COLORADO RIVER CUTTHROAT (*Oncorhynchus clarki pleuriticus*) MANAGEMENT ACTIVITIES AND ACCOMPLISHMENT REPORT: 1999 – 2003 COLORADO, WYOMING AND UTAH

Introduction

The Conservation Agreement and Strategy for Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*) in the States of Colorado, Utah and Wyoming March 1999, was initiated by wildlife agencies in Colorado, Utah and Wyoming to reduce the threats to the species, to stabilize and enhance populations and to maintain its ecosystem. The Conservation Agreement (Agreement) has been developed to expedite implementation of conservation measures for Colorado River cutthroat trout (CRCT) in Colorado, Utah and Wyoming as a collaborative and cooperative effort among resource agencies. The Conservation Strategy (Strategy) provides the framework for long-term conservation, restoration and a clear allocation of resources for that purpose (CRCT Task Force 1999). The Conservation Agreement and Strategy for Colorado River cutthroat trout (CAS) was revised in 2001 to include federal and tribal signatories. Prior to signing this document we had been implementing conservation plans within each state (Utah Division of Wildlife Resources 1997, Interagency Plan 1993 and 1994).

The CRCT conservation team is comprised of fisheries professionals from the state wildlife agencies in Colorado, Utah and Wyoming, the US Fish and Wildlife Service (USFWS), US Bureau of Land Management (BLM), US Forest Service, National Park Service, and Ute Indian Tribe of the Uintah and Ouray Reservation. We meet biannually to discuss conservation and management issues, accomplishments, and future work plans. Agencies provide written reports each year that outline their accomplishments and work plans. The reports are shared with federal and state agencies along with other interest groups. The meetings have provided a productive forum to share information, exchange ideas and increase consistency in management approach.

Signatories to the CAS have agreed to expedite implementation of CRCT conservation measures. We are committed to eliminating or reducing threats to CRCT through implementation of the Strategy. Our goal is to assure the long-term persistence of CRCT throughout their historic range. We will strive to establish and maintain at least two metapopulations within each geographic management unit (GMU). We will improve habitat and maintain areas that currently support CRCT. Genetic diversity will be maintained and populations will be expanded where it is ecologically, sociologically and economically feasible.

The CAS states we will maintain and restore 383 conservation populations in 1,754 streams miles and 18 lake populations in 652 acres in 15 geographic management units (GMUs) within the historic range. We will eliminate or reduce threats and assure that CRCT populations are well distributed throughout their historic range.

This report summarizes work that has been completed in the years 1999-2003 to meet conservation goals by signatories to the CAS.

Analysis Area

The analysis area includes the CRCT distribution in the states of Colorado, Utah and Wyoming. The CRCT populations are divided into 15 GMUs across three states. GMUs are used to organize population and habitat distribution and planning and management activities within each state. Colorado is divided into 6 geographic management areas, Utah into 4 and Wyoming has 5 geographic management areas.

Colorado: Each GMU is delineated by sub-major river drainage and includes the Yampa, White, Colorado, Gunnison, Dolores, and San Juan GMU's. Due to the small number of CRCT waters in the Green and Little Snake river drainages, these waters are described and listed within the Yampa GMU. The Colorado GMU includes all waters flowing into the Colorado River above the Colorado state line with exception of the Gunnison River and its associated tributaries.

Utah: Northeastern/NR GMU covers the Uinta Mountains along the Utah-Wyoming border. Northeastern GMU includes the south slope of the Uinta Mountains and the Taraputs Plateau. Southeastern GMU lies within the Colorado Plateau and encompasses the southern portion of the Colorado and Green River drainages except the Fremont and Escalante River drainages. Southern GMU contains the Fremont and Escalante River drainages.

Wyoming: The Blacks Fork/Eastside GMU is located in the southwest area of the state and the Little Snake River unit is located in the Sierra Madres in south-central Wyoming. The East Fork GMU encompasses the southern Wind River mountain range north to the New Fork River. The Upper Green River unit is located in the headwaters of the Green River drainage. The eastside tributaries flow from the Wind River mountain range and the westside tributaries are fed from the Gros Ventre Wilderness. The Westside GMU includes all tributaries within the Wyoming Range (westside of the Green River drainage) from Beaver Creek to Fontenelle watersheds.

Results CRCT Database

The CRCT conservation team has developed a database to track CRCT population and genetic information. Team members update the database annually. The CRCT database was used to create most of the tables provided in this report. The database provides consistent and current information from the cooperating agencies. It has been provided to the USFWS for their use as they evaluate the petition to list CRCT as Threatened or Endangered. Information for this report has been obtained from the database and from all state and federal agencies

Current Distribution

Our long-term objectives set in 1998 state that we will have 1,754 stream miles of CRCT conservation populations (325 Colorado, 537 Utah and 893 Wyoming) (Table 1). We have exceeded objective for total stream miles in Colorado. Wyoming and Utah have not met their long-term objectives. However Utah has exceeded their objectives for all GMUs except the Northeastern. In 1998 it was determined that CRCT conservation populations occupied 524 miles (161 waters), and 601 acres (12 waters) (Table 2). Currently, we have 1,024 stream miles and 1,124 acres with known CRCT conservation populations in Colorado, Utah and Wyoming

(Table 3). The miles of known CRCT conservation populations have increased by 500 stream miles (49% increase) from 1998 to 2003 (Figure 1). These increases are due primarily to restoration efforts (100 miles) and genetic results identifying pure populations. Conservation populations continue to be found mainly in short headwater stream sections (Table 4).

Known core conservation populations inhabited 384 miles of habitat in 1998 (CRCT Task Force 1999). By 2003 Colorado, Utah and Wyoming had identified 198 waters, 722+ stream miles and 540 acres as core conservation populations (<1% introgression) (Table 4). From 1998 to 2003 known CRCT core conservation populations increased by 338 stream miles. Core conservation populations continue to be found mainly in short headwater stream sections with some notable exceptions (Table 6).

Table 1. Long-term objectives for numbers and miles/acres of CRCT Conservation populations in Colorado, Utah and Wyoming set as of December 1, 1998.

Geographical Management Unit	**Long-Term Objectives**			
	Streams (number)	**Streams (miles)**	**Lakes (number)**	**Lakes (acres)**
Colorado	**111**	**324.6**	**15**	**547**
Colorado	50	121.6	13	222
Dolores	9	23.0	0	Na
Gunnison	15	60.0	0	Na
San Juan	12	35.0	0	Na
White	7	21.0	1	287.0
Yampa	18	64.0	1	38.0
Utah	**52**	**537**	**0**	**0**
Northeastern	33	432.0	0	Na
Northeastern / NR	Na	Na	Na	Na
Southeastern	11	70.0	0	Na
Southern	8	35.0	0	Na
Wyoming	**220**	**892.8**	**3**	**105**
Blacks Fork/Eastside	48	242.0	0	Na
East Fork	4	22	1	28.0
Little Snake	60	198.0	0	Na
Upper Green	12	65.8	1	6.0
Westside	96	365.0	1	71.0
Total – All States	**383**	**1754.4**	**18**	**652**

+ = mileage or acreage information is incomplete

Table 2. Numbers and miles/acres of CRCT Conservation populations in Colorado, Utah and Wyoming as of July 1998.

Geographical Management Unit	Existing CRCT Conservation Populations			
	Streams (number)	Streams (miles)	Lakes (number)	Lakes (acres)
Colorado	**87**	**230.3+**	**9**	**496.4**
Colorado	47	107.1	7	171.4
Dolores	3	2.5+	0	Na
Gunnison	3	10.0+	0	Na
San Juan	12	35.7	0	Na
White	4	11.0	1	287.0
Yampa	18	64.0	1	38.0
Utah	**8**	**36.0+**	**0**	**Na**
Northeastern	4	30.0+	0	Na
Northeastern / NR	Na	Na	Na	Na
Southeastern	2	6.0+	0	Na
Southern	2	0.0+	0	Na
Wyoming	**66**	**258.0**	**3**	**104.5**
Blacks Fork/Eastside	9	42.4	0	Na
East Fork	2	11.0	1	28.0
Little Snake	32	90.9	0	Na
Upper Green	3	17.3	1	5.5
Westside	20	96.4	1	71.0
Total – All States	**161**	**524.3**	**12**	**600.9**

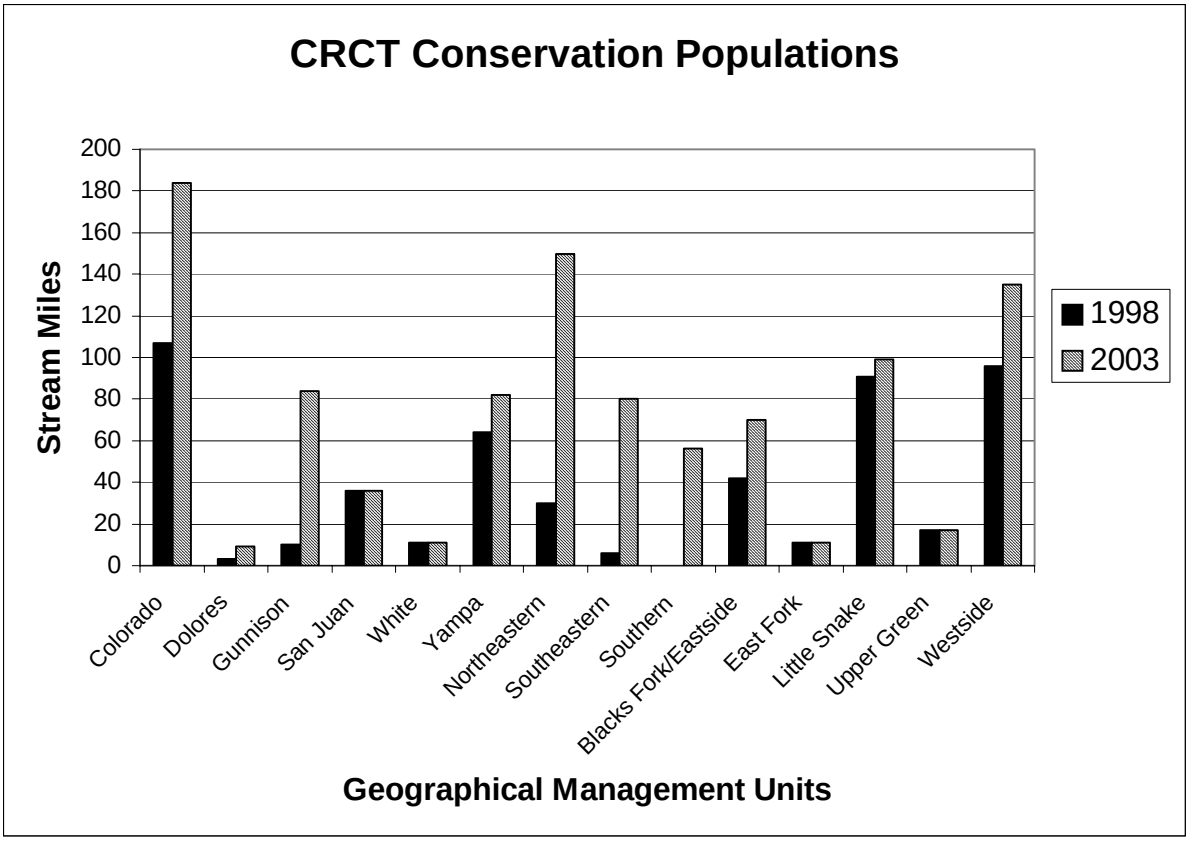

Figure 1. Comparison of CRCT Conservation populations in 1998 and 2003 for each GMU in Colorado, Utah and Wyoming. The Northeastern and Northeastern NR GMUs have been combined.

