

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Gila pandora</i> / Rio Grande chub			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	Endemic to Rio Grande basin in Colorado. Occurs on 1 Forest in R2 (RGNF). Fewer than 10 populations remain in R2; several of these from transplants that have occurred in recent years. Successful reproduction documented at several sites. Long-term success of transplants is unknown at this time. Listed as a "Species of Special Concern" in Colorado in 1996. Colorado Natural Heritage Program Rank of "critically imperiled" (S1) (?). Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Colorado Natural Heritage Program. CDOW fisheries inventories, 1999-2000. Zuckerman, 1984. Zuckerman and Langlois, 1990.
2 Distribution outside R2	B	In New Mexico, Rio Grande chub is declining in many locations, but appears stable in others. Listed as a New Mexico state "Species of Concern" in 1994. New Mexico Natural Heritage Program ranks the species "rare or uncommon" in New Mexico. Listed as threatened in Texas (one population remains). Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> New Mexico Department of Game and Fish, 1994. New Mexico Natural Heritage program, 1997. Sublette et al., 1990.
3 Dispersal Capability	A	Existing populations are disjunct, occurring in isolated stream segments. Dispersal capability likely very low due to fragmented habitat or non-native species serving as barriers to movement. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Calamusso and Rinne, 1999. Zuckerman, 1984. Zuckerman and Langlois, 1990.
4 Abundance in R2	A	Status of populations in Colorado varies from stable to declining. Many populations are small and potentially imperiled (non-native species present, habitat degradation). Introduced lake populations may be more secure than historic stream populations. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Alves, pers. Comm.. CDOW fisheries inventories, 2000. Zuckerman, 1984. Zuckerman and Langlois, 1990.

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5 Population Trend in R2	A	Rio Grande chub was historically very abundant throughout its range. It was described as common in Colorado (Cope and Yarrow, 1875), and Jordan (1891) described the species as “abundant everywhere” in the Rio Grande in Colorado. The species also appeared to be an abundant food source for pre-Columbian residents of prehistoric Blanca Lake settlements, based on numerous chub bones found in archaeological digs in the San Luis Valley, Colorado (Jones, 1977). Rio Grande chub has declined rapidly, now occupying only a fraction of its historic range (fewer than 7 historic populations remain). Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Alves, pers. Comm.. Cope and Yarrow, 1875. Jones, 1977. Jordan, 1891. Zuckerman, 1984. Zuckerman and Langlois, 1990.
6 Habitat Trend in R2	A	Habitat condition trend varies from slightly improving to stable to downward. Stream dewatering, spring development, habitat degradation from grazing, roads, etc. still occurring in places. Lower elevation habitats on private land also impacted and declining in many places. Some improvements in habitat are occurring on public land as a result of improved management practices and restricted use as compared to historic use levels. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Alves, pers. Comm.. Calamusso and Rinne, 1999. Swift-Miller, pers. Obs. Zuckerman, 1984. Zuckerman and Langlois, 1990.
7 Habitat Vulnerability or Modification	A	Habitat is very vulnerable to modification from management activities including grazing, road construction, dewatering, logging, etc. Current direction (Rio Grande Forest Plan standards and guidelines) probably reasonably protective of habitats, when adhered to. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Calamusso and Rinne, 1999 Rinne and Platania, 1995. Sublette et al., 1990
8 Life History and Demographics	A	Hybridizes with native longnose dace (<i>Rhinichthys cataractae</i>). Extirpated from many historic sites, where longnose dace has persisted. Predation by and competition with non-natives (e.g., non-native trouts, northern pike) also appears important. Limited information available about reproductive biology and basic biology/ecology, so confidence in this rating is moderate. Confidence in Rank High or Medium or Low	<ul style="list-style-type: none"> Bestegen and Platania, 1990. Calamusso and Rinne, 1996. Calamusso and Rinne, 1999. Cross and Minckley, 1960. Koster, 1957. Rinne and Platania, 1995. Sublette et al., 1990. Zuckerman, 1984. Zuckerman and Langlois, 1990.
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National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY (L)¹ 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	
				Halsey NF		Buffalo Gap NG		Bighorn NF	
				Nebraska NF		Ft. Pierre NG		Black Hills NF	
				Ogalala NG				Medicine Bow NF	
								Thunder Basin NG	
	X								

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¹ 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.

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