

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Colorado River cutthroat trout ( <u>Oncorhynchus clarki pleuriticus</u> )			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<p>Researchers and managers have identified 318 extant populations of Colorado River cutthroat trout distributed throughout their historical range. Of the known 318 populations, 271 populations are located in Region 2 (Colorado and Wyoming). Of the 271 populations in R2, only 69 populations are considered to be “genetically pure” based on meristic, morphometric, and genetic analyses. At best, the extant populations of Colorado river cutthroat trout may represent no more than one percent of historical populations.</p> <p>Confidence in Rank <b>High</b> or Medium or Low</p>	<ul style="list-style-type: none"> <li>• Behnke 1979</li> <li>• CRCT Task Force 2001</li> <li>• Young et al. 1996</li> <li>• Baxter and Stone 1995</li> </ul>
2 Distribution outside R2	A	<p>Researchers and managers have identified 47 extant populations of Colorado River cutthroat trout located outside of Region 2 (Utah and Wyoming). Fourteen of the 47 populations are considered “genetically pure”. Although all of the streams that could conceivably contain relic populations of Colorado River cutthroat trout have not been examined, most of the streams likely to support the aforementioned populations have been sampled by electrofishing.</p> <p>Confidence in Rank <b>High</b> or Medium or Low</p>	<ul style="list-style-type: none"> <li>• CRCT Task Force 2001</li> <li>• Young et al. 1996</li> </ul>
3 Dispersal Capability	A	<p>Because of water developments (dams, water diversions, etc.) and the introductions of non-native competitors (brook trout and rainbow trout), essentially all of the known populations of Colorado river cutthroat trout are restricted to headwater drainages located in national forests in Region 2. Additionally, fish barriers that have been constructed to protect relic populations of Colorado River cutthroat trout from non-native salmonids (competition and hybridization) have further restricted the ability of CRCT to disperse among historically available habitats.</p> <p>Confidence in Rank <b>High</b> or Medium or Low</p>	<ul style="list-style-type: none"> <li>• CRCT Task Force 2001</li> <li>• Young et al. 1996</li> </ul>

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4 Abundance in R2	B	<p>Most of the available data that describe population numbers (estimates) of CRCT are for adult fish (total length &gt; 6.0 inches). These data may exist for perhaps half of the known populations of CRCT (Colorado and Wyoming). Although the existing data suggest relatively wide distribution of relic populations of CRCT, many of the populations exhibit relatively low abundance (&lt; 1,000 adults).</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b></p>	<ul style="list-style-type: none"> <li>CRCT Task Force 2001</li> </ul>
5 Population Trend in R2	B	<p>Because of efforts by federal and state agencies to protect and enhance relic populations of CRCT, it appears that extant populations are somewhat stable, especially those populations located in Colorado and Wyoming. It is clear, however, that relatively small populations are especially susceptible to anthropogenic and natural environmental perturbations that could result in abrupt diminutions or extirpations of local populations.</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b></p>	<ul style="list-style-type: none"> <li>CRCT Task Force 2001</li> <li>Young et al. 1996</li> </ul>
6 Habitat Trend in R2	C	<p>Efforts to by federal and state agencies to eradicate non-native salmonids from CRCT habitats have resulted in some habitat expansion. If this expansion can be considered an upward trend in suitable habitat availability, then it must be placed in the context of limited opportunities to increase CRCT habitats because of existing human values that focus on non-native gamefish and agricultural/municipal water uses.</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b></p>	<ul style="list-style-type: none"> <li>CRCT Task Force 2001</li> <li></li> </ul>
7 Habitat Vulnerability or Modification	B	<p>Although in general, existing CRCT habitats are not considered to be vulnerable to anthropogenic modifications, some site-specific habitats may be vulnerable to fluctuations in water availability do to periodic drought and climate change. Because much of existing CRCT habitats are located in federal land (includes Indian reservations), they can be protected from many potential modifications and exploitations. Additional protections are afforded by existing federal and state laws.</p> <p>Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b></p>	<ul style="list-style-type: none"> <li>CRCT Task Force 2001</li> <li>Young et al. 1996</li> </ul>

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<b>8</b> Life History and Demographics	<b>B</b>	Colorado River cutthroat trout are vulnerable to competition by brook trout and vulnerable to hybridization with rainbow trout. In addition, CRCT are vulnerable to whirling disease and especially vulnerable to exploitation (fishing pressure).  Confidence in Rank <b>High</b> or Medium or Low	<ul style="list-style-type: none"> <li>• CRCT Task Force 2001</li> <li>• Young et al. 1996</li> <li>• Baxter and Stone 1995</li> </ul>
Evaluator(s): <b>Gregory S. Eaglin (fisheries biologist), Medicine Bow/Routt National Forest</b>			Date: <b>12 July 2001</b>

National Forests in the Rocky Mountain Region where species is **KNOWN (K)** or **LIKELY (L)**<sup>1</sup> to occur:

<u>Colorado NF/NG</u>		<u>Kansas NF/NG</u>		<u>Nebraska NF/NG</u>		<u>South Dakota NF/NG</u>		<u>Wyoming NF/NG</u>	
Known	Likely	Known	Likely	Known	Likely	Known	Likely	Known	Likely
		Cimmaron NG		Samuel R. McKelvie NF		Black Hills NF		Shoshone NF	
X				Halsey NF		Buffalo Gap NG		Bighorn NF	
X				Nebraska NF		Ft. Pierre NG		Black Hills NF	
X				Ogalala NG				Medicine Bow NF	X
X								Thunder Basin NG	
X									

<sup>1</sup> Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

## References

Baxter, T. G. and M.D. Stone. 1995. Fishes of Wyoming. Wyoming Game and Fish Department, Cheyenne, Wyoming.

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.

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. 87pp.

Young, M.K., R.N. Schmal, T.W. Kohley, and V.G. Leonard. 1996. Conservation status of Colorado River cutthroat trout. General Technical Report RM-282. U.S. Department of Agriculture. Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado. 32pp.