

State of Alaska
Department of Fish and Game
Nomination for Waters
Important to Anadromous Fish

1993
Year of Revision

ALASKA DEPT. OF
FISH & GAME

DEC 18 1991

REGION II
HABITAT DIVISIO

Anadromous Water Catalog Volume S. E.
USGS Quad Two B-2
Name of Waterway Montana Creek
Anadromous Water Catalog Number of Waterway 111-50-10500 - 2003-3054

Change to _____ Atlas
_____ Catalog
 Both
Addition
Deletion _____
Correction _____

For Office Use

Nomination # 92 302

Richard Reed 12/17/91
Regional Supervisor Date

Ed Weir 12/16/92

J. Inoue 1/7/93
Drafted Date

(B) on a hatched map

Name addition:
USGS name _____
Local name _____

| Species | Date(s) Observed | Spawning | Rearing | Migration |
|---------------------|----------------------------|---------------------|---|-----------|
| <u>CoHo</u> | <u>October annually</u> | <u>5-100 adults</u> | <u>many observed in summer</u> | |
| <u>Dolly Varden</u> | <u>October annually</u> | <u>50-100 adult</u> | <u>many rearing DV observed in summer</u> | |
| <u>Chum</u> | <u>July - Aug annually</u> | <u>50-100 adult</u> | | |

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

Salmon survey counts of this tributary are included in total survey counts for Montana - McGinnis Creeks

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print) Michael R Bethers

Date: 12/16/91 Signature: _____
Address: _____
Signature of Area Biologist: _____




MIKE BETHERS
AREA MANAGEMENT BIOLOGIST
JUNEAU - YAKUTAT AREA

DEPARTMENT OF FISH & GAME
SOUTHEAST REGIONAL OFFICE
DIVISION OF SPORT FISH

DOUGLAS ISLAND CENTER BLDG.
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JNO B-2

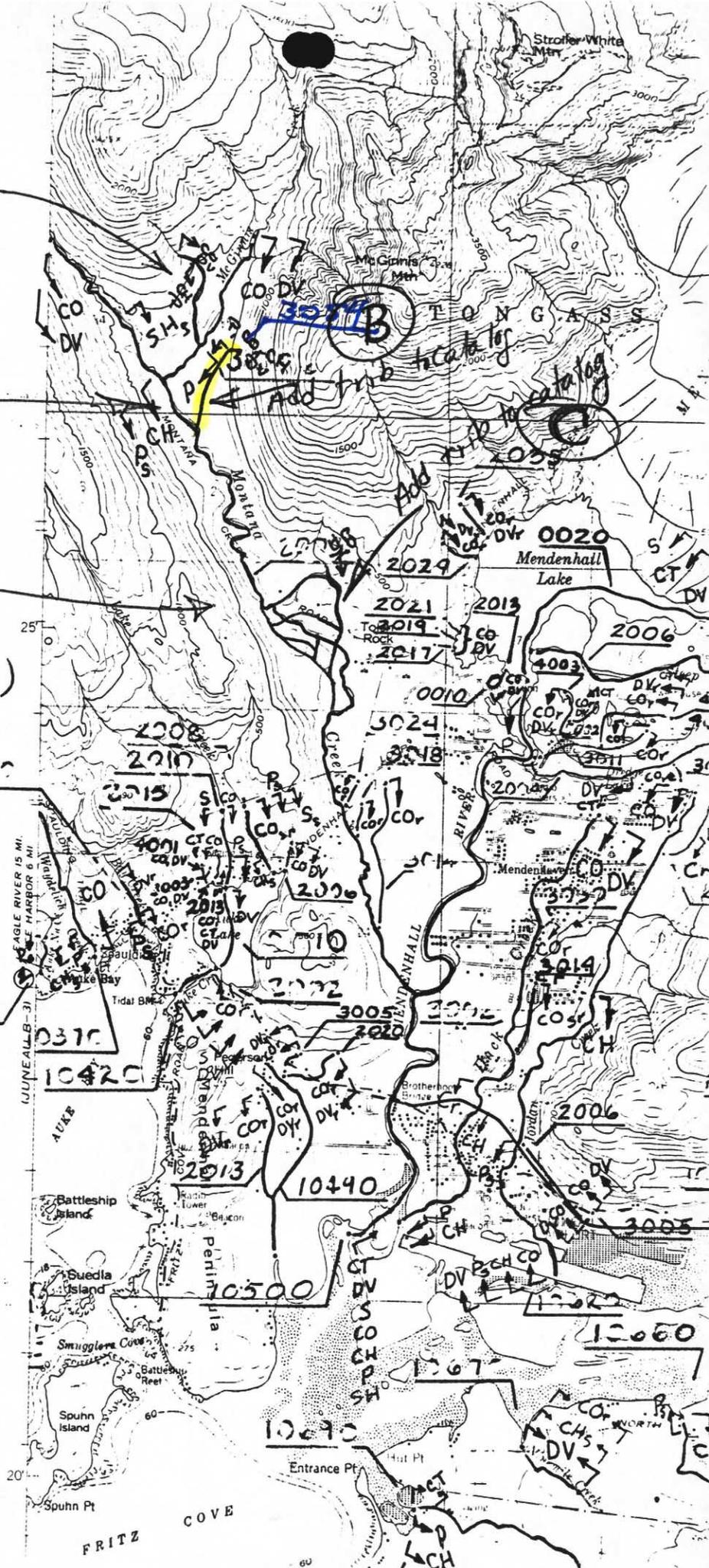
"Add Springs Pond" Creek

(A)

"Little McGinnis" Creek

Change
Montana Creek
Stream Channel
(now braided as
shown on this map)
(both sides of Montana Cr Rd)

ADD STREAM
111-50-10500-2003
- 3054
w/ COs CHs



ALREADY IN ATLAS

AWC Volume SE SC SW W AR IN USGS Quad Juneau B-2

