FIELD TRIP REPORT

DATE: October 15 and 16, 1997

TITLE: Underwater fish surveys in Lower West Fork Jarbidge River.

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Date: December 4, 1997

OBJECTIVE: To conduct underwater surveys for fluvial bull trout to determine their presence/absence in the West Fork Jarbidge River.

BACKGROUND: Personnel from Idaho-BLM, Idaho-USFWS, and the Intermountain Forest and Range Experiment Station conducted underwater surveys for bull trout during July, 1994 and on August 7 and 8, 1995. In 1994 they saw an one adult bull trout in a pool located about 1.5 miles downstream of the Nevada-Idaho border and 6 bull trout in the pool formed below the Jack Creek culvert barrier. In 1995 the only bull trout seen was also in the Jack Creek culvert pool. They concluded that migratory bull trout are still present in the Jarbidge River drainage. In August through mid-October, 1997 Idaho Fish and Game operated downstream weirs in both Jarbidge River forks in Idaho. The weirs were installed to get a better handle on the magnitude of the migratory bull trout population. It was thought that migratory bull trout would return downstream in the fall period following their spawning in Nevada. Only a single subcatchable bull trout was captured and it was caught in early-August in the West Fork Jarbidge River weir.

PROCEDURE: Underwater surveys were conducted during daylight in pools beginning at the Stateline to about 2.0 miles upstream. A beaver pond located about 4.4 miles into Nevada and Jack Creek culvert pool were also snorkeled. Only pools large enough to allow at least one snorkeler to enter were surveyed. Most pools were large enough for both snorkelers to enter. Each snorkeler concentrated on finding fish on their respective side of the pool. Fish within the view of both snorkelers were only classified by one person. Fish were identified as to species and given a relative size description (young-of-year, fingerling, subcatchable, catchable, or hatchery-catchable). Species, number, and relative size were recorded after each pool was surveyed. Pools were classified as quality type #1, #2, or #3 or the smaller #4 (GAWS Level III Methodology).

FINDINGS AND EVALUATION: On October 15th from 1000 hours to 1730 hours we snorkeled 39 pools. The beginning water temperature at Stateline was 42°F and the ending temperature was 50°F. A subcatchable redband trout was actually pulled from the rocks when we entered the first pool. This hiding behavior is common when stream temperatures are cold. A total of 214 fish were identified on the first day of survey. No bull trout were seen. On October 16th from 1000 hours to 1400 hours we snorkeled 24 pools and identified 82 fish. No bull trout were seen. River temperature ranged from 43°F to 51°F. A total of 296 fish were identified during the course of the survey. Redband trout were the most commonly seen species. Of the 268 redband trout (90.5% of sample) there were 62 catchables, 106 fingerling to subcatchables and 40 young-of-year. A total of 23 mountain whitefish (60.9% catchable) were seen. There were 8 hatchery rainbow trout identified by there usually larger size and eroded dorsal fin. Only two live sculpin and one dead sculpin were seen.

The Jack Creek culvert pool was vacant of fish. The temperature of Jack Creek was 42°F. The fact that no fish were seen in the culvert pool was a surprise. Past electrofishing surveys have always resulted in numbers of redband trout being found. It could be that the cold water caused fish to enter the river which was running at 51°F when Jack Creek was 42°F when snorkeled.

RECOMMENDATION: Snorkeling should be used to continue the search for bull trout in the Jarbidge River drainage. Most of the pools that were sampled in this study were very likely two large for effective electrofishing capture methods. Underwater surveys would seem suitable in other river environments where visibility is clear.