



ANADROMOUS FISH INVENTORY

ILIAMNA NATURAL RESOURCE RANGE, ALASKA
and Associated Area of Ecological Concern

Prepared for

Fish and Wildlife Service

by

Arctic Environmental Information and Data Center

University of Alaska, Anchorage

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On Reserve

Anadromous Fish Inventory
Information Framework

a. Bibliography

The files of the Arctic Environmental Information and Data Center were utilized for the compilation of an initial bibliography. Referenced titles were then obtained and citations pertaining to the area and species of interest which appeared in these reports were added to expand the initial bibliography. References were deleted if, when obtained, the study was not found to pertain to the area or species of interest. In a few cases where references were unobtainable, such citations are followed by the note "(not seen)" to indicate that any pertinent data contained in this reference is not included in the remainder of the inventory.

All possible reference sources are listed with the exception of those containing extremely general subject matter, most early (before 1910) exploratory reports, and annual report series such as Alaska Fishery and Fur-Seal Industries in (year) which were issued prior to 1960.

b. Species Lists

A list of anadromous and coastal marine fishes for each proposed refuge or proposed additions to existing refuges was compiled. An initial list was taken from each final environmental statement; however, three major taxonomic references were consulted to add to, or delete from this initial list - List of Fishes of Alaska and Adjacent Waters with a Guide to Some of Their Literature (Quast and Hall 1972), Pacific Fishes of Canada (Hart 1973), and Freshwater Fishes of Canada (Scott and Crossman 1973). Species on the lists which were considered to be coastal marine inhabitants were verified with A List of Common and Scientific Names of Fishes from the United States and Canada (Bailey

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et al. 1970). However, further studies of certain families of fishes inhabiting Alaskan waters are needed - e.g. Cottidae - since some species have not been included in the American Fisheries Society list because their taxonomic status has not been determined. Species which have been included in some of the earlier ichthyological literature and have not recently been verified are not included in the present lists.

An anadromous species was considered to be one which spawns in fresh water, and at some point in its early life cycle, undergoes a migration to salt or brackish water. In some regions (Koyukuk, Yukon Flats) a non-migratory form of an anadromous species (inconnu, some whitefish) was determined from the literature, and therefore, this species was not included in the list. Coastal marine species were considered to be residents of nearshore neritic, lagoon, or estuarine habitats. Species which generally inhabit fresh water, but have been found to enter coastal, brackish water, were included as coastal marine forms and were indicated thus - e.g. ninespine stickleback.

c. Histories of Commercial, Sport, and Subsistence Fisheries

Historical references were consulted as well as management reports and periodicals for any data which document the commercial, sport, or subsistence utilization of anadromous fish within the boundaries of ecological concern for each proposed refuge. Knowledgeable research and management personnel with state and federal agencies also were consulted to provide additional unpublished data. In many refuge areas, historical information was sparse. However, considerable use was made of descriptions of subsistence life styles documented in Alaska Natives and the Land (Federal Field Committee 1968). Sport and commercial historical information was largely

taken from Alaska Department of Fish and Game publications.

Each refuge historical summary is a brief description of trends of activity, rather than a year-by-year account. For example, some publications have traced the history of cannery operation in a particular region and have indicated when and where each company began or ceased operation. These types of data were synthesized into a general account of the contribution and significance of cannery operation in that area. Significant sources of information are appropriately referenced.

d. Habitat

Anadromous fish habitat was regularly calculated to the most upstream record for any species. All habitat, except the largest lakes, was measured in linear statute miles from drainage mouth to most upstream record using a fine string to follow the main channel as charted on standard U.S. Geological Survey 1:250,000 scale quadrangle sheets. For major lakes, habitat areas are recorded in square miles.

For major rivers such as the Yukon, Kobuk and Kuskokwim, standard mileage reference points utilized by the Alaska Department of Fish and Game were used.

In the Wood River and Kvichak River drainages, extensive spawning ground catalogs have been published (Demory, Orrell and Heinle 1964; Marriott 1963). In these two systems linear miles of habitat are taken directly from these previous calculations.

In the tabular record of this data, tributaries are listed immediately following and indented from the larger watercourse into which they flow. Each refuge listing begins at the northwesternmost corner of the area of interest.

Where species are not known but anadromous fish are recorded as present (Alaska Department of Fish and Game 1975), waterways are so indicated. All other systems are recorded by species present. A series of annotated U.S. Geological Survey quadrangles compiled by the Alaska Department of Fish and Game, Habitat Division, was helpful in clarifying certain habitat areas and species.

e. Key Spawning and Rearing Areas

This section is one of the weakest of this report. Almost all information came from Atkinson, Rose and Duncan (1967) except for the excellent data in the spawning ground catalogs for the Wood River and Kvichak River drainages (Demory, Orrell and Heinle 1964; Marriott 1963). Little other compiled information exists and that in Atkinson, Rose and Duncan (1967) was, at times, found to be questionable in its accuracy--for example, the existence of spawning grounds in the main channels of the lower Yukon River and above the Tazimina River falls in the Lake Iliamna area is suspect.

Areas of major lakes which are prime rearing areas for sockeye salmon, are recorded in square miles. In the Wood River and Kvichak River drainages, spawning grounds are measured in both linear miles of waterway and in acres of utilized or potentially utilizable area.

Tabular data, including the method of listing tributaries, is handled in the same manner as the habitat information.

f. Runs/Escapement

Escapement counts or estimates of total spawning run were obtained almost entirely from Alaska Department of Fish and Game management reports and surveys conducted by the University of Washington's Fisheries Research

Institute on the Kvichak River and Wood River drainages. These counts are a variety of weir, aerial and tower counts and are so indicated. In a few cases, population estimates from tagging studies are available.

g. Harvest Data

Harvest includes separate statistics for the subsistence, commercial and sport fisheries. Data are in numbers of fish as reported to the managing agency.

Harvest data were obtained almost entirely from Alaska Department of Fish and Game management reports and International North Pacific Fisheries Commission Statistical Yearbooks. Where possible, commercial harvest data are tabulated by statistical district sub-units. Often such detail is not readily accessible, and data are portrayed by entire statistical district. Subsistence data are listed by village or by statistical district. Sport harvest data are almost nonexistent except for a few selected survey sites in the Kvichak River and Naknek River drainages.

h. Effort

Effort includes the amount of gear used, number of licenses and time fished where these data are available. Commercial effort is moderately documented while little sport and subsistence effort is available.

Effort information has been derived almost entirely from Alaska Department of Fish and Game management reports. The statistical divisions used in reporting the data vary. In some cases, entire areas may not have been subdivided for effort statistics, while in other parts of the state, this information is available by statistical district or even subdistrict.

Value of catch to the fisherman has been calculated from "price per fish" data provided in Alaska Department of Fish and Game management reports.

i. Mylar Overlays

The following information was plotted on mylar overlays of U.S. Geological Survey 1:250,000 scale quadrangles:

1. All waterways inhabited by anadromous fish are indicated to their most upstream record of any species of interest.
2. Anadromous inhabitants are named for all waterways where present.
3. Spawning and rearing areas are identified and are rated in value for each species. This rating is most often based on a minimum of data and should be used with extreme care and recognition that, at most, only the relative abundance of spawners utilizing such an area is indicated. Where data for salmon are more readily available, a low rating indicates a spawning population of less than 5,000 fish; a medium rating indicates a spawning population of between 5,000 and 20,000 fish; and a high rating indicates in excess of 20,000 spawners may regularly use such an area. Much of the information base for this section was obtained from escapement statistics reported in Alaska Department of Fish and Game management reports and in Demory, Orrell and Heinle (1964) and Marriott (1963).
4. Recorded harvest areas are indicated as commercial, sport or subsistence along with major species harvested. Again, much of this information involved the interpretation of data presented in Alaska Department of Fish and Game management reports.
5. All operating or recently operating federal or state research research stations or field sites are plotted.
6. Various activities which might become sources of impact on the fisheries resources were plotted including potential gas pipeline stream crossings (Arctic National Wildlife Refuge), oil and gas wells (Arctic

National Wildlife Refuge), potential dam sites, existing airfields, and locations of mineral occurrence of potential economic value including concentrations of existing mineral claims.

j. Statewide Mylar Overlay of Major Anadromous Fish Streams

"Major" is defined as having a regular run of the indicated species in excess of 50,000 fish. Primary data for this section was obtained from Atkinson, Rose and Duncan (1967).

Coastal Marine and Anadromous Fish
Iliamna National Resource Range

(o)	Pacific lamprey	<u>Entosphenus tridentatus</u>
(o)	Arctic lamprey	<u>Lampetra japonica</u>
c	Salmon shark	<u>Lamna ditropis</u>
	Pacific sleeper shark	<u>Somniosus pacificus</u>
	Spiny dogfish	<u>Squalus acanthias</u>
	Big skate	<u>Raja binoculata</u>
	Black skate	<u>Raja kincaidi</u>
	Starry skate	<u>Raja stellulata</u>
	Pacific herring	<u>Clupea harengus pallasii</u>
o	Bering cisco	<u>Coregonus laurettae</u>
o	Pink salmon	<u>Oncorhynchus gorbuscha</u>
o	Chum salmon	<u>Oncorhynchus keta</u>
o	Coho salmon	<u>Oncorhynchus kisutch</u>
o	Sockeye salmon	<u>Oncorhynchus nerka</u>
o	Chinook salmon	<u>Oncorhynchus tshawytscha</u>
*	Round whitefish	<u>Prosopium cylindraceum</u>
(o)	Arctic char	<u>Salvelinus alpinus</u>
(o)	Dolly Varden	<u>Salvelinus malma</u>
o	Pond smelt	<u>Hypomesus olidus</u>
	Capelin	<u>Mallotus villosus</u>
(o)	Rainbow smelt	<u>Osmerus eperlanus</u>
(o)	Longfin smelt	<u>Spirinchus thaleichthys</u>
o	Eulachon	<u>Thaleichthys pacificus</u>
	Saffron cod	<u>Eleginus gracilis</u>
	Pacific cod	<u>Gadus morhua macrocephalus</u>
	Walleye pollock	<u>Theragra chalcogramma</u>
	Unnamed ophidiid	<u>Spectrunculus radcliffei</u>
	Alaska eelpout	<u>Bothrocara pusillum</u>
	Fish doctor	<u>Gymnelis viridis</u>
	Shortfin eelpout	<u>Lycodes brevipes</u>
	Black eelpout	<u>L. diapterus</u>
	Wattled eelpout	<u>L. palearis</u>
*	Threespine stickleback	<u>Gasterosteus aculeatus</u>
*	Ninespine stickleback	<u>Pungitius pungitius</u>
	Pacific sandfish	<u>Trichodon trichodon</u>
	Smallmouth ronquill	<u>Bathymaster leurolepis</u>
	Searcher	<u>Bathymaster signatus</u>
	Northern ronquill	<u>Ronquilus jordani</u>
	Pighead prickleback	<u>Acantholumpenus mackayi</u>
	Decorated warbonnet	<u>Chirolophis polyactocephalus</u>
	Slender eelblenny	<u>Lumpenus fabricii</u>
	Stout eelblenny	<u>Lumpenus medius</u>
	Snake prickleback	<u>Lumpenus sagitta</u>

Ribbon prickleback
 Whitebarred blenny
 Banded gunnel
 Bering gunnel
 Crescent gunnel
 Saddleback gunnel
 Bering wolffish
 Wolf-eel
 Quillfish
 Graveldiver
 Pacific sand lance
 Pacific Ocean perch
 Silvergray rockfish
 Dusky rockfish
 Darkblotched rockfish
 Blackgill rockfish
 Northern rockfish
 Redstripe rockfish
 Sablefish
 Masked greenling
 Whitespotted greenling
 Atka mackerel
 Padded sculpin
 Crested sculpin
 Silverspotted sculpin
 * Sharpnose sculpin
 Calico sculpin
 * Coastrange sculpin
 Spinyhead sculpin
 Antlered sculpin
 Unnamed cottid
 Armorhead sculpin
 Threaded sculpin
 Red Irish lord
 Yellow Irish lord
 Northern sculpin
 Twohorn sculpin
 Spatulate sculpin
 Blackfin sculpin
 Plain sculpin
 Warthead sculpin
 Great sculpin
 Shorthorn sculpin
 Eyeshade sculpin
 Tidepool sculpin
 Spineless sculpin
 Tadpole sculpin
 Grunt sculpin

Phytichthys chirus
Poroclinus rothrocki
Pholis fasciata
Pholis gilli
Pholis laeta
Pholis ornata
Anarhichas orientalis
Anarrhichthys ocellatus
Ptilichthys goodei
Scytalina cerdale
Ammodytes hexapterus
Sebastes alutus
Sebastes brevispinis
Sebastes ciliatus
Sebastes crameri
Sebastes melanostomus
Sebastes polyspinis
Sebastes proriger
Anoplopoma fimbria
Hexagrammos octogrammus
Hexagrammos stelleri
Pleurogrammus monopterygius
Artedius fenestralis
Blepsias bilobus
Blepsias cirrhosus
Clinocottus acuticeps
Clinocottus embryum
Cottus aleuticus
Dasycottus setiger
Enophrys diceraus
Eurymen gyrinus
Gymnocanthus galeatus
Gymnocanthus pistilliger
Hemilepidotus hemilepidotus
Hemilepidotus jordani
Icelinus borealis
Icelus bicornis
Icelus spatula
Malacocottus kincaidi
Myoxocephalus jaok
Myoxocephalus niger
Myoxocephalus polyacanthocephalus
Myoxocephalus scorpius
Nautichthys pribilovius
Oligocottus maculosus
Phalloctottus obtusus
Psychrolutes paradoxus
Rhamphocottus richardsoni

Kelp sculpin
 Arched sculpin
 Scissortail sculpin
 Roughspine sculpin
 Ribbed sculpin
 Spectacled triglops
 Sturgeon poacher
 Aleutian alligatorfish
 Gray starsnout
 Spinycheek starsnout
 Bigeye poacher
 Blackfin poacher
 Fourhorn poacher
 Bering Poacher
 Warty poacher
 Tubenose poacher
 Sawback poacher
 Longnose poacher
 Smooth lumpsucker
 Pacific spiny lumpsucker
 Spotted snailfish
 Ribbon snailfish
 Marbled snailfish
 Tidepool snailfish
 Unnamed cyclopterid
 Showy snailfish
 Ringtail snailfish
 Tadpole snailfish
 Arrowtooth flounder
 Rex sole
 Flathead sole
 Pacific halibut
 Butter sole
 Rock sole
 Yellowfin sole
 Longhead dab
 Dover sole
 Starry flounder
 Alaska plaice

Sigmistes caulias
Sigmistes smithi
Triglops forficata
Triglops macellus
Triglops pingeli
Triglops scepticus
Podothecus acipenserinus
Aspidophoroides bartoni
Asterotheca alascana
Asterotheca infraspinata
Asterotheca pentacanthus
Bathyagonus nigripinnis
Hypsagonus quadricornis
Ocella dodecaedron
Ocella verrucosa
Pallasina barbata
Sarritor frenatus
Sarritor leptorhynchus
Aptocyclus ventricosus
Eumicrotremus orbis
Liparis callyodon
Liparis cyclopus
Liparis dennyi
Liparis florum
Liparis megacephalus
Liparis pulchellus
Liparis rutteri
Nectoliparis pelagicus
Atheresthes stomias
Glyptocephalus zachirus
Hippoglossoides elassodon
Hippoglossoides stenolepis
Isopsetta isolepis
Lepidopsetta bilineata
Limanda aspera
Limanda proboscidea
Microstomus pacificus
Platichthys stellatus
Pleuronectes quadrituberculatus

- (o) Anadromous
 o Both anadromous and resident
 * May enter coastal, brackish water

History of Subsistence Fishery
Iliamna National Resource Range, Alaska

Very little information is available which documents the subsistence utilization of anadromous fish in this region. Although fish may have been the most important staple to interior Native inhabitants of this region, to coastal Natives, fish was perhaps no more important than game or plants staple (Rostlund 1952).

