

Investigation and selection of resistance board weir site locations in the Innoko River drainage, Innoko National Wildlife Refuge, Alaska, 2001

Abstract: A feasibility study was conducted on August 20 to survey various tributaries within in the Innoko River drainage for potential weir sites. An aerial survey was the method of choice to collect the desired information. The result of a 2001 pilot radio telemetry study, conducted by Fairbanks Fishery Resource Office and Innoko National Wildlife Refuge personnel, indicated that salmon utilized tributaries in the upper Innoko River drainage. The aerial survey for this study focused on those tributaries; Dishna River, Tolstoi Creek, Ophir Creek, and the main stem Innoko River above the mouth of the North Fork. Due to complications with logistics, early termination of Refuge field camp prevented the use of their boat, motor, and camp, our study was limited to one aerial survey and no ground surveys. The criteria for selecting possible weir sites was based on; 1) flow characteristics, 2) water depth, 3) channel width, 4) substrate size, and 5) stream bottom characteristics. Out of all the tributaries surveyed the best site location was either on the main stem Innoko River 20 km upstream of the North Fork or on the Dishna River 10 km above the mouth. Because little hydrography data have been collected from this drainage it would be advisable to conduct a pilot study, i.e. counting tower, to record water characteristics throughout the field season. The information from the pilot study would give an indication if a resistance board weir is feasible to operate.

Citation: VanHatten, G. K. 2002. Investigation and selection of resistance board weir site locations in the Innoko River drainage, Innoko National Wildlife Refuge, Alaska, 2001. U. S. Fish and Wildlife Services, Office of Subsistence Management, Fisheries Resource Monitoring Program, Final Report (Study No. 01-048). U.S. Fish and Wildlife Service, Fishery Resource Office, Fairbanks, Alaska.