

still light compared to accessible waters near Anchorage. The invertebrate population suffered with logging which altered the hydrology and removed the stream cover. There has never been a heavy growth of aquatic vegetation in this stream. There is no water diversion in the system. There is no domestic pollution either but sedimentation and alluvial instability has been increased with the logging.

This stream has not benefited by the loss of ground cover, stream shelter or the road building seen there now. The clear-cut logged areas are only slowly re-vegetating and the hydrology of the river has not returned to its pristine state. Increased flood flows removed the artificial spawning channel designed to mitigate the losses caused by logging and the idea was dropped. By its proximity to the road, this stream will get a great increase in fishing pressure particularly after the ferry system starts service to Hollis.

✓ Karta River

This stream discharges into Karta Bay which is the northern extremity of Kasaan Bay on Prince of Wales Island. The fix on the mouth is N. Lat. 55°33'30", W. Long. 132°34'18". It may be seen on Maps U.S.G.S. Craig (C-2) and (C-3). The drainage area is 49.5 sq. mi. and contains 2 major lakes, Salmon Lake 1384 acres and Karta Lake of 282 acres. They lie at elevations of 108 and 104 feet respectively. The discharge from the system ranges from over 5,000 c.f.s. in flood to 25 c.f.s. nominal low with an average of 117 c.f.s. The river will rise about 4 feet above normal flow when in flood. There is no road access into this system although the watershed is scheduled for logging in the K.P.C. sale via an access from Big Salt Lagoon near Klawak. The whole system lies within the Tongass National Forest. The stream bottom is largely new angular rock of moderate grade from the falls to salt water (8 ft/mile). Pool-riffle frequency is good. A partial barrier lies about 2 1/2 miles above the tide and denies pink and chum salmon access to the lakes. Spawning area is good, the stream hosting excellent runs of pink, chum, coho and sockeye salmon which are now much depleted. Excellent populations of the indigenous trout also use the system. Bank cover is pristine spruce-hemlock forest. The watershed is of glacial origin being mostly gentle in the bottom and steep sided to 3,000 feet at the summits. There is considerable area of cedar cover and open muskeg. The system once supported a grand sockeye run which is now much depleted. A sport fishery on the steelhead and other trout has been steadily increasing over the past 20 years and it is not unusual to find up to 15 anglers on the river of a weekend.

The system seems to be more fertile than most resulting in noticeably greater invertebrate populations including scuds. The lakes have good beds of nuphar in the shallow areas and there is enough Ceratophyllum and Vallisnaria to host a wintering trumpeter swan. There is no industrial use of the water at present or pollution as yet.

The Karta River watershed is in the K.P.C. timber sale. To log it would inflict extreme damage on the environmental balances now present and aggravate the depleted salmonid fish populations. Sport fishing is increasing which logging will not benefit.

Klawak Creek

Klawak Creek discharges into the inlet of the same name on the west side of Prince of Wales Island. The location fix of the mouth is N. Lat. 55°32'54" and W. Long. 133°2'30". The map reference is U.S.G.S. Craig (C-4) (C-3) (B-4) and (B-3). The stream originates as the outlet of Klawak Lake which spills at elevation 30 ft. and is of even grade to the tide one mile away. The cascade at the lake spill is 12 ft. high and passable to fish at all but extreme low water flows. The drainage area is 18 sq. mi. and the lake surface is 2750 acres. Flow is 30 c.f.s. nominal, 175 c.f.s. average and in excess of 10,000 in heavy runoff. The outlet stream may raise as much as 4 ft. The stream is paralleled by the road to Hollis and lies wholly within the Tongass National Forest. Stream bottom is gravel some of which is quite coarse with a scattering of boulders. There are 3 pools between the lake spill and tidewater but the connecting stretches are deep enough to harbor fish at all times. There is no barrier to migratory fish except that fish have trouble ascending the falls at the lake spill during extremely low water. Spawning area in the stream is excellent. The bank cover is spruce-hemlock forest and pristine. The watershed is typical Southeast Alaska of glacial origin and steep sided. Timber and muskeg areas end in alpine cover at 1800 ft. to the summit at over 3,000 ft. Fish using the system include pink, chum, silver and sockeye salmon, cutthroat, Dolly Varden, rainbow and steelhead trout, stickleback and cottoids. The system has supported a salmon cannery since early in the century. This has depleted the runs to a pittance of what it was in the beginning. There is some anachris and vallisnaria in the stream which winters a few trumpeter swan. There is no use of the water and no pollution except cannery and domestic in the intertidal zone.

The runs of fish in this system are greatly depleted by overfishing the salmon. A wier in the early 1930's operated by the F & W S recorded 1.5 million fish through. The count in 1969 was 67,000. The sockeye counts were 300,000 and 1,800 respectively. The system is probably one of the outstanding examples of nutrient mismanagement in Alaska.