Simple pens or other obstructions, or various forms of traps used separately from weirs, were utilized to harvest salmon from this region. Other methods employed in the harvesting of fish included harpoons, fish hooks, and nets.

The historical subsistence pattern of the area's Eskimo inhabitants was one of movement between coastal marine and interior riverine pursuits. The Aglemiut, however, such as inhabitants of the villages of Kingiak and Paugwik on the Naknek River, depended more heavily upon marine resources and coastal lagoon habitats. The seasonal pattern of fishing activities, however, is typified by the Eskimo inhabitants of the Nushagak River. In the fall after ice had formed on the river, traps for whitefish were placed, and fish caught were probably used immediately. Families from the Dillingham area and other bay communities would travel up the Wood River to Lake Aleknagik to fish for trout through the ice with hooks. Frozen trout were stacked like wood and brought back to the villages by dogteam.

Before freeze-up, in recent years, a subsistence harvest of sockeye, pink, and silver salmon was vigorously pursued. Fish were dried and stored for the winter. During winter, villages were fully occupied and all mobility had ceased. Only in recent

years have Natives ventured out during winter, usually by snowmobile, and then usually in the pursuit of caribou and moose. Some whitefish may be taken through river ice in winter.

In spring, many river families prepared to move from their village sites to temporary camps along streams in the Interior. Boats and other household equipment were moved by dogsled as late as April. The coastal Eskimo engaged in seal hunting, as well as dipping smelt, and remained to fish, perhaps selling a few fresh fish to canneries in order to obtain money to buy food and other supplies before returning upriver.

By early summer, families returned to the villages and prepared for salmon fishing by repairing gear and situating themselves at favorite spots. Fishing methods included fish traps, spears, and dip nets. Some families moved to the coast to fish, a practice which has become increasingly prevalent in recent years after commercial fishing was introduced. The Tikchik people apparently did not remain on the coast long, but returned to their villages to catch and dry salmon. In the Nushagak area fish were also dried, and roe was preserved in seal oil. Some Eskimos found seasonal employment in fish canneries, usually on a day-to-day basis.

In recent years, although the commercial harvest of salmon is heavily pursued by the Natives, subsistence harvests of fish are still extremely important to their economy. Fish put up and dried in the summer fish camps are vitally important as a winter food supply for both humans and dogs. During aboriginal times,

in addition to drying fish, some were buried and allowed to partially decay for the purpose of making a delicacy or seasoning (Rostlund 1952).

Presently, the main areas of substantial subsistence fishing effort are the Nushagak drainage, the Lake Iliamna-Lake Clark drainage, and the Naknek-Kvichak area. Subsistence fishing activities in the Egegik and Ugashik Districts is only slight. Harvests are usually air-dried or smoked. Subsistence fishing in the Naknek-Kvichak and Nushagak drainages, therefore, is very important to local inhabitants, especially outlying villagers, who are still dependent upon salmon for winter dog food and for augmentation to their own diets. The total annual subsistence harvest of salmon in these two major drainages amounts to 100,000 to 170,000 fish annually. For example, in the Naknek-Kvichak District, during the years 1963 to 1971, the average annual subsistence harvest of all five species of Pacific salmon amounted to 77,500. In the Nushagak District during this same period of time, the total salmon harvest averaged 55,200 salmon per year. It is interesting to note that in the Nushagak District, the upriver villages were apparently more dependent upon subsistence fishing than the inhabitants of downstream villages.

Other areas in the Bristol Bay region where subsistence harvests of salmon were reported included Aleknagik, a village on the Snake River, the village of Yacherk on the Igushik River, and on Lake Iliamna and Lake Clerk. In the latter areas, the subsistence catch was estimated to be approximately 10 percent of the total salmon escapement to those systems (Kerns and Phinney 1964).

Since 1959, subsistence fishing has been monitored under a permit system administered by the State of Alaska, Department of Fish and Game. As a result, subsistence fishing activities have been restricted in some areas in the form of gear restrictions or limited fishing times, for example the king salmon subsistence fishery on the Naknek River. From 1959 to 1964, subsistence fishery permits were required only in certain areas, with some gear regulation. In 1965 permits were required for subsistence fishing in all Bristol Bay areas, again with some gear restrictions. A portion of the Naknek River was closed to subsistence fishing in 1967, and in 1968 subsistence fishing on the Naknek River was limited to one day per week, permitting only 10 fathoms of set gill net. In 1968 the Egegik and Ugashik Rivers were closed to subsistence fishing during the emergency order period. At present, therefore, the personal-use fishery within the area of ecological concern for this proposed refuge is still viable, and is managed under a permit system.

History of Commercial Fishery
Iliamna National Resource Range, Alaska

In most historical accounts of commercial fishing activities in the Bristol Bay region, frequent reference is made to districts. The five districts of this area are: the Naknek-Kvichak, Nushagak, Egegik, Ugashik, and Togiak. The latter three are outside the area of ecological concern for the proposed refuge.

Commercial harvests of salmon in the Bristol Bay area began in the Nushagak District in 1884. Catches have been recorded however only since 1893. Initial commercial gear for salmon included fish traps and gill nets. Seines were not initiated until 1922, and were prohibited soon thereafter. Salmon fishing then almost exclusively utilized gill nets, with fish traps being eliminated in 1923. Power boats were introduced in 1922, soon thereafter prohibited until 1951. Sailboats, therefore, were the primary method utilized to harvest salmon during this period. Staked or set gill nets deployed along the beaches were also utilized by the infirm, women and young fishermen. Later, able-bodied men tended set nets. In recent years nearly all productive beach areas in the Bristol Bay area have been fished by set net.

During World War II salmon fishing effort declined in the Bristol Bay area, with a gradual increase in gear in the postwar period (late 1940s). A rapid increase in gear followed in 1951 with the legalization of powered fishing craft. In the late 1950s some gear limitations were imposed upon commercial fishermen but were dropped with the advent of statehood. Gear limitations again

were instigated during the 1968 salmon season, but these restrictions were ruled unconstitutional by the courts prior to the 1969 season and were removed from the regulations. Following this, then, a sliding gear scale was utilized from 1968 to 1969, 1970, and 1973.

From 1893 to 1900, red salmon fishing rapidly developed, with some overexploitation of this resource. As a result, the period from 1900 through 1951 was a period of decline. The period from 1952 to present is considered a period of recovery.

Management of fishing effort in the Bristol Bay area prior to statehood employed setting commercial harvest quotas well in advance of salmon runs. These harvest quotas remained essentially constant throughout the fishing period. After statehood, the emergency order concept was established, where fishing periods were set daily on the basis of current information on catches or an estimated escapements. These fishing times are presently known as the "emergency order period" or the "red salmon season," usually lasting four weeks.

Boundaries of fishing areas have been adjusted through the years, changes being made as new knowledge is gained. The objective of changing boundaries was to enable the fishing fleet to harvest each river system's stocks separately, if possible. Throughout this period to present day, a trend toward moving boundaries closer to the river mouth has prevailed. A statistical history of harvests in the Bristol Bay area from the year 1893 through 1969

has been published by Nelson (1970). This publication traces 77 years of historical catches of salmon. A statistical review of the Alaska salmon fisheries is also available in Rich and Ball (1929) which traces a history of federal fishery laws and regulations affecting the salmon fisheries in Alaska, with considerable emphasis on the Bristol Bay area, from 1899 through 1924. The following paragraphs will trace the history of commercial fishing and processing in the Bristol Bay area.

The first commercial harvest of salmon began in 1884 in the Nushagak District. In this year, the Arctic Packing Company located the first cannery on the Nushagak River near the Moravian Mission. In 1885 the Alaska Packing Company erected a plant on the western side of the Nushagak River and during the succeeding year a third packer, Bristol Bay Canning Company, opened in Dillingham. Many other canning companies followed in ensuing years, primarily locating their processing facilities on the Nushagak and Naknek Rivers. A saltery was established approximately 10 miles above the mouth of the Igushik River in 1902. The history of commercial fishing and processing in the Bristol Bay area shows a high mortality among canneries since their inception in 1884. Of the 51 built in western Alaska (Alaska Peninsula and Yukon River included), 36 burned or were abandoned or moved to other sites. Numerous operations were consolidated into single large processors. By 1950 only 15 plants operated in western Alaska.

The Bristol Bay area was off the line of steamship travel, and as a result, the canning companies were compelled to operate

vessels to transport employees, supplies, and fishery products into and out of the area. These cannery ships, belonging to various plants, anchored as near the canneries as possible.

In Nushagak Bay, drift gill nets were the favored harvest method in the early 1900s, with only occasional use of fish traps. In 1908, after a hearing held by the Secretary of Commerce and Labor, it was decreed that the Wood River be closed to commercial fishing and that all commercial fishing be prohibited in the Nushagak River itself. This was probably the result of very heavy fishing pressure on the Nushagak during previous years. Exports of from 800 to 1,200 barrels of salted salmon per year were reported from the Nushagak during this time.

The history of commercial fishing in other large-producing regions of the Bristol Bay area is less clear, notably for the Kvichak and Naknek Bay areas. The first commercial enterprise on the Kvichak was in 1894, when the Prosper Fishing and Trading Company and the Alaska Packer's Association each established a saltery; later in 1896 they consolidated. In subsequent years other canning companies became established in the Kvichak area at Koggiung, Hallerville, near Bear Slough, and on the lower side of Pederson Point.

In the early 1900s, commercial salmon fishing in Kvichak Bay was principally a gill net operation. Nearly all fishing occurred in the bay area, with little effort upstream. Because of the numerous shoals in Kvichak Bay, fishing boats were unable

to deliver catches directly to the canneries. Thus, large scows were moored in convenient places in the bay, catches delivered to them, and small run-boats were employed to take the fish to the processors.

In 1922 the Carlisle Packing Company's floating processing vessel was forced to move from the Yukon River due to its closure, and thus also began operations in Kvichak Bay. Major fishing effort on the Naknek River, however, began in the early 1900s with gill net fishing. The first commercial fishing began earlier, in 1890, when the Arctic Packing Company built and operated a saltery on the east bank of the Naknek. Many other seafood processing industries were built on the Naknek River in succeeding years.

In recent years, the trend in the Bristol Bay region has been towards fewer processing plants but increased vessel participation in the harvest. All five species of Pacific salmon are taken in the Bristol Bay area, and the season is characterized by an intense activity during the extremely short salmon fishing periods. These seasons are subject to many closures and openings by emergency order during the period from mid-June to mid-July.

Fishing generally commences in early June for king salmon, primarily in the Nushagak District, and peaks during the last two weeks of June. Fishing effort then begins to focus on sockeye salmon in all districts, with effort peaking around July fourth and ending generally by mid-July. Chum salmon are fished during the same time period as sockeye salmon are fished, but the chum season generally lasts one week longer. Pink salmon runs, since

they are heaviest during even numbered years, are heavily fished during these times only, primarily in the Nushagak District.

The pink salmon fishing season commences in mid-June, and is over by the second week in August. Minimum fishing activity occurs for coho salmon, generally after the pink salmon run is over.

Coho salmon are usually fished only by Bristol Bay area residents, beginning in mid-July, peaking during the last week in July through mid-August, and generally ending during the last week of August.

Sockeye salmon runs, because of their magnitude and commercial value, are the target for the bulk of the commercial fishing effort in the Bristol Bay area, as well as the majority of management and research activities. The total Bristol Bay commercial salmon fishery has an average wholesale value of over 30 million dollars per year, averaged over the past 12 years (1960-1972). The major red salmon-producing drainage in the Bristol Bay area is the Kvichak River.

Gear restrictions and fishing periods vary from year to year in the Bristol Bay area. Set gill nets and drift gill nets are the predominant gear types. In 1972, for example, approximately 2,600 units of gear were registered to fish in Bristol Bay. The largest amount of gear registered to fish the Bristol Bay area was observed during 1969, with 2,900 units registered.

Processing activities in the Bristol Bay area are focused primarily on salmon, with some salmon roe processed for specialty markets. Salmon products range from canned, fresh, frozen, to cured. Presently, 21 processors operate in Bristol Bay (1972)

including floating and shoreside canneries, and several freezer ships.

The above described events trace only salmon fishing in the Bristol Bay area,. However, an interest in developing a freshwater commercial fishery has flourished since 1962. Essentially, four ventures were established in the following areas: Iliamna-Lake Clark, Naknek Lake, Lake Aleknagik, and Tikchik Lakes.

These freshwater fisheries focused primarily on nonanadromous species, such as lake trout, whitefish, and some burbot. However, many persons attempted to commercially harvest Arctic char and some anadromous forms of whitefish. The Iliamna-Lake Clark venture began in 1962 and 1963. This venture further evolved in 1964, primarily during the spring and fall, harvesting 9,000 fish, 60 percent of which were whitefish, 15 percent lake trout, and 25 percent Arctic char. This catch was valued at appromimately \$5,600. The Naknek Lake venture, outside the area of ecological concern for the proposed refuge, occurred during May through November of 1969, with a total harvest of 700 fish (lake trout and whitefish). During the fall of 1966 on Lake Aleknagik, 400 fish were harvested, 83 percent of which were Arctic char. The fourth venture on the Tikchik Lakes, occurring during the period from 1966 to 1967, centered primarily on Lake Tikchik, where 94 percent of the harvest occurred. Whitefish, predominantly humpback whitefish, amounted to 62 percent of this catch, with the remaining catch comprised of lake trout, pike, Arctic char and burbot (Nelson 1969).

There presently exists the potential for continued commercial harvest of freshwater species. Stocks of whitefish (primarily humpback whitefish) and lake trout are present in harvestable quantities in the Tikchik Lake system. Whitefish apparently are acceptable on the market, but little information exists to document the present day freshwater fishery in the Bristol Bay area.

History of Sport Fishery
Iliamna National Resource Range, Alaska

Because of this region's remoteness and relative inaccessibility, only minimal sport fishing pressure occurred in the area in early years. With the advent of air travel, increasing numbers of sport fishermen have angled the rivers and lakes of the Bristol Bay and Cook Inlet drainages. Rivers such as the Naknek, Wood, Nushagak, Newhalen, Brooks, and others, and their headwater lakes, such as Brooks, Wood, Tikchik, Iliamna, and Clark, are known by sport fishermen worldwide for their great anadromous fishing possibilities. Nearly all lakes, streams, and rivers in this area potentially hold trophy-sized salmon and trout, and in recent years, thousands of man-hours are expended in this pursuit. Angler success (average annual fish caught per hour) has usually been high, up to an average of 0.7 fish per hour, with considerable monetary investment made by each fisherman in gear, licenses, lodging, and transportation into and out of the area.

