guard Station and Jokowdowski cabin, can be recorded without extensive surveys, but field survey is the only way to find unknown sites. During the recording process, archaeologists should also assess site condition and potential threats, and recommend future actions to preserve, manage, study, and interpret significant heritage resources.

Goals

- Identify, record, preserve, manage, study, and interpret historical resources in the CPSIA.
- Promote public understanding of the CPSIA historical resources.

Management Implementation Guidelines

- Comply with cultural resource laws. Design and implement management actions to avoid impacts to important heritage resources.
- Eliminate potential impacts and threats to important historical resources.
- Locate, identify, record, evaluate, assess, preserve, manage, study, and interpret historical resources in the CPSIA.

Opportunities

- Prepare historical contexts for the CPSIA, using histories, cultural resources records, archival records, oral histories, the reported site records, and consultations with tribes tied to the park. Synthesize the information to provide a basis for finding sites, evaluating their significance, and interpreting them for the public.
- Record known sites in the area that are not yet recorded, including the old location of the California Park Ranger Station, Jokowdowski cabin, and the Old Beef Trail. Assess site condition and potential threats, and recommend future actions to preserve, manage, study, and interpret significant heritage resources.
- Conduct cultural resource surveys in California Park to find unknown sites, such as American Indian archaeological sites. More of these sites need to be identified and studied so the human past and use of the area can be understood and interpreted to the public. Assess site condition and potential threats, and recommend future actions to preserve, manage, study, and interpret heritage sites.
- Stabilize important heritage sites to prevent loss of non-renewable resources and to preserve them for future study and interpretation.
- Standard procedure for RNF cultural resource surveys generates GIS coverages of cultural resources. An analysis of the GIS and other information gathered should be undertaken to provide a synthesis of the prehistory and history of the area, identify research questions and future needed work, and provide new information for interpretation.
- Interview people who participated in the historical life of California Park to document these oral histories.
- Encourage scientific study of cultural resoruces in the CPSIA.
- Interpret historic and prehistoric sites in the CPSIA even if they are not eligible to the NRHP, because the public is often still interested and interpreting less important sites helps better preserve significant sites for scientific study of the human past. Specific options include developing a hiking trail to Knowles Creek Cabin along the old closed road and designing a brochure on the history of California Park's homesteads, stock trails, and other cultural resources.

Scenic Values

The scenery in and around the California Park Special Interest Area is one of the reasons the area was designated as a Special interest Area. The CPSIA is a unique high elevation sagebrush park surrounded by mature aspen forests. Forest road 150, running throught he CPSIA is designated as a 4.2 scenery management prescription area (Figure 2, page 8). This additional management area designation within the SIA was established to ensure the appropriate management of the scenic resouce.

Aspen was identified as particularly important in the California Park SIA for its scenic value. The aspen stands in the California Park SIA include some of the largest diameter aspen trees on the forest, some of the most extensive aspen clones. The forests are extensive and surround the majority of the open parklands. The SIA aspen stands are a scenic resource treasured by the public. The colorful displays of the fall leaves and changing colors brings people from all over the country to the California Park SIA.

Aspen stands in the area have the potential to be either relatively stable or in a successional stage to climax as conifer stands (Mueggler, 1988). It appears that both situations are occurring in the area. Aspen in the CPSIA is declining in some areas due to succession to conifer and browsing of young regeneration by wild and domestic ungulates. An aspen push (designed to regenerate aspen stands) was conducted on approximately 20 acres east of Knowles creek in 1992. Browsing by wild and domestic ungulates eliminated all regeneration stimulated by the management action and hence converted the aspen stands into upland openings.

In addition to the scenic value of aspen, the aspen forests surrounding the CPSIA are very important to many wildlife species including the greater sandhill crane. The aspen forest ecosystem supports a high level of biodiversity and is a critical habitat type for many species of migratory songbirds. The aspen stands in the California Park SIA are home to the only known nesting colony of purple martin (*Progne subis*) on the Routt National Forest. These cavity nesting birds are classified as a Forest Service Region 2 sensitive species and are declining across their range.

The Forest Plan has additional direction in regards to aspen management as follows:
Biological Diversity
Guideline 1. Maintain aspen, even at the expense of spruce/fir or other late-successional stands.

Management Implementation Guidelines – Scenic Values

Goals

- Promote successful regeneration of declining aspen clones.

Management Implementation Guidelines

- Maintain and improve the aspen forests in the CPSIA
- Promote public understanding of the unique high elevation parks in the CPSIA.

Opportunities

- Use prescribed burning in declining aspen stands to regenerate aspen.
- Adjust management to reduce ungulate impacts to regenerating aspen stands.
- Look at opportunities to regenerate declining aspen stands.
- Consider the use of temporary fencing to protect regenerating aspen stands.
- Evaluate the existing condition of aspen forests in the CPSIA.
- Evaluate change in the CPSIA aspen stands by review of historical aerial photographs.
- Identify climax and successional aspen stands.
- Create an interpretative display to educate the public on the unusual high elevation parks in the CPSIA.
- Evaluate if the 4.2 management prescription area designation in the CPSIA is necessary with a scenery management emphasis incorporated into the CPSIA.
    - Consider a nonsignificant Forest Plan amendment to dissolve this prescription designation and convert to 2.1 SIA designation.
- Monitor the aspen community type to help quantify changes in aspen stand presence and aspen understory characteristics. Aspen monitoring should include permanent transects and photo points.

General Goals and 'Other' Opportunities

This section of the management plan was developed to identify the Goals, Management Implementaiton Guidelines, and Opportunities that were developed in the working group process. This 'Other Opportunities' section was developed because some goals and opportunities are more general pertaining to larger issues in the SIA and do not clearly fit within the contecxt of an SIA special interest value topic.

Management Implementation Guidelines – General Goals and 'Other Opportunities'

Goals

- Maintain elk population numbers that are consistent with the capability of the area to provide habitat for nongame species, SIA value focus species as well as forage for livestock without compromising resource objectives.
- Improve hunter success and satisfaction by retaining elk on National Forest during hunting season.
- Continue to involve the individuals and groups who have commented on the management actions occurring in the California Park area during scoping efforts.
- Develop a comprehensive interpretative plan for the California Pak SIA.

Management Implementation Guidelines

- Road and access management proposals should be developed in close coordination with district recreation specialists.
- Provide ample public opportunity to comment on actions proposed for implementation within the CPSIA as a result of the management plan.

Opportunities

- Develop an action plan with goals for short term and long term action.
- Develop a mechanism for evaluation and updating the California Park Management Plan.
    - Hold an annual meeting of the California Park working group to review, comment and evaluate the Management Plan.
- Conduct follow-up monitoring on all land management actions to evaluate if the action is successful in moving the condition towards the DFC. Align monitoring with Forest Plan monitoring.
- Work with the CSU extension office to test tarweed treatment alternatives.
- Reduce elk populations within the CPSIA.
- The CDOW will implement a limited archery and muzzleloading season for the California Park area (began in 2000), reducing early season elk movement to private land, and providing for the opportunity for improved elk harvest during the rifle season.
    - Continue the elk management regulations.
- Elk responses and movements will be monitored to determine success of alterations to management strategies and success of decreasing elk populations in the CPSIA.
- Consider closing or decommissioning roads providing excessive motorized access to elk and contributing to elk movement off of National Forest lands.
- Evaluate elk response to seasonal trail closures. Determine if closures are effective at keeping

elk on the National Forest during the hunting season.

- Evaluate the effects of the spring road closure to elk.
- Outline road concerns identified in the Elkhead and Slater Roads Analyses that are causing resources damage, and identify actions to minimize and mitigate negative impacts.
- Conduct utilization assessments for both livestock and wildlife forage use. This is necessary in order to quantify wildlife use before livestock enter the allotment; and to additionally quantify use occurring through the remainder of the season when both livestock and wildlife are present.
- Identify key riparian reaches where long term quantitative monitoring will be conducted. As management changes are made to achieve desired conditions, such monitoring will be necessary to more accurately determine the trend of riparian conditions. Such monitoring should include permanent transects and photo points.
- Develop scoring method for rangeland and riparian seral stages.
- Determine changes in the hydrologic regime through an analysis of nearby USGS stream gauge data.
- Conduct stream bank surveys to determine the extent of unstable banks and potential rehabilitation measures.
- Develop allotment management plan for the California Park Allotment that incorporated the Management Implementation Guidelines developed for the SIA.
- Determine the pros and cons of designating the CPSIA as a State Natural Area.
    - Contact the Natural Areas program and initiate the designation process.
    - Improve management of the state section of land within the CPSIA.
    - Mark the boundary of the state section of land.
    - Evaluate the potential of converting the state section of land to Federal ownership.
- Develop a comprehensive interpretation plan for the California Park SIA. This would require a commitment of funding and personnel time, and would be best accomplished with the help of an interpretive specialist.
    - Get partners to help us in this area.
    - Educate recreationists on the California Park SIA values, and positively encouraged people to respect and protect these values.
    - Evaluate the interpretative opportunities of the California Park Guard station.
    - Emphasize attractive and effective information, education and interpretation displays at key locations, focusing on the Special Interest Area values.
    - Present accurate information on regulations and restrictions intended to protect the SIA values.
    - Appropriately sign, number and maintain all Forest Development Roads in the SIA to their designated level, according to Road Management Objectives.
    - Develop current, attractive and informative trailhead displays.
    - Promote public understanding and support for the CPSIA management plan inorder to protect the special values of the area.
- Adequately sign and maintain trail 1144.
- Ensure signs throughout the management area are well maintained and conform to current standards.
- Inventory and monitor dispersed campsites.
- Evaluate the potential of renting the California Park Guard Station as a base for recreation and interpretive opportunities throughout the summer, fall and winter.
- Rehabilitate dispersed campsites prior to degeneration beyond acceptable standards.

