

STATE OF COLORADO

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DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF WILDLIFE**  
AN EQUAL OPPORTUNITY EMPLOYER

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*For Wildlife-  
For People*

**TO:** Teresa Steely  
**FROM:** Dan Kowalski  
**RE:** North Fork of the Gunnison Sampling, 2004

**INTRODUCTION**

The North Fork of the Gunnison River was sampled by Division of Wildlife personnel and volunteers on September 29, 2004 to monitor fish populations. Two stations were sampled by two pass removal electrofishing using a Smith Root 1.5 KVA bank electrofisher with five anodes. The first site was located upstream of the Monitor Ditch diversion near Paonia, CO and was 433 ft. long with an average width of 79 ft. (UTM 13S 272587, 4304112). The second site was near the Gunnison County maintenance shop below Paonia Dam and was 635 ft. long with an average width of 69 ft. (UTM 13S 294023, 4312286).

**RESULTS**

Native fish species observed at the Monitor Ditch site were bluehead sucker, flannelmouth sucker, speckled dace, and mottled sculpin. Rainbow trout, brown trout, bluegill sunfish, green sunfish, and white suckers were also observed. A summary of population estimates is in Table 1 and the species composition of sampled fishes appears in Figure 1. Rainbow trout was the most abundant fish and had an estimated biomass of 24 pounds per acre.

Native fish species sampled at the County Shop site were bluehead sucker, flannelmouth sucker, and mottled sculpin. Evidence of native cutthroat trout hybridization with rainbows was also observed in a small number of fish. Non-native rainbow trout, brown trout, and white suckers were present as well. A summary of population estimates is in Table 2 and the species composition of sampled fishes appears in Figure 2. A length frequency histogram of sampled rainbow trout is presented in Figure 3. Rainbow trout were the most abundant fish and had an estimated biomass of 65 pounds per acre.

**Table 1.** Fish population statistics and 95% confidence intervals from the Monitor Ditch site on the North Fork.

<b>Species</b>	<b>#/Mile</b>	<b>95% C.I.</b>	<b>Lbs/Acre</b>	<b>95% C.I.</b>
Rainbow Trout	270	256, 284	24	23, 25
Brown Trout	98	85, 111	9	8, 10
Bluehead Sucker	49	13, 85	4	1, 7
Flannelmouth Sucker	73	55, 91	15	11, 19
White Sucker	134	0, 388	9	0, 27

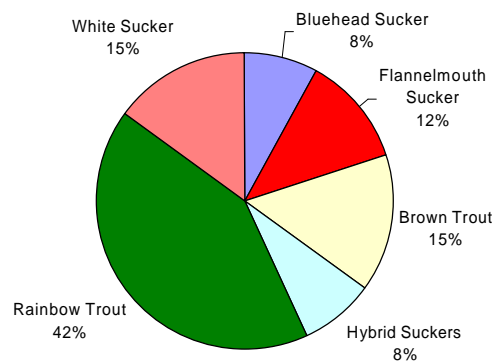
**Table 2.** Fish population statistics and 95% confidence intervals from the County Shop site on the North Fork.

<b>Species</b>	<b>#/Mile</b>	<b>95% C.I.</b>	<b>Lbs/Acre</b>	<b>95% C.I.</b>
Rainbow Trout	708	577, 839	65	53, 77
Brown Trout	133	65, 201	9	5, 13
Bluehead Sucker	597	519, 675	100	87, 113
Flannelmouth Sucker	58	48, 68	20	16, 24

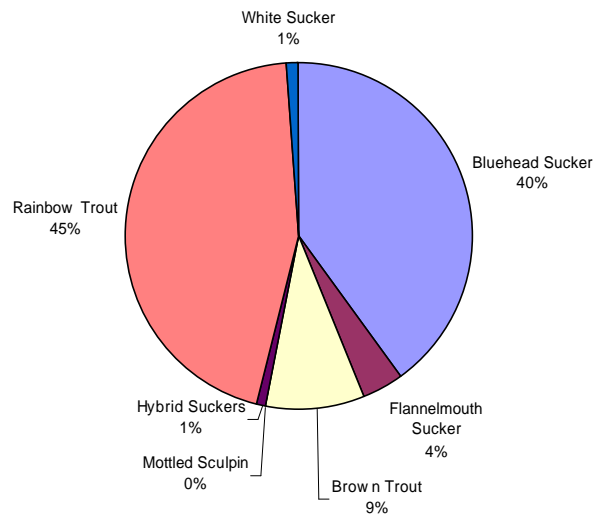
## MANAGEMENT IMPLICATIONS

Both sampling locations had healthy populations of both sport and native fish. Populations of bluehead and flannelmouth suckers appear strong, although the presence of white suckers and sunfish species could be detrimental to the native fish community. Presence and numbers of nonnative fish will continue to be monitored.

Rainbow trout are the predominant sport fish in the North fork and populations appear health especially higher in the drainage. Rainbows at this site exceed the Division of Wildlife's minimum requirements for biomass and number of quality fish for Gold Medal status (60 lbs/acre and 12 fish/acre over 14 inches). Although periodic stocking of rainbow trout does occur, the majority of the fish observed were wild fish. Young of the year and age 1 fish were observed at the county shop site as well as mature fish of several year classes indicating good natural reproduction. This fishery will continue to be managed as a wild salmonid recreation stream (management category 302).



**Figure 1.** Species composition of fish sampled at the Monitor Ditch site on the North Fork.



**Figure 2.** Species composition of fish sampled at the Monitor Ditch site on the North Fork.

**Figure 3. Rainbow Trout Length Frequency  
North Fork of the Gunnison River, County Shop, 2004**