Sport fishing pressure in the past has been increased by the establishment of both private and military sport fishing camps in the area. For example, these camps include the King Salmon Base Dock, and areas upstream on Naknek Lake and Naknek Rapids (Lake Camp and Rapids Camp). Other areas include a fishing recreation camp at Igiugig and in the Ugashik River Narrows. Two private sport fishing camps also exist on Lake Tikchik. In 1954, concern about the reported trend of deteriorating sport fishing led to the establishment of creel censuses of personnel

using military rest camps on the Naknek River. At this time the Naknek River was the area receiving heaviest utilization in the Bristol Bay area (up to 3,000 man-days per year). Results of these surveys have led to increased regulation to protect stocks of sport fish from over-exploitation.

In most areas, small aircraft are available for charter by fly-in fishermen. Most air taxi operators are based in villages and lodges, such as at Iliamna Lake. The expansion of facilities into more remote areas such as the Wood River Wilderness Camp and the Golden Horn Lodge on Lake Mikchik, increased sport fishing pressure on the Wood River-Tikchik Lakes area.

Sport fishing for rainbow trout, Dolly Varden, and salmon is the basis for an important industry in the proposed Iliamna area of interest. From the standpoint of numbers caught, hours fished, and catching enjoyment, the rainbow trout perhaps has been the number one sport fish in the area. However, sport fishing in the region historically has been dependent upon access to streams and lakes, which has been greatly aided by recent advances in air transportation. Areas which were readily accessible from villages, lodges, or remote landing strips were utilized much more heavily. Even at present the majority of sport fishing effort is still expended in the easily reached stretches of rivers or lakes.

Anadromous Species Abbreviations

AL = Arctic lamprey

AC = Arctic char

PS = Pink salmon

CS = Chum salmon

RS = Sockeye salmon

KS = King salmon

SS = Coho salmon

In = Inconnu

BWF = Broad whitefish

ACI = Arctic cisco

LC = Least cisco

WF = Whitefish (species unidentified)

RBS = Rainbow smelt

BC = Bering cisco

UN = Species unidentified

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

Drainage Name	Anadromous Species (Habitat in miles)								
	KS	PS	CS	SS	RS	AC	RBS	UN	AL
Unnamed Creek*								X	
Williams Creek								X	
Unnamed Creek		4	4						
Unnamed Creek		4	4						
UNNAMED CREEK			2						
Unnamed Creek								X	
Unnamed Creek		3							
Unnamed Creek		3							
Unnamed Creek		3							
UNNAMED CREEK			2						
Sunday Creek			6						
Unnamed Creek								X	
Unnamed Creek								X	
Unnamed Creek			3						
Unnamed Creek			4						
Amakdedori Creek			6		6				
Chenik River								X	
Paint River		15	9						
Dunuletak Creek			5						
Unnamed Creek								X	
Lake Fork			2						
McNeil River	10		10	10	10				
Mikjik Creek			2		4				
Little Kamishak River		16	16		16				
Strike Creek			5		9				
Kamishak River		8	4	4	2				
(Continued)									

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

Drainage Name	Anadromous Species (Habitat in miles)								
	KS	PS	CS	SS	RS	AC	RBS	UN	AL
Unnamed Creek UNNAMED CREEK Douglas River		6 5	6 5 5	6	6				
Big River		(NOT IN REFUGE AREA)							
Unnamed Creek BIG CREEK Naknek River	30	X 5 30	X 5 30	X 30	30	30	25		30
Pauls Creek	18		X						
Smelt Creek			10						
King Salmon Creek	30		26	26					
Eskimo Creek								X	
BIG Creek NAKNEK LAKE TRIBUTARIES American Creek HARD SCRABBLE CREEK Graveyard Creek	20		X	X	9 35 X	35			
Unnamed Creek		10	14					X	
Coffee Creek		10	10						
Unnamed Creek		15							
Kvichak River	65	65	65	65	65	65			
Bear Creek		10	10						
Alagnak River	52	70	52	68	70	70			
Unnamed Creek			35	8					
Unnamed Creek								X	
Unnamed Creek								X	
Unnamed Creek								X	
Nonvianuk River	15	15	2	10	15	15			
Nonvianuk Lake	X				X	X			
Kulik River	1				1	15			
(Continued)									

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

Drainage Name	Anadromous Species (Habitat in miles)							
	KS	PS	CS	SS	RS	AC	RBS	UN
Silver Horn Creek					4			
Unnamed Creek								X
Tsun Creek					3			
B-10 Creek					1			
Lake Beverly	X	X	X	X	X	X		
Peace River	2	2	2	2		2		
Lake Mikchalk	X	X	X	X	X	X		
Wind River	2	2	2	2	2	2		
K-8 Creek					X			
K-7 Creek					7			
K-5 Creek					X			
Grant River					5			
K-11 Creek					X			
K-10 Creek					X			
K-4 Creek					X			
K-3 Creek					X			
K-1 Creek					5			
Lake Kulik					X			
Little Muklung River								X
Unnamed Creeks								X
Portage Creek								X
Iowithla River	28	20	26	26				
Unnamed Creek		6						
Koggiling Creek								X
(Continued)								

Anadromous Fish Habitat,
Iliamna National Resource Range
and Associated Areas of Ecological Concern

Drainage Name	Anadromous Species (Habitat in miles)							
	KS	PS	CS	SS	RS	AC	RBS	UN
Koklong Creek								X
Lookout Creek		15						
Lower Klutuk Creek								X
Kokwok River		20	30					
Kenakuchuk Creek			15					
Klutuk Creek		18						
Tunravik Creek								X
Nunachuak Creek		12						
Unnamed Creek		8						
Mulchatna River	150	35	110	110	190	35		
Unnamed Creek					10			
Stuyahok River	45		45	20				
UNNAMED CREEK	5			5				
Pike Creek			8					
Koktuli River			35	45	45			
Unnamed Creek								X
Swan River								X
Old Man Creek			25					
Dixie Creek								
Ethel Creek			10					
Mosquito River			20					
EAST FORK			14					
Keefer Creek			10					
Unnamed Creek			10					
Chilchitna River								X
Nikadavna Creek								X
(Continued)								

Anadromous Fish Habitat
Iliamna National Resource Range
and Associated Areas of Ecological Concern

Drainage Name	Anadromous Species (Habitat in miles)								
	KS	PS	CS	SS	RS	AC	RBS	UN	AL
Harris Creek								X	
Unnamed Creek								X	
Klutuspak Creek	X								
Vukpalik Creek	X								
King Salmon River	40	15	25	30	15				
Unnamed Creeks	29								
Klutapuk Creek	13								
Chichitnok River	28								
Unnamed Creek	9								
				</					

Key Anadromous Fish Spawning and Rearing Areas Iliamna National Resource Range and Associated Areas of Ecological Concern

[illegible]

Key Anadromous Fish Spawning and Rearing Areas Iliamna National Resource Range and Associated Areas of Ecological Concern

[illegible]

Key Anadromous Fish Spawning and Rearing Areas Iliamna National Resource Range and Associated Areas of Ecological Concern

[illegible]

Key Anadromous Fish Spawning and Rearing Areas
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

and Associated Areas of Ecological Concern

(Continued)

• Key Anadromous Fish Spawning and Rearing Areas:
Iliamna National Resource Range
and Associated Areas of Ecological Concern

[illegible]

and Associated Areas of Ecological Concern

[illegible]

and Associated Areas of Ecological Concern

[illegible]

Key Anadromous Fish Spawning and Rearing Areas Iliamna National Resource Range and Associated Areas of Ecological Concern

[illegible]

and Associated Areas of Ecological Concern

(Continued)

Key Anadromous Fish Spawning and Rearing Areas Iliamna National Resource Range and Associated Areas of Ecological Concern

[illegible]

Key Anadromous Fish Spawning and Rearing Areas Iliamna National Resource Range and Associated Areas of Ecological Concern

[illegible]

and Associated Areas of Ecological Concern

(Continued)

Key Anadromous Fish Spawning and Rearing Areas Iliamna National Resource Range and Associated Areas of Ecological Concern

[illegible]

Magnitude of Runs or Escapements

Iliamna National Resource Range

Naknek River Sockeye Salmon				Naknek River Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,526,181	1970	1,725,513	1963	905,358	1970	732,502
1964	2,555,936	1971	2,706,490	1964	1,349,604	1971	935,754
1965	1,832,398	1972	1,356,825	1965	717,798	1972	586,518
1966	2,109,107	1973	462,686	1966	1,016,445	1973	356,676
1967	1,225,482	1974		1967	755,640	1974	
1968	1,791,404	1975		1968	1,023,222	1975	
1969	2,135,092			1969	1,331,202		

Notes: Total runs

Notes: Total escapement

Naknek River (Big Creek) King Salmon				Naknek River (King Salmon Creek) King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	2,690	1970	1,600*	1963		1970	260***
1964	1,160*	1971	490**	1964	378	1971	704
1965	867*	1972	1,060	1965		1972	1,224
1966	1,223*	1973	1,106	1966	633*	1973	115
1967	1,129*	1974		1967	281**	1974	
1968	3,716*	1975		1968	2,204*	1975	
1969	5,000			1969	2,599*		

Notes: Aerial survey
*Float survey
**Incomplete survey - probably a low count

Notes: Aerial Survey
*Float survey
**Incomplete float survey
***Incomplete aerial survey - probably a low count

Magnitude of Runs or Escapements

Iliamna National Resource Range

Naknek River King Salmon				Naknek River King Salmon (Paul's Creek)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	2,500	1963		1970	
1964		1971	1,620	1964		1971	52
1965		1972	351	1965		1972	156
1966		1973	1,315	1966		1973	0
1967	800	1974		1967		1974	
1968	1,200	1975		1968		1975	
1969	1,200			1969			

Notes:

Aerial Survey

Notes:

Aerial survey

Naknek River Coho Salmon (King Salmon Creek)				Alagnak River Sockeye Salmon (Branch)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	316,924	1970	406,630
1964		1971		1964	522,583	1971	509,083
1965		1972		1965	414,323	1972	198,128
1966		1973		1966	310,637	1973	43,752
1967		1974		1967	269,358	1974	
1968	550	1975		1968	254,983	1975	
1969				1969	273,107		

Notes:

Aerial survey

Notes:

Total run

Magnitude of Runs or Escapements

Iliamna National Resource Range

Alagnak River (Branch)		Sockeye Salmon		Alagnak River (BRANCH)		King Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	203,204	1970	177,060	1963		1970	4,600- 5,300
1964	248,700	1971	187,302	1964		1971	1,400- 1,500
1965	175,020	1972	151,188	1965		1972	2,200- 2,500
1966	174,336	1973	35,280	1966	1,465 1,800*	1973	825- 1,250
1967	202,626	1974		1967		1974	
1968	193,872	1975		1968	7,000- 10,000	1975	
1969	182,490			1969	5,000- 7,000		

Notes: Total escapement

Notes: Aerial survey
*Tower survey

Kvichak		Sockeye Salmon		Kvichak		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	562,219	1970	30,516,530	1963	338,760	1970	13,935,306
1964	1,720,606	1971	6,152,253	1964	957,120	1971	2,387,392
1965	42,111,590	1972	1,396,319	1965	24,325,926	1972	1,009,962
1966	7,943,759	1973	286,492	1966	3,775,184	1973	226,554
1967	5,061,860	1974		1967	3,216,208	1974	
1968	2,945,005	1975		1968	2,557,440	1975	
1969	12,154,769			1969	8,394,204		

Notes: Total run

Notes: Total escapement

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (lower Talarik Creek)				Kvichak Sockeye Salmon (Middle Talarik Creek)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	10,400	1970		1963	100	1970	
1964	24,480	1971		1964	2,450	1971	
1965	230,000	1972		1965	66,000	1972	
1966	85,500	1973		1966	10,850	1973	
1967	27,500	1974		1967	3,680	1974	
1968	24,700	1975		1968	2,769	1975	
1969	54,800			1969	12,350		

Notes:

Notes:

Kvichak Sockeye Salmon (upper Talarik Creek)				Kvichak Sockeye Salmon (Pete Andrew Creek)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	150	1970		1963	100	1970	
1964	1,070	1971		1964	2,025	1971	
1965	910	1972		1965	14,750	1972	
1966	1,450	1973		1966	3,780	1973	
1967	47	1974		1967	810	1974	
1968	4,920	1975		1968	5,050	1975	
1969	2,585			1969	18,915		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak River (Little Roadhouse Creek)		Sockeye Salmon		Kvichak River (Knutson Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	160	1970	
1964	145	1971		1964	95	1971	
1965	1,400	1972		1965	900	1972	
1966	150	1973		1966	550	1973	
1967	404	1974		1967	1,340	1974	
1968	2,800	1975		1968	577	1975	
1969	5,100			1969	675		

Notes:

Notes:

Kvichak River (Knutson Ponds)		Sockeye Salmon		Kvichak River (Pedro Creek and Ponds)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	127	1970		1963	21	1970	
1964	240	1971		1964	525	1971	
1965	6,350	1972		1965	34,500	1972	
1966	1,560	1973		1966	2,900	1973	
1967	400	1974		1967	1,200	1974	
1968	275	1975		1968	4,330	1975	
1969	850			1969	2,450		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak River (Canyon Creek)		Sockeye Salmon		Kvichak River (Tomkok Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	700	1970		1963	800	1970	
1964	2,000	1971		1964	865	1971	
1965	20,200	1972		1965	5,000	1972	
1966	6,500	1973		1966	1,332	1973	
1967	1,620	1974		1967	2,160	1974	
1968	945	1975		1968	2,040	1975	
1969	4,150			1969	8,410		

Notes:

Notes:

Kvichak River (Prince Creek Ponds)		Sockeye Salmon		Kvichak River (Car Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	220	1970		1963	100	1970	
1964	25	1971		1964	1,017	1971	
1965	6,900	1972		1965	7,900	1972	
1966	350	1973		1966	3,640	1973	
1967	449	1974		1967	300	1974	
1968	310	1975		1968	2,450	1975	
1969	7,900			1969	5,925		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak River (Mink Creek)		Sockeye Salmon		Kvichak River (Hudson's Ponds)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	600	1970	
1964		1971		1964	250	1971	
1965	500	1972		1965	5,900	1972	
1966	184	1973		1966	750	1973	
1967	22	1974		1967	181	1974	
1968	1	1975		1968	342	1975	
1969	1,400			1969	525		

Notes:

Notes:

Kvichak River (N.W. Eagle Bay Creek)		Sockeye Salmon		Kvichak River (N.E. Eagle Bay Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	160	1970	
1964	40	1971		1964	430	1971	
1965	1,300	1972		1965	14,700	1972	
1966	51	1973		1966	1,930	1973	
1967	11	1974		1967	1,418	1974	
1968	5	1975		1968	125	1975	
1969	650			1969	3,250		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak River Sockeye Salmon (N.E. Eagle Bay Creek Ponds)				Kvichak River Sockeye Salmon (Young's Creek)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	130	1970		1963	30	1970	
1964		1971		1964	245	1971	
1965		1972		1965	5,050	1972	
1966		1973		1966	1,044	1973	
1967		1974		1967	780	1974	
1968		1975		1968	237	1975	
1969				1969	1,095		

Notes:

Notes:

Kvichak River Sockeye Salmon (Canyon Springs)				Kvichak River Sockeye Salmon (Wolf Creek Ponds)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	20	1970		1963	90	1970	
1964	170	1971		1964	20	1971	
1965	1,100	1972		1965	16,200	1972	
1966		1973		1966	2,600	1973	
1967		1974		1967	150	1974	
1968	325	1975		1968	50	1975	
1969	600			1969	2,150		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak River (Chekok)		Sockeye Salmon		Kvichak River (Airstrip Ponds)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	580	1970		1963		1970	
1964	120	1971		1964		1971	
1965	450	1972		1965		1972	
1966	400	1973		1966	1,400	1973	
1967	715	1974		1967	429	1974	
1968	1,830	1975		1968	1,136	1975	
1969	4,000			1969	5,200		

Notes:

Notes:

Kvichak River (Russian Creek)		Sockeye Salmon		Kvichak River (Pile River)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	30	1970		1963		1970	
1964		1971		1964	50	1971	
1965		1972		1965	20	1972	
1966		1973		1966	140	1973	
1967		1974		1967	3,090	1974	
1968	451	1975		1968	1,437	1975	
1969	1,150			1969	985		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak River Sockeye Salmon (Kaskanak Flats)				Kvichak River Sockeye Salmon (Iliamna River, main stream)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	2,940	1970	
1964	450	1971		1964	7,045	1971	
1965		1972		1965	80,600	1972	
1966	3,500	1973		1966	40,510	1973	
1967		1974		1967	57,400	1974	
1968		1975		1968	15,055	1975	
1969				1969	55,190		

Notes:

Notes:

Kvichak River Sockeye Salmon (Iliamna River, Right Fork)				Kvichak River Sockeye Salmon (Iliamna River, Left Fork)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,200	1970		1963	150	1970	
1964	593	1971		1964	401	1971	
1965	86,000	1972		1965	41,500	1972	
1966	24,920	1973		1966	5,800	1973	
1967	51,000	1974		1967	30,800	1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (Bear Creek Ponds)				Kvichak Sockeye Salmon (False Creek)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,100	1970		1963		1970	
1964	2,203	1971		1964		1971	
1965	5,600	1972		1965		1972	
1966	1,210	1973		1966		1973	
1967	3,000	1974		1967	960	1974	
1968	1,015	1975		1968		1975	
1969	1,825			1969	250		

Notes:

Notes:

Kvichak Sockeye Salmon (Old Williams Creek)				Kvichak Sockeye Salmon (Chinkelyes Creek)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	4,000	1970	
1964		1971		1964	525	1971	
1965		1972		1965	27,300	1972	
1966		1973		1966	6,430	1973	
1967	1,120	1974		1967	20,000	1974	
1968		1975		1968	3,300	1975	
1969	200			1969	5,700		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Jack Durand Creek)

Sockeye Salmon

Year	No. of Fish	Year	No. of Fish
1963	60	1970	
1964	74	1971	
1965		1972	
1966	450	1973	
1967	7,900	1974	
1968	650	1975	
1969	1,550		

Notes:

Kvichak (Surprise Creek)

Sockeye Salmon

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964		1971	
1965	6,100	1972	
1966		1973	
1967		1974	
1968	85	1975	
1969	200		

Notes:

Kvichak (Squirrel Village Creek)

Sockeye Salmon

Year	No. of Fish	Year	No. of Fish
1963	500	1970	
1964	42	1971	
1965	4,500	1972	
1966		1973	
1967	302	1974	
1968	90	1975	
1969	450		

Notes:

Kvichak (Tommy River)

Sockeye Salmon

Year	No. of Fish	Year	No. of Fish
1963	930	1970	
1964	600	1971	
1965	8,400	1972	
1966	610	1973	
1967	3,350	1974	
1968	655	1975	
1969	7,600		

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Tommy Springs)		Sockeye Salmon		Kvichak (Pope Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	200	1970		1963	10	1970	
1964	170	1971		1964		1971	
1965	1,700	1972		1965	10	1972	
1966	200	1973		1966		1973	
1967	400	1974		1967		1974	
1968	70	1975		1968		1975	
1969	250			1969			

Notes:

Notes:

Kvichak (Nick "G" Creek)		Sockeye Salmon		Kvichak (Copper River)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	50	1970		1963	10,500	1970	
1964	190	1971		1964	15,115	1971	
1965	2,550	1972		1965	288,000	1972	
1966	500	1973		1966	76,200	1973	
1967	835	1974		1967	165,260	1974	
1968	554	1975		1968	80,066	1975	
1969	1,525			1969	62,150		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Alec Flyum Creek) Sockeye Salmon				Kvichak (Kakhonak River) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	80	1971		1964		1971	
1965		1972		1965	100	1972	
1966		1973		1966	470	1973	
1967	520	1974		1967	962	1974	
1968	470	1975		1968	537	1975	
1969	1,000			1969	1,350		

Notes:

Notes:

Kvichak (Cabin Creek) Sockeye Salmon				Kvichak (Granite Creek) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	50	1971		1964	25	1971	
1965		1972		1965	350	1972	
1966	150	1973		1966	80	1973	
1967	298	1974		1967	519	1974	
1968	508	1975		1968	428	1975	
1969	100			1969	2,300		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Lake Creek)		Sockeye Salmon		Kvichak (Nick "N" Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	30	1970	
1964	200	1971		1964	30	1971	
1965	900	1972		1965	8,050	1972	
1966	500	1973		1966	670	1973	
1967	256	1974		1967	449	1974	
1968	820	1975		1968	4,280	1975	
1969	3,775			1969	13,225		

Notes:

Notes:

Kvichak (Camp Creek)		Sockeye Salmon		Kvichak (Dennis Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	50	1970	
1964	25	1971		1964	320	1971	
1965	1,600	1972		1965	8,550	1972	
1966	29	1973		1966	450	1973	
1967	46	1974		1967	468	1974	
1968	350	1975		1968	1,882	1975	
1969	1,040			1969	2,925		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Belinda Creek)		Sockeye Salmon		Kvichak (Gibraltar)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	400	1970		1963	8,200	1970	
1964	2,080	1971		1964	5,055	1971	
1965	1,930	1972		1965	196,000	1972	
1966	220	1973		1966	80,400	1973	
1967	216	1974		1967	40,000	1974	
1968	2,162	1975		1968	26,400	1975	
1969	1,300			1969	37,925		

Notes:

Notes:

Kvichak (Little Gibraltar Creek)		Sockeye Salmon		Kvichak (Dream Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	10	1970		1963	40	1970	
1964	57	1971		1964	1,225	1971	
1965	17,600	1972		1965	33,300	1972	
1966	3,790	1973		1966	13,750	1973	
1967		1974		1967		1974	
1968	538	1975		1968	4,375	1975	
1969	3,785			1969	18,100		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (S.E. Creek)		Sockeye Salmon					
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	120	1970		1963		1970	
1964	444	1971		1964		1971	
1965	21,500	1972		1965		1972	
1966	4,700	1973		1966		1973	
1967		1974		1967		1974	
1968	3,885	1975		1968		1975	
1969	8,700			1969			

Notes:

Notes:

Kvichak (Trout Creek)		Sockeye Salmon		Kvichak (Leon Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	300	1970		1963		1970	
1964	5	1971		1964		1971	
1965	1,700	1972		1965		1972	
1966	560	1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969	2,825			1969	300		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Steam Bath Creek)		Sockeye Salmon		Kvichak (Newhalen River)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965	22,320	1972	
1966		1973		1966	15,800	1973	
1967	292	1974		1967	172,800	1974	
1968	1	1975		1968	9,345	1975	
1969				1969	13,800		

Notes:

Notes:

Kvichak (Little Bear Creek and Ponds)		Sockeye Salmon		Kvichak (Alexi Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	10	1970		1963	3	1970	
1964	10	1971		1964	1	1971	
1965	1,100	1972		1965	695	1972	
1966		1973		1966	50	1973	
1967		1974		1967	10	1974	
1968	115	1975		1968	325	1975	
1969	925			1969	250		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Alexi Lake)		Sockeye Salmon		Kvichak (Tazimina River)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	46	1970		1963		1970	
1964	30	1971		1964	150	1971	
1965	13,790	1972		1965	49,100	1972	
1966	2,500	1973		1966	4,880	1973	
1967	7,600	1974		1967	23,000	1974	
1968	11,180	1975		1968	250	1975	
1969	18,725			1969	22,610		

Notes:

Notes:

Kvichak (stream between Hammonds & Kijik River)		Sockeye Salmon		Kvichak (Priest Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966	1,000	1973		1966		1973	
1967		1974		1967	1,000	1974	
1968		1975		1968	225	1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Kijik River)		Sockeye Salmon		Kvichak (Little Kijik River)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	260	1970	
1964		1971		1964	150	1971	
1965		1972		1965	8,630	1972	
1966	2,215	1973		1966	4,820	1973	
1967	7,500	1974		1967	11,600	1974	
1968	1,766	1975		1968	1,125	1975	
1969				1969	2,450		

Notes:

Notes:

Kvichak (Kijik Lake Tribs.)		Sockeye Salmon		Kvichak (Currant Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	80	1971		1964		1971	
1965		1972		1965		1972	
1966	3,500	1973		1966		1973	
1967	1,320	1974		1967		1974	
1968	450	1975		1968	10	1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Tanalian River)		Sockeye Salmon		Kvichak (22 Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965	500	1972		1965		1972	
1966	304	1973		1966	10	1973	
1967	1,600	1974		1967		1974	
1968	8	1975		1968		1975	
1969	150			1969			

Notes:

Notes:

Kvichak (Sucker Bay Lake)		Sockeye Salmon		Kvichak (Pickeral Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	10	1970		1963		1970	
1964	30	1971		1964		1971	
1965	434	1972		1965		1972	
1966	305	1973		1966		1973	
1967	190	1974		1967		1974	
1968	941	1975		1968		1975	
1969	4,350			1969	730		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Tlikakila River)		Sockeye Salmon		Kvichak (Chokotonik River)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968	2,883	1975		1968	1,730	1975	
1969				1969			

Notes:

Notes:

				Kvichak (Knutson Bay)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	3,200	1970	
1964		1971		1964	1,800	1971	
1965		1972		1965	25,000	1972	
1966		1973		1966	51,300	1973	
1967		1974		1967	23,450	1974	
1968		1975		1968	4,840	1975	
1969				1969	27,600		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Gibraltar Ponds)		Sockeye Salmon		Kvichak (Lonesome Bay)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	60	1970	
1964		1971		1964	20	1971	
1965		1972		1965	9,000	1972	
1966		1973		1966	1,650	1973	
1967		1974		1967	8,650	1974	
1968	275	1975		1968	1,485	1975	
1969	3,000			1969	2,525		

Notes:

Notes:

Kvichak (Finger Beaches)		Sockeye Salmon		Kvichak (S.E. Beaches)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	2,250	1970		1963	20	1970	
1964	642	1971		1964	316	1971	
1965	29,100	1972		1965	38,500	1972	
1966	9,070	1973		1966	10,410	1973	
1967	11,050	1974		1967	16,300	1974	
1968	2,650	1975		1968	2,640	1975	
1969	2,550			1969	1,200		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Tommy Beach) Sockeye Salmon				Kvichak (Ross Islands) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	300	1970		1963		1970	
1964	400	1971		1964	20	1971	
1965	7,000	1972		1965	92,000	1972	
1966	650	1973		1966		1973	
1967		1974		1967	435	1974	
1968	782	1975		1968	4,451	1975	
1969	4,050			1969	1,785		

Notes:

Notes:

Kvichak (Rabbit Island) Sockeye Salmon				Kvichak (Eagle Islands) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965	24,800	1972		1965	24,000	1972	
1966	1,880	1973		1966	1,080	1973	
1967	700	1974		1967	110	1974	
1968	1,915	1975		1968	845	1975	
1969	5,045			1969	1,600		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (Halfway Island and Reefs)				Kvichak Sockeye Salmon (Middle Islands)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	425	1971		1964		1971	
1965		1972		1965	750	1972	
1966	50	1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Kvichak Sockeye Salmon (Kakhonak Islands)				Kvichak Sockeye Salmon (Intricate Islands)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965	12,000	1972		1965	69,000	1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968	350	1975		1968	10	1975	
1969	1,300			1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (Hedlund's Islands)				Kvichak Sockeye Salmon (Knutson Island)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964	220	1971	
1965	32,500	1972		1965	56,000	1972	
1966	2,055	1973		1966	660	1973	
1967	140	1974		1967	8,607	1974	
1968		1975		1968	10,975	1975	
1969	4,175			1969			

Notes:

Notes:

Kvichak Sockeye Salmon (Woody Island)				Kvichak Sockeye Salmon (Flat Islands)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,105	1970		1963	2,845	1970	
1964	6,505	1971		1964	5,405	1971	
1965	607,000	1972		1965		1972	
1966	19,450	1973		1966		1973	
1967	12,390	1974		1967		1974	
1968	35,955	1975		1968		1975	
1969	70,550			1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak (Triangle Island group) Sockeye Salmon				Kvichak (E-2 Island) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	270	1970		1963		1970	
1964	2,013	1971		1964	125	1971	
1965	352,500	1972		1965	152,000	1972	
1966	10,350	1973		1966	1,900	1973	
1967	2,960	1974		1967	100	1974	
1968	3,020	1975		1968	609	1975	
1969	1,410			1969	1,015		

Notes:

Notes:

Kvichak (Seal Rookery Islands) Sockeye Salmon				Kvichak (Pedro Bay Islands) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	78	1971		1964		1971	
1965	20,000	1972		1965	90,000	1972	
1966	500	1973		1966	1,400	1973	
1967		1974		1967	140	1974	
1968		1975		1968	7,600	1975	
1969				1969	5,850		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (Porcupine Island)				Kvichak Sockeye Salmon (Fuel Dump Island)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965	300,000	1972		1965		1972	
1966	12,380	1973		1966		1973	
1967	960	1974		1967		1974	
1968	11,799	1975		1968	8,250	1975	
1969	28,145			1969			

Notes:

Notes:

Kvichak Sockeye Salmon (Gibraltar Lake Beaches)				Kvichak Sockeye Salmon (Gibraltar No. 1 Pond)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,320	1970		1963	50	1970	
1964	2,657	1971		1964	455	1971	
1965	72,150	1972		1965	1,300	1972	
1966	16,130	1973		1966	3,400	1973	
1967		1974		1967		1974	
1968	6,665	1975		1968		1975	
1969	10,880			1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (Lake Clark Beaches)

