

Title: Waptus River Bull Trout Surveys

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Surveys were conducted by the USFWS in the Waptus River, a tributary of the upper Cle Elum River above Cle Elum Lake between September 4 and September 11, 2003 to determine presence/absence of bull trout (*Salvelinus confluentus*). The presence of the species has been documented in Waptus Lake but its presence and distribution has not been documented in the river. The surveys were conducted using the protocol developed by Peterson et al. (2002) in cooperation with the American Fisheries Society. Nineteen randomly selected 100 meter stream units were snorkeled at night. Four units above Waptus Lake were surveyed; eleven units between a barrier falls near Hour Creek and the lake outflow were surveyed; and four units between the wilderness boundary and the falls were sampled. All species observed were counted with the total length of each individual estimated. During the day preceding the sampling the habitat available in each unit was generally described, wetted widths and water depths were measured across transects, water temperatures were taken, and stream gradient was measured. A total of 1,039 fish were observed in the sampling with rainbow trout accounting for 63 percent of the total, brook trout 23 percent, sculpin 13 percent, and cutthroat making up one percent of the total. During the extent of the surveys only one possible bull trout was observed, that observation occurring in one of the units sampled above Waptus Lake. This juvenile measured 80 mm in total length. A tissue sample was taken and the fish was released unharmed. A genetic analysis revealed the fish to be an F2 hybrid, likely the result of mating between a brook trout and a bull trout/brook trout hybrid. As was the case in the upper Cle Elum River, bull trout do not appear to exist in significant numbers in the Waptus River drainage. Reasonable speculation points to a negative species interaction with brook trout and, at least below the lake, elevated water temperatures as being the possible reasons for this.