



# Colorado River, Pumphouse-Radium

## FISH SURVEY AND MANAGEMENT INFORMATION

Jon Ewert - Aquatic Biologist (Hot Sulphur Springs)

**General Information:** Beginning with Gore Canyon, the Colorado River offers many miles of public access downstream of Kremmling. The Pumphouse recreation area, and other locations downstream from that point, are very popular launching points for floating the river by both anglers and other recreational boaters.

**Location:** West of Kremmling, accessed from Grand County road 1.

**Recreational Management:** Bureau of Land Management. Use fees apply at developed recreational sites.

### Amenities and General Info.

- BLM recreation areas at Pumphouse and Radium offer camping, boat ramps, and pit toilets. Privately owned operations at Rancho Del Rio and State Bridge offer similar facilities.

### Regulations

- The bag and possession limit for trout is two fish. Standard regulations apply otherwise.

### Previous Stocking

None—this reach of the Colorado River is managed as a wild, self-sustaining sport fishery.

### Sportfishing Notes

- One of the largest trout rivers in the state, this reach of river offers a wide diversity of habitat to fish.
- Float fishing is highly popular, although wading is highly productive as well, especially at lower flows, and for those willing to hike to more secluded locations.
- Large populations of the giant stonefly *Pteronarcys californica* inhabit this reach and can produce spectacular fishing. Because this species has a multi-year life cycle in its larval form, nymphs of this species are present virtually year-round and fishing with large salmonfly nymphs can be productive nearly any time.
- In addition to the stoneflies there are many other prey items available to trout including caddis, mayflies, and an assortment of forage fish. Streamer fishing can be productive.

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Fish sampling information

Jon Ewert — aquatic biologist



The information contained in this report was obtained from a 2-mile long sampling station which ends at the Radium bridge (above). The Radium hot spring is at middle right and the Sheephorn Creek confluence is at middle left. This reach of river contains a wide variety of habitat (canyon-type water with large boulders, large riffles, deep pools, long runs, braided channel) and is considered to be a good representation of the river in this area.



Sampling on this reach of river is accomplished using two 16-foot electrofishing rafts such as the one pictured above. There is a generator and control box on the boat behind the rower, and a livewell in front of the rower. A fiberglass boom extending from the bow holds an electrode in the water. The netters capture the stunned fish and place them in the livewell. Fish are weighed, measured, marked, and released. At a later date the survey is repeated. The proportion of marked fish in the second sample yields the statistics necessary to estimate population parameters. Because of the size of this reach of river, two boats working in tandem on opposite sides of the river are necessary.

	# fish per mile > 6"	# fish per mile >14"	Biomass (lbs./acre)	# fish per acre >14"	Avg. relative weight (body condition)
<b>May 5, 2010</b>					
<b>Brown trout</b>	1,721	596	103	36	93.7
<b>Rainbow trout</b>	216	168	17	10	87.2
<b>April 28, 2011</b>					
<b>Brown trout</b>	1,823	741	110	44	88.8
<b>Rainbow trout</b>	650	472	47	28	87.2

The table above displays the population estimates from 2010 and 2011. The only significant change between the two years is the increases in rainbow trout estimates. This is likely due to a chance occurrence that in 2011 we happened to encounter more dense pre-spawn aggregations of rainbows than we did in 2010. It is unlikely that the actual population of fish increased by that amount over the course of one year. The graph shown below indicates that the size structure of the brown trout population was virtually unchanged between 2010 and 2011. Fewer total fish were captured in 2011, but this was due to higher flows creating more difficult conditions for sampling.

One unique aspect of this fishery is that it contains the most diverse assemblage of fish species of any river in the area. 12 species of fish were captured:

- Brook trout
- Kokanee
- Bluehead sucker
- Colorado River cutthroat
- Longnose sucker
- Mottled sculpin
- Brown trout
- Mountain whitefish
- Rainbow trout
- Rainbow-cutthroat hybrid
- Speckled dace
- Snake River cutthroat
- White sucker