- Implement strategies to reduce or eliminate off-road motorized vehicle violations.
- Develop and maintain parternships to maintain and mark snowmobile access routes.
- Develop strategies to maintain the good opportunity for solitude in the CPSIA.
- Develop a strategy to ensure adequate state and federal agency presence for a high level of public service and resource protection.

REFERENCES

Athearn, Frederic J. 1982. *An Isolated Empire: A History of Northwest Colorado.* Bureau of Land Management-Colorado. Cultural Resource Series No. 2. Second Edition. Denver.

Author Unknown. 1975. *History of Routt National Forest 1905-1975.* Ms on file at Routt National Forest Supervisor's Office, Steamboat Springs, Colorado.

Behnke, R. J. 1979. *Monograph of the Native Trouts of the Genus Salmo of Western North America.* USDA Forest Service, Rocky Mountain Region, Denver, Colorado.

Behnke, R. J. 1992. *Native Trout of Western North America.* American Fisheries Society Monograph 6.

Behnke, R. J., and M. Zarn. 1976. *Biology and Management of Threatened and Endangered Western Trouts.* USDA Forest Service, Rocky Mountain Forest and Range Experimental Station, Fort Collins, Colorado. General Technical Report RM-28.

Berrigan, Dianne M. 1987. *A Class III Intensive Cultural Resource Inventory for the East Farnham Timber Sale in the Yampa* at the Routt National Forest Supervisor's Office, Steamboat Springs, Colorado.

BLM, 1993: Riparian area management: process for assessing proper functioning condition. U.S. Dept. of the Interior, Bureau of Land Management Service Center, Denver CO, TR 1737-9 1993. 51 pp.

Boisvert, J.H. 2001. Personal Communication with Columbian Sharp-tailed grouse biologist Jennifer H. Boisvert. Steamboat Springs, Colorado.

CDH 1998: Provisional implementation guidance for determining sediment deposition impacts to aquatic life in streams and rivers. Colorado Dept. of Health and Environment, June 1998.

CDH, 2002: Water quality segments still requiring TMDLs: Colorado's 2002 303(d) list and monitoring and evaluation list. Colorado Dept. of Public Health and Environment. September 2002.

CRCT Task Force. 2001. *Conservation Agreement and Strategy for Colorado River Cutthroat Trout (Oncorhynchus clarki pleuriticus) in the States of Colorado, Utah and Wyoming.* Colorado Division of Wildlife. Fort Collins. 87p.

Fausch, K. D. 1988. *Tests of Competition Between Native and Introduced Salmonids in Streams: What Have We Learned?* Canadian Journal of Fisheries and Aquatic Sciences 45:2238-2246.

Fausch, K. D. 1989. *Do Gradient and Temperature Affect Distributions of, and Interactions Between, Brook Char (Salvelinus fontinalis) and Other Resident Salmonids in Streams?* Physiology and Ecology Japan, Special Volume 1:303-322.

Hughes, J. Donald. 1977. *American Indians of Colorado.* Pruett Publishing Company, Boulder, Colorado (2nd Edition, 1987).

Martinez, A. M. 1988. *Identification and Status of Colorado River Cutthroat Trout in Colorado.* American Fisheries Society Symposium 4:81-89.

Mehls, Steven F. 1984. *Colorado Mountains Historic Context.* Colorado Historical Society, Denver, Colorado.

Metcalf, Michael D., and Kevin D. Black. 1991. *Archaeological Excavations at the Yarmony Pit House Site, Eagle County, Colorado.* Bureau of Land Management-Colorado, Cultural Resources Series No.31, Denver.

Miller, Wick R. 1986. Numic Languages. In *Great Basin*, edited by Warren L. D'Azevedo, pp. 98-106. Handbook of North American Indians, vol. 11, edited by William C. Sturtevant. Smithsonian Institution, Washington, D.C.

Tread of Pioneers Museum. 1979. *The Historical Guide to Routt County*. Frederic Printing, Denver, CO.

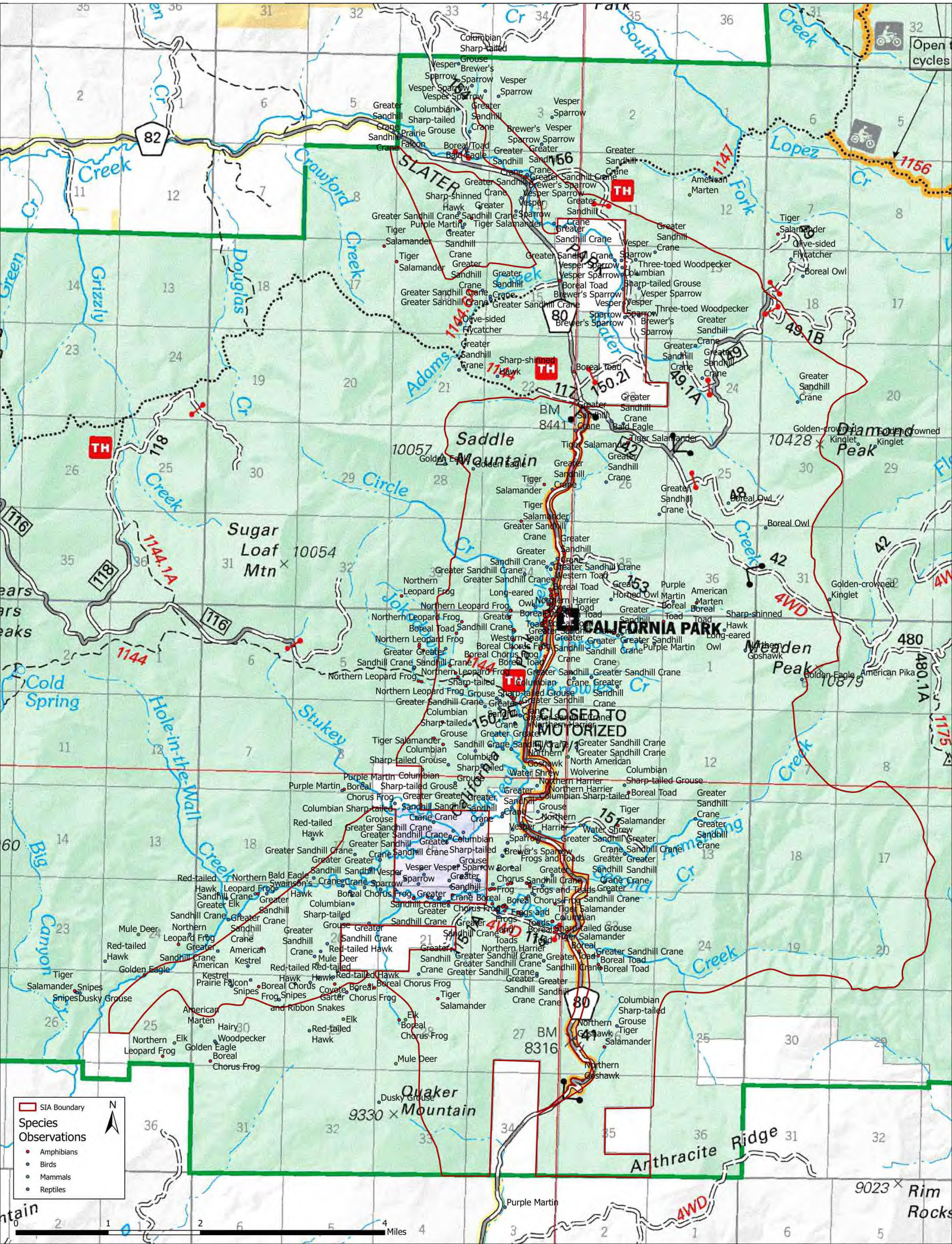
USDA Forest Service. 1998a. *Routt National Forest Land and Resource Management Plan, 1997 Revision.* USDA Forest Service Medicine Bow-Routt National Forest. Steamboat Springs, Colorado.

USDA Forest Service. 1998b. *Final Environmental Impact Statement for the Routt National Forest Land and Resource Management Plan - 1997 Revision.* USDA Forest Service Medicine Bow-Routt National Forest. Steamboat Springs, Colorado.