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964		1971	
1965		1972	
1966	54	1973	
1967		1974	
1968	875	1975	
1969			

Notes:

Kvichak Sockeye Salmon (Kvichak Lake Beaches)

Year	No. of Fish	Year	No. of Fish
1963	810	1970	
1964	1,470	1971	
1965	30,350	1972	
1966	40,470	1973	
1967	65,100	1974	
1968	3,545	1975	
1969	12,025		

Notes:

Kvichak Sockeye Salmon (Lincoln Rock Beaches)

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964		1971	
1965		1972	
1966		1973	
1967		1974	
1968	250	1975	
1969	225		

Notes:

Kvichak Sockeye Salmon (Foxy Lake Beaches)

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964		1971	
1965		1972	
1966		1973	
1967		1974	
1968	152	1975	
1969			

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (Intricate Bay Beaches)				Kvichak Sockeye Salmon (Pickeral Lake)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969	1,660			1969	150		

Notes:

Notes:

Kvichak Sockeye Salmon (Eagle Bay Beaches)				Kvichak Sockeye Salmon (Pedro Bay Beaches)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969	2,000			1969	13,890		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Sockeye Salmon (Pile Bay Beaches)				Kvichak Sockeye Salmon (Pedro-Knutson mainland beaches)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969	900			1969	6,400		

Notes:

Notes:

Kvichak Sockeye Salmon (6 Mile Lake)				Kvichak Sockeye Salmon (Dumbell Lake)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969	1,450			1969	2,175		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kvichak Pink Salmon (Kaskanak Flats)				Kvichak PINK Salmon (Main river below Kaskanak Flats)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	1,670*	1971		1964		1971	
1965		1972		1965		1972	
1966	14,200	1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969	3,772		

Notes: * Greater than 14,000 total

Notes:

Kvichak Pink Salmon (Kaskanak Flats to Lake Iliamna)				Kvichak Chum Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964	3,000	1971	
1965		1972		1965		1972	
1966		1973		1966	2,800*	1973	
1967		1974		1967		1974	
1968	103,787	1975		1968		1975	
1969				1969			

Notes: Individual pink salmon were seen in or near the following locals: Belinda Cr., Gibraltar Cr., Triangle Is., Fuel Dump Is., Finger Beach, Iliamna Village, Kakhonak Bay, Tabin Bay, Nondalton Fish Village, Newhalen R., Pedro Bay, Pile Bay, and Iliamna River.

Notes: *approximate figure for Kaskanak Flats

Magnitude of Runs or Escapements

Iliamna National Resource Range

Igushik River		Sockeye Salmon		Igushik River		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	181,109	1970	670,920	1963	92,184	1970	370,920
1964	318,999	1971	618,943	1964	128,532	1971	210,960
1965	314,051	1972	502,537*	1965	180,840	1972	60,018
1966	445,248	1973	157,744	1966	206,360	1973	59,508
1967	300,481	1974	83,126	1967	281,772	1974	
1968	439,396	1975		1968	194,508	1975	
1969	751,554			1969	512,328		

Notes: *ADF&G figure

Total Runs

Notes: Total Escapements

Igushik River		Pink Salmon		Igushik River		King Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	100
1964	444	1971		1964		1971	40
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

				Snake River (to Eagle Cr.)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	3,700
1964		1971		1964		1971	400
1965		1972		1965		1972	100
1966		1973		1966	520	1973	
1967		1974		1967	370	1974	
1968		1975		1968	220	1975	
1969				1969	300		

Notes:

Notes:

Eagle Creek Lake		Sockeye Salmon		Eagle Creek		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	250	1963		1970	50
1964		1971	130	1964		1971	0
1965		1972	20	1965		1972	20
1966	0	1973		1966	120	1973	
1967	0	1974		1967	260	1974	
1968	0	1975		1968	20	1975	
1969	130			1969	240		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Killian Creek		Sockeye Salmon		East Creek		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	2,300	1963		1970	200
1964		1971	700	1964		1971	20
1965		1972	300	1965		1972	20
1966	530	1973		1966	20	1973	
1967	2,300	1974		1967	150	1974	
1968	700	1975		1968	100	1975	
1969	1,400			1969	30		

Notes:

Notes:

West Shore Beaches		Sockeye Salmon		East Shore Beaches		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	3,730	1963		1970	1,430
1964		1971	2,150	1964		1971	790
1965		1972	280	1965		1972	280
1966	1,120	1973		1966	480	1973	
1967	2,540	1974		1967	820	1974	
1968	920	1975		1968	320	1975	
1969	1,800			1969	650		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

South Shore Beaches		Sockeye Salmon		SNAKE RIVER		SOCKEYE SALMON	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	230	1963	61,176	1970	23,800
1964		1971	80	1964	27,049	1971	16,041
1965		1972	0	1965	20,146	1972	7,205
1966	0	1973		1966	7,308	1973	931
1967	250	1974		1967	11,000	1974	
1968	200	1975		1968	4,100	1975	
1969	70			1969	9,300		

Notes:

Notes: TOTAL RUN

SNAKE RIVER		SOCKEYE SALMON					
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	37,960	1970	23,800	1963		1970	
1964	12,436	1971	8,500	1964		1971	
1965	12,000	1972	2,000	1965		1972	
1966	4,500	1973	931	1966		1973	
1967	11,000	1974		1967		1974	
1968	4,100	1975		1968		1975	
1969	9,300			1969			

Notes: TOTAL ESCAPEMENT

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Snake River

Pink Salmon

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	36	1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Snake River		King Salmon		Weary River		King Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	150	1963		1970	230
1964		1971	60	1964		1971	60
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969	60			1969			

Notes:

Notes:

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River (Yako Creek)		Sockeye Salmon		Wood River (Whitefish Creeks)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	100	1970	1,200	1963	400	1970	2,300
1964	1,100	1971	500	1964	1,100	1971	200
1965	900	1972		1965	400	1972	
1966	1,500	1973		1966	1,800	1973	
1967	200	1974		1967	400	1974	
1968	400	1975		1968	1,100	1975	
1969	300			1969	300		

Notes:

Notes:

Wood River (Ice Creek)		Sockeye Salmon		Wood River (Happy Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	800	1970	7,100	1963	800	1970	1,000
1964	4,800	1971	5,100	1964	1,900	1971	700
1965	11,500	1972		1965	2,600	1972	
1966	12,700	1973		1966	2,900	1973	
1967	4,400	1974		1967	1,000	1974	
1968	7,900	1975		1968	1,300	1975	
1969	6,100			1969	1,700		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River (Hansen Creek)		Sockeye Salmon		Wood River (Sunshine Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	2,600	1970	3,200	1963	800	1970	1,200
1964	2,600	1971	1,300	1964	865	1971	500
1965	3,600	1972		1965	500	1972	
1966	15,700*	1973		1966	3,700	1973	
1967	3,300*	1974		1967	700	1974	
1968	2,400	1975		1968	2,100	1975	
1969	2,900			1969	700		

Notes: *Tagging estimates indicated spawning populations of 10,400 in 1966 and 4,600 in 1967.

Notes:

Wood River (Agulowak River)		Sockeye Salmon		Wood River (Fenno Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	14,000	1970	220,000	1963	3,100	1970	3,800
1964	65,000	1971	130,000	1964	3,100	1971	1,800
1965	165,000	1972		1965	1,600	1972	
1966	176,000	1973		1966	2,400	1973	
1967	70,000*	1974		1967	900	1974	
1968	130,000	1975		1968	4,600	1975	
1969				1969			

Notes: *Tagging estimates of spawning populations was 123,600.

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River Sockeye Salmon (Stovall Creek Lake)				Wood River Sockeye Salmon (Teel Creek)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	3,700	1970	6,400	1963	800	1970	2,500
1964	11,300	1971	6,700	1964	2,400	1971	
1965	2,066	1972		1965	40	1972	
1966	9,900	1973		1966	4,700	1973	
1967	1,400	1974		1967	300	1974	
1968	2,300	1975		1968	300	1975	
1969	3,700			1969	800		

Notes:

Notes:

Wood River Sockeye Salmon (Allah Creek Beach)				Wood River Sockeye Salmon (Lynx Lake)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,200	1970	10,000	1963	6,200	1970	6,000
1964	5,300	1971	5,300	1964	4,500	1971	3,000
1965	2,000	1972		1965	7,500	1972	
1966	4,800	1973		1966	4,100	1973	
1967	1,700	1974		1967	1,900	1974	
1968	1,800	1975		1968	3,500	1975	
1969	4,700			1969	2,700		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River (Little Togiak River)		Sockeye Salmon		Wood River (Pick Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	9,000	1970	13,000	1963	9,700	1970	11,000
1964	15,000	1971	6,000	1964	16,000	1971	5,100
1965	8,900	1972		1965	7,600	1972	
1966	9,000	1973		1966	9,400	1973	
1967	7,000	1974		1967	3,900	1974	
1968	5,500	1975		1968	6,300	1975	
1969	3,300			1969	6,800		

Notes:

Notes:

Wood River (Elva Creek)		Sockeye Salmon		Wood River (N-4 to N-6 Beach)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	200	1970	600	1963	4,600	1970	12,300
1964	700	1971	200	1964	10,000	1971	6,400
1965	100	1972		1965	6,400	1972	
1966	700	1973		1966	10,900	1973	
1967	200	1974		1967	3,600	1974	
1968	100	1975		1968	6,400	1975	
1969	100			1969	6,400		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River (Otts Bay Beach)				Wood River (Anvil Bay Beach)			
Sockeye Salmon		Sockeye Salmon		Sockeye Salmon		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	4,400	1970	6,000	1963	18,000	1970	23,000
1964	1,700	1971	3,300	1964	32,800	1971	21,000
1965	900	1972		1965	12,900	1972	
1966	1,400	1973		1966	35,200*	1973	
1967	3,500	1974		1967	17,400*	1974	
1968	1,800	1975		1968	7,700	1975	
1969	300			1969	6,600		

Notes:

Notes:

*Tagging estimates of population
yielded: 1966 - 29,400
1967 - 18,800

Wood River (Hidden Lake Creek)				Wood River (Kema Creek)			
Sockeye Salmon		Sockeye Salmon		Sockeye Salmon		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	2,400	1970	1,700	1963	2,400	1970	2,100
1964	8,200	1971	700	1964	6,000	1971	4,400
1965	1,066	1972		1965	5,000	1972	
1966	1,067	1973		1966	3,300	1973	
1967	1,300	1974		1967	2,100	1974	
1968	4,000	1975		1968	3,100	1975	
1969	2,300			1969	2,500		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River (Agulupak River)		Sockeye Salmon		Wood River (Moose Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	47,500	1970	120,000	1963	2,100	1970	3,200
1964	42,900	1971	100,000	1964	12,700	1971	3,000
1965	130,800	1972		1965	1,700	1972	
1966	110,000*	1973		1966	4,000	1973	
1967	25,000*	1974		1967	1,900	1974	
1968	100,000	1975		1968	3,400	1975	
1969	140,000			1969	2,600		

Notes:

*Tagging estimates of Sockeye spawning populations yielded:

1966 - 121,700

1967 - 31,600

Notes:

Wood River (Hope Creek)		Sockeye Salmon		Wood River (B-9 to B-12 Beaches)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,800	1970	1,500	1963	16,000	1970	4,900
1964	15,000	1971	2,800	1964	10,900	1971	3,100
1965	200	1972		1965	11,300	1972	
1966	2,700	1973		1966	19,200	1973	
1967	500	1974		1967	5,600	1974	
1968	400	1975		1968	1,700	1975	
1969	300			1969	200		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River Sockeye Salmon (Hardluck Bay Beach)				Wood River Sockeye Salmon (Silver Horn Beach)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	21,500	1970	16,900	1963	71,300	1970	40,800
1964	25,400	1971	35,000	1964	69,500	1971	41,400
1965	15,400	1972		1965	4,400	1972	
1966	20,500	1973		1966	44,900	1973	
1967	21,100	1974		1967	15,200*	1974	
1968	15,000	1975		1968	17,500	1975	
1969	1,600			1969	3,100		

Notes: *

Notes: *Tagging estimates of spawning populations was 27,000 in 1967.

Wood River Sockeye Salmon (Lake Mikchalk Beaches)				Wood River Sockeye Salmon (Peace River)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	19,400	1970	9,500	1963	19,300	1970	5,000
1964	13,000	1971	15,000	1964	18,800	1971	4,000
1965	10,500	1972		1965	6,600	1972	
1966	10,000	1973		1966	16,000	1973	
1967	12,000	1974		1967	7,000	1974	
1968	10,000	1975		1968	2,000	1975	
1969	5,000			1969	2,000		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River (Wind River) Sockeye Salmon				Wood River (Lake Kulik Beaches) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	5,000	1970	500	1963	111,100	1970	42,000
1964	4,500	1971	1,000	1964	112,300	1971	53,000
1965	2,500	1972		1965	19,700	1972	
1966	4,000	1973		1966	60,000	1973	
1967	1,400	1974		1967	55,400	1974	
1968	500	1975		1968	25,000	1975	
1969	2,000			1969	12,000		

Notes:

Notes:

Wood River (Grant River) Sockeye Salmon				Wood River (Pike Creek) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	32,900	1970	13,000	1963	2,300	1970	2,600
1964	22,700	1971	13,000	1964	3,400	1971	2,700
1965	8,300	1972		1965	2,000	1972	
1966	13,000	1973		1966	8,200	1973	
1967	6,000	1974		1967	1,500	1974	
1968	6,000	1975		1968	500	1975	
1969	5,000			1969	1,800		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River (Portage Creek)		Sockeye Salmon		Wood River (Lynx Creek)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	600	1963	1,600	1970	2,100
1964		1971		1964	1,600	1971	3,300
1965		1972		1965	900	1972	
1966		1973		1966	1,500	1973	
1967		1974		1967	2,400	1974	
1968		1975		1968	2,300	1975	
1969				1969	1,300		

Notes:

Notes:

Wood River (Bear Creek)		Sockeye Salmon					
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,500-3,000	1970	2,500	1963		1970	
1964	3,300	1971	4,700	1964		1971	
1965	4,100	1972		1965		1972	
1966	4,700	1973		1966		1973	
1967	2,100*	1974		1967		1974	
1968	3,000	1975		1968		1975	
1969	3,400			1969			

Notes: *Tagging estimate (probably over-estimate) was 6,500 spawners.

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River King Salmon				Wood River streams King Salmon (Ice, Sunshine, Peace, & Wind)			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	50	1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969	70		

Notes:

Notes:

WOOD RIVER (TOTAL SYSTEM) SOCKEYE SALMON				WOOD RIVER (TOTAL SYSTEM) SOCKEYE SALMON			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,254,787	1970	1,758,492	1963	721,404	1970	1,161,964
1964	2,154,375	1971	1,437,643 (1,611,565)*	1964	1,076,112	1971	851,202
1965	1,143,652	1972	669,171	1965	675,156	1972	430,602
1966	1,963,416	1973	412,740	1966	1,208,682	1973	330,474
1967	1,045,526	1974		1967	515,772	1974	
1968	1,055,961	1975		1968	649,344	1975	
1969	1,056,375			1969	604,338		

Notes:

TOTAL RUN

* ADF+G ESTIMATE

Notes:

TOTAL ESCAPEMENT

Magnitude of Runs or Escapements

Iliamna National Resource Range

Wood River				Pink Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	1,560	1971		1964		1971	
1965		1972		1965		1972	
1966	20,000	1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			
Notes:				Notes:			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			
Notes:				Notes:			

Magnitude of Runs or Escapements

Iliamna National Resource Range

King Salmon River		Sockeye Salmon		Old Stuyahok River		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	603*	1970		1963	207*	1970	
1964	200	1971		1964	50	1971	
1965	1,000	1972		1965		1972	
1966	943*	1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes: *Float count. Remainder are aerial counts.