Table 3. Numbers and miles/acres of CRCT Conservation populations in Colorado, Utah and Wyoming as of July 2003.

Geographical Management Unit	Existing CRCT Conservation Populations			
	Streams (number)	Streams (miles)	Lakes (number)	Lakes (acres)
Colorado	**144**	**405.3 +**	**27**	**367.2**
Colorado	75	183.9 +	19	234.0
Dolores	4	9	0	0
Gunnison	21	83.8	2	75.1
San Juan	13	35.6	0	0
White	4	11	1	4
Yampa	27	82 +	5	54.1
Utah	**55**	**286.4**	**10**	**164**
Northeastern	12	96.2	2	116
Northeastern / NR	10	54.2	3	26.9
Southeastern	22	80	0	0
Southern	11	56	5	16.2
Wyoming	**86**	**331.8**	**4**	**592.5**
Blacks Fork/Eastside	17	69.9	1	488
East Fork	1	11	1	28
Little Snake	38	98.7	0	0
Upper Green	3	17.3	1	5.5
Westside	27	134.9	1	71
Total – All States	**285**	**1,023.5+**	**41**	**1,123.7**

Table 4. Frequency of number of miles occupied by CRCT Conservation populations (A, A- B+ B). The information is from the tri-state database, July 2003.

Stream Miles	State			
	Colorado	Utah	Wyoming	Total
0.5	7	3	5	15
1	27	4	20	51
2	44	15	20	79
3	21	6	12	39
4	12	5	4	21
5	10	4	5	19
6	5	3	5	13
7	2	2	3	7
8	1	2	1	4
9	3	2	2	7
10	2	2	1	5
11	0	1	2	3
12	0	1	2	3
13	0	0	0	0
14	0	1	0	1
15	1	0	0	1
16	0	0	0	0
17	0	0	0	0
18	0	0	1	1
19	0	0	0	0
20	0	0	1	1
21	0	1	0	1

Total 271

Table 5. Numbers and miles/acres of CRCT Core Conservation populations in Colorado, Utah and Wyoming as of July 2003.

Geographical Management Unit	**Existing CRCT Core Conservation Populations**			
	Streams (number)	**Streams (miles)**	**Lakes (number)**	**Lakes (acres)**
Colorado	**98**	**305.1 +**	**19**	**287.8**
Colorado	44	122.7+	15	209.6
Dolores	2	5.5	0	0
Gunnison	18	68.5	2	75.1
San Juan	7	21.4	0	0
White	4	11.0	0	0
Yampa	23	76 +	2	3.1
Utah	**35**	**175.5**	**8**	**147.4**
Northeastern	4	34.3	2	116
Northeastern / NR	5	40.3	1	15.2
Southeastern	15	44.9	0	0
Southern	11	56	5	16.2
Wyoming	**65**	**241.8**	**3**	**104.5**
Blacks Fork/Eastside	10	39.4	0	0
East Fork	1	11.0	1	28.0
Little Snake	33	90.6	0	0
Upper Green	3	17.3	1	5.5
Westside	18	83.5	1	71.0
Total – All States	**198**	**722.4**	**30**	**539.7**

Table 6. Frequency of the number of miles occupied by CRCT Core Conservation populations (A, A- purity). This only includes waters with known stream miles. The information is from the tri-state database, July 2003.

Stream Miles	State			
	Colorado	Utah	Wyoming	Total
0.5	3	3	4	10
1	18	4	16	38
2	27	14	18	59
3	15	6	7	28
4	10	2	4	16
5	8	4	5	17
6	4	3	5	12
7	2	2	2	6
8	1	2	1	4
9	2	2	2	6
10	2	2	0	4
11	0	1	2	3
12	0	0	2	2
13	0	0	0	0
14	0	1	0	1
15	1	0	0	1
16	0	0	0	0
17	0	0	0	0
18	0	0	1	1
19	0	0	0	0
20	0	0	0	0
21	0	1	0	1

Total = 209

Genetics

Introgressed populations are identified as a native cutthroat trout subspecies that has reproduced with other cutthroat subspecies (intraspecific) or other salmonids (interspecific). Some introgressed populations may offer genetic, ecological or behavioral attributes valuable to the conservation efforts. Seven categories have been identified for determining the genetic status and one classification for unknown (Table 7).

Table 7. Genetic categories used for assessing the status of CRCT as identified by the CRCT Task Force, 2001.

Categories	Description
A	≤ 1% introgression – Pure Core Conservation population (CCP)
A-	≤ 1% introgression – Pure but slightly different from norm CCP or Conservation Population (CP)
B+	Essentially pure (< 5% hybridization) (CP)
B	≤ 10% introgression – Slight hybridization (CP)
C	Between 15 – 20% hybridization – (Possible CP)
D	> 20% - Distinct hybridization
U	Unknown genetic status. These are populations that have not been tested for genetic purity

Populations designated as core conservation are a reproducing and recruiting population of native cutthroat trout being managed to preserve unique genetic, ecological and/or behavioral characteristics. These populations are < 1% introgressed and have not been altered by genetic alterations due to known human cause (Utah Division of Wildlife Resources 2000).

Conservation populations are also reproducing and recruiting populations that are generally ≤ 10% introgressed. Some tributaries with unknown genetic purity are conservation populations if the drainages allow for migration. Conservation populations are naturally reproducing or managed through periodic stocking.

Samples were mostly selected from waters with suspect CRCT populations and were collected within 14 of the 15 GMUs (Table 8). Analyses were completed on 282 waters (Table 8). CRCT that are not introgressed occupy 722 miles (71% of occupied conservation population habitat) (Table 4). Fifty-nine percent of the CRCT populations are genetically unaltered (A), 17% are slightly introgressed (A-), and 14% are described as B purity (Table 9). There are still a relatively large number (601) of undetermined purity waters (Table 10). Some genetic samples are in hand and will be analyzed when funding is available. Others will likely remain in the unknown category because they are likely introgressed due to previous stocking activities.

Table 8. Number of CRCT streams and lakes with completed genetic analyses from 1999 – 2003 in Colorado, Utah and Wyoming.

Geographic Management Unit	Genetic Analyses 1999 - 2003	
	Streams (number)	Lakes (number)
Colorado	**194**	**8**
Colorado	68	2
Dolores	9	0
Gunnison	50	2
San Juan	19	1
White	14	1
Yampa	34	2
Utah	**28**	**3**
Northeastern	4	1
Northeastern / NR	2	1
Southeastern	20	1
Southern	2	0
Wyoming	**60**	**1**
Blacks Fork/Eastside	27	0
East Fork	0	0
Little Snake	12	0
Upper Green	2	0
Westside	18	1
Total – All States	**282**	**12**

Table 9. Number of populations with known purity of B or better for each GMU, July 2003.

Geographical Management Unit	**Purity Rating Number of Populations**			
	A	**A-**	**B+**	**B**
Colorado	**73**	**44**	**19**	**35**
Colorado	39	20	11	24
Dolores	1	1	2	0
Gunnison	17	3	0	3
San Juan	5	2	4	2
White	2	2	0	1
Yampa	9	16	2	5
Utah	**45**	**12**	**4**	**1**
Northeastern	11	1	2	0
Northeastern / NR	3	11	0	0
Southeastern	15	0	2	1
Southern	16	0	0	0
Wyoming	**72**	**0**	**1**	**15**
Blacks Fork/Eastside	11	0	0	7
East Fork	2	0	0	0
Little Snake	33	0	1	4
Upper Green	4	0	0	0
Westside	22	0	0	4
Total – All States	**190**	**56**	**24**	**51**

Table 10. Number of populations with known purity of B- or less or cutthroat trout populations with unknown genetic purity. This table was constructed from the CRCT tri-state database July 2003.

Geographical Management Unit	**Purity Rating Number of Populations**			
	B-	**C**	**D**	**U**
Colorado	**17**	**18**	**18**	**456**
Colorado	7	8	4	207
Dolores	1	0	1	39
Gunnison	3	1	6	87
San Juan	1	1	3	28
White	1	5	4	37
Yampa	4	3	0	60
Utah	**2**	**3**	**5**	**107**
Northeastern	0	0	1	59
Northeastern / NR	0	1	0	29
Southeastern	2	2	4	18
Southern	0	0	0	1
Wyoming	**0**	**7**	**2**	**38**
Blacks Fork/Eastside	0	0	1	2
East Fork	0	0	0	3
Little Snake	0	0	0	2
Upper Green	0	1	0	2
Westside	0	6	1	29
Total – All States	**19**	**28**	**25**	**601**

Management activities

Management activities occurring in each state are addressing the problems that have contributed to the historic decline in the number of CRCT populations. The Strategy identified three primary activities: 1) protecting existing and restored ecosystems, 2) restoring degraded systems and 3) coordination and planning within and across jurisdictional lines. This report focuses on accomplishments that provide a better understanding of current distribution, and maintenance and restoration projects. The activities address the 26 strategies identified in the CRCT Conservation Agreement and Strategy (CRCT Task Force 2001).

Population and Habitat

From 1999 through 2003 state agencies completed CRCT population and habitat surveys in 710 streams and 105 lakes (Table 11). Stream monitoring includes baseline population and habitat monitoring, presence surveys, and population and habitat trend monitoring. These conservation

efforts focus on assuring maintenance of existing conservation populations, identifying new conservation populations and identifying habitat limitations.

Table 11. Number of CRCT streams and lakes monitored and/or surveyed state agencies in each GMU since 1999.

Geographical Management Unit	**Population Monitoring 1999 – 2003**	
	Streams (number)	**Lakes (number)**
Colorado	**338**	**28**
Colorado	116	10
Dolores	14	0
Gunnison	128	7
San Juan	23	3
White	18	1
Yampa	39	7
Utah	**189**	**74**
Northeastern	53	55
Northeastern / NR	12	13
Southeastern	111	0
Southern	13	6
Wyoming	**183**	**3**
Blacks Fork/Eastside	63	0
East Fork	2	1
Little Snake	53	0
Upper Green	6	0
Westside	59	2
Total – All States	**710**	**105**

CRCT population streams range from small isolets to metapopulations. Seventy-five waters support CRCT core conservation populations of greater than 500 adults (Table 12). In the three states, 34% of the known CRCT conservation populations support more than 500 adults (Table 13).

