MEMORANDUM

State of Alaska

TO: Scott Grundy
Regional Supervisor
Habitat Division
Fairbanks

DATE: 5/26/83

FILE NO:

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FROM: Jim Raymond
Area Biologist, FRED
Fairbanks

SUBJECT: Hammond River

83-1402

Mike Kaill and I drove up the Haul Road 23-25 May to get a quick look at the fisheries habitat and fisheries resources in the Hammond River. This trip was made in response to a request by placer miners in the area to reclassify the Hammond River for industrial discharge. A hearing on the reclassification was scheduled for 31 May.

We set a 4-by-4 ft trap with 16-ft wings in the Hammond River immediately below the Haul Road Bridge. Because the river was flowing fast and rising, the wings were usually partially washed out, so on average the wings were about 8 ft long. The trap was fished from 2200 hrs on 23 May to 0900 hrs on May 25. No fish were caught. The water temperature varied between 0.3 and 2.2°C. The water was muddy and visibility was only about 2 to 3 inches.

(For comparison, the same trap (with 30-ft wings) caught about 75 juvenile fish (salmon, grayling, lake chub, suckers, lampreys) per day in the Tanana River a few days earlier. However, the Tanana River watershed is about two orders of magnitude larger than the Hammond River watershed and the water temperature was higher (~7°C).)

On 24 May we hiked about six miles up the Hammond River to the Alminco placer mine at Vermont Creek. The Hammond River had a high gradient and was fast flowing (~3 to 4 ft/s) throughout this section. We seined in a few places in the fast current but caught nothing. We saw only one spot that looked suitable for a resting area for fish. The water was fairly muddy here also but we saw one 8-inch grayling.

No mining activity was going on at Vermont Creek. Several of the miners were working on the road with heavy equipment but we did not see any erosion. The muddiness of the Hammond River was the same above and below Vermont Creek. One of the miners who was familiar with the geology of the area said that the turbidity of the Hammond River was due to glacial silt deposited in the area by past glaciers. Terry Bendock of the Sport Fish Division thinks that a high turbidity is typical of many streams in the Brooks Range in the spring. But he says that these streams also tend to clear up somewhat in the summer.

Here are some other bits of information on the Hammond River. Bernie Wright, the former DOT foreman at Coldfoot told me in 1978 that the Hammond River flowed year-round. I passed over the Hammond River in April and October of 1980. On 14 April it was snow-covered. On October 3 I remember seeing it flowing and that the water was clear. One of the miners told me that they cut a hole in the ice in early May this year near Vermont Creek but found no water.

On 3 October 1980 I canoed from The Koyukuk River Middle Fork bridge #1 (a few miles below the mouth of the Hammond River) several miles downstream to pipeline mile 230. The water was very clear. We looked for fish but saw none.

In summary we failed to find many fish or good fish habitat in the Lower Hammond River during a short survey in late May. However, the Hammond River may be more hospitable to fish in the summer when water temperatures are higher and water velocites and water turbidity are lower.

cc: Mike Kaill, Regional Biologist, FRED Division