Notes: *Float counts

Koktuli River		Sockeye Salmon		Mulchatna River		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	1,100	1971		1964	4,250	1971	
1965	300	1972		1965	4,840*	1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes: *Poor survey conditions. Probably low count.

(Aerial survey)

Notes: *Poor survey conditions. Probably low count,

(Aerial survey)

Magnitude of Runs or Escapements

Iliamna National Resource Range

Kokwok River Sockeye Salmon				Chichitnok River Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	1,100*	1971		1964	100*	1971	
1965	2,630*	1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes: *Aerial Survey

Notes: *Aerial Survey

Chilchitna River Sockeye Salmon				Chilikadrotna River Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	100*	1971		1964	100*	1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes: *Aerial Survey

Notes: *Aerial Survey

Magnitude of Runs or Escapements

Iliamna National Resource Range

Iowithla River

Sockeye Salmon

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	200*	1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

*Aerial Survey

Notes:

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Nushagak (TOTAL SYSTEM)		Pink Salmon		Nushagak (Nuyakuk)		Pink Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	909,000	1970		1963	883,500	1970	153,000
1964		1971		1964		1971	-
1965		1972		1965		1972	59,000
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Nushagak-Mulchatna		Pink Salmon		TIKCHIK RIVER		PINK SALMON	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	25,000	1970		1963	140,500	1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Nushagak River King Salmon				Nushagak River (Stuyahok River) King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	40,000-50,000	1963		1970	
1964		1971		1964	18,000*	1971	
1965		1972		1965		1972	
1966	30,000-50,000	1973		1966		1973	
1967	50,000-80,000	1974		1967		1974	
1968	60,000-80,000	1975		1968	5,000+	1975	
1969				1969			

Notes:

Notes:

*Includes King Salmon River

NUSHAGAK R. (NUYAKUK R.) SOCKEYE SALMON				NUSHAGAK R. (NUYAKUK R.) SOCKEYE SALMON			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	344,039	1970	604,265	1963	166,608	1970	364,648
1964	214,671	1971	431,897 (383,996)*	1964	103,224	1971	224,382
1965	364,356	1972	61,562	1965	203,070	1972	28,596
1966	293,546	1973	213,289	1966	161,010	1973	110,016
1967	53,317	1974		1967	20,250	1974	
1968	167,753	1975		1968	96,642	1975	
1969	129,464			1969	69,828		

Notes: TOTAL RUN

* ADF+G Estimate

Notes: TOTAL ESCAPEMENT

Magnitude of Runs or Escapements

Iliamna National Resource Range

Muklung River King Salmon				Keefer Creek King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	590	1963		1970	
1964	1,000	1971	280	1964		1971	
1965	570	1972	150	1965		1972	
1966		1973		1966		1973	
1967	350	1974		1967		1974	
1968	750	1975		1968	100	1975	
1969	520			1969			

Notes:

Notes:

Chilchitna River King Salmon				Mosquito River King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968	120	1975		1968	340	1975	
1969				1969	110		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Nunachuak River King Salmon				Old Man Creek King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968	10	1975	
1969				1969			

Notes: King Salmon Present

Notes:

Vukpalik Creek King Salmon				Nuyakuk River King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	240
1964		1971		1964		1971	70
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968	50	1975		1968	430	1975	
1969				1969	70		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Napotoli Creek King Salmon				Klutuk River King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	130
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968	130	1975	
1969	20*			1969	50*		

Notes: Poor survey conditions. Probably low count.

Notes: Poor survey conditions. Probably low count.

Nushagak River King Salmon				Kokwok River King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	110
1964	3,600	1971		1964		1971	80
1965	5,200	1972	1,210	1965		1972	
1966	2,470	1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969	160*			1969	90		

Notes: *Poor survey conditions. Probably low count.

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Klutisplau		King Salmon		Iowithla River		King Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	320	1963		1970	700
1964		1971		1964	100	1971	390
1965	140	1972	280	1965		1972	170
1966		1973		1966		1973	
1967		1974		1967	200	1974	
1968	310	1975		1968	850	1975	
1969	90			1969	580		

Notes:

Notes:

Chilikadrotna		King Salmon		Koktuli River		King Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	1,500
1964	200	1971		1964	2,800	1971	1,400
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967	3,300	1974	
1968	410	1975		1968	4,220	1975	
1969				1969	1,600		

Notes:

Notes:

Magnitude of Runs or Escapements

Iliamna National Resource Range

Stuyahok River King Salmon				Chichitnok River King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	433*	1970	1,900	1963	400	1970	
1964	234 1,688*	1971	-	1964		1971	
1965	-	1972	610	1965		1972	100
1966	-	1973		1966		1973	
1967	2,500	1974		1967		1974	
1968	2,470	1975		1968	160	1975	
1969	1,220			1969	100		

Notes: *Float survey counts, remainder are aerial survey counts

Notes:

Mulchatna River King Salmon				King Salmon River King Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963	540*	1970	1,060
1964	2,150	1971		1964	67 355*	1971	-
1965		1972		1965	700 275*	1972	900
1966		1973		1966	850 -	1973	
1967		1974		1967	-	1974	
1968	1,710	1975		1968	1,000	1975	
1969				1969	670		

Notes:

Notes: *Float survey counts, remainder are aerial survey counts.

Magnitude of Runs or Escapements

Iliamna National Resource Range

Stuyahok River Chum Salmon				Mulchatna River Chum Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	5,000*	1970		1963	2,500*	1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968	10,000 +	1975		1968		1975	
1969				1969			

Notes: *Float survey count

Notes: *Aerial survey

Chichitnok Chum Salmon				King Salmon River Chum Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	200*	1970		1963	12*	1970	
1964		1971		1964	-	1971	
1965		1972		1965	126	1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes: *Aerial survey count

Notes: *Float survey count

Magnitude of Runs or Escapements

Iliamna National Resource Range

Nushagak River		Chum Salmon					
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964	11,000*	1971		1964		1971	
1965	-	1972	200,000	1965		1972	
1966	60,000-80,000	1973		1966		1973	
1967	50,000-70,000	1974		1967		1974	
1968	90,000-110,000	1975		1968		1975	
1969				1969			

Notes: *Most of these in Mulchatna River

Notes:

NUSHAGAK - MULCHATNA RIVERS		SOCKEYE SALMON		NUSHAGAK - MULCHATNA RIVERS		SOCKEYE SALMON	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	65,490	1970	97,213	1963	45,700	1970	113,198
1964	47,851	1971	96,042	1964	18,700	1971	58,338
1965	50,384	1972	19,868	1965	28,200	1972	7,434
1966	91,479	1973	137,661	1966	50,174	1973	80,394
1967	122,839	1974		1967	46,658	1974	
1968	58,735	1975		1968	32,070	1975	
1969	39,100			1969	16,792		

Notes: TOTAL RUN

Notes: TOTAL ESCAPEMENT

Magnitude of Runs or Escapements

Iliamna National Resource Range

Tikchik River Sockeye Salmon				Allen River Beaches Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1950	6,000	1957	15,000	1950	206	1957	2,400
1951	5,000	1958	16,000	1951	521	1958	20,000
1952	5,000	1959	5,400	1952	639	1959	3,550
1953	30,000			1953	4,655		
1954	5,000			1954	250		
1955	500			1955	1,128		
1956	7,500			1956	1,500		

Notes: Estimated escapement, not actual count.

Notes: Estimated escapement, not actual count.

Creek No. 4 Sockeye Salmon (Chauekuktuli Lake)				Mirror Creek Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1950		1957		1950		1957	
1951		1958		1951		1958	
1952	20	1959		1952	217	1959	
1953	82			1953	437		
1954	1			1954	80		
1955	0			1955	86		
1956				1956			

Notes: Estimated escapement, not actual count.

Notes: Estimated escapement, not actual count.

Magnitude of Runs or Escapements

Iliamna National Resource Range

Creek A (Tikchik Lake)		Sockeye Salmon		Creek No. 3A (Nuyukuk Lake)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1950	600	1957	900	1950	43	1957	
1951	105	1958	8,500	1951	21	1958	
1952	63	1959	774	1952	40	1959	
1953	494			1953	57		
1954	240			1954	25		
1955	1,000			1955	18		
1956	100			1956			

Notes: Estimated escapement, not actual count.

Notes: Estimated escapement, not actual count.

Creek No. 3 (Chauekuktuli Lake)		Sockeye Salmon		Creek No. I (Chauekuktuli Lake)		Sockeye Salmon	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1950	33	1957		1950	41	1957	10
1951	23	1958		1951	109	1958	0
1952	90	1959		1952	67	1959	
1953	306			1953	312		
1954	15			1954	16		
1955	3			1955	26		
1956	9			1956	0		

Notes: Estimated escapement, not actual count.

Notes: Estimated escapement, not actual count.

Magnitude of Runs or Escapements

Iliamna National Resource Range

Creek No. 3 (Nuyukuk Lake) Sockeye Salmon				Creek B (Tikchik Lake) Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1950	45	1957	No record	1950	1,200	1957	885
1951	166	1958	"	1951	981	1958	2,200
1952	306	1959	"	1952	968	1959	2,607
1953	502			1953	1,156		
1954	50			1954	390		
1955	5			1955	571		
1956	0			1956	500		

Notes: Estimated escapement, not actual count.

Notes: Estimated escapement, not actual count.

Creek No. 5 (Chauekuktuli Lake) Sockeye Salmon				Allen River Sockeye Salmon			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1950		1957		1950		1957	1,400
1951		1958		1951		1958	900
1952	2	1959		1952		1959	50
1953	23			1953			
1954	0			1954			
1955				1955			
1956				1956	250		

Notes: Estimated escapement, not actual count.

Notes: Estimated escapement, not actual count.

Subsistence Harvest

Iliamna National Resource Range

Sockeye Salmon		Naknek-Kvichak 324		King Salmon		Naknek-Kvichak 324	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	61,700	1970	108,200	1963	500	1970	300
1964	85,900	1971	66,400	1964	500	1971	200
1965	71,900	1972	52,200	1965	500	1972	400
1966	74,500	1973	41,600	1966	600	1973	600
1967	68,500	1974		1967	500	1974	
1968	71,000	1975		1968	500	1975	
1969	76,300			1969	400		

Notes:

Notes:

Chum Salmon		Naknek-Kvichak 324		Pink Salmon		Naknek-Kvichak 324	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	100	1970	700	1963		1970	100
1964		1971		1964	1,100	1971	
1965	100	1972	400	1965		1972	700
1966	300	1973	300	1966	2,700	1973	
1967	100	1974		1967		1974	
1968	100	1975		1968	300	1975	
1969	100			1969			

Notes:

Notes:

Subsistence Harvest

Iliamna National Resource Range

Coho Salmon

Naknek-Kvichak

324

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	400	1970	200	1963		1970	
1964	800	1971	100	1964		1971	
1965	300	1972	100	1965		1972	
1966	400	1973	500	1966		1973	
1967	500	1974		1967		1974	
1968	200	1975		1968		1975	
1969	400			1969			

Notes:

Notes:

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Subsistence Harvest

Iliamna National Resource Range

King Salmon

Naknek River

324

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	233	1963		1970	
1964		1971	240	1964		1971	
1965		1972	438	1965		1972	
1966	519	1973	627	1966		1973	
1967	699	1974		1967		1974	
1968	488	1975		1968		1975	
1969	400			1969			

Notes:

Notes:

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Subsistence Harvest
Iliamna National Resource Range

Sockeye Salmon				King Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	41,200	1970	38,200	1963	3,600	1970	6,900
1964	31,800	1971	42,400	1964	2,900	1971	4,400
1965	47,500	1972	24,100	1965	4,600	1972	4,000
1966	23,600	1973	28,000	1966	3,700	1973	6,600
1967	34,900	1974		1967	3,700	1974	
1968	30,000	1975		1968	6,600	1975	
1969	27,700			1969	7,100		

Notes:

Notes:

Chum Salmon				Pink Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	8,500	1970	8,800	1963		1970	1,000
1964	8,700	1971	4,200	1964	4,100	1971	
1965	18,400	1972	8,200	1965	200	1972	1,200
1966	6,000	1973	7,600	1966	4,900	1973	100
1967	14,000	1974		1967	800	1974	
1968	8,600	1975		1968	5,800	1975	
1969	8,200			1969	100		

Notes:

Notes:

Subsistence Harvest

Iliamna National Resource Range

Coho Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	3,900	1970	1,000	1963		1970	
1964	4,900	1971	2,300	1964		1971	
1965	5,400	1972	1,000	1965		1972	
1966	2,400	1973	2,200	1966		1973	
1967	4,000	1974		1967		1974	
1968	1,900	1975		1968		1975	
1969	7,100			1969			

Notes:

Notes:

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Subsistence Harvest

Iliamna National Resource Range

Sockeye Salmon		Nushagak 325		Chum Salmon		Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	13,600	1970	22,800	1963	1,100	1970	5,300
1964	7,200	1971	13,300	1964	200	1971	700
1965	16,700	1972	8,100	1965	7,400	1972	1,200
1966	4,100	1973	10,900	1966	400	1973	2,700
1967	14,800	1974		1967	6,700	1974	
1968	11,100	1975		1968	3,300	1975	
1969	11,400			1969	3,700		

Notes:

Nushagak Bay

Notes:

Nushagak Bay

King Salmon		Nushagak 325		Pink Salmon		Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,200	1970	3,500	1963		1970	1,300
1964	800	1971	2,000	1964	1,400	1971	0
1965	1,700	1972	1,600	1965	100	1972	300
1966	1,800	1973	4,000	1966	2,100	1973	100
1967	2,400	1974		1967	600	1974	
1968	3,900	1975		1968	3,400	1975	
1969	3,800			1969	100		

Notes:

Nushagak Bay

Notes:

Nushagak Bay

Iliamna National Resource Range

Coho Salmon		Nushagak 325		Sockeye Salmon		Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1,500	1970	400	1963		1970	7,400
1964	2,600	1971	500	1964	5,300	1971	6,600
1965	3,200	1972	500	1965		1972	3,400
1966	600	1973	1,600	1966	5,700	1973	4,000
1967	2,000	1974		1967	9,100	1974	
1968	1,100	1975		1968	3,200	1975	
1969	4,200			1969	5,100		

Notes: Nushagak Bay

Notes: Manokotak

King Salmon		Nushagak 325		Chum Salmon		Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	100	1963		1970	200
1964	100	1971	100	1964		1971	0
1965		1972		1965		1972	
1966	200	1973	100	1966	100	1973	
1967	100	1974		1967		1974	
1968	100	1975		1968		1975	
1969	100			1969	100		

Notes: Manokotak

Notes: Manokotak

Subsistence Harvest

Iliamna National Resource Range

Pink Salmon				Coho Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	400
1964	100	1971		1964	600	1971	1,200
1965		1972		1965		1972	400
1966	100	1973		1966	1,000	1973	500
1967	100	1974		1967	1,600	1974	
1968	0	1975		1968	400	1975	
1969				1969	900		

Notes: Manokotak

Notes: Manokotak

Red Salmon				King Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	6,000	1963		1970	1,900
1964		1971	7,500	1964		1971	800
1965	3,300	1972	2,700	1965	400	1972	900
1966	2,300	1973	3,700	1966	500	1973	900
1967	3,600	1974		1967	500	1974	
1968	6,400	1975		1968	800	1975	
1969	5,400			1969	1,800		

Notes: Ekwok

Notes: Ekwok

Subsistence Harvest

Iliamna National Resource Range

Chum Salmon		Nushagak 325		Pink Salmon		Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	2,700	1963		1970	
1964		1971	1,000	1964		1971	
1965	1,500	1972	1,700	1965		1972	100
1966	2,200	1973	2,200	1966	1,200	1973	
1967	5,000	1974		1967		1974	
1968	2,500	1975		1968	500	1975	
1969	2,800			1969	0		

Notes: Ekwok

Notes: Ekwok

Coho Salmon		Nushagak 325					
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	100	1963		1970	
1964		1971	100	1964		1971	
1965	500	1972	0	1965		1972	
1966	200	1973	100	1966		1973	
1967	100	1974		1967		1974	
1968		1975		1968		1975	
1969	600			1969			

Notes: Ekwok

Notes:

Subsistence Harvest
Iliamna National Resource Range

Sockeye Salmon				King Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	1,600	1963		1970	600
1964		1971	5,000	1964		1971	500
1965	1,300	1972	4,300	1965		1972	700
1966	400	1973	4,300	1966	200	1973	900
1967	1,000	1974		1967		1974	
1968	500	1975		1968	200	1975	
1969	300			1969	200		
Notes: New Stuyahok				Notes: New Stuyahok			
Chum Salmon				Pink Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	700	1963		1970	100
1964		1971	100	1964		1971	
1965	300	1972	1,600	1965		1972	300
1966	100	1973	1,300	1966	200	1973	
1967		1974		1967		1974	
1968	100	1975		1968	200	1975	
1969	200			1969			
Notes: New Stuyahok				Notes: New Stuyahok			

Subsistence Harvest

Iliamna National Resource Range

Coho Salmon ^e		Nushagak 325		Sockeye Salmon		Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	2,100
1964		1971		1964		1971	2,000
1965		1972	100	1965	4,800	1972	2,000
1966		1973		1966	4,300	1973	2,100
1967		1974		1967	300	1974	
1968		1975		1968	600	1975	
1969	100			1969			

Notes:

New Stuyahok

Notes:

Kokiganek

King Salmon		Nushagak 325		Chum Salmon		Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	200	1963		1970	500
1964		1971	400	1964		1971	1,300
1965	1,300	1972	300	1965	4,600	1972	1,900
1966	500	1973	300	1966	2,300	1973	500
1967	100	1974		1967	300	1974	
1968	100	1975		1968	300	1975	
1969				1969			

Notes:

Koliganek

Notes:

Koliganek

Subsistence Harvest
Iliamna National Resource Range

Pink Salmon				Coho Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	100	1963		1970	
1964		1971		1964		1971	100
1965		1972	300	1965	100	1972	
1966	700	1973		1966	400	1973	
1967		1974		1967		1974	
1968	400	1975		1968		1975	
1969				1969			

Notes:

Koliganek

Notes:

Koliganek

Sockeye Salmon				King Salmon			
		Nushagak 325				Nushagak 325	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	1,200	1963		1970	
1964	4,100	1971	2,400	1964		1971	
1965	5,800	1972	100	1965	100	1972	
1966	3,000	1973	1,000	1966		1973	
1967	1,000	1974		1967		1974	
1968	1,200	1975		1968		1975	
1969	800			1969			

Notes:

Wood River

Notes:

Wood River

Subsistence Harvest

Iliamna National Resource Range

Chum Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964		1971	
1965		1972	
1966	100	1973	
1967		1974	
1968		1975	
1969			

Notes:

Wood River

Pink Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964	200	1971	
1965		1972	
1966		1973	
1967		1974	
1968		1975	
1969			

Notes:

Wood River

Coho Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964	200	1971	
1965	100	1972	
1966		1973	
1967		1974	
1968		1975	
1969	100		

Notes:

Wood River

Notes:

Subsistence Effort

Iliamna National Resource Range

		Number of Permits Issued			
1963	71				Note: Nushagak Bay
1964	58				
1965	88				
1966	53				
1967	84				
1968	86				
1969	122				
1970	92				
1971	105				
1972	106				
1973	137				
1974					

Subsistence Effort
Iliamna National Resource Range

	Number of Permits Issued			
1963				Note: Manokotak
1964	19			
1965				
1966	24			
1967	30			
1968	12			
1969	24			
1970	26			
1971	32			
1972	34			
1973	34			
1974				

Subsistence Effort

Iliamna National Resource Range

	Number of Permits Issued			
1963				Note: Ekwok
1964				
1965	8			
1966	10			
1967	8			
1968	9			
1969	9			
1970	11			
1971	9			
1972	8			
1973	8			
1974				

Subsistence Effort

Iliamna National Resource Range

	Number of Permits Issued			
1963				Note: New Stuyahok
1964				
1965	3			
1966	6			
1967	1			
1968	2			
1969	5			
1970	6			
1971	6			
1972	15			
1973	19			
1974				

Subsistence Effort
Iliamna National Resource Range

	Number of Permits Issued			
1963				Note: Koliganek
1964				
1965	6			
1966	8			
1967	1			
1968	1			
1969				
1970	4			
1971	3			
1972	3			
1973	4			
1974				

Subsistence Effort

Iliamna National Resource Range

	Number of Permits Issued			
1963				Note: Wood River
1964	16			
1965	16			
1966	9			
1967	4			
1968	5			
1969	2			
1970	8			
1971	9			
1972	2			
1973	14			
1974				

Subsistence Effort

Iliamna National Resource Range

NARNEK RIVER (324)

Year	No. of Permits				
1965	50				
1966	67				
1967	-				
1968	-				
1969	-				
1970	-				
1971	-				
1972	85				
1973	114				

Commercial Harvest

Iliamna National Resource Range

Sockeye Salmon* Japanese High Seas				Sockeye Salmon* Japanese High Seas			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	928,700	1970	3,451,100	1963	60,100	1970	1,206,900
1964	254,500	1971		1964	843,000	1971	
1965	6,100,100	1972		1965	403,500	1972	
1966	1,531,200	1973		1966	56,500	1973	
1967	866,000	1974		1967	21,000	1974	
1968	863,700	1975		1968	791,000	1975	
1969	1,239,500			1969	1,239,500		

Notes:

Maturing salmon
* Estimations of Japanese mothership catches according to Fredin and Worlund (1974). Entire Bristol Bay area

Notes:

Immature salmon
* Estimations of Japanese mothership catches according to Fredin and Worlund (1974). Entire Bristol Bay area

Sockeye Salmon Naknek-Kvichak 324				Sockeye Salmon Naknek-Kvichak 324			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	957,902	1970	17,803,805	1963	223,459	1970	16,581,224
1964	2,243,701	1971	5,857,378	1964	763,486	1971	3,764,861
1965	19,139,567	1972	1,203,604	1965	17,785,664	1972	386,357
1966	5,397,538	1973	174,420	1966	4,168,575	1973	59,938
1967	2,337,226	1974	602,821	1967	1,800,652	1974	201,155
1968	1,216,858	1975	3,037,014	1968	387,565	1975	1,741,458
1969	4,655,072			1969	3,760,565		

Notes:

Total district

Notes:

Kvichak River only

Commercial Harvest

Iliamna National Resource Range

Sockeye Salmon Naknek-Kvichak
324

Year	No. of Fish	Year	No. of Fish
1963	620,823	1970	993,011
1964	1,206,332	1971	1,770,736
1965	1,114,600	1972	770,307
1966	1,092,662	1973	106,010
1967	469,842	1974	398,670
1968	768,182	1975	1,278,692
1969	803,890		

Notes:

Naknek River only

Sockeye Salmon Naknek-Kvichak
324

Year	No. of Fish	Year	No. of Fish
1963	113,620	1970	229,570
1964	273,883	1971	321,781
1965	239,303	1972	46,940
1966	136,301	1973	8,472
1967	66,732	1974	2,996
1968	61,111	1975	16,864
1969	90,617		

Notes:

ALAGNAK River Only

Pink Salmon Kvichak
324

Year	No. of Fish	Year	No. of Fish
1963	56	1970	28,300
1964	49,127	1971	50
1965	514	1972	55,203
1966	142,221	1973	5
1967	20	1974	482,621
1968	218,732	1975	1
1969	205		

Notes:

Chum Salmon Kvichak
324

Year	No. of Fish	Year	No. of Fish
1963	100,408	1970	105,200
1964	153,825	1971	151,500
1965	14,802	1972	114,373
1966	57,347	1973	148,676
1967	49,606	1974	34,784
1968	43,187	1975	64,756
1969	42,535		

Notes:

Commercial Harvest

Iliamna National Resource Range

Coho Salmon

Kvichak
324

Year	No. of Fish	Year	No. of Fish
1963	6,823	1970	100
1964	3,133	1971	100
1965	3,053	1972	40
1966	4,096	1973	119
1967	1,175	1974	555
1968	7,357	1975	5
1969	17		

Notes:

King Salmon

Kvichak
324

Year	No. of Fish	Year	No. of Fish
1963	4,713	1970	18,500
1964	12,902	1971	10,300
1965	9,793	1972	2,126
1966	5,456	1973	854
1967	3,705	1974	506
1968	6,398	1975	507
1969	19,016		

Notes:

Sockeye Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963	842,744	1970	1,188,534
1964	1,420,941	1971	1,256,799
1965	793,323	1972	386,900
1966	1,170,271	1973	266,424
1967	657,711	1974	511,656
1968	749,281	1975	640,553
1969	773,207		

Sockeye Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963	553,383	1970	596,528
1964	1,075,262	1971	586,441*
1965	468,496	1972	238,569
1966	754,734	1973	82,266
1967	529,754	1974	359,387
1968	406,617	1975	303,321
1969	452,037		

Notes: Total district

Notes: Wood River only
*ADFG count = 760,363

Commercial Harvest

Iliamna National Resource Range

Sockeye Salmon Nushagak 325

Year	No. of Fish	Year	No. of Fish
1963	88,924	1970	300,000
1964	190,467	1971	407,983*
1965	133,211	1972	97,726
1966	238,888	1973	23,618
1967	18,709	1974	53,468
1968	244,888	1975	198,292
1969	239,226		

Notes: Igushik River only
*ADFG count = 291,577

Sockeye Salmon Nushagak 325

Year	No. of Fish	Year	No. of Fish
1963	177,431	1970	239,617
1964	111,447	1971	207,515*
1965	161,286	1972	32,966
1966	132,536	1973	103,273
1967	33,067	1974	69,329
1968	71,111	1975	98,242
1969	59,636		

Notes: Nuyakuk River only
*ADFG count = 159,614

Sockeye Salmon Nushagak 325

Year	No. of Fish	Year	No. of Fish
1963	23,216	1970	
1964	14,613	1971	7,541
1965	8,146	1972	5,205
1966	2,808	1973	7,880
1967		1974	8,579
1968		1975	
1969			

Notes: Snake River only

Sockeye Salmon Nushagak 325

Year	No. of Fish	Year	No. of Fish
1963	19,790	1970	52,389
1964	29,151	1971	54,860*
1965	22,184	1972	12,434
1966	41,305	1973	57,267
1967	76,181	1974	21,592
1968	26,665	1975	32,119
1969	22,308		

Notes: Nushagak-Mulchatna Rivers only
*ADFG count = 37,704

Commercial Harvest

Iliamna National Resource Range

Pink Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963	226	1970	417,800
1964	1,479,817	1971	50
1965	95	1972	67,011
1966	2,337,066	1973	64
1967	265	1974	402,416
1968	1,705,150	1975	121
1969	263		

Notes:

Chum Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963	167,161	1970	435,000
1964	466,509	1971	360,000
1965	14,229	1972	302,740
1966	129,344	1973	340,019
1967	338,286	1974	154,074
1968	178,786	1975	165,328
1969	237,126		

Notes:

Coho Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963	29,648	1970	3,700
1964	26,416	1971	8,000
1965	2,851	1972	4,152
1966	11,517	1973	29,093
1967	31,517	1974	12,896
1968	48,867	1975	6,486
1969	37,982		

Notes:

King Salmon

Nushagak
325

Year	No. of Fish	Year	No. of Fish
1963	45,979	1970	87,500
1964	108,617	1971	82,800
1965	85,910	1972	45,946
1966	58,184	1973	30,599
1967	96,240	1974	31,872
1968	78,201	1975	21,446
1969	80,774		

Notes:

Commercial Harvest

Iliamna National Resource Range

Sockeye Salmon Cook Inlet
248

Year	No. of Fish	Year	No. of Fish
1963	3	1970	< 50
1964	1,947	1971	< 50
1965		1972	
1966	21	1973	
1967	1	1974	
1968	1	1975	
1969	3		

Notes:

Sockeye Salmon Cook Inlet
245

Year	No. of Fish	Year	No. of Fish
1963	133,740	1970	172,400
1964	111,235	1971	91,900
1965	304,588	1972	
1966	242,618	1973	
1967	240,952	1974	
1968	160,693	1975	
1969	120,058		

Notes:

Sockeye Salmon Cook Inlet
243

Year	No. of Fish	Year	No. of Fish
1963	46	1970	2,800
1964	32	1971	< 50
1965	808	1972	
1966		1973	
1967	181	1974	
1968	491	1975	
1969	10,720		

Year	No. of Fish	Year	No. of Fish
1963		1970	
1964		1971	
1965		1972	
1966		1973	
1967		1974	
1968		1975	
1969			

Notes:

Commercial Harvest

Iliamna National Resource Range

Pink Salmon Cook Inlet 248				Pink Salmon Cook Inlet 245			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	65,973	1970	12,300	1963	5,913	1970	78,300
1964	17,769	1971	16,400	1964	77,593	1971	2,900
1965		1972		1965	2,429	1972	
1966	2,945	1973		1966	99,913	1973	
1967	13,097	1974		1967	3,481	1974	
1968	37,949	1975		1968	192,848	1975	
1969	78,831			1969	5,441		

Notes:

Notes:

Pink Salmon Cook Inlet 243							
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	16,341	1970	10,200	1963		1970	
1964	2,950	1971	15,700	1964		1971	
1965	3,452	1972		1965		1972	
1966		1973		1966		1973	
1967	4,243	1974		1967		1974	
1968	170,376	1975		1968		1975	
1969	1,326			1969			

Notes:

Notes:

Commercial Harvest

Iliamna National Resource Range

Chum Salmon Cook Inlet 248				Chum Salmon Cook Inlet 245			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	13,715	1970	81,200	1963	80,472	1970	254,200
1964	39,603	1971	24,700	1964	174,289	1971	121,800
1965		1972		1965	88,191	1972	
1966	12,688	1973		1966	119,660	1973	
1967	22,759	1974		1967	75,842	1974	
1968	24,016	1975		1968	196,807	1975	
1969	48,009			1969	85,635		
Notes:				Notes:			
Chum Salmon Cook Inlet 243							
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	177	1970	14,700	1963		1970	
1964	2,677	1971	1,600	1964		1971	
1965	3,175	1972		1965		1972	
1966		1973		1966		1973	
1967	1,462	1974		1967		1974	
1968	23,099	1975		1968		1975	
1969	5,184			1969			
Notes:				Notes:			

Commercial Harvest

Iliamna National Resource Range

Coho Salmon		Cook Inlet 248		Coho Salmon		Cook Inlet 245	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	95	1970	200	1963	36,056	1970	64,000
1964	115	1971	100	1964	57,313	1971	27,700
1965		1972		1965	28,337	1972	
1966	247	1973		1966	45,341	1973	
1967	54	1974		1967	39,503	1974	
1968	59	1975		1968	77,078	1975	
1969	120			1969	28,496		

Notes:

Notes:

Coho Salmon		Cook Inlet 243					
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	2	1970	100	1963		1970	
1964		1971	≤ 50	1964		1971	
1965	122	1972		1965		1972	
1966		1973		1966		1973	
1967	20	1974		1967		1974	
1968	42	1975		1968		1975	
1969	1			1969			

Notes:

Notes:

Commercial Harvest
Iliamna National Resource Range

King Salmon		Cook Inlet 248		King Salmon		Cook Inlet 245	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1	1970		1963	1,815	1970	900
1964	5	1971		1964	62	1971	1,700
1965		1972		1965	509	1972	
1966		1973		1966	312	1973	
1967		1974		1967	377	1974	
1968		1975		1968	486	1975	
1969	1			1969	1,902		

Notes:

Notes:

King Salmon		Cook Inlet 243					
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1	1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967	1	1974		1967		1974	
1968		1975		1968		1975	
1969	1			1969			

Notes:

Notes:

Commercial Value
Iliamna National Resource Range

Sockeye Salmon

Kvichak
324

Year	\$ Value	Year	\$ Value
1963	642,000	1970	12,997,000
1964	1,503,000	1971	5,623,000
1965	12,824,000	1972	1,252,000
1966	3,778,000	1973	
1967	1,706,000	1974	
1968	900,000		
1969	4,096,000		

Pink Salmon

Kvichak
324

Year	\$ Value	Year	\$ Value
1963		1970	5,400
1964		1971	15.50
1965		1972	25,000
1966	28,400	1973	
1967	3.40	1974	
1968	37,200		
1969	45		

Notes: Prices paid to fishermen based on prices paid to company fishermen

Notes: Prices paid to fishermen based on prices paid to company fishermen

Chum Salmon

Kvichak
324

Year	\$ Value	Year	\$ Value
1963	37,000	1970	32,000
1964	57,000	1971	77,000
1965	5,500	1972	62,000
1966	21,000	1973	
1967	18,000	1974	
1968	16,000		
1969	16,000		

Coho Salmon

Kvichak
325

Year	\$ Value	Year	\$ Value
1963	4,600	1970	100
1964	2,100	1971	100
1965	2,000	1972	32
1966	2,900	1973	
1967	900	1974	
1968	5,400		
1969	14.80		

Notes: Prices paid to fishermen based on prices paid to company fishermen

Notes: Prices paid to fishermen based on prices paid to company fishermen

Commercial Value
Iliamna National Resource Range

King Salmon

Kvichak
324

Sockeye Salmon

Nushagak
325

Year	\$ Value	Year	\$ Value	Year	\$ Value	Year	\$ Value
1963	10,000	1970	43,000	1963	565,000	1970	868,000
1964	28,000	1971	26,000	1964	952,000	1971	1,207,000
1965	22,000	1972	6,400	1965	532,000	1972	402,000
1966	11,000	1973		1966	819,000	1973	
1967	8,000	1974		1967	480,000	1974	
1968	14,000			1968	554,000		
1969	42,000			1969	680,000		

Notes: Prices paid to fishermen based on prices paid to company fishermen

Notes: Prices paid to fishermen based on prices paid to company fishermen

Pink Salmon

Nushagak
325

Chum Salmon

Nushagak
325

Year	\$ Value	Year	\$ Value	Year	\$ Value	Year	\$ Value
1963		1970	79,000	1963	62,000	1970	131,000
1964		1971	- 15	1964	173,000	1971	184,000
1965		1972	31,000	1965	5,300	1972	163,000
1966	467,000	1973		1966	48,000	1973	
1967	45	1974		1967	125,000	1974	
1968	290,000			1968	66,000		
1969	58			1969	90,000		

Notes: Prices paid to fishermen based on prices paid to company fishermen

Notes: Prices paid to fishermen based on prices paid to company fishermen

Commercial Value

Iliamna National Resource Range

Coho Salmon

Nushagak
325

King Salmon

Nushagak
325

Year	\$ Value	Year	\$ Value	Year	\$ Value	Year	\$ Value
1963	20,000	1970	3,700	1963	101,000	1970	201,000
1964	18,000	1971	8,000	1964	239,000	1971	209,000
1965	1,900	1972	3,300	1965	189,000	1972	138,000
1966	8,000	1973		1966	116,000	1973	
1967	23,000	1974		1967	212,000	1974	
1968	36,000			1968	172,000		
1969	33,000			1969	179,000		

Notes: Prices paid to fishermen based on prices paid to company fishermen

Notes: Prices paid to fishermen based on prices paid to company fishermen

Year	\$ Value	Year	\$ Value	Year	\$ Value	Year	\$ Value

Notes:

Notes:

Commercial Effort

Iliamna National Resource Range

NAKNEK-KVICHAK District (324)

Year	Number of Set Nets	Number of Drift Nets		
1963	167	565		
1964	220	730		
1965	218	1,039		
1966	206	1,074		
1967	185	563		
1968	169	552		
1969	282	1,160		
1970	198	1,045		
1971	168	947		
1972				
1973				
1974				
1975				

Commercial Effort

Iliamna National Resource Range

NUSHAGAK DISTRICT (325)

Year	Number of Set Nets	Number of Drift Nets		
1963				
1964	208	548		
1965	190	407		
1966	205	578		
1967	122	467		
1968	144	571		
1969	176	395		
1970	158	325		
1971	149	349		
1972				
1973				
1974				
1975				

Commercial Effort

Iliamna National Resource Range

ENTIRE BRISTOL BAY REGION

Year	Commercial Licenses	150 Fathom Drift Nets	100 Fathom Drift Nets	50 Fathom Set Nets	
1963	3,602	1,275	184	889	
1964	3,725	1,454	182	930	
1965	3,789	1,426	167	993	
1966	4,264	1,637	228	965	
1967	3,422	1,514	184	830	
1968	3,337	—	1,684	839	
1969	4,114	1,604	324	970	
1970	4,423	1,647	234	890	
1971	4,330	1,637	228	846	
	3,612	1,574	190	854	
	3,579	1,017	2,186	1,005	

Sport Harvest

Iliamna National Resource Range

King Salmon Naknek 324				King Salmon Naknek 324			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	2,730	1963		1970	152
1964		1971	2,417	1964	381	1971	
1965		1972	1,668	1965		1972	216
1966		1973		1966	266	1973	
1967	1,579	1974		1967		1974	
1968	2,203	1975		1968		1975	
1969	4,631			1969			

Notes: Total harvest

Notes: King Salmon Base Dock

King Salmon Naknek 324				Coho Salmon Naknek 324			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	581	1970	903	1963		1970	
1964	361	1971		1964	154	1971	
1965		1972	719	1965		1972	
1966		1973		1966	2	1973	
1967	464	1974		1967	117	1974	
1968		1975		1968		1975	
1969				1969			

Notes: Naknek Rapids Camp

Notes: King Salmon Base Dock

Sport Harvest

Iliamna National Resource Range

Sockeye Salmon				Arctic Char			
		Naknek 324				Naknek 324	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970	10	1963	33	1970	6
1964	55	1971		1964		1971	
1965		1972	7	1965		1972	3
1966	31	1973		1966	5	1973	
1967	77	1974		1967	17	1974	
1968		1975		1968		1975	
1969				1969			

Notes: King Salmon Base Dock

Notes: King Salmon Base Dock

Chum Salmon				Pink Salmon			
		Naknek				Naknek	
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964	413	1971	
1965		1972		1965		1972	
1966	2	1973		1966	0	1973	
1967	1	1974		1967	1	1974	
1968		1975		1968		1975	
1969				1969			

Notes: King Salmon Base Dock

Notes: King Salmon Base Dock

Sport Harvest

Iliamna National Resource Range

Coho Salmon

Naknek

Year	No. of Fish	Year	No. of Fish
1963	1	1970	27
1964		1971	
1965		1972	
1966		1973	
1967		1974	
1968		1975	
1969			

Notes: Naknek Rapids Camp

Sockeye Salmon

Naknek

Year	No. of Fish	Year	No. of Fish
1963	467	1970	528
1964	170	1971	
1965		1972	193
1966		1973	
1967	751	1974	
1968		1975	
1969			

Notes: Naknek Rapids Camp

Arctic Char

Naknek

Year	No. of Fish	Year	No. of Fish
1963	16	1970	21
1964	31	1971	
1965		1972	39
1966		1973	
1967	30	1974	
1968		1975	
1969			

Notes: Naknek Rapids Camp

Chum Salmon

Naknek

Year	No. of Fish	Year	No. of Fish
1963		1970	3
1964	1	1971	
1965		1972	21
1966		1973	
1967		1974	
1968		1975	
1969			

Notes: Naknek Rapids Camp

Sport Harvest

Iliamna National Resource Range

Pink Salmon				Naknek			
Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963	1	1970	14	1963		1970	
1964	191	1971		1964		1971	
1965		1972	3	1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes: Naknek Rapids Camp

Notes:

Year	No. of Fish	Year	No. of Fish	Year	No. of Fish	Year	No. of Fish
1963		1970		1963		1970	
1964		1971		1964		1971	
1965		1972		1965		1972	
1966		1973		1966		1973	
1967		1974		1967		1974	
1968		1975		1968		1975	
1969				1969			

Notes:

Notes:

Sport Effort

Iliamna National Resource Range
NAKNEK RIVER (324)

Year	No. of Anglers	No. of Hours	No. of Angler-Days		
1963	-	-	-		Note: King Salmon Base Dock
1964	501	1,729	-		
1965	-	-	-		
1966	249	983	-		
1967	578	1,862	1,293		
1968	-	-	1,495		
1969	-	-	1,140		
1970	362	1,189	1,589		
1971	-	-	1,259		
1972	377	1,422	936		

Sport Effort

Iliamna National Resource Range

NAKNEK RIVER (324)

Year	No. of Anglers	No. of Hours	No. of Angler-Days		
1963	466	2,963	-		Note: Naknek Rapids Camp
1964	434	3,001	-		
1965	-	-	-		
1966	1,054	-	-		
1967	456	3,038	2,916		
1968	-	-	2,252		
1969	-	-	2,672		
1970	362	1,189	1,520		
1971	-	-	1,382		
1972	377	1,668	2,107		

Anadromous Fish Inventory Update System
Iliamna National Resource Range, Alaska

Comprehensive statistical summaries of anadromous fish data for the proposed refuge are compiled in Annual Management Report, Bristol Bay Area, an informal report of the Bristol Bay area biologists of the Alaska Department of Fish and Game and Annual Management Report, Cook Inlet Area, a similar report by the Cook Inlet area biologists. These documents are prepared at the Anchorage and Homer offices respectively with contributions from various field personnel. Usually these data will be available in the spring following field season; probably April or May would be the opportune time to request these reports for the previous year.

Past investigations have been conducted by the Division of Sport Fish, Alaska Department of Fish and Game under the Federal Aid in Fish Restoration Program. These studies are titled Inventory and Cataloging of Sport Fish and Sport Fish Waters in Bristol Bay and Lower Kuskokwim Drainages. It is not often that these reports contain extensive material on anadromous fish, but they usually focus on rainbow trout populations. Recent reports in this series have been compiled by Louis Gwartney, fishery biologist. Again, these data should become available in the spring following the previous summer's field season.

A number of Alaska Department of Fish and Game serial publications regularly contain data on the Iliamna area. These series should be consulted from time to time or a request placed with the Division of Commercial Fisheries, Alaska Department of Fish and Game, Juneau to regularly receive these publications. The series which contain Iliamna information are Informational Leaflets, Bristol Bay Data Reports, Technical Data Reports. Usually the Technical Data Reports contain data on catch and escapement as well as smolt counts.

The Informational Leaflet series contains various miscellaneous reports. The Bristol Bay Data Report series contains comprehensive summaries and statistics of the fishery, as well as specific reports on various aspects of the individual stocks and their management. These reports are released on an irregular basis and a standing request for all publications; and these series would probably be most helpful in maintaining a current awareness of the Iliamna Refuge

Many publications on the fisheries of the Iliamna area are prepared by the Fishery Research Institute, University of Washington, Seattle. A standing request for their circular and contribution series would be helpful in maintaining an awareness of Iliamna information. In addition, a yearly summary of research entitled Research in Fisheries (year) is prepared each year. A standard request for this volume should be made.

The National Marine Fisheries Service has done considerable work in the Iliamna area. Studies by NMFS biologists and publications released are usually listed the Northwest Fisheries Center Monthly Report. This publication can be requested from the National Marine Fisheries Service, Northwest Fisheries Center, 2725 Montlake Boulevard East, Seattle, Washington 98105.

Anadromous Fish Inventory Study Needs
Iliamna National Resource Range, Alaska

1. Anadromous fish have been more intensively studied in the Iliamna area than in any other region of the state. However, almost all this research has been concentrated on sockeye salmon. Therefore, emphasis needs to be done collecting data for the other four species of salmon--chum, coho, king and pink.

2. Aerial surveys need to be expanded to ascertain escapement levels for other than sockeye salmon. Particularly important are additional data on escapements for the headwaters of the Nushagak and Mulchatna Rivers.

3. Aerial escapement surveys need to be increased for the Cook Inlet drainages within the area of ecological concern. Stock levels in these areas are not well known.

4. Subsistence data needs to be collected in more detail for individual villages in the Iliamna area. Gross subsistence harvests are recorded, but detailed subsistence data are lacking.

5. Sport harvest data (creel census) needs to be collected, particularly from outlying lodges and sport recreation charter locales. Little is presently known of the sport fishery which occurs in this area beyond the detailed information collected for the king salmon of the Naknek River.

6. Commercial harvest data for the subdistricts along the western shore of Cook Inlet needs to be recorded in more detail. Only scattered records of the catch in these areas exists from previous years.

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Iliamna National Resource Range

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