Table 12. Frequency of CRCT Core Conservation populations with known adult abundance for all three states. The information is from tri-state database, July 2003

Geographical Management Unit	Population Abundance for CRCT Conservation Populations			
	0 – 100	101 – 499	500 – 999	>1000
Colorado	**17**	**35**	**25**	**11**
Colorado	8	21	12	7
Dolores	1	0	0	0
Gunnison	2	5	2	1
San Juan	1	2	0	2
White	0	3	1	0
Yampa	5	4	10	1
Utah	**13**	**13**	**8**	**22**
Northeastern	2	2	2	9
Northeastern / NR	5	3	2	0
Southeastern	1	6	3	5
Southern	5	2	1	8
Wyoming	**36**	**19**	**5**	**4**
Blacks Fork/Eastside	6	3	1	0
East Fork	0	0	0	2
Little Snake	18	5	3	1
Upper Green	2	1	1	0
Westside	10	10	0	1
Total – All States	**66**	**67**	**38**	**37**

Table 13. Frequency of CRCT Conservation populations with known adult abundance for all three states. The information is from the tri-state database, July 2003.

Geographical Management Unit	Population Abundance for CRCT Conservation Populations			
	0 – 100	101 – 499	500 – 999	>1000
Colorado	**30**	**51**	**35**	**14**
Colorado	18	32	16	8
Dolores	2	1	0	0
Gunnison	2	5	3	1
San Juan	1	3	3	3
White	0	4	1	0
Yampa	7	6	12	2
Utah	**12**	**8**	**6**	**21**
Northeastern	2	2	3	12
Northeastern / NR	5	3	2	0
Southeastern	0	1	0	1
Southern	5	2	1	8
Wyoming	**43**	**23**	**7**	**4**
Blacks Fork/Eastside	8	4	2	0
East Fork	0	0	0	2
Little Snake	21	7	3	1
Upper Green	2	1	1	0
Westside	12	11	1	1
Total – All States	**85**	**82**	**48**	**39**

Stream habitat surveys in Colorado River cutthroat trout streams occurred both before and after the Conservation Strategy was signed (Table 14). Two-thirds of the current CRCT streams have been surveyed (186 of 285). Many have been surveyed repeatedly. Survey types varied from descriptive riparian surveys to detailed quantified surveys of channel characteristics and vegetation. Physical lake surveys are virtually non-existent.

Table 14. Stream or lake surveys by federal agencies on Conservation Population waters in Colorado, Utah, and Wyoming from 1990 to 1998 and from 1999 to 2003. The number in parentheses after the number of surveys from 1999-2003 is the number of streams surveyed which were also surveyed pre-1999.

Geographic Management Unit	**Streams surveyed (number)**		**Lakes surveyed (number)**	
	Pre-1999	**1999-2003**	**Pre-1999**	**1999-2003**
Colorado	**74**	**43 (14)**	**3**	**0**
Colorado	39	20 (5)	3	0
Dolores	2	0	n/a	n/a
Gunnison	3	14 (1)	0	0
San Juan	10	0	n/a	n/a
White	4	3 (3)	0	0
Yampa	16	6 (4)	0	0
Utah	**18**	**7**	**0**	**0**
Northeastern	7	0	0	0
Northeastern / NR	11	0	0	0
Southeastern	0	4	n/a	n/a
Southern	0	3	0	0
Wyoming	**41**	**22 (6)**	**0**	**0**
Blacksfork/Eastside	6	3	0	0
East Fork	1	0	0	0
Little Snake	9	14 (1)	n/a	n/a
Upper Green	2	0	0	0
Westside	23	5 (5)	0	0
Total – All States	**133**	**72 (19)**	**3**	**0**

Four instream flow water rights have been secured in Colorado River cutthroat trout streams since 1999 with two more in process. Sixty-seven CRCT streams had instream flow water rights prior to 1999. Many of the instream flow protections were secured by the BLM in a focused effort to protect cutthroat streams. Three lakes have minimum lake levels established.

Most physical habitat improvement projects occurred before 1999. There have been 16 habitat improvement projects since 1999 by Federal agencies (Table 15).

Table 15. Habitat improvement projects for Conservation Populations in Colorado, Utah, and Wyoming from 1999 to 2003.

Geographic Management Unit	Habitat Improvement Projects 1999-2003	
	Streams (number)	Lakes (number)
Colorado	**5 (12 pre-1999)**	**0**
Colorado	1 (6 pre-1999)	0
Dolores	1	n/a
Gunnison	0	0
San Juan	0 (1 pre-1999)	n/a
White	2	0
Yampa	1 (5 pre-1999)	0
Utah	**8 (1 pre-1999)**	**0 (1 pre-1999)**
Northeastern	3	0
Northeastern / NR	0	0
Southeastern	2	n/a
Southern	3 (1 pre-1999)	0 (1 pre-1999)
Wyoming	**3 (10 pre-1999)**	**0**
Blacksfork/Eastside	1	0
East Fork	0	0
Little Snake	1 (3 pre-1999)	n/a
Upper Green	0 (2 pre-1999)	0
Westside	1 (5 pre-1999)	0
Total – All States	**16 (23 pre-1999)**	**0 (1 pre-1999)**

Macroinvertebrate monitoring has occurred in 33 CRCT streams. Many of these sites have been monitored repeatedly, up to 7 times. Eleven of the streams were monitored both before 1999 and from 1999 to 2003 (Table 16).

Table 16. Macroinvertebrate sampling in streams for Conservation Populations in Colorado, Utah, and Wyoming from 1999 to 2003. No macroinvertebrate sampling has occurred in lakes.

Geographic Management Unit	Number of streams sampled for macroinvertebrates between 1978 and 1998	Number of streams with macroinvertebrate sampling since 1998 (number of sites repeated from pre-1998)
Colorado	**21**	**11 (9)**
Colorado	9	6 (5)
Dolores	0	0
Gunnison	3	0
San Juan	1	0
White	1	1 (1)
Yampa	7	4 (3)
Utah	**6**	**4 (1)**
Northeastern	5	0
Northeastern / NR	0	0
Southeastern	0	1
Southern	1	3 (1)
Wyoming	**1**	**1 (1)**
Blacksfork/Eastside	0	0
East Fork	0	0
Little Snake	0	0
Upper Green	0	0
Westside	1	1 (1)
Total – All States	**28**	**16 (11)**

Nonnative Trout Removal

Hybridization and competition are known threats to CRCT populations. States have increased the number of populations and densities of CRCT through active removal of nonnative trout by electrofishing or chemical treatments. Wyoming removed nonnative trout using electrofishing for streams located in the Blacks Fork/Eastside, Little Snake, Upper Green and Westside GMUs with the intent to reduce or eliminate adverse effects from nonnative fish. In Colorado, electrofishing was used to remove nonnative trout from 40 waters. These efforts have been conducted to determine feasibility of this method to reduce or eliminate nonnative trout.

The use of rotenone and antimycin to remove nonnative species has been an effective fish management tool. Reestablishing CRCT populations in drainages require years of planning and multiple years of implementation. Chemical rehabilitation projects are labor intensive and usually require multi- agency coordination. Each state has been working towards recovering CRCT populations. Currently we have completed chemical treatments in 36 waters, 100 stream miles and 91 acres (Table 17).

Wyoming and Colorado have discontinued stocking non-native salmonids on Conservation populations of Colorado River cutthroat trout. Utah stocks only sterile non-native trout in CRCT conservation population waters. Utah has almost entirely stopped stocking any rainbow trout into streams (Utah Division of Wildlife Resources 2003). Utah has stopped stocking Yellowstone cutthroat trout all over the state and with few exceptions isn't stocking any cutthroat trout outside their historic range.

Table 17. Numbers and miles/acres of CRCT streams and lakes that have been chemically treated from 1999 to 2003 in Colorado, Utah and Wyoming.

Geographical Management Unit	**Chemical Treatments 1999 – 2003**			
	Streams (number)	**Streams (miles)**	**Lakes (number)**	**Lakes (acres)**
Colorado	**3**	**2.25**	**4**	**12.8**
Colorado	1	0.25	2	9.7
Dolores	0	0	0	0
Gunnison	0	0	0	0
San Juan	0	0	0	0
White	0	0	0	0
Yampa	2	2	2	3.1
Utah	**14**	**46.5**	**12**	**73.2**
Northeastern	1	3.0	0	0
Northeastern / NR	1	6.0	1	15.2
Southeastern	5	3.25	1	42
Southern	7	34.2	10	16
Wyoming	**7**	**51**	**5**	**5**
Blacks Fork/Eastside	2	5	0	0
East Fork	0	0	0	0
Little Snake	5	33	5	5
Upper Green	0	0	0	0
Westside	5	13	0	0
Total – All States	**22**	**88.2**	**14**	**86.8**

Metapopulations

The primary goal of the management agencies is to assure the long-term persistence of CRCT throughout their historic range. The CAS states this will be achieved by establishing two self-sustaining meta-populations, each consisting of 5 separate, viable and interconnected sub-populations, in each GMU. This is the long-term goal that we are striving to meet. In the short-term each state will have one self-sustaining meta-population within each GMU (Table 18).

Drainages in Colorado that contain meta-populations or are considered for meta-population restoration projects include California Park, Fraser River, South Fork Williams Fork Yampa River, Upper Muddy Creek basin, Lost Dog, and Ranch Creek tributaries. Four waters were reclaimed on the Three Forks Ranch in the Yampa River management unit in 2001. Restocking

these waters was completed in 2002 utilizing a local Little Snake River population from Wyoming. These waters will serve as refugia for this strain and may be used as a brood source for future reclamation efforts. Three other Colorado waters were chemically treated and restored to native species in 2002 as part of the metapopulation restoration effort.

In Wyoming, chemical treatments are being implemented in the Little Snake, Blacks Fork/Eastside, and Westside GMUs. The Little Snake and Westside projects are striving towards establishing meta-populations. The largest project in Wyoming, started in 2000, is the LaBarge CRCT restoration project (Westside GMU). This project includes the construction of a fish migration barrier on LaBarge Creek (completed 2002), construction of temporary barriers on 6 tributaries (completed 2001 – 2002), chemical treatments on 13 tributaries (5 tributaries completed), and treatment on 27 stream miles on the mainstem LaBarge Creek. Chemical treatments are labor intensive and require several years of treatment to successful remove all non-natives. Completion of treatments in the fifty-eight stream miles is anticipated in 2007. The temporary barriers will be removed after nonnative fish species removal has been deemed successful. This will connect all subpopulations with LaBarge Creek and create the largest meta-population restoration project in Wyoming. The project area will be stocked with pure CRCT starting in 2007.

Restoration within the Little Snake River GMU continues. The North Fork Little Snake River and its largest tributary, the West Branch, have been treated with chemicals to remove nonnative brook trout, restoring over 8 stream miles. The Little Snake project includes reclaiming more than 35 stream miles. The High Savery project (Little Snake River GMU) includes 15 stream miles and 5 reservoir acres. Since 2003, fifteen stream miles and 5 ponds have been reclaimed. This work will continue until nonnatives are removed and a self-sustaining native cutthroat population is established. CRCT will be stocked in High Savery reservoir in 2004.

Chemical treatments continue in the Gilbert Creek drainage (Blacks Fork/Eastside GMU). Five stream miles have been successfully restored and a self-sustaining CRCT population is established in the Wyoming portion of the drainage. Wyoming and Utah biologists have been working cooperatively to restore native species in the Gilbert Creek drainage.