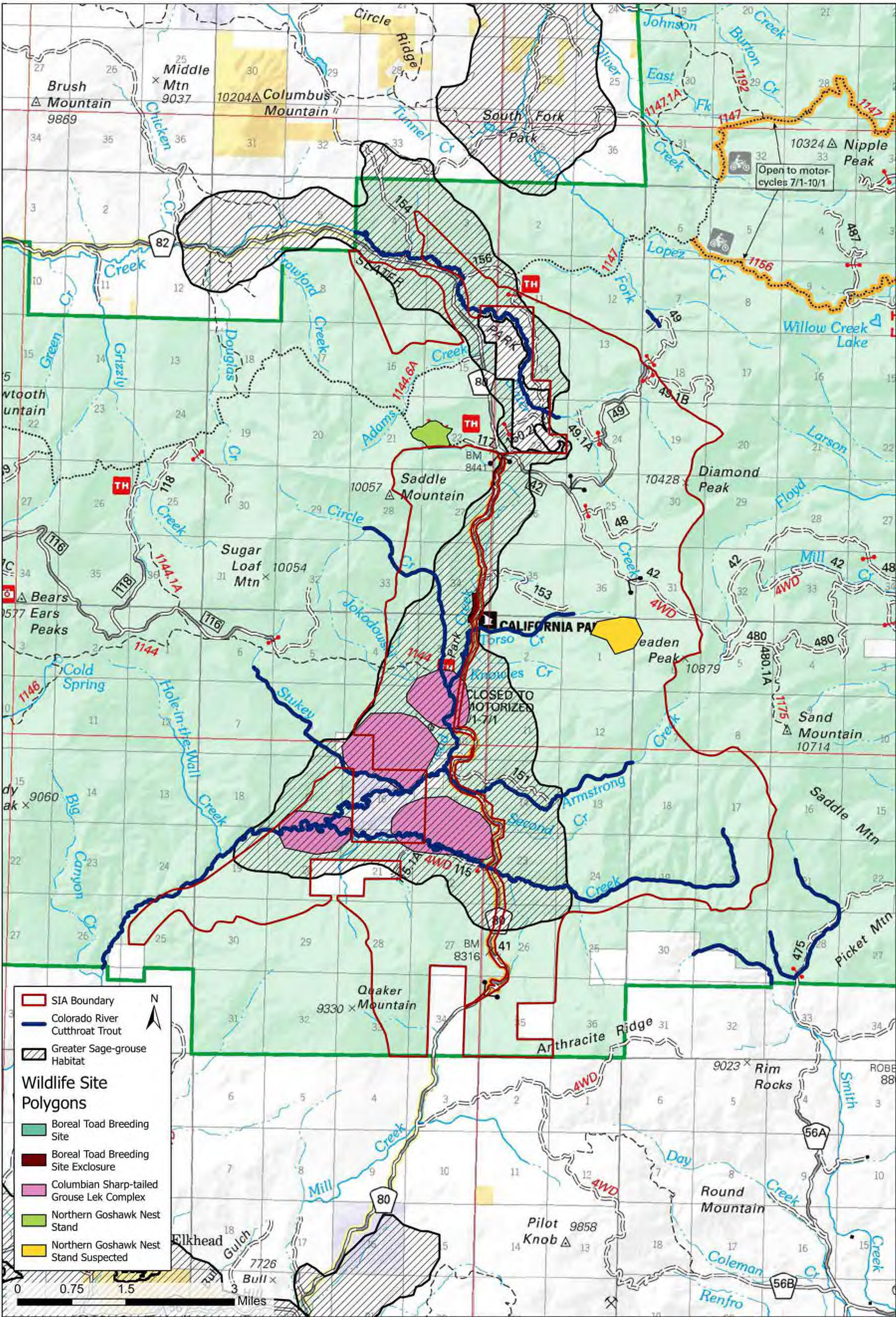
Winward, A.H. 2000: Monitoring the vegetation resources in riparian areas. USDA Forest Service Rocky Mountain Research Station General Technical Report RMRS-GTR-47, April 2000. 49 pp.

Young, M. K. 1995. *Colorado River Cutthroat Trout.* M. K. Young, technical editor. Pages 16-23. In: A Conservation Assessment for Inland Cutthroat Trout. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado. General Technical Report RM-GTR-256.

California Park Wildlife Observations



California Park Wildlife Polygons



Field Review for the Bears Ears Fuels Reduction and Restoration Project

Medicine Bow-Routt National Forest

Hahns Peak – Bears Ears Ranger District

Prepared by: Chelsea Johnson, Biological Science Technician

FY 22

INTRODUCTION

The Fuels Reduction part of the project area contains approximately 57,000 acres. The project fuels area was designed with using data from the Routt County Community Wildfire Protection Plan (CWPP) and the Moffat County CWPP. A 300-foot buffer around private lands, homes and the areas outlined in the Moffat County CWPP. A 100-foot buffer along private lands and USFS trails, and natural barriers were used to create fuel breaks for conducting prescribed fires or to assist in the management of fires in the event of a wildfire. The prescribed fire areas were determined by looking at roads, trails and natural barriers that would assist in the control of prescribed fires as well as assist with fire management in the event of a wildfire.

The majority of the project area is located in the Elkhead Mountain Geographic Area, with the north part of the project area in the Slater Creek Geographic Area.

The Elkhead Mountain Geographic Area is managed by of Forest management prescriptions, 1.32 Backcountry Recreation, 2.1 research natural Areas, 4.2 Scenery, 4.3 Dispersed Recreation, 5.11 General Forest and Rangelands-Forest Vegetation Emphasis, 5.12 General Forest and Rangelands-Range Vegetation Emphasis, and 5.13 Forest products, outlined in the Routt Forest Land and Resource Management Plan, 1997 Revision (LRMP) pp. 3-45 through 3-46.

The Slater Creek Geographic Area is managed by of Forest management prescriptions, 1.32 Backcountry Recreation, 2.1 research natural Areas, 3.31 Backcountry Recreation, motorized, 4.2 Scenery, 4.3 Dispersed Recreation, 5.11 General Forest and Rangelands-Forest Vegetation Emphasis, and 5.13 Forest products, outlined in the Routt Forest Land and Resource Management Plan, 1997 Revision (LRMP) pp. 3-61 through 3-62.

Forest Service management activities in the Bear Ears Fuels Reduction and Restoration Project area have historically included timber sales, timber salvage, precommercial thinning, hazardous fuel reduction treatments, grazing, non-motorized & motorized trail building and maintenance, rangeland improvements, stream restoration for Colorado River cutthroat trout and water quality, and restoration of intermittent and ephemeral draws and fire suppression. NEPA that has been completed in the past that included hazardous fuel reduction and timber removal include Forest-Wide Hazardous Tree Removal and Fuels Reduction (2009), along with the Armstrong (2012) and First Creek (2017) Restoration Environmental Assessments which were implemented through 2021.These projects focused on restoring Colorado River cutthroat trout habitat as well as improving riparian/wetland habitats, stream function and water quality. The wet meadow and upland restoration would complement these past efforts providing for comprehensive watershed restoration.

PURPOSE AND NEED

The purpose of this project is (1) to reduce wildfire risk to the communities of Wilderness Ranch, Hitch Mountain, and Quaker Mountain. (2) To reduce wildfire effects including sedimentation increases, to the City of Craig additional water supply the Elkhead Reservoir, (3) to enhance efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape; (4) to protect, restore, and enhance forest ecosystem components—(A) to promote the recovery of Greater Sage Grouse and native fish species ;(B) to improve biological diversity; and(C) to

enhance productivity and carbon sequestration. (5) Completed through a collaborative process of planning, prioritizing, implementing hazardous fuel reduction projects, and wetland/upland restoration projects.

PROJECT AREA

The proposed Bears Ears Fuels Reduction Project area is located on the Hahn's Peak Bears Ears Ranger District of the Medicine Bow-Routt National Forests and Thunder Basin National Grassland in Routt County, Colorado, approximately 10 miles north of Hayden, Colorado. The legal land description is

Township 8 North, Range 88 West, Sections; 5,6
Township 9 North, Range 86 West, Sections; 5,20,21,28,29
Township 9 North, Range 87 West, Sections; 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,17,18,19,20,21,22, 23,24,25,26,27,28,29,30,31,32,33,34,35
Township 9 North, Range 88 West, Sections; 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19, 20,21,22,23,24,25,26,27,28,29,30
Township 9 North, Range 89 West, Sections; 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,23,24,25
Township 9 North, Range 90 West, Sections; 1
Township 10 North, Range 86 West, Sections; 3,4,5,7,17,18,19,30,31,32,33
Township 10 North, Range 87 West, Sections; 3,4,9,10,11,13,15,16,17,19,21,22,23,26,27,28,29,30,31, 32,33,34,35,36
Township 10 North, Range 88 West, Sections; 7,8,9,10,13,14,18,19,20,21,22,23,24,25,26,27,28,29,30,31 32,33,34,35,36
Township 10 North, Range 89 West, Sections; 1,2,3,4,5,6,7,8,11,14,15,16,17,18,19,20,21,22,26,27,28,29, 30,31,32,33,34,35,36
Township 10 North, Range 90 West, Sections; 13,14,23,24,25,26,36
Township 11 North, Range 86 West, Sections; 3,4,5,8,18,30,32,33

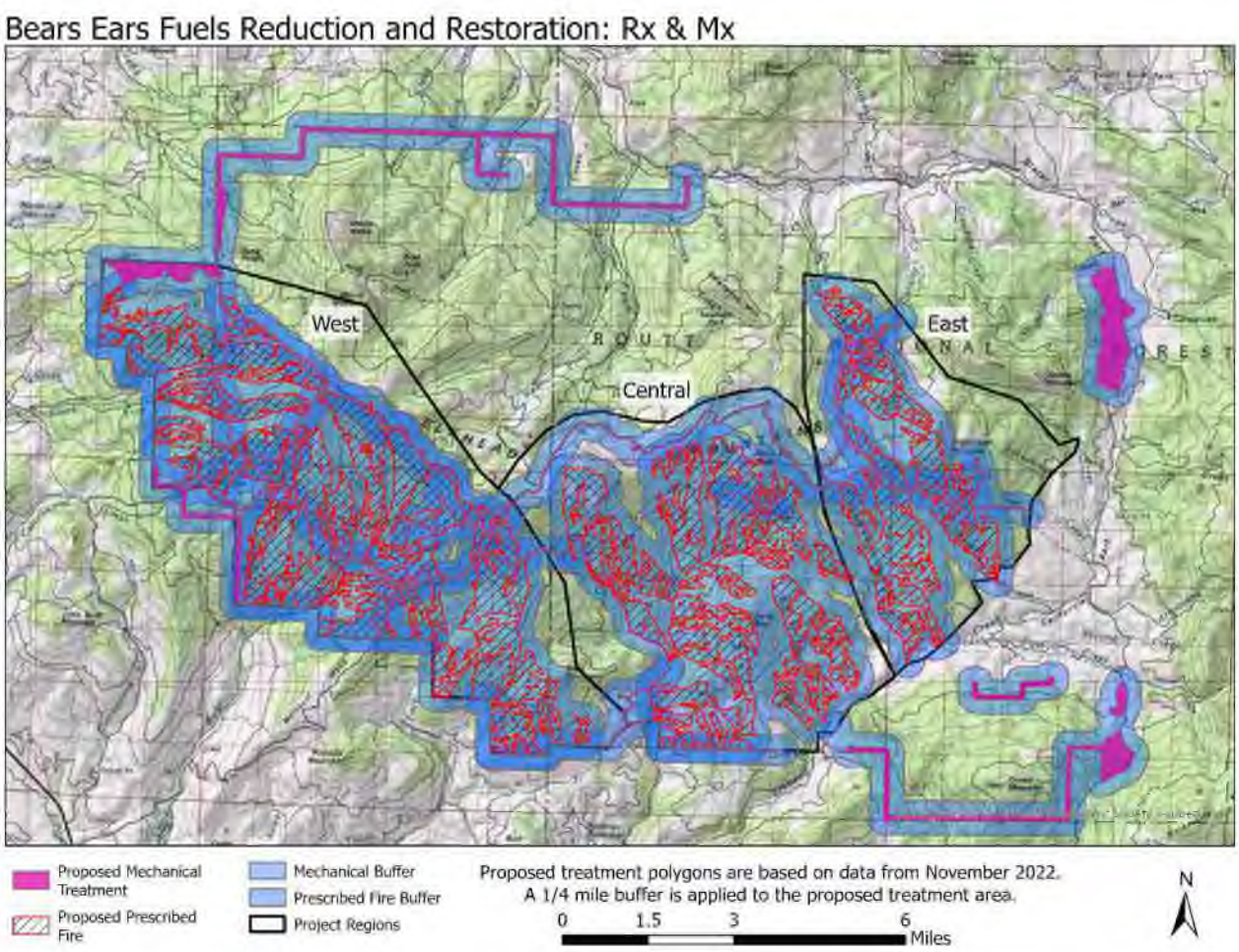


Figure 1. Proposed fuel treatments including mechanical and prescribed fire for the Bears Ears Fuels Reduction and Restoration project.

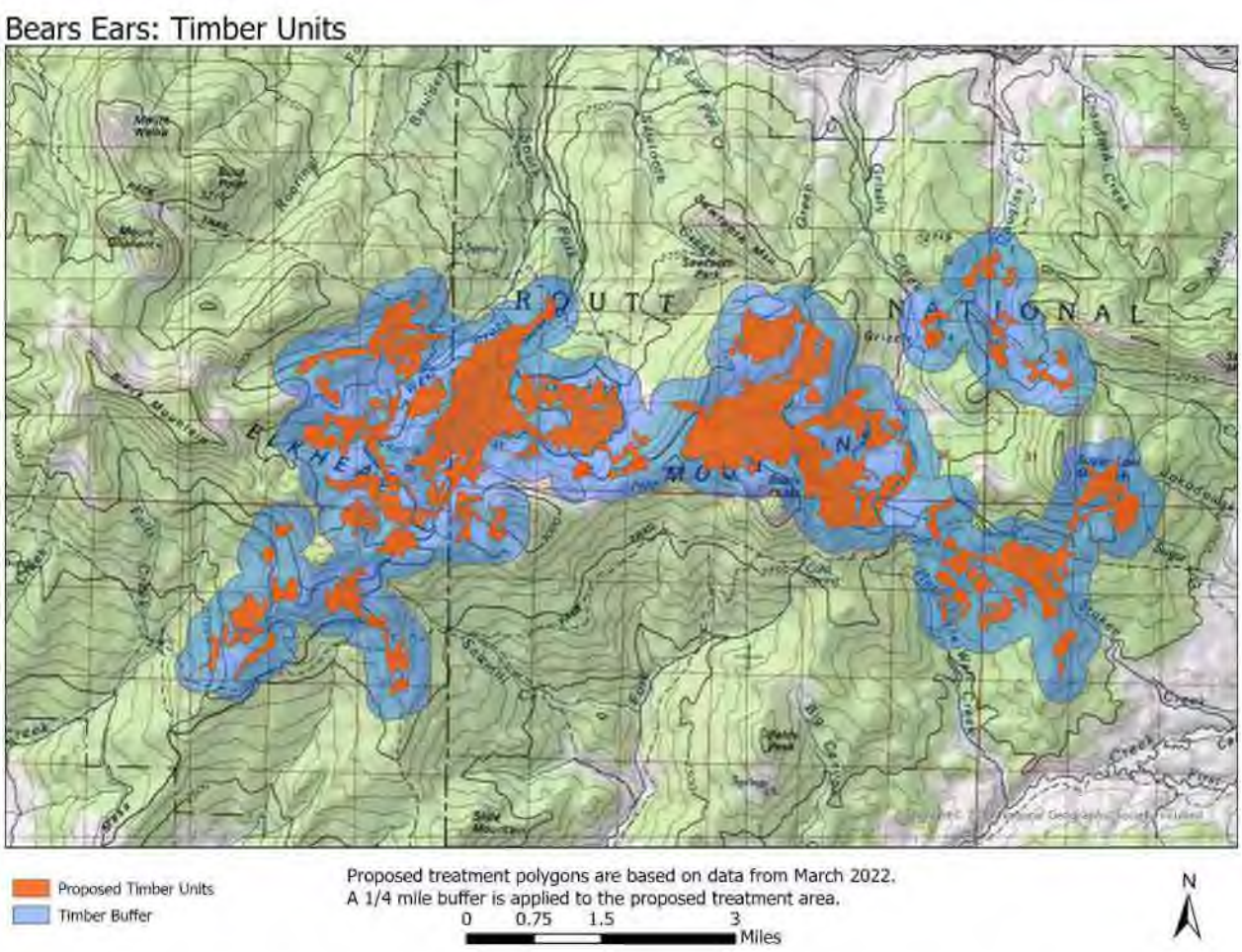


Figure 2. Proposed timber units to be included in the Bears Ears Fuels Reduction and Restoration project.

PRE-FIELD REVIEW

A pre-field review was conducted for threatened (T), endangered (E), and sensitive (S) terrestrial species that may occur or be affected by activities associated with the Bears Ears Fuels Reduction and Restoration project. Total area examined was 68,623.70 acres; 61,833 acres occurring within the fuels proposed action area and 17,143.47 acres occurring within the timber proposed action area. These areas included proposed treatments with a 0.25 mile buffer to account for total area that will be surveyed for wildlife (Table 1). The timber portion of the project was also analyzed in this pre-field review but will likely become a separate project in the future.

Table 1. Estimated acreage for each proposed treatment, including survey buffer for wildlife. Buffer acreage excludes private land that will not be surveyed.

Bears Ears Fuels	Proposed Treatment Area	Proposed Area w/ 0.25 mile buffer
Mechanical Treatment	4,989.64	27,440.72
Prescribed Fire	20,197.60	42,287.75
Total	25,187.15	54,352.00

** there is overlap between mechanical and prescribed fire treatments

Timber	5,040.50	17,143.47
Total	5,040.50	17,143.47
Total w/ Fuels and Timber	28,957.85	61,142.49

** there is overlap between proposed fuels and timber treatments

Existing occurrence information within the buffered treatment area, as well as known or potential habitat, was reviewed by overlaying the Natural Resource Information System (NRIS) Wildlife database. TES and Region 2 sensitive species that were historically detected within 0.25 miles of the proposed actions are listed below (Table 2,3,4,5,6,7).

Table 2. Known historical occurrences of wildlife that occurred either within the proposed mechanical treatment boundary or within 0.25 miles. TES species are denoted with letters, R2 sensitive species are italicized with an asterisk (*). All known historical occurrences of terrestrial species are listed in appendix i.

Species	In Project Boundary	Near Project Boundary (0.25 mile)	Total
Boreal Toad *	2	7	9
Brewer's Sparrow *	0	3	3
Canada Lynx **(E)**	0	1	1
Greater Sandhill Crane	1	17	18
Northern Goshawk *	11	25	36
Northern Harrier *	0	1	1
Northern Leopard Frog *	2	4	6
Olive-sided Flycatcher *	2	0	2
Pacific Marten *	0	4	4
Purple Martin *	0	1	1
Total	18	63	81

Table 3. Known wildlife sites (points and polygons) that occurred either within the proposed mechanical treatment boundary or within 0.25 miles.

Wildlife Sites (points)	In Project Boundary	Near Project Boundary (0.25 mile)	Total
American Pika Logger #13	0	1	1
Greater Sandhill Crane Nest	1	9	10
Northern Goshawk Nest	2	8	10
Raptor Nest	0	2	2
Snowshoe Hare Pellet Plot Reference Point	8	22	30
Songbird Monitoring Points – MIS	1	6	7
Amphibian Site	0	1	1
Total	12	49	61

Wildlife Sites (polygons)	In Project Boundary	Near Project Boundary (0.25 mile)	Total
Field Validated Lynx Winter Foraging Habitat	0	1	1
Northern Goshawk Nest Stand	2	3	5
Total	2	4	6

Table 4. Known historical occurrences of wildlife that occurred either within the proposed prescribed fire treatment boundary or within 0.25 miles. TES species are denoted with letters, R2 sensitive species are italicized with an asterisk (*). All known historical occurrences are listed in appendix ii.

Species	In Project Boundary	Near Project Boundary (0.25 mile)	Total
Black-footed Ferret **(E)**	0	1	1
Boreal Toad *	2	3	5
Brewer's Sparrow *	1	2	3
Canada Lynx **(E)**	1	0	1
Northern Goshawk *	3	12	15
Northern Leopard Frog *	0	4	4
Olive-sided Flycatcher *	0	2	2
Pacific Marten *	1	2	3
Purple Martin *	1	1	2
Total	9	27	36

Table 5. Known wildlife sites (points and polygons) that occurred either within the proposed prescribed fire treatment boundary or within 0.25 miles.

Wildlife Sites (points)	In Project Boundary	Near Project Boundary (0.25 mile)	Total
American Pika Logger #13	1	0	1
Cliff Nest	0	1	1
Greater Sandhill Crane Nest	7	7	14
Northern Goshawk Nest	0	4	4
Peregrine Falcon Nest	0	1	1
Purple Martin Colony	0	1	1
Raptor Nest	0	4	4
Snowshoe Hare Pellet Plot	14	16	30
Songbird Monitoring Point - MIS	4	9	13
Total	26	43	69

Wildlife Sites (polygons)	In Project Boundary	Near Project Boundary (0.25 mile)	Total
Columbian Sharp-tailed Grouse Lek Complex	0	2	2
Northern Goshawk Nest Stand	3	0	3
Total	3	2	5

Table 6. Known historical occurrences of wildlife that occurred either within the proposed timber treatment boundary or within 0.25 miles. TES species are denoted with letters, R2 sensitive species are italicized with an asterisk (*). All known historical terrestrial species occurrences are listed in appendix iii.

Species	In Project Boundary	Near Project Boundary (0.5 mile)	Total
Boreal Toad *	1	2	3
Brewer's Sparrow *	0	3	3
Northern Goshawk *	3	7	10
Olive-sided Flycatcher *	3	8	11
Pacific Marten *	2	2	4
Total	9	22	31

Table 7. Known wildlife sites (points and polygons) that occurred either within the proposed timber treatment boundary or within 0.25 miles.

Wildlife Sites (polygons)	In Project Boundary	Near Project Boundary (0.25 mile)	Total
Field Validated Lynx Foraging Habitat	0	1	1
Northern Goshawk Reserve Nest Stand	2	3	5
Total	2	4	6

Wildlife Site (points)	In Project Boundary	Near Project Boundary (0.25 mile)	Total
Carnivore Camera Site	2	1	3
Northern Goshawk Nest	1	1	2
Raptor Nest	0	1	1
Snowshoe Hare Pellet Plots	16	34	50
Songbird Monitoring Points - MIS	2	12	14
Total	21	49	70

Lynx Habitat

Proposed actions occur within the Elkhead LAU, and the Sugarloaf LAU. Proposed fuels actions within the Elkhead LAU would result in an estimated 10,340.80 acres of suitable lynx habitat being converted into unsuitable habitat and brings the total unsuitable percentage to 29.20%. Proposed timber actions would convert an additional 2,786.30 suitable habitat into unsuitable and bring the total unsuitable percentage over the 30% allowable threshold to 35.61%. However, 2,717.70 acres fall within the HFRA WUI definition and can be used towards the total 3% WUI allowance for the Medicine Bow-Routt National Forest. Including this exemption brings the final unsuitable percentage for both proposed fuels and timber actions below the 30% threshold to 29.36% (Table 8, Figure 3,4).

Proposed fuels actions within the Sugarloaf LAU would result in an estimated 3,614.50 acres of suitable lynx habitat being converted into unsuitable habitat and brings the total unsuitable percentage to 15.11%. Proposed timber actions would convert an additional 2,254.20 acres of suitable lynx habitat into unsuitable habitat and bring the total unsuitable habitat percentage to 20.54% (Table 8). The proposed Diamond Peak Vegetation management project also occurs within the Sugarloaf LAU and converts an estimated 71.6 acres of suitable into unsuitable habitat as the project is proposed at this time. This brings the total unsuitable habitat percentage to 20.73%. All estimated acreages assume that proposed actions will result in 100% conversion of suitable lynx habitat into unsuitable lynx habitat.

Table 8. Estimated impacts to lynx habitat acreage per LAU based on proposed actions. Proposed actions are estimated to result in 100% conversion of suitable lynx habitat to unsuitable habitat.

LAU	Treatment Type	Suitable Habitat	Unsuitable Habitat	Total	Percentage	New Habitat Acres	New Unsuitable Habitat Acres
Elkhead	Prescribed Fire	8,965.30	122.90	9,088.20			
	Mechanical	1,693.17	73.68	1,766.85			
	Total	**10,340.80**	**180.40**	**10,521.20**	**29.20**	**30,813.20**	**12,710.80**
Sugarloaf	Prescribed Fire	2,510.01	151.39	2,661.40			
	Mechanical	1,206.73	44.65	1,251.38			
	Total	**3,614.50**	**191.90**	**3,806.40**	**15.11**	**35,131.50**	**6,253.50**

**there is overlap between prescribed fire and mechanical treatment polygons

**there is overlap between prescribed fire and mechanical treatment polygons

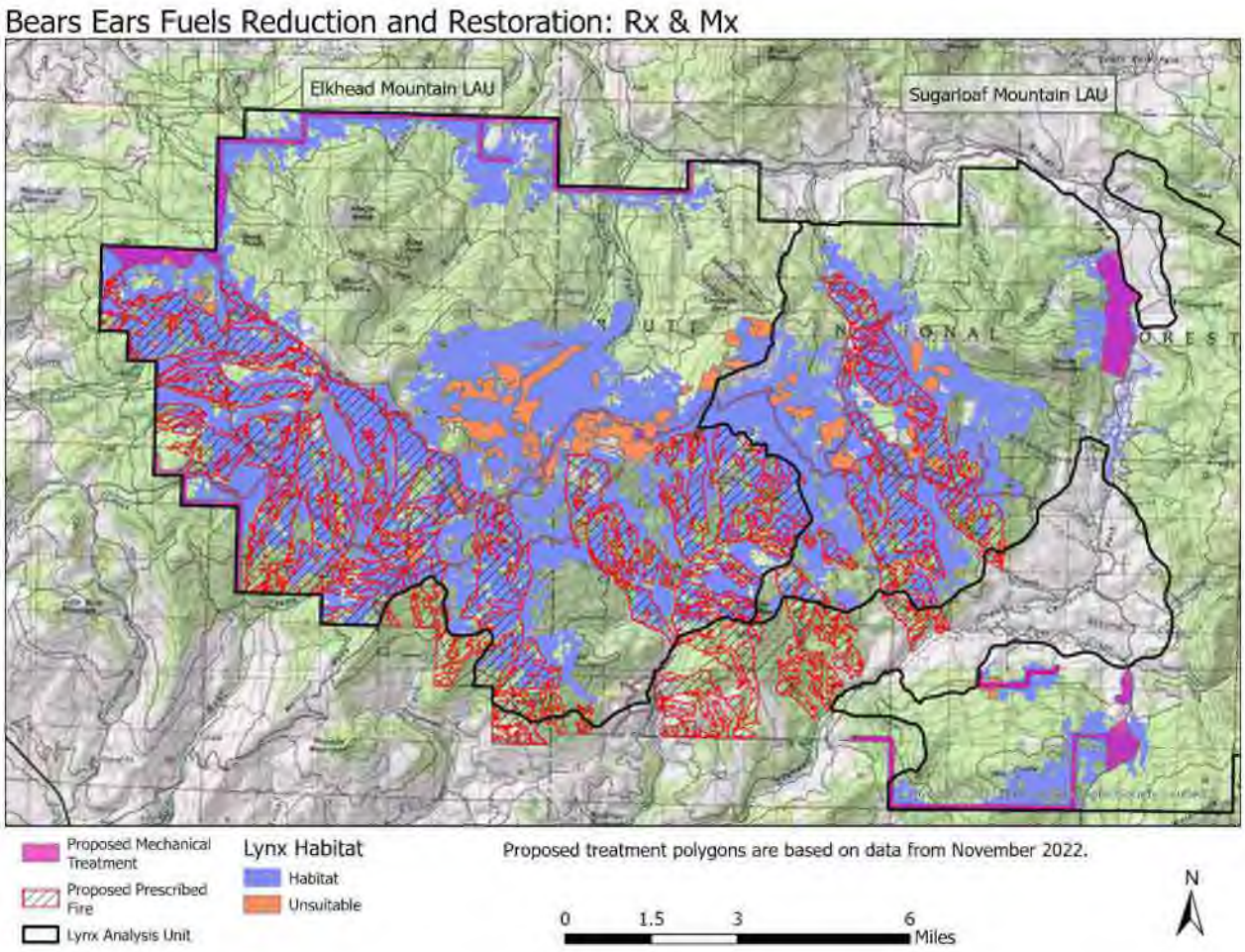


Figure 3. Lynx habitat occurrence within proposed fuels treatment units (mechanical and prescribed fire).

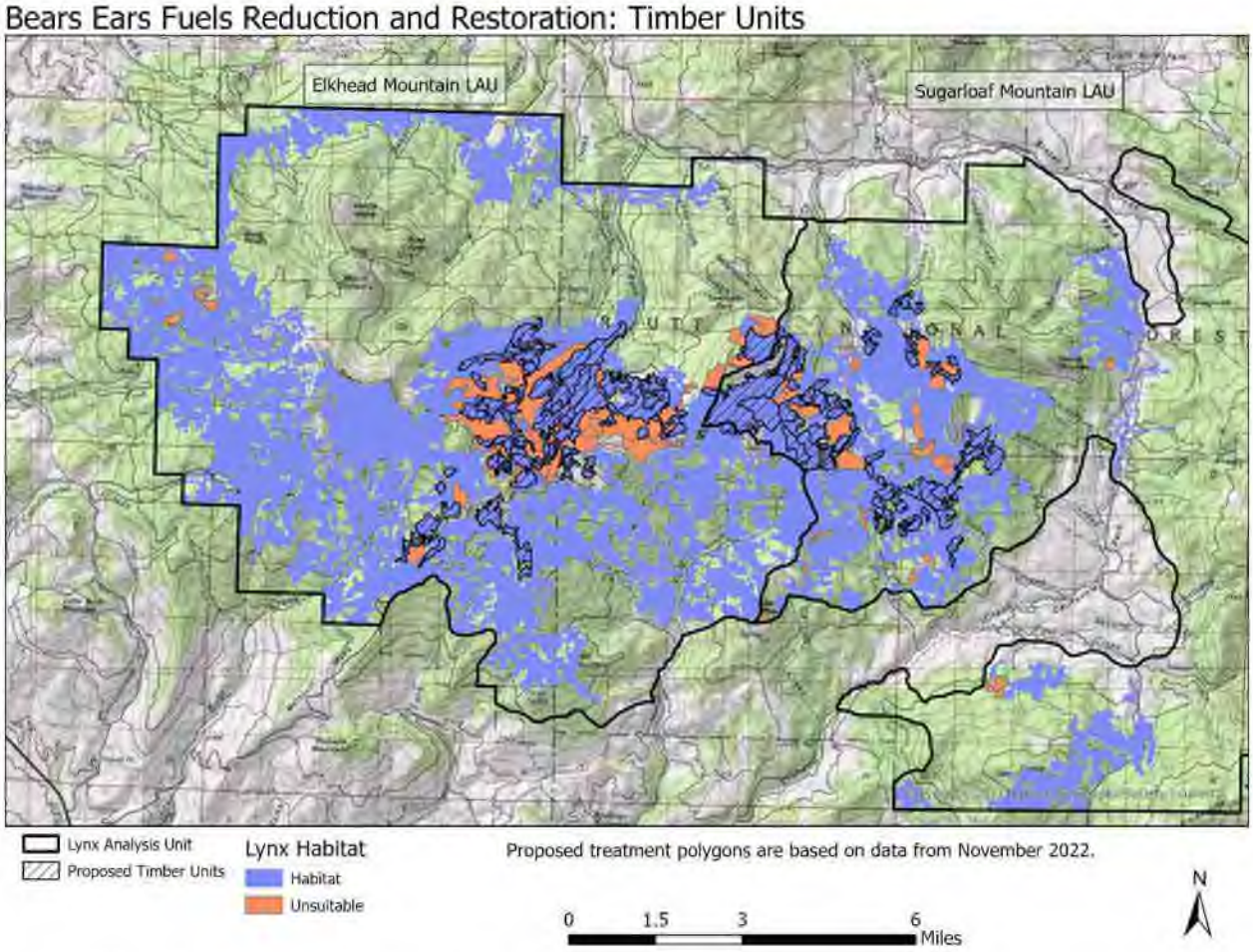


Figure 4. Lynx habitat occurrence within proposed timber treatment units.

Threatened/Endangered Species

Instances of federally listed threatened and endangered species (TES) occurred within or near (1/4 mile) of the proposed action area. One instance of a black-footed ferret was recorded in 2002 by David Armstrong. One instance of Canada lynx was recorded in 1911 by the U.S. Department of Agriculture, Bureau of Biological Survey.

Northern Goshawk

Within and near (1/4 mile) the proposed treatment areas several instances of Northern goshawk nests and nest stands occurred. Within ¼ mile of proposed fuel treatments (including mechanical treatments and prescribed fire) 10 known Northern goshawk nests, five identified nest stands, and four territories occurred (Table 9, Figure 5).

Table 9. Known occurrences of Northern goshawk nests within ¼ mile of proposed fuels treatments.

Nest Name	Last Checked	Last Active	Nest Status
RTHB-FMGHN1	2022	2021	Intact
RTHB-FMGHN2	2022	2018	Not found
RTHB-SLGHN1	2005	1992	Retired
RTHB-GPGHN1	2005	Unknown	Retired
RTHB-SCGHN1	1998	1993	Retired
RTHB-SCGHN2	2016	2013	Unknown
RTHB-SCGHN3	2004	Unknown	Retired
RTHB-SCGHN4	2016	1996	Unknown
RTHB-SCGHN5	2016	Unknown	Unknown
RTHB-SCGHN6	2016	Unknown	Unknown

Within ¼ mile of proposed timber treatments five identified nest stands, two territories, and two nests occurred (Table 10, Figure 6). It is suggested that thorough nest searches within known territories and nest site visits begin nest field season (FY23).

Table 10. Known occurrences of Northern goshawk nests within ¼ mile of proposed timber treatments.

Nest Name	Last Checked	Last Active	Nest Status
RTHB-SLGHN1	2005	1992	Retired
RTHB-MLGHN1	2005	Unknown	Retired

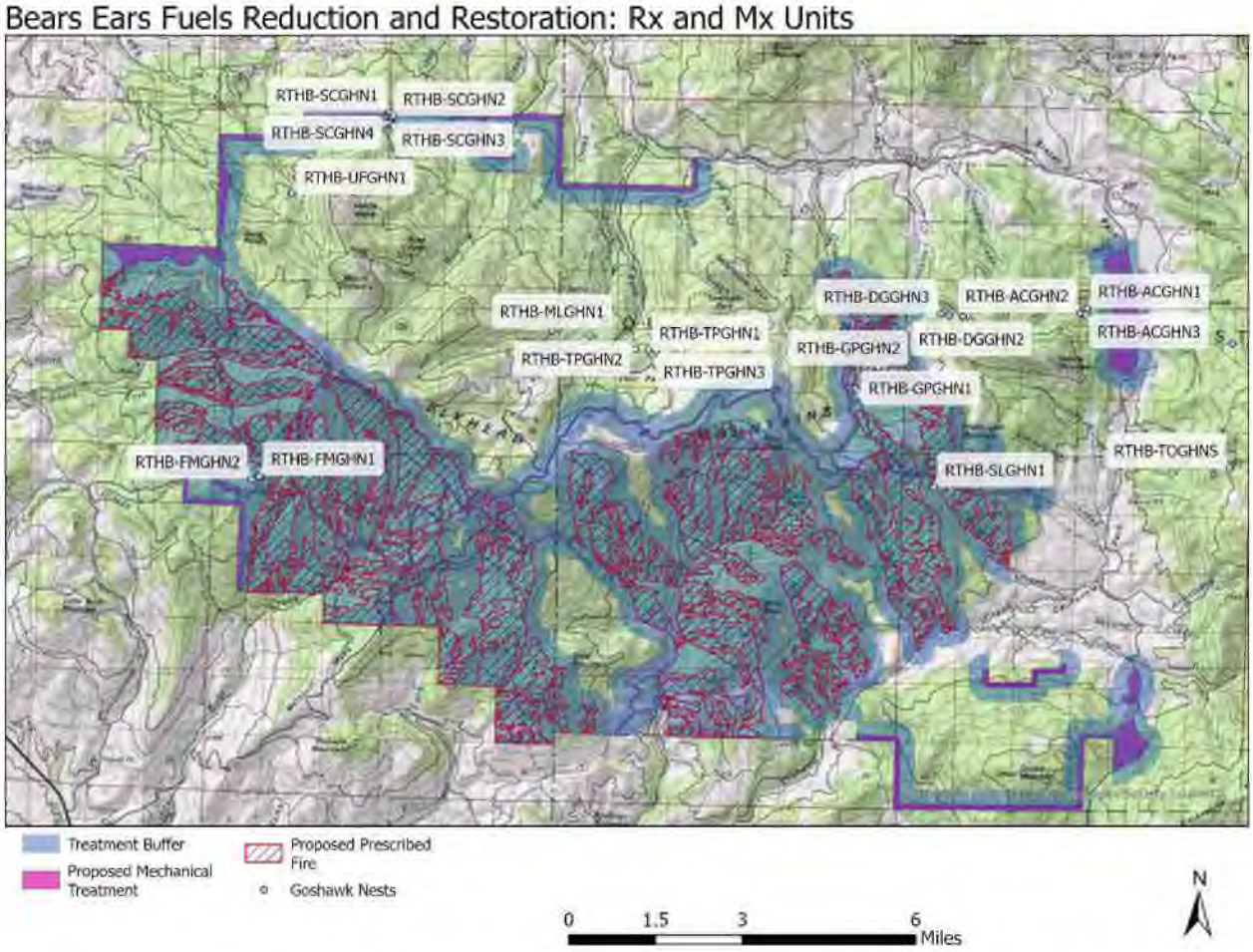


Figure 5. Known Northern goshawk nests near proposed fuels treatments (mechanical and prescribed fire).

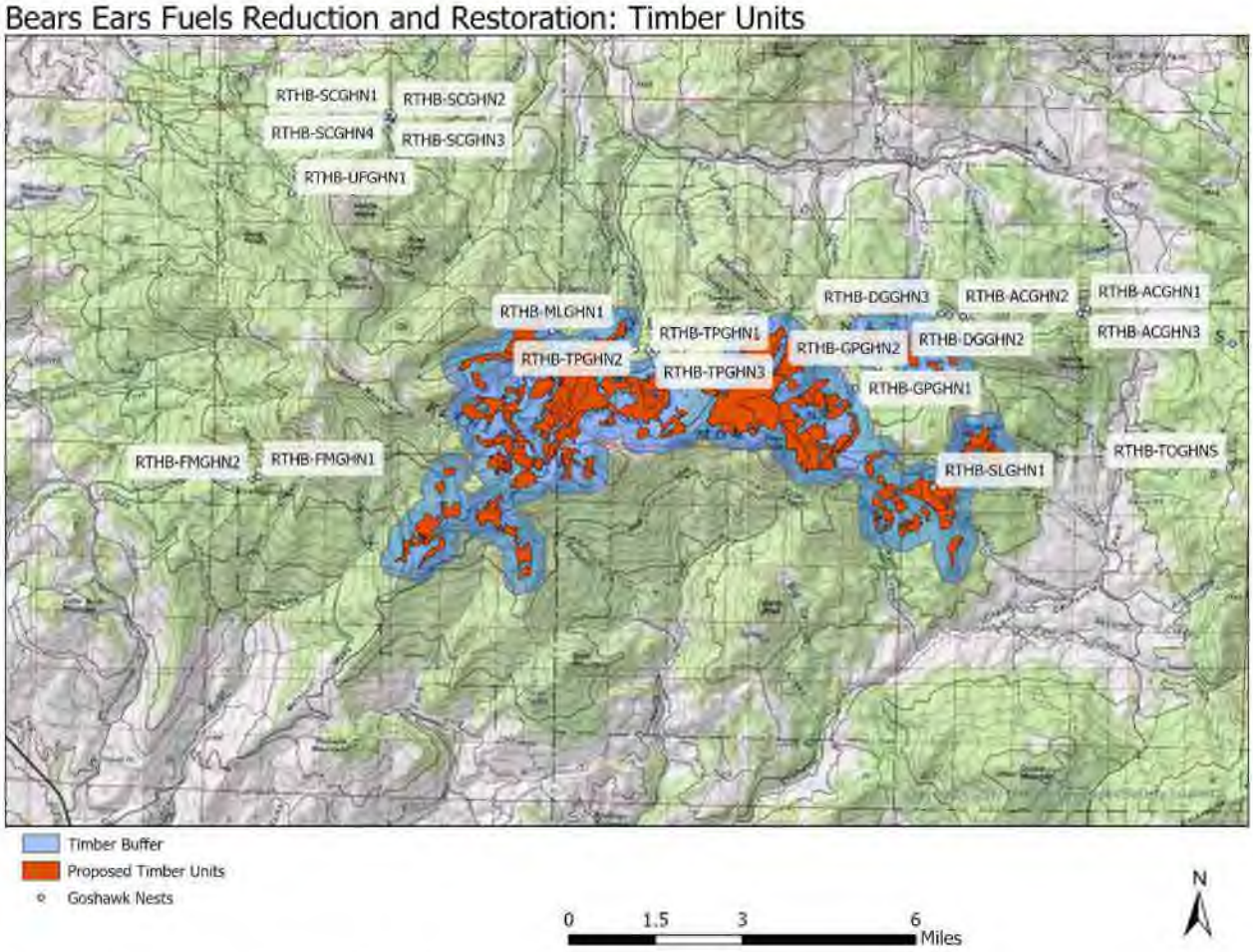


Figure 6. Known Northern goshawk nests near proposed timber treatments.

Field Review

Methods

Vegetation habitat inventory and detection surveys were planned at 3,522 sample points throughout the Bears Ears Fuels Reduction and Restoration analysis area. The point grid within and surrounding the treatment units include a ¼ mile buffer zone and were distributed based off of the Woodbrdige and Hagris 2006: Goshawk Inventory and Monitoring Guide. Points were placed 200 meters apart, with a 100 meter offset, and parallel lines were 250 meters apart. Some sample points fell outside of the Routt National Forest Administrative boundary on private land or fell on vertical cliffs, or on slopes greater than 35 degrees, and were removed from the survey grid.

Due to the landscape scale survey effort required, samples points were broken up into multiple phases to be completed each year over the next eight years (Figure 7). These phases were created based on the implementation guide created by the Bears Ears Fuels project manager and can be found at: *1950~Projects\SZ~HPBE~1950\EA\HPBE-1950 Bears Ears Fuels Reduction and Restoration ProjectEA\09 Implementation*

At each survey point, crews used Fox Pro callers broadcasting the goshawk's alarm call to attract Northern goshawk (*Accipiter gentilis*), orienting the caller in four directions, and using three attempts at least 30 seconds apart.

Vegetation was assessed at each point for relative quality of habitat for the primary pretty of Canada lynx (*Lynx canadensis*). Vegetative communities were documented by dominant species and average diameter at breast height (DBH).

Presence and sign of lynx's primary prey, snowshoe hare (*Lepus americanus*) were noted. Lateral vegetative obstruction at 10 meters distant from each point's center (dense horizontal cover) was estimated at less than or greater than 35%. The estimates were made at ground level to six feet, and six feet to twelve feet above ground level (approximate cover available during summer and winter months with snow pack) at each point to assess suitability of snowshoe hare habitat.

To calculate potential lynx habitat from field collected data a scoring system was utilized. Areas with confirmed dense horizontal cover (>35% lateral vegetative obstruction at 10 meters) were given a score of 1 and areas lacking dense horizontal cover were given a score of 0. Vegetative communities were then scored. Points with dominant conifer and conifer-hardwood habitats were given a score of 1 while points with dominant grass/forb or bare ground were given a score of 0. These general characteristics are based on the general habitat characteristics outlined in the Canada Lynx Conservation Assessment and Strategy (Ruediger et al. 2000). These scores only serve as a rudimentary display of potential lynx habitat and do not serve as a final ruling of suitable or unsuitable lynx habitat.

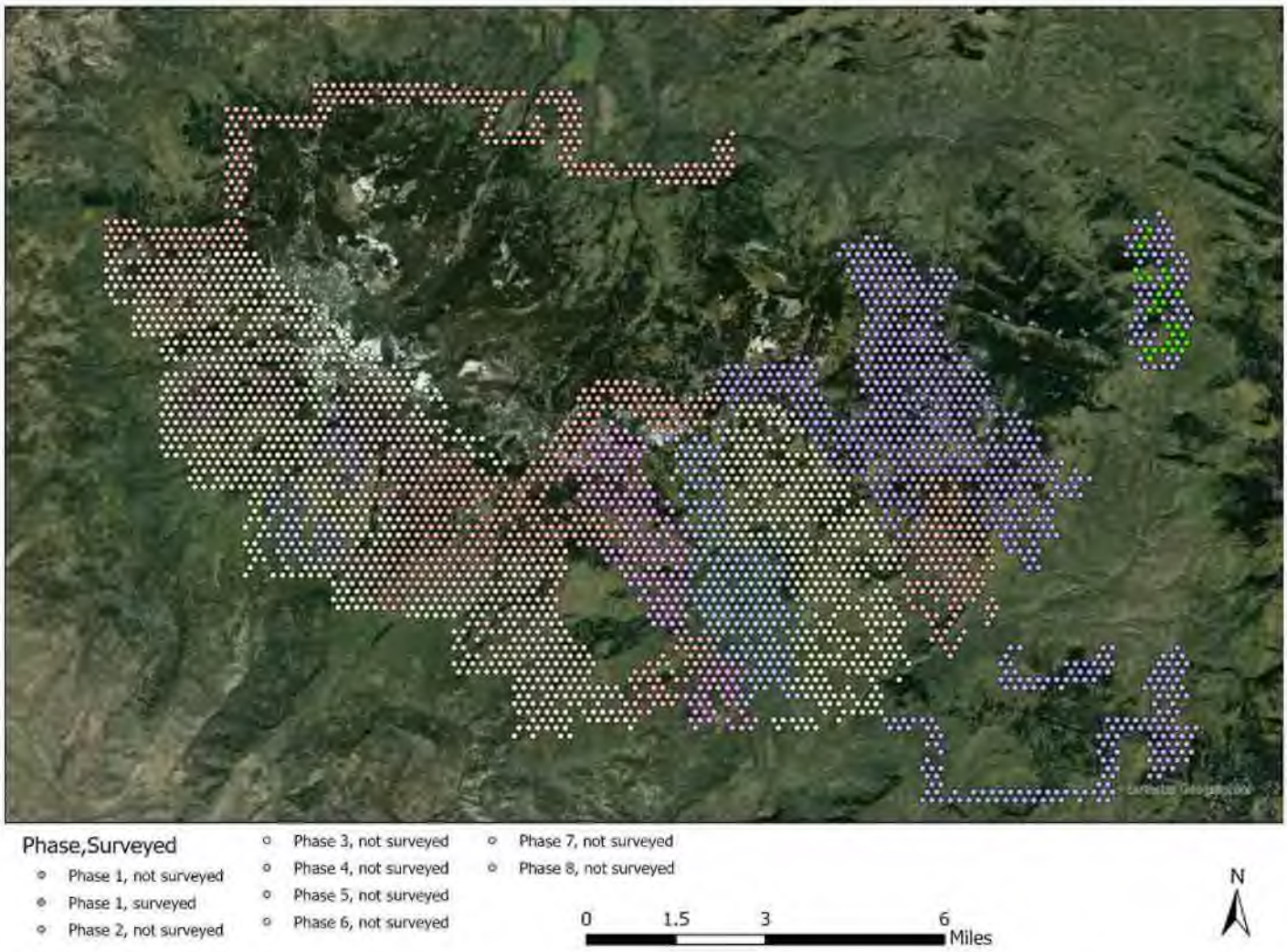


Figure 7. Map of survey points broken down by phases proposed by the implementation schedule.

Results

FY22

Field crews began surveying points within phase 1 of the eight identified phases in FY22. A total of 37 points were surveyed prior to the Bears Ears geographic area being closed off due to the Rainbow Family gathering occurring in Adams Park.

Species detected

During the short survey window that occurred, several species were detected within the phase 1 survey area. One red-tailed hawk, one hermit thrush, two sandhill cranes, one black bear, and two chorus frogs were observed in FY 22.

FY23

Field crews completed 311 survey points within Phase 1. During this survey period multiple species observations occurred, and new raptor nests were discovered (Table 11, Table 12, Figure 8).

Table 11. Occurrences of wildlife that occurred either within the proposed mechanical treatment boundary or within 0.25 miles during surveys for the Bears Ears Fuels Reduction Project (include FY22-23). TES species are denoted with letters, R2 sensitive species and Tier 1 and Tier 2 species are italicized with an asterisk (*).

Species	In Project Boundary	Near Project Boundary (0.25 mile)	Total
American Kestrel	0	1	1
*American Pika**	1	3	4
American Robin	1	2	3
Black Bear	0	1	1
Brown Creeper	0	1	1
Chorus Frog	2	0	2
Common Raven	1	2	3
Dark-eyed Junco	1	7	8
*Elk**	1	2	3
Gray Jay	3	7	10
*Greater Sandhill Crane**	1	4	5
Green-tailed Towhee	0	2	2
Hairy Woodpecker	0	2	2
Hermit Thrush	2	3	5
House Wren	0	2	2
*Lazuli Bunting**	0	1	1
Mountain Chickadee	1	4	5
Mule Deer	0	2	2
Northern Flicker	0	2	2
Pronghorn	1	1	2
Red-breasted Nuthatch	0	3	3
Red-tailed Hawk	2	6	8
Ruby-crowned Kinglet	2	3	5
Sharp-shinned Hawk	0	3	3
Steller's Jay	0	5	5
*Swainson's Hawk**	0	2	2
Turkey Vulture	0	1	1
Vesper Sparrow	0	2	2
Violet-green Swallow	0	2	2
Warbling Vireo	2	1	3
Western Tanager	1	3	4
Western Wood-peewee	1	1	2
White-crowned Sparrow	0	4	4
Total	22	87	109

Table 12. Raptor nests occurring within or near (0.25 mile) of proposed fuel treatments within the Bears Ears Fuels Reduction Project. An asterisk * indicates nests that were found during project surveys.

Nest Name	Species	Last Checked	Last Active	Nest Status	Comments
RTHB-EHRTN1	RTHA	2023	Unknown	Inactive	
RTHB-EHRTN2*	RTHA	2023	2023	Active	
RTHB-FCRTN1*	RTHA	2023	2023	Active	
RTHB-FMGHN1	NOGO	2023	2021	Not Found	Nest knocked out of tree
RTHB-FMGHN2	NOGO	2023	2018	Not Found	
RTHB-GPGHN1	NOGO	2023	2005	Not Found	
RTHB-GPGHN2	NOGO	2017	Unknown	Unknown	
RTHB-GPSSHN1*	SSHA	2023	Unknown	Inactive	
RTHB-GPSSHN2*	SSHA	2023	2023	Active	
RTHB-SCGHN1	NOGO	1998	1993	Retired	
RTHB-SCGHN2	NOGO	2016	2013	Unknown	
RTHB-SCGHN3	NOGO	2004	Unknown	Retired	
RTHB-SCGHN4	NOGO	2016	1996	Unknown	
RTHB-SCGHN5	NOGO	2016	Unknown	Unknown	
RTHB-SCGHN6	NOGO	2016	Unknown	Unknown	
RTHB-SLCRTN1*	RTHA	2023	Unknown	Inactive	
RTHB-SLGHN1	NOGO	2023	1992	Retired - Not Found	
RTHB-SLPFN1*	PEFA	2023	Unknown	Inactive	Checked outside nesting window
RTHB-SLPFN2*	PEFA	2023	Unknown	Inactive	Checked outside nesting window
RTHB-SLSSHN1	SSHA	2023	2023	Active	

Appendix:

Appendix i. All known historical occurrences of wildlife that occurred either within the proposed mechanical treatment boundary or within 0.25 miles. TES species are denoted with letters, R2 sensitive species are italicized with an asterisk (*).

Species	In Project Boundary	Near Project Boundary (0.25 mile)	Total
American Kestrel	1	1	2
American Mink	1	0	1
American Pika	0	11	11
Bald Eagle	0	2	2
Bobcat	1	2	3
Boreal Chorus Frog	0	18	18
Boreal Owl	1	0	1
Boreal Toad *	2	7	9
Brewer's Sparrow *	0	3	3
Canada Lynx **(E)**	0	1	1
Cooper's Hawk	0	3	3
Coyote	0	1	1
Dusky Grouse	0	1	1
Elk	0	1	1
Golden-crowned Kinglet	0	1	1
Golden Eagle	0	1	1
Greater Sandhill Crane	1	17	18
Mule Deer	0	1	1
Northern Goshawk *	11	25	36
Northern Harrier *	0	1	1
Northern Leopard Frog *	2	4	6
Olive-sided Flycatcher *	2	0	2
Pacific Marten *	0	4	4
Purple Martin *	0	1	1
Red-tailed Hawk	0	4	4
Sharp-shinned Hawk	0	4	4
Swainson's Hawk	0	1	1
Three-toed Woodpecker	1	5	6
Tiger Salamander	1	24	25
Vesper Sparrow	0	1	1
Wilson's Warbler	0	1	1
Total	24	146	170

Appendix ii. All known historical occurrences of wildlife that occurred either within the proposed prescribed fire treatment boundary or within 0.25 miles. TES species are denoted with letters, R2 sensitive species are italicized with an asterisk (*).

Species	In Project Boundary	Near Project Boundary (0.25 mile)	Total
American Kestrel	6	2	8
American Mink	0	1	1
American Pika	22	5	27
Bald Eagle	2	3	5
Black-footed Ferret **(E)**	0	1	1
Bobcat	1	1	2
Boreal Chorus Frog	11	20	31
Boreal Owl	1	0	1
Boreal Toad *	2	3	5
Brewer's Sparrow *	1	2	3
Canada Lynx **(E)**	1	0	1
Cooper's Hawk	0	1	1
Coyote	1	1	2
Dusky Grouse	1	2	3
Elk	5	11	16
Evening Grosbeak	1	0	1
Golden-crowned Kinglet	1	0	1
Golden Eagle	1	2	3
Great Horned Owl	0	1	1
Greater Sandhill Crane	10	11	21
Hairy Woodpecker	2	2	4
Mule Deer	5	3	8
Northern Goshawk *	3	12	15
Northern Leopard Frog *	0	4	4
Olive-sided Flycatcher *	0	2	2
Pacific Marten *	1	2	3
Peregrine Falcon	1	3	4
Prairie Falcon	4	0	4
Purple Martin *	1	1	2
Red-naped Sapsucker	0	4	4
Red-tailed Hawk	7	5	12
Sharp-shinned Hawk	1	1	2
Swainson's Hawk	1	1	2
Three-toed Woodpecker	3	3	6
Tiger Salamander	8	28	36
Turkey Vulture	0	1	1
Vesper Sparrow	0	1	1
Western Tanager	1	0	1
Wilson's Warbler	2	0	2
Total	107	140	247

Appendix iii. All known historical occurrences of wildlife that occurred either within the proposed timber treatment boundary or within 0.25 miles. TES species are denoted with letters, R2 sensitive species are italicized with an asterisk (*).

Species	In Project Boundary	Near Project Boundary (0.5 mile)	Total
American Kestrel	0	1	1
American Mink	0	1	1
American Pika	0	6	6
Bobcat	0	2	2
Boreal Chorus Frog	0	5	5
Boreal Owl	3	2	5
Boreal Toad *	1	2	3
Brewer's Sparrow *	0	3	3
Dusky Grouse	0	1	1
Elk	0	1	1
Golden-crowned Kinglet	1	2	3
Northern Goshawk *	3	7	10
Olive-sided Flycatcher *	3	8	11
Pacific Marten *	2	2	4
Peregrine Falcon	0	1	1
Red-tailed Hawk	0	1	1
Sharp-shinned Hawk	0	2	2
Snowshoe Hare	1	0	1
Three-toed Woodpecker	0	8	8
Tiger Salamander	0	3	3
Vesper Sparrow	0	1	1
Wilson's Warbler	0	1	1
Total	14	60	74

Bears Ears Fuels Reduction and Restoration: Rx & Mx