Utah has been actively chemically renovating streams in the Southern GMU. Rotenone was used to remove nonnative fish species from several drainages. Portions of four streams and four reservoirs have been completed. This includes 35 stream miles and 69 acres. In the Southern GMU the drainages with salmonid habitat are very simple and likely will not have five interconnected populations. Many streams flow into low desert reaches that were not yearlong trout habitat. UM Creek is 25 miles long and does have a few small tributaries in the headwaters that are occupied by Colorado River cutthroat trout. In the Southeastern GMU the White River and Muddy Creek drainages are considered metapopulations. Further work needs to be done in both drainages. The Northeastern GMU has the potential for several metapopulations especially on the south slope of the Uinta Mountains where some drainages are 15 – 20 miles long with many tributaries. Surveys need to be completed on many of these watersheds. In the Northeastern/NR GMU the Henrys Fork and Smiths Fork both contain a long mainstem and several tributaries with Colorado River cutthroat trout.

Table 18. Number of metapopulations in each GMU, July 2003.

Geographic Management Units	Number of Metapopulations (5 or more populations)	Number of Metapopulations (2-4 populations)
Colorado	**4**	**11**
Colorado	1	3
Dolores	0	0
Gunnison	1	2
San Juan	0	2
White	0	1
Yampa	2	3
Utah	**5**	**4**
Northeastern	1	2
Northeastern / NR	2	0
Southeastern	1	1
Southern	1	1
Wyoming	**2**	**8**
Blacks Fork/Eastside	0	1
East Fork	0	1
Little Snake	1	2
Upper Green	0	1
Westside	1	3
Total – All States	11	23

Brood Development

Each state has established CRCT brood sources and refugium. Colorado has established brood stocks from 2 streams and 2 lakes in the Colorado GMU, 1 lake in Dolores, and 2 streams in the San Juan.

Utah has also developed multiple brood sources for their GMUs. Sheep Creek (Northeastern GMU, Northeastern/NR GMU), Lake Canyon (Northeastern GMU, North Tavaputs Sub-GMU), Duck Fork Reservoir (Southeastern GMU, South Tavaputs Sub-GMU), and Dougherty Basin Lake (Southern GMU) all have been established and maintained as brood sources or refugium for CRCT populations in Utah. Sheep Creek Lake is being managed for both South Slope and North Slope brood. Both brood sources are differentially fin-clipped and only one brood (North Slope or South Slope) will be spawned per year to provide extra protection against any mix-ups in spawning and egg taking, in the hatchery system or in stocking.

Wyoming is developing a captive brood source from Belvedere Canal for the Little Snake River GMU. CRCT from this brood source will be stocked in High Savery Reservoir. North Piney Lake captive brood source will be used for restoration within the Westside GMU. Restoration project requiring CRCT stocking in the East Fork, Upper Green and Blacks Fork/Eastside GMUs will be accomplished primarily using transplants.

Reintroduction

Many high-elevation lakes in Colorado have been converted to CRCT plants to maintain angling opportunities at these waters. From 1999 to 2003 357 waters were stocked with pure CRCT in Colorado. In Utah, fish have been annually stocked in approximately 75 waters in the Northeastern and Southern GMUs. Most of the stocking in the Northeastern GMU was to replace Yellowstone cutthroat stocking that was discontinued several years ago. Genetically unaltered CRCT have been transplanted into new streams in Utah. This has expanded the existing range by 20 waters. Wyoming has eliminated nonnative trout stocking in CRCT conservation and core populations since the early 1990s. CRCT reintroduction efforts began in the 1970's with the development of a brood source. CRCT streams in Wyoming were stocked to supplement populations, reintroduce CRCT to historic drainages, maintain angling opportunities, increase purity and out compete nonnative trout species. Wyoming has transplanted CRCT in Little Snake and Blacks Fork/Eastside GMUs to expand their range and enhance existing populations.

Discussion and Conclusion

We have made progress towards our long-term goals and each objective. Each year we meet to discuss past accomplishments, future plans and to revisit the Strategy's goals and objectives.

Colorado, Utah and Wyoming state agencies strive to meet the Conservation Agreement and Strategy goals and objectives with the understanding that these are long-term projects.

Each state has identified hundreds of stream miles known to be occupied by Conservation populations of Colorado River cutthroat trout (Table 1). Known stream populations in 1998 (Table 2) were about 30% of the long-range objectives for stream miles. We didn't see many opportunities to expand Conservation populations in lentic habitats so long-range objectives were similar to the amount of known occupied habitats. All of the states increased occupied stream miles by at least 29% and the overall increase was 95% between 1998 and 2003. With the exception in the East Fork, Upper Green, White and San Juan GMUs we have increased the number of streams and stream miles since 1998 (Figure 1). Colorado has exceeded objective for numbers of streams and stream miles for all GMUs and Utah has exceeded objective for the number of streams. With the exception of the Northeastern GMU streams, all of the original objectives in this conservation agreement have been exceed in Utah. In Wyoming the objectives for number of streams and stream miles may be overly aggressive and not achievable in the next 10 years. Conservation populations increased much more in lakes and reservoirs than the signatories had anticipated.

Most (87%) of the Conservation populations occupy streams less than 7 miles long (Table 4). Ninety-six percent of the populations were in streams 10 miles long or less. However, some populations occupy waters up to 21 miles in length.

Seventy-one percent of known Conservation populations are Core populations with less than 1% introgression (Table 5). Core populations occupied similar habitats to Conservation populations.

We are working towards establishing 2 metapopulations in each GMU. As previously stated, we have trouble establishing 2 metapopulations with 5 interconnected populations in each GMU because of the simple and limited structure of the drainages.

Each state has or is working to establish a brood population for each GMU and in some cases brood populations in sub-GMUs. Biologists are actively working to increase the distribution of Colorado River cutthroat trout by reducing stocking of non-native trout, removing non-natives from waters historically occupied by Colorado River cutthroat trout and by using brood or donor populations to expand and increase the number of populations within historic range. Colorado and Utah (Hepworth 2004) have enough production from brood populations that they have been able to stock CRCT for sport fisheries purposes in several waters annually for the last few years. This stocking has greatly reduced the use of non-natives within historic CRCT habitat.

Conservation efforts for Colorado River cutthroat trout have greatly increased in all three states over the last several years. With the expansion of the Sport Fish Restoration Fund in the 1980's, native cutthroat trout work was added to the annual work programs. Native cutthroat trout management and culture projects have expanded and are now found in administration, culture, fish health, research, habitat, and conservation and sport fisheries programs. With the increased emphasis on native cutthroat trout conservation, occupied stream miles have increased over 15 times what previously existed in Utah's Southern Region management area (Hepworth 2002).

The combined efforts of the signatories of this Conservation Agreement and Strategy for Colorado River cutthroat trout in the states of Colorado, Utah and Wyoming have greatly expanded the number of populations and occupied streams miles of Colorado River cutthroat trout since this agreement was first formalized in 1999. Long-range objectives haven't been met in some areas, but the objectives were long-range and work continues. In many areas the long-range objectives have been met but the signatories don't have any plans of stopping conservation efforts because the original objectives were met. State administrators continue strong support for the conservation efforts and the success of this group. They support continued funding and workloads for these conservation efforts. Because Colorado River cutthroat trout are not listed under ESA, local governments and private landowners largely continue to support these conservation efforts. The land management agencies are critical partners in this effort. Cooperative projects between the federal and state agencies have greatly contributed to the success of these conservation projects.

References

Hepworth et al 2002. A Review of a Quarter Century of Native Trout Conservation in Southern Utah. Intermountain Journal of Sciences, Vol. 8, No. 3: 125 – 142.

Hepworth et al 2004. A 5-year review of the Colorado River cutthroat trout wild brood stock program at Dougherty Basin Lake, Utah, 1999 – 2003. Publication No. 04 – 05. Utah Division of Wildlife Resources, Salt Lake City, UT. 19 pp.

Interagency Plan. 1993. Colorado River cutthroat trout inter-agency five year management plan (1993 – 1997) Green River Westside tributary enclave. Wyoming Game and Fish Department, Bridger-Teton National Forest, and Pinedale BLM Resource Area plan, Pinedale, Wyoming.

Interagency Plan. 1994. Conservation plan for the Colorado River cutthroat trout, Little Snake River drainage, southwestern Wyoming. Medicine Bow National Forest, Wyoming Game and Fish Department and Great Divide BLM Resource Area final report, Green River, Wyoming.

Utah Division of Wildlife Resources. 1997. Conservation agreement and strategy for Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus)* in the State of Utah. Publication No. 97-20. Utah Division of Wildlife Resources, Salt Lake City, UT. 61 pp.

Utah Division of Wildlife Resources. 2000. Cutthroat trout management: a position paper, genetic considerations associated with cutthroat trout management. Publication number 00-26. Salt Lake City. 9pp.

Utah Division of Wildlife Resources. 2003. Fish Stocking and Transfer Procedures. Policy Number W2ADM-1. Salt Lake City. 19 pp.

Appendix A: Known Core Conservation CRCT populations (purity ratings of > 99 % CRCT)

Tri-State Summary for CRCT Waters:

Report Date: *16-Jul-03*

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO	**Colorado**									
		Abrams Creek	23414	A	100	1.0		1	No	NONE
		Adams Lake	72760	A	199		4.6	5	Yes	NONE
		Antelope Creek	25595	A-	200	1.0		2	No	NONE
		Arapahoe Lake #2	71148	A			1.5	0	Yes	NO INFO
		Beaver Creek	19097	A	1000	10.0		0	No	NONE
		Big Creek, East Fork	27791	A	300	2.0		0	Yes	NONE
		Bobtail Creek	23026	A	792	5.0		2	No	BKT
		Boulder Lake #3	65436	A			14	0	Yes	NO INFO
		Boundary Lake	72974	A	200		2	0	No	NO INFO
		Cabin Creek	19403	A-	2121	4.4		0	No	BKT
		Camp Creek	19746	A-	500	3.0		0	No	NONE
		Carr Creek	19441	A	200	9.0		1	No	NONE
		Carter Creek	22404	A-	300	2.0		4	No	NONE
		Cataract Lake, Middle	65739	A			8	0	Yes	NO INFO
		Cattle Creek	19491	A	300	2.0		4	No	BKT
		Clinton Gulch Reservoir	71679	A-	1001		95	1	No	NONE
		Columbine Creek	23684	A	250	1.0		5	No	NONE
		Cross Creek #2	23103	A	300	3.0		5	No	NO INFO
		Cross Creek, West	25406	A-	600	5.1		5	No	NONE
		Cunningham Creek	23957	A	100	1.0		1	No	NONE
		Eagle Pass Ranch Creek	24509	A				0	Yes	BRT
		Fifth Lake	72772	A	299		7.4	5	Yes	NONE
		Flapjack Lake #1	66628	A			1.5	0	Yes	NO INFO
		Flapjack Lake #2	66630	A			1	0	Yes	NO INFO
		Flapjack Lake #3	66642	A			5	0	Yes	NO INFO
		Fraser River #3	20367	A	0	1.0		1	Yes	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO	**Colorado**									
		French Gulch	24179	A-	300	2.0		2	No	NONE
		Fryingpan Lake	66755	A-	1001		14	0	No	NONE
		Hallam Lake	67195	A	500		5	0	Yes	NO INFO
		Hamilton Creek	25521	A	1206	2.5		1	No	BKT
		Hat Creek	27195	A	200	1.5		2	Yes	NONE
		Horseshoe Lake	67391	A			4.6	0	Yes	NO INFO
		Hunter Creek	23230	A				0	No	NO INFO
		Jim Creek #2	23242	A	102	2.9		1	Yes	BKT
		Kinney Creek	23527	A	208	4.2		4	Yes	BKT
		Little Green Creek	23038	A-	500	2.0		3	No	NONE
		Lost Trail Creek	21030	A-	100	1.0		4	No	NONE
		Meadow Creek	21155	A-	625	2.5		3	No	BKT
		Meadow Creek, East	27284	A-	105	2.0		3	No	NONE
		Mitchell Creek	28072	A	500	4.5		1	No	NONE
		Muddy Creek, Little	23642	A-	286	6.2		0	Yes	BKT
		Nanita Lake	72897	A	2001		34	5	Yes	NONE
		Nickelson Creek	24315	A-	200	1.0		0	No	NONE
		Owens Creek Tributary (Unnamed)	21434T	A-				0	No	NO INFO
		Paradise Creek	21493	A	501	1.5		5	Yes	NONE
		Ptarmigan Creek	72924	A	600	1.0		4	Yes	NONE
		Ranch Creek, North Fork	27323	A	140	1.0		2	Yes	NONE
		Ranch Creek, South Fork	27335	A	100	2.0		1	No	NO INFO
		Roan Creek	21701	A	500	5.0		1	No	NONE
		Roaring Fork Creek	26915	A-	304	2.4		3	No	NONE
		Spruce Creek #1	22997	A-	55	0.5		1	No	NONE
		Swan River, North Fork	22260	A-	400	2.0		0	No	BKT
		Thompson Creek, Middle	22347	A				0	Yes	NO INFO
		Timber Creek	26674	A		3.0		0	Yes	NO INFO

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO	**Colorado**									
		Timber Lake	72873	A	500		12	4	Yes	NONE
		Trail Creek	25660	A-	1049	5.2		0	No	BKT
		Trapper Creek	25204	A	500	4.0		0	No	NONE
		Vasquez Creek, Little	24030	A	100	2.0		2	No	NONE
		Vasquez Creek, South Fork	23571	A-	351	10.3		3	No	BKT
CO	**Dolores**									
		Deep Creek	39671	A-	100	3.0		6	No	NONE
		Taylor Creek, Little	47767	A		2.5		2	No	NONE
CO	**Gunnison**									
		Antelope Creek, West	48016	A	100	5.0		2	No	NONE
		Beaver Creek (North)	38237	A		15.0		1	Yes	BKT
		Beaver Creek, West	44355	A	501	5.0		4	Yes	BKT
		Deep Creek	39621	A	3.0	0		No		
		Doug Creek	45197	A	100	3.0		0	No	NO INFO
		Dry Creek, East Fork	48618	A		2.0		0	No	NO INFO
		Dyke Creek	39885	A	1786	4.0		0	Yes	BKT
		Henderson Creek	40600	A-		4.0		0	No	NO INFO
		Hubbard Creek, Main	49355	A	233	2.0		0	Yes	NONE
		Hubbard Creek, Middle	48620	A-	326	2.0		0	No	NONE
		Nate Cr	41791	A	653	3.0		0	Yes	NONE
		Pryor Creek	39702	A		2.0		0	No	NONE
		Road Beaver Creek	38182	A	200	4.0		0	No	BKT
		Roberts Creek	44305	A		5.5		0	No	NONE
		Rock Creek	45870	A	298	1.0		5	No	BKT
		Second Creek	48771	A-		3.0		6	No	BKT
		Terror Creek, West Fork	43606	A		3.0		0	Yes	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO	**Gunnison**									
		Trail Gulch	46199	A	424	2.0		0	No	BKT
		Youngs Creek Reservoir #3	93346	A			23	0	Yes	NONE
		Youngs Creek Reservoir 2	93334	A			52.1	0	Yes	NONE
CO	**San Juan**									
		Augustora Creek	44486	A	30	0.5		5	No	NONE
		Cutthroat Creek	39415	A-		2.0		1	No	RBT
		Headache Creek	39491	A		1.3		1	No	BKT
		Hermosa Creek, East Fork	47628	A	2330	3.0		4	Yes	NONE
		Himes Creek	39502	A	200	2.0		5	No	BKT
		Navajo River #2 (Upper)	49064	A	385	3.6		5	No	NONE
		Piedra River, East Fork	42096	A-	6830	9.0		4	No	NONE
CO	**White**									
		Big Beaver Creek	24935	A-	400	4.0		0	No	BKT, RBT
		Fawn Creek	20254	A-	600	2.0		1	No	NONE
		Hahn Creek	27967	A	400	2.0		4	No	NONE
		Snell Creek	22044	A	150	3.0		1	Yes	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO	**Yampa**									
		Armstrong Creek	19035	A-	600	4.0		2	No	BKT
		Beaver Creek	19124	A	300	1.5		3	Yes	NONE
		Beaver Creek	19150	A-	600	6.0		2	Yes	NONE
		Cataract Creek	22959	A-				0	Yes	NO INFO
		Circle Creek	19530	A-	100	1.0		2	Yes	BKT
		Coyner Creek	26074	A-	500	1.0		0	No	NONE
		Elkhead Creek #3	23165	A-	416	6.0		2	Yes	NONE
		First Creek	20266	A-	800	8.0		2	No	NONE
		Indian Run Creek	20759	A-	240	7.0		0	No	NONE
		Little Snake, South Fork	22032	A-	700	7.0		2	No	NONE
		Lost Dog Creek	26193	A	100	2.0		1	No	BKT
		Milk Creek	24961	A	500	3.0		0	Yes	NONE
		Oliver Creek	24092	A-	600	3.0		2	No	NONE
		Pagoda Creek	27739	A-	800	4.0		2	Yes	NONE
		Poose Creek	21561	A-	1100	5.0		2	No	NO INFO
		Poose Creek #2	23418	A	100	1.0		2	Yes	NONE
		Rough Creek	23301	A-	400	2.0		2	No	NONE
		Three Forks Ranch Lower Pond	TFR02	A			2.3	0	Yes	
		Three Forks Ranch Upper Pond	TFR01	A			0.8	0	Yes	
		Three Forks Ranch Upper Pond East Tributary	TFR03	A		1.0		0	Yes	
		Three Forks Ranch Upper Pond West Tributary	TFR04	A		0.5		0	Yes	
		Trout Creek	23557	A-	550	2.0		4	No	BKT
		Williams Fork Yampa, South Fork	23482	A-	600	3.0		0	No	NO INFO
		Williams Fork, South Fork	22791	A-	100	6.0		2	Yes	NONE
		Willow Creek	22854	A	100	2.0		1	No	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
UT	**NE**									
		Daggett Creek	II CI 030A	A		2.3		6	No	GOT
		Duchesne R., W. Fk.	II BE 150	A		21.0		1	No	NONE
		Lake Canyon Lake	II 173BB	A			36	1	Yes	RBT, BKT
		Sheep Creek Lake	II 080 C	A			80	0	Yes	BKT
		Timber Cyn. Cr.	II BE 060H 01-02	A	433	11.0		1	No	BNT
UT	**NE/nr**									
		Beaver Creek, Middle Fork	II CJ 040B 02	A		10.1		6	No	BKT
		Gilbert L. GR-150	II 596	A			16	6	No	BKT
		Smiths Fk. W. Fk.	II CK 020B 01	A	557-1000	10.0		6	No	BKT
UT	**SE**									
		Big Bear Creek	II AI 120G 01	A	348	8.0		0	No	NONE
		Bob Bishop Canyon Creek	II AK 100B 03 01	A		1.5		5	Yes	TGT
		Gentry Hollow Creek	II AI 130I 02 01	A		4.1		1	No	NONE
		Johnson Fork Creek	II AK 190A 01 01	A	528	2.4		0	No	NONE
		La Sal Creek (Section 3)	I BQ 070 03	A		3.2		1	No	NO INFO
		La Sal Creek Ditch, Main Div.	I BQ 080B	A	194 - 480	2.3		0	No	BKT
		Little Horse Creek	II AI 120I 01 01	A	22	1.2		4	Yes	NONE
		Tabbyune Creek	II AK 190C 01	A	1174	2.8		0	No	NONE
		Tabbyune Creek	II AK 190C 02	A		2.0		0	No	NONE
		Tie Fork Canyon	II AI 130I 01	A	250 - 356	2.0		1	No	BNT
		Trail Hollow Creek	II AK 190A 02 01	A	158	2.0		0	No	NONE
		Watch Canyon Creek	II AK 190B 01E 01	A		2.2		0	No	NONE
		White R., L. Fk.	II AK 190B 01	A		3.0		0	No	NONE
		White R., M. Fk.	II AK 190B 01 01	A		2.2		0	No	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
UT	**SE**									
		White R., Rt. Fk.	II AK 190A 01	A	106 - 194	6.0		0	No	NONE
UT	**SO**									
		Boulder Creek, E. Fk.	I AJ 110C 02	A	113	2.5		0	No	BKT
		Boulder Creek, E. Fk.	I AJ 110C 02b	A	1197	0.5		4	No	NONE
		Boulder Creek, W. Fk.	I AJ 110D 02	A	333	6.0		1	No	NONE
		Dougherty Basin Lake	I 310	A	650		3	1	Yes	BKT
		Long Willow Bottom Lake	I 328A	A			4.4	1		
		Round Willow Bottoms Lake	I 347	A			8.3	1		
		Solitaire Lake	I 825	A			4.7	1		
		Tall Four Lake NCL	I 360	A	250		0.7	4	Yes	BKT
		Twitchell Creek	I AJ 160F 01	A		3.5		6		
		UM Creek	I AZ 130Z 02	A		14.7		6		
		UM Creek, Left Fork	I AZ 130Z 02 01	A		3.4		6		
		UM Creek, Rt. Fk.	I AZ 130Z 03 01	A	100	5.0		1	Yes	TIGER TROUT
		White Creek	I AJ 160E 02	A	370	2.0		1	No	BKT, RBT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY	**Blacks Fork/East**									
		Archie Creek	GR841915UA	A	100	2.0		0	No	BKT
		Beaverdam Hollow Creek	GR841848UA	A	50	2.5		0	No	NONE
		Devils Hole Creek	GR841760LN	A	50	4.5		0	No	NONE
		Horse Creek	GR841965UA	A	200	9.5		0	No	NONE
		Little Gilbert Creek	GR841930UA	A	150	3.0		1	No	BKT
		Middle Fork Muddy Creek	GR841860UA	A		2.0		0		BKT
		Red Creek	GR845860SR	A	50	9.9		0	Yes	NONE
		Trout Creek	GR841975SR	A	300	3.0		0	Yes	NONE
		Van Tassel Creek	GR841865UA	A	100	1.0		0	No	BKT
		West Muddy Creek	GR841855UA	A	50	2.0		0	No	BKT
WY	**East Fork**									
		Irish Canyon Creek	PE843560SE	A	1000	11.0		5	No	NONE
		Sunrise Lake	PE140283SE	A	1000		28	0	Yes	NONE
WY	**Little Snake**									
		Alisha Creek	GR872689CN	A	50	0.6		0	No	NONE
		Bachelor Creek	GR872693CN	A	50	1.0		2	No	NONE
		Beaver Creek	GR872520CN	A	50	1.0		0	No	NONE
		Belvidere Ditch	GR872260CN	A	500	12.8		1	No	NONE
		Dale Creek	GR872950CN	A	50	2.0		0	No	NONE
		Deadline Creek	GR872865CN	A	50	2.0		1	No	NONE
		Deadman Creek	GR872940CN	A	150	2.6		1	No	NONE
		Deep Creek	GR872340CN	A	200	6.7		1	No	NONE
		Deep Rock Creek	GR872697CN	A		1.0		0	No	NONE
		Dirtyman Creek	GR872480CN	A	100	5.8		1	No	NONE
		East Branch Deep Creek	GR872346CN	A		1.5		0	No	NONE
		Green Creek	GR872687CN	A	100	0.8		2	No	NONE
		Green Timber Creek	GR872910CN	A	130	2.5		1	No	NONE
		Haggerty Creek	GR872685CN	A		3.6		2	No	NONE
		Happy Creek	GR872980CN	A	50	0.7		1	No	NONE
		Haskins Creek	GR872720CN	A	50	6.5		0	No	BKT
		Hell Canyon Creek	GR872370CN	A	100	1.8		1	No	NONE
		Mill Creek	GR872350CN	A	200	5.5		1	No	BKT
		North Fork Big Sandstone Creek	GR872366CN	A	100	2.0		0	No	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY		**Little Snake**								
		North Fork Little Snake River	GR872840CN	A	1600	2.0		1	No	BKT
		Rabbit Creek	GR872870CN	A	50	2.0		1	Yes	NONE
		Rhodine Creek	GR872955CN	A	50	2.0		1	No	NONE
		Right Branch Mill Creek	GR872354CN	A		0.9		0	No	NONE
		Roaring Fork Little Snake River	GR872800CN	A	500	2.0		1	No	BKT
		Rose Creek	GR872900CN	A	50	1.5		1	No	NONE
		Sandstone Creek, AC	GR872365CN	A	50	1.0		0	No	NONE
		Soloman Creek	GR872880CN	A	260	3.5		1	No	NONE
		South Fork Mill Creek	GR872352CN	A		1.8		0	No	NONE
		Standard Creek	GR872875CN	A	100	1.7		1	No	NONE
		Ted Creek	GR872945CN	A	20	2.0		1	No	NONE
		Third Creek	GR872944CN	A	30	1.0		1	No	NONE
		West Branch Deep Creek	GR872345CN	A		1.6		0	No	NONE
		West Branch N Fk Little Snake	GR872860CN	A	500	7.2		1	Yes	NONE
WY		**Upper Green**								
		Big Sheep Mountain Lake	PE140876SE	A	200		5.5	4	Yes	NONE
		Klondike Creek	PE845160SE	A	50	5.0		0	Yes	NONE
		Rock Creek	PE845080SE	A	700	11.0		0	Yes	BKT
		Trudy Creek	PE845042SE	A	100	1.3		0	No	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop		Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY	**Westside**										
	Camp Creek	PE844285SE	A	50	1.0		0	No	NONE		
	Clear Creek	PE843205LN	A	100	2.0		1	Yes	BKT		
	Dead Cow Creek	PE844280SE	A	50	4.0		0	No	NONE		
	Hardin Creek	PE844070SE	A	50	2.5		1	Yes	BKT		
	Irene Creek	PE844060SE	A	50	1.0		1	Yes	BKT		
	LaBarge Creek	PE843030LN	A	350	18.0		0	Yes	BKT RBT		
	North Fork Beaver Creek	PE843282SE	A	200	3.4		1	No	NONE		
	North Piney Lake	PE140948SE	A	1500		71	0	Yes	BKT		
	Nylander Creek	PE844080SE	A	100	3.0		1	Yes	BKT		
	Pine Grove Creek	PE843255SE	A	50	7.3		0	Yes	NONE		
	Rock Creek	PE843065SE	A	100	2.5		1	Yes	NONE		
	Sjhoberg Creek	PE844110SE	A	200	2.0		2	No	NONE		
	South Fork Beaver Creek	PE843284SE	A	350	4.5		0	No	RBT		
	South Fork Fontenelle Creek	GR842760LN	A	100	3.5		0	No	BKT		
	South Fork North Horse Creek	PE844340SE	A	200	4.0		0	Yes	BKT		
	South Horse Creek	PE844250SE	A	300	8.0		0	No	BKT SRC		
	South LaBarge Creek	PE843155LN	A	200	6.5		2	Yes	BKT RBT		
	Spring Creek	PE843200LN	A	200	5.0		0	No	BKT		
	Trail Ridge Creek	PE843281SE	A	300	5.3		0	No	NONE		

Purity Codes

A = Pure; A- = Pure but mixed w/other pure CRCT Pop.; B+ = Essentially Pure; B = Slightly Hybridized; C = Some Hybridization; D = Distinct Hybridization; U = Unknown

Species Codes

BKT = Brook Trout; BNT = Brown Trout; BVC = Bonneville Cutthroat Trout; GOL = Golden Trout; GRA = Arctic Grayling; MWF = Mountain Whitefish; PPN = Pikes Peak Cutthroat Trout; RBT = Rainbow Trout; RXC = Rainbow-Cutthroat Trout hybrid; SPL = Splake; SRC = Snake River Cutthroat Trout; TGT = Tiger Trout; YSC = Yellowstone Cutthroat Trout

Appendix B: Known Conservation CRCT populations (purity ratings of at least 90 % CRCT)

Tri-State Summary for CRCT Waters:

Report Date: *16-Jul-03*

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO	**Colorado**									
		Abrams Creek	23414	A	100	1.0		1	No	NONE
		Adams Lake	72760	A	199		4.6	5	Yes	NONE
		Antelope Creek	25595	A-	200	1.0		2	No	NONE
		Arapaho Creek	19023	B	100	3.0		0	No	BKT
		Arapahoe Lake #2	71148	A			1.5	0	Yes	NO INFO
		Avalanche Lake	64977	B			9	0	Yes	NO INFO
		Baker Gulch	22961	B		2.0		0	No	BKT
		Beaver Creek	19097	A	1000	10.0		0	No	NONE
		Bench Lake	72885	B	350		6.4	5	Yes	NONE
		Berry Creek	19162	B	100	2.0		0	No	NO INFO
		Big Creek, East Fork	27791	A	300	2.0		0	Yes	NONE
		Big Creek, Middle Fork	27637	B		2.0		0	No	NONE
		Bobtail Creek	23026	A	792	5.0		2	No	BKT
		Booth Creek	23806	B	150	3.0		4	No	NONE
		Boulder Lake #3	65436	A			14	0	Yes	NO INFO
		Boundary Lake	72974	A	200		2	0	No	NO INFO
		Brush Creek	19275	B	500	4.0		0	Yes	NONE
		Buzzard Creek #2	27753	B		1.5		0	Yes	NO INFO
		Cabin Creek	19403	A-	2121	4.4		0	No	BKT
		Cabin Creek	19415	B				0	No	
		Camp Creek	19746	A-	500	3.0		0	No	NONE
		Carr Creek	19441	A	200	9.0		1	No	NONE
		Carter Creek	22404	A-	300	2.0		4	No	NONE
		Cataract Creek	19489	B+	300	3.0		0	No	NO INFO
		Cataract Lake, Middle	65739	A			8	0	Yes	NO INFO
		Cattle Creek	19491	A	300	2.0		4	No	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO		**Colorado**								
		Cattle Creek, North Fork	27830	B	50	0.5		0	No	NO INFO
		Clinton Gulch Reservoir	71679	A-	1001		95	1	No	NONE
		Columbine Creek	23684	A	250	1.0		5	No	NONE
		Corral Creek	19756	B	500	2.0		0	Yes	BKT
		Cross Creek #2	23103	A	300	3.0		5	No	NO INFO
		Cross Creek, West	25406	A-	600	5.1		5	No	NONE
		Cunningham Creek	23957	A	100	1.0		1	No	NONE
		Eagle Pass Ranch Creek	24509	A				0	Yes	BRT
		Elliot Creek, North Fork	26042	B	0	2.0		0	No	BKT
		Fifth Lake	72772	A	299		7.4	5	Yes	NONE
		Flapjack Lake #1	66628	A			1.5	0	Yes	NO INFO
		Flapjack Lake #2	66630	A			1	0	Yes	NO INFO
		Flapjack Lake #3	66642	A	5	0			Yes	NO INFO
		French Gulch	24179	A-	300	2.0		2	No	NONE
		Fryingpan Lake	66755	A-	1001		14	0	No	NONE
		FryingPan River #2, South Fork	23468	B	300	2.0		1	No	NONE
		Grove Creek	20545	B				0	No	NONE
		Hack Lake	67149	B	100		1	0	Yes	NO INFO
		Hallam Lake	67195	A	500		5	0	Yes	NO INFO
		Hamilton Creek	25521	A	1206	2.5		1	No	BKT
		Hat Creek	27195	A	200	1.5		2	Yes	NONE
		Horseshoe Lake	67391	A			4.6	0	Yes	NO INFO
		Hunter Creek	23230	A				0	No	NO INFO
		Indian Creek	24149	B+	0	1.0		0	No	BKT
		Iron Creek	25482	B	5	1.9		0	No	NONE
		Jim Creek #2	23242	A	102	2.9		1	Yes	BKT
		JQS Gulch	25228	B+	100	0.5		0	No	NONE
		Kinney Creek	23527	A	208	4.2		4	Yes	BKT
		Little Green Creek	23038	A-	500	2.0		3	No	NONE
		Little Green Creek, North	23038N	B+	790	1.0		3	No	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO		**Colorado**								
		Lost Trail Creek	21030	A-	100	1.0		4	No	NONE
		Meadow Creek	21155	A-	625	2.5		3	No	BKT
		Meadow Creek, East	27284	A-	105	2.0		3	No	NONE
		Mirror Lake, Lower	68533	B+			8	0	Yes	NO INFO
		Mitchell Creek	28072	A	500	4.5		1	No	NONE
		Muddy Creek, Little	23642	A-	286	6.2		0	Yes	BKT
		Nanita Lake	72897	A	2001		34	5	Yes	NONE
		Nickelson Creek	24315	A-	200	1.0		0	No	NONE
		North Inlet	21371	B	200	6.0		0	No	NO INFO
		Owens Creek Tributary (Unnamed)	21434T	A-				0	No	NO INFO
		Parachute Creek, East Fork	21460	B+	99	5.0		4	No	BKT
		Parachute Creek, Middle Fork	22973	B+	200	2.0		4	No	BKT
		Paradise Creek	21493	A	501	1.5		5	Yes	NONE
		Pitkin Creek	24389	B	150	3.0		3	No	BKT
		Polk Creek	24391	B+	300	2.0		3	No	NONE
		Ptarmigan Creek	72924	A	600	1.0		4	Yes	NONE
		Ranch Creek, North Fork	27323	A	140	1.0		2	Yes	NONE
		Ranch Creek, South Fork	27335	A	100	2.0		1	No	NO INFO
		Red Dirt Creek	23250	B				0	No	NO INFO
		Red Dirt Creek, East Fork	27361	B+	300	2.0		2	No	NONE
		Roan Creek	21701	A	500	5.0		1	No	NONE
		Roaring Fork Creek	26915	A-	304	2.4		3	No	NONE
		Spruce Creek #1	22997	A-	55	0.5		1	No	NONE
		Spruce Creek #3	22133	B+	400	2.0		3	No	BKT
		Steelman Creek	26725	B	908	4.3		4	No	BKT
		Swan River, North Fork	22260	A-	400	2.0		0	No	BKT
		Thompson Creek, Middle	22347	A				0	Yes	NO INFO
		Thompson Creek, North	22359	B+	1000	2.0		0	Yes	NONE
		Thunderbolt Creek	22385	B	100	0.5		0	No	NO INFO

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO		**Colorado**								
		Timber Creek	26674	A		3.0		0	Yes	NO INFO
		Timber Lake	72873	A	500		12	4	Yes	NONE
		Trail Creek	25660	A-	1049	5.2		0	No	BKT
		Trapper Creek	25204	A	500	4.0		0	No	NONE
		Ute Creek	28200	B	150	1.0		1	No	NONE
		Vasquez Creek, Little	24030	A	100	2.0		2	No	NONE
		Vasquez Creek, South Fork	23571	A-	351	10.3		3	No	BKT
		Yule Creek	26585	B				0	No	NO INFO
CO		**Dolores**								
		Deep Creek	39671	A-	100	3.0		6	No	NONE
		Elk Creek	47298	B+	50	1.5		6	No	NONE
		Rio Lado Creek	49723	B+	300	2.0		0	No	NONE
		Taylor Creek, Little	47767	A		2.5		2	No	NONE
CO		**Gunnison**								
		Antelope Creek, West	48016	A	100	5.0		2	No	NONE
		Anthracite Creek, North	38047	B		3.0		0	Yes	NONE
		Beaver Creek (North)	38237	A		15.0		1	Yes	BKT
		Beaver Creek, West	44355	A	501	5.0		4	Yes	BKT
		Deep Creek	39621	A	3.0	0		No		
		Deer Beaver Creek	41810	B	700	3.0		0	No	NONE
		Doug Creek	45197	A	100	3.0		0	No	NO INFO
		Dry Creek, East Fork	48618	A		2.0		0	No	NO INFO
		Dyke Creek	39885	A	1786	4.0		0	Yes	BKT
		Gunnison R, Smith Fk, N	40535	B		9.3		0	Yes	BNT, RBT
		Henderson Creek	40600	A-		4.0		0	No	NO INFO
		Hubbard Creek, Main	49355	A	233	2.0		0	Yes	NONE
		Hubbard Creek, Middle	48620	A-	326	2.0		0	No	NONE
		Nate Cr	41791	A	653	3.0		0	Yes	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO		**Gunnison**								
		Pryor Creek	39702	A		2.0		0	No	NONE
		Road Beaver Creek	38182	A	200	4.0		0	No	BKT
		Roberts Creek	44305	A		5.5		0	No	NONE
		Rock Creek	45870	A	298	1.0		5	No	BKT
		Second Creek	48771	A-		3.0		6	No	BKT
		Terror Creek, West Fork	43606	A		3.0		0	Yes	NONE
		Trail Gulch	46199	A	424	2.0		0	No	BKT
		Youngs Creek Reservoir #3	93346	A			23	0	Yes	NONE
		Youngs Creek Reservoir 2	93334	A			52.1	0	Yes	NONE
CO		**San Juan**								
		Augustora Creek	44486	A	30	0.5		5	No	NONE
		Beaver Creek	38275	B	2700	5.5		4	Yes	NONE
		Big Bend Creek	47325	B+	620	1.0		4	No	NONE
		Clear Creek	47565	B+	500	1.7		2	Yes	NONE
		Cutthroat Creek	39415	A-		2.0		1	No	RBT
		Elk Creek	39986	B+		2.0		0	No	NONE
		Headache Creek	39491	A		1.3		1	No	BKT
		Hermosa Creek, East Fork	47628	A	2330	3.0		4	Yes	NONE
		Himes Creek	39502	A	200	2.0		5	No	BKT
		Navajo River #2 (Upper)	49064	A	385	3.6		5	No	NONE
		Piedra River, East Fork	42096	A-	6830	9.0		4	No	NONE
		Shaw Creek	43977	B	200	2.0		5	No	NONE
		Virginia Gulch Creek, West	43923	B+	545	2.0		4	No	NONE
CO		**White**								
		Big Beaver Creek	24935	A-	400	4.0		0	No	BKT, RBT
		Fawn Creek	20254	A-	600	2.0		1	No	NONE
		Hahn Creek	27967	A	400	2.0		4	No	NONE
		Little Skinny Fish Lake	69941	B	400		4	0	No	NO INFO
		Snell Creek	22044	A	150	3.0		1	Yes	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop		Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
CO	**Yampa**										
	Armstrong Creek	19035	A-	600	4.0		2	No	BKT		
	Beaver Creek	19124	A	300	1.5		3	Yes	NONE		
	Beaver Creek	19150	A-	600	6.0		2	Yes	NONE		
	Cataract Creek	22959	A-				0	Yes	NO INFO		
	Circle Creek	19530	A-	100	1.0		2	Yes	BKT		
	Coyner Creek	26074	A-	500	1.0		0	No	NONE		
	Diana Lake	66248	B	900	9.0		0	Yes	NO INFO		
	Elkhead Creek #3	23165	A-	416	6.0		2	Yes	NONE		
	First Creek	20266	A-	800	8.0		2	No	NONE		
	Indian Run Creek	20759	A-	240	7.0		0	No	NONE		
	Johnson Creek	20802	B	200	2.0		2	No	NONE		
	Little Snake, South Fork	22032	A-	700	7.0		2	No	NONE		
	Lopez Creek	21082	B	50	0.5		2	No	NONE		
	Lost Dog Creek	26193	A	100	2.0		1	No	BKT		
	Luna Lake	68115	B+	1000	38		0	Yes	NONE		
	Mandall Creek	21054	B	100	1.0		0	No	NO INFO		
	Milk Creek	24961	A	500	3.0		0	Yes	NONE		
	Oliver Creek	24092	A-	600	3.0		2	No	NONE		
	Pagoda Creek	27739	A-	800	4.0		2	Yes	NONE		
	Poose Creek	21561	A-	1100	5.0		2	No	NO INFO		
	Poose Creek #2	23418	A	100	1.0		2	Yes	NONE		
	Porcupine Lake	69232	B	400		4	0	Yes	NO INFO		
	Rough Creek	23301	A-	400	2.0		2	No	NONE		
	Smith Creek	26395	B+	600	2.5		0	No	NONE		
	Three Forks Ranch Lower Pond	TFR02	A			2.3	0	Yes			
	Three Forks Ranch Upper Pond	TFR01	A			0.8	0	Yes			
	Three Forks Ranch Upper Pond East Tributary	TFR03	A		1.0		0	Yes			
	Three Forks Ranch Upper Pond West Tributary	TFR04	A		0.5		0	Yes			
	Trout Creek	23557	A-	550	2.0		4	No	BKT		
	Williams Fork Yampa, South Fork	23482	A-	600	3.0		0	No	NO INFO		
	Williams Fork, South Fork	22791	A-	100	6.0		2	Yes	NONE		
	Willow Creek	22854	A	100	2.0		1	No	BKT		

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
UT	**NE**									
		Avintiquin Creek	II BE 060G 01	A		9.0		4	No	NONE
		Brownie Creek	II BH 010B 01-02	A		6.8		4	No	NONE
		Currant Creek	II BE 060 04	A		8.0		0	No	CTBV
		Daggett Creek	II CI 030A	A		2.3		6	No	GOT
		Dry Fork Creek	II BH 010 04	A		5.5		0	No	BKT
		Duchesne R., W. Fk.	II BE 150	A		21.0		1	No	NONE
		Lake Canyon Lake	II 173BB	A			36	1	Yes	RBT, BKT
		Mill Hollow Creek	II BE 060G 07A1 01	A		3.0		4	No	CTBV
		She Cyn Creek	II BB 060A 01	B+		12.0		6	No	NONE
		Sheep Creek Lake	II 080 C	A			80	0	Yes	BKT
		Sheep Creek, N. Fk.	II CI 050	A		9.6		0	No	BKT
		Sheep Creek, S. Fk.	II CI 030	A-		4.0		0	No	BKT
		Steer Gulch	II BB 050F 01	B+		4.0		6	No	NO INFO
		Timber Cyn. Cr.	II BE 060H 01-02	A	433	11.0		1	No	BNT
UT	**NE/nr**									
		Beaver Creek, Middle Fork	II CJ 040B 02	A		10.1		6	No	BKT
		Blacks Fork, E. Fk.	II CK 040 02	A-	129	7.0		1	No	NONE
		Blacks Fork, E. Fk. 18	II CK 040R 01	A-		2.6		6	No	NONE
		Blacks Fork, E. Fk. 23	II CK 040W 01	A-		5.4		6	No	NONE
		Blacks Fork, E. Fk. 24	II CK 040X 01	A-		3.4		6	No	MT. WF
		Blacks Fork, L. E. Fk.	II CK 040A 01	A-	680	7.2		0	No	BKT, MWF
		Blacks Fork, L. E. Fk. 13	II CK 040K 13 01	A-		0.8		6	No	NONE
		Blacks Fork, L. E. Fk. 15	II CK 040K 15 01	A-		1.9		6	No	NONE
		Blacks Fork, L. E. Fk. 20	II CK 040K 20 01	A-		1.0		6	No	NONE
		Blacks Fork, L. E. Fk. 23	II CK 040K 23 01	A-		2.0		6	No	NONE
		G-105 Lake	II 595VZ	A-			6.1	6	No	NONE
		G-69 Lake	II 595Q	A-			4.8	6	No	NONE
		Gilbert L. GR-150	II 596	A			16	6	No	BKT
		Smiths Fk. W. Fk.	II CK 020B 01	A	557-1000	10.0		6	No	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
UT	**SE**									
		Beaver Creek	II AK 180 01	U	30	2.6		6	No	RBT
		Beaver Creek	II AK 180 02	U	295	13.1		6	No	NONE
		Big Bear Creek	II AI 120G 01	A	348	8.0		0	No	NONE
		Bob Bishop Canyon Creek	II AK 100B 03 01	A		1.5		5	Yes	TGT
		Boulger Creek	II AI 130U 01	B+	2294	2.0		1	No	RBTXCT
		Gentry Hollow Creek	II AI 130I 02 01	A		4.1		1	No	NONE
		Geyser Creek	I BQ 050B 02	B+	704	4.6		0	No	NONE
		Gordon Creek, N Fk	II AK 100A 01	U	151	3.0		4	No	TGT
		Johnson Fork Creek	II AK 190A 01 01	A	528	2.4		0	No	NONE
		Jump Creek	II AK 180A 01	U	343-634	5.8		0	No	BNT
		La Sal Creek (Section 3)	I BQ 070 03	A		3.2		1	No	NO INFO
		La Sal Creek Ditch, Main Div.	I BQ 080B	A	194 - 480	2.3		0	No	BKT
		Lake Canyon Creek	II AI 130M 05	B		4.0		1	No	NO INFO
		Little Horse Creek	II AI 120I 01 01	A	22	1.2		4	Yes	NONE
		Tabbyune Creek	II AK 190C 01	A	1174	2.8		0	No	NONE
		Tabbyune Creek	II AK 190C 02	A		2.0		0	No	NONE
		Tie Fork Canyon	II AI 130I 01	A	250 - 356	2.0		1	No	BNT
		Trail Hollow Creek	II AK 190A 02 01	A	158	2.0		0	No	NONE
		Watch Canyon Creek	II AK 190B 01E 01	A		2.2		0	No	NONE
		White R., L. Fk.	II AK 190B 01	A		3.0		0	No	NONE
		White R., M. Fk.	II AK 190B 01 01	A		2.2		0	No	NONE
		White R., Rt. Fk.	II AK 190A 01	A	106 - 194	6.0		0	No	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
UT	**SO**									
		Boulder Creek, E. Fk.	I AJ 110C 02	A	113	2.5		0	No	BKT
		Boulder Creek, E. Fk.	I AJ 110C 02b	A	1197	0.5		4	No	NONE
		Boulder Creek, W. Fk.	I AJ 110D 02	A	333	6.0		1	No	NONE
UT	**SO**									
		Dougherty Basin Lake	I 310	A	650		3	1	Yes	BKT
		Long Willow Bottom Lake	I 328A	A			4.4	1		
		Pine Creek, W. Br.	I AJ 150C 01	A	355-1042	5.0		0	No	NONE
		Round Willow Bottoms Lake	I 347	A			8.3	1		
		Sand Creek	I AZ 130M 01 01	A	24	2.0		2	Yes	NONE
		Solitaire Lake	I 825	A			4.7	1		
		Tall Four Lake NCL	I 360	A	250		0.7	4	Yes	BKT
		Twitchell Creek	I AJ 160F 01	A		3.5		6		
		UM Creek	I AZ 130Z 02	A		14.7		6		
		UM Creek, Left Fork	I AZ 130Z 02 01	A		3.4		6		
		UM Creek, Rt. Fk.	I AZ 130Z 03 01	A	100	5.0		1	Yes	TIGER TROUT
		Water Canyon	I AJ 170B 01	A	32- 194	0.3		2	No	NONE
		White Creek	I AJ 160E 02	A	370	2.0		1	No	BKT, RBT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY	**Blacks Fork/East**									
		Archie Creek	GR841915UA	A	100	2.0		0	No	BKT
		Beaverdam Hollow Creek	GR841848UA	A	50	2.5		0	No	NONE
		Currant Creek	GR841200SR	B	500	10.0		1	Yes	BKT
		Devils Hole Creek	GR841760LN	A	50	4.5		0	No	NONE
		East Muddy Creek	GR841840UA	B	50	2.0		0	No	NONE
		Gilbert Creek	GR841925UA	A	500	6.0		1	Yes	BKT RBT
		Gooseberry Creek	GR840976SR	B		3.0		0	Yes	NONE
		Horse Creek	GR841965UA	A	200	9.5		0	No	NONE
		Little Gilbert Creek	GR841930UA	A	150	3.0		1	No	BKT
		Little Indian Creek	GR841755LN	B	100	1.5		0	No	RBT
		Meeks Cabin Reservoir	GR240267UA	B			488	0	No	
		Middle Fork Muddy Creek	GR841860UA	A		2.0		0		BKT
		Red Creek	GR845860SR	A	50	9.9		0	Yes	NONE
		Trout Creek	GR841975SR	A	300	3.0		0	Yes	NONE
		Van Tassel Creek	GR841865UA	A	100	1.0		0	No	BKT
		West Muddy Creek	GR841855UA	A	50	2.0		0	No	BKT
		Westside Tributary	GR841931UA	B		1.0		0	No	BKT
		Willow Creek	GR841905UA	B	350	7.0		0	No	BKT
WY	**East Fork**									
		Irish Canyon Creek	PE843560SE	A	1000	11.0		5	No	NONE
		Sunrise Lake	PE140283SE	A	1000		28	0	Yes	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY	**Little Snake**									
		Alisha Creek	GR872689CN	A	50	0.6		0	No	NONE
		Bachelor Creek	GR872693CN	A	50	1.0		2	No	NONE
		Beaver Creek	GR872520CN	A	50	1.0		0	No	NONE
		Belvidere Ditch	GR872260CN	A	500	12.8		1	No	NONE
		Dale Creek	GR872950CN	A	50	2.0		0	No	NONE
		Deadline Creek	GR872865CN	A	50	2.0		1	No	NONE
		Deadman Creek	GR872940CN	A	150	2.6		1	No	NONE
		Deep Creek	GR872340CN	A	200	6.7		1	No	NONE
		Deep Rock Creek	GR872697CN	A		1.0		0	No	NONE
		Dirtyman Creek	GR872480CN	A	100	5.8		1	No	NONE
		Douglas Creek	GR872360CN	B	200	3.0		0	No	BKT
		East Branch Deep Creek	GR872346CN	A		1.5		0	No	NONE
		Elk Creek	GR872353CN	B	50	0.5		0	No	NONE
		Green Creek	GR872687CN	A	100	0.8		2	No	NONE
		Green Timber Creek	GR872910CN	A	130	2.5		1	No	NONE
		Haggerty Creek	GR872685CN	A		3.6		2	No	NONE
		Happy Creek	GR872980CN	A	50	0.7		1	No	NONE
		Harrison Creek	GR872920CN	B	150	2.0		1	No	NONE
		Haskins Creek	GR872720CN	A	50	6.5		0	No	BKT
		Hatch Creek	GR872485CN	B+	50	1.6		0	No	NONE
		Hell Canyon Creek	GR872370CN	A	100	1.8		1	No	NONE
		Mill Creek	GR872350CN	A	200	5.5		1	No	BKT
		North Fork Big Sandstone Creek	GR872366CN	A	100	2.0		0	No	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY	**Little Snake**									
		North Fork Little Snake River	GR872840CN	A	1600	2.0		1	No	BKT
		Rabbit Creek	GR872870CN	A	50	2.0		1	Yes	NONE
		Rhodine Creek	GR872955CN	A	50	2.0		1	No	NONE
		Right Branch Mill Creek	GR872354CN	A		0.9		0	No	NONE
		Roaring Fork Little Snake River	GR872800CN	A	500	2.0		1	No	BKT
		Rose Creek	GR872900CN	A	50	1.5		1	No	NONE
		Sandstone Creek, AC	GR872365CN	A	50	1.0		0	No	NONE
		Skull Creek	GR872359CN	B	50	1.0		0	No	NONE
		Soloman Creek	GR872880CN	A	260	3.5		1	No	NONE
		South Fork Mill Creek	GR872352CN	A		1.8		0	No	NONE
		Standard Creek	GR872875CN	A	100	1.7		1	No	NONE
		Ted Creek	GR872945CN	A	20	2.0		1	No	NONE
		Third Creek	GR872944CN	A	30	1.0		1	No	NONE
		West Branch Deep Creek	GR872345CN	A		1.6		0	No	NONE
		West Branch N Fk Little Snake	GR872860CN	A	500	7.2		1	Yes	NONE
WY	**Upper Green**									
		Big Sheep Mountain Lake	PE140876SE	A	200		5.5	4	Yes	NONE
		Klondike Creek	PE845160SE	A	50	5.0		0	Yes	NONE
		Rock Creek	PE845080SE	A	700	11.0		0	Yes	BKT
		Trudy Creek	PE845042SE	A	100	1.3		0	No	NONE

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY	**Westside**									
		Bare Creek	PE844170SE	B	100	3.0		1	Yes	BKT
		Camp Creek	PE844285SE	A	50	1.0		0	No	NONE
		Clear Creek	PE843205LN	A	100	2.0		1	Yes	BKT
		Dead Cow Creek	PE844280SE	A	50	4.0		0	No	NONE
		Fish Creek	PE843285SE	B	400	20.7		0	Yes	BKT SRC
		Hardin Creek	PE844070SE	A	50	2.5		1	Yes	BKT
		Irene Creek	PE844060SE	A	50	1.0		1	Yes	BKT
		LaBarge Creek	PE843030LN	A	350	18.0		0	Yes	BKT RBT
		Lead Creek	PE844310SE	B	500	3.0		0	No	BKT
		Middle Fork Fish Creek	PE843295SE	U		0.7		0	No	NONE
		Mill Creek	PE844330SE	A		1.0		0	No	BKT
		Nameless Creek	PE843180LN	B	50	3.0		1	Yes	BKT
		North Cottonwood Creek	PE844020SE	A	100	6.0		0	Yes	BKT RBT
		North Fork Beaver Creek	PE843282SE	A	200	3.4		1	No	NONE
		North Fork Fish Creek	PE843290SE	U		2.0		0	No	NONE
		North Piney Lake	PE140948SE	A	1500		71	0	Yes	BKT
		Nylander Creek	PE844080SE	A	100	3.0		1	Yes	BKT
		Pine Grove Creek	PE843255SE	A	50	7.3		0	Yes	NONE
		Rock Creek	PE843065SE	A	100	2.5		1	Yes	NONE
		Sjhoberg Creek	PE844110SE	A	200	2.0		2	No	NONE
		South Cottonwood Creek	PE844120SE	A	250	12.0		0	Yes	BKT SRC
		South Fork Beaver Creek	PE843284SE	A	350	4.5		0	No	RBT
		South Fork Fontenelle Creek	GR842760LN	A	100	3.5		0	No	BKT

State	GMU	Water Name	Water Code	Purity	Adult Pop	Miles	Acres	Barrier	CRCT Stocked?	Other Salmonids
WY	**Westside**									
		South Fork North Horse Creek	PE844340SE	A	200	4.0		0	Yes	BKT
		South Horse Creek	PE844250SE	A	300	8.0		0	No	BKT SRC
		South LaBarge Creek	PE843155LN	A	200	6.5		2	Yes	BKT RBT
		Spring Creek	PE843200LN	A	200	5.0		0	No	BKT
		Trail Ridge Creek	PE843281SE	A	300	5.3		0	No	NONE

Purity Codes

A = Pure; A- = Pure but mixed w/other pure CRCT Pop.; B+ = Essentially Pure; B = Slightly Hybridized; C = Some Hybridization; D = Distinct Hybridization; U = Unknown

Species Codes

BKT = Brook Trout; BNT = Brown Trout; BVC = Bonneville Cutthroat Trout; GOL = Golden Trout; GRA = Arctic Grayling; MWF = Mountain Whitefish; PPN = Pikes Peak Cutthroat Trout; RBT = Rainbow Trout; RXC = Rainbow-Cutthroat Trout hybrid; SPL = Splake; SRC = Snake River Cutthroat Trout; TGT = Tiger Trout; YSC = Yellowstone Cutthroat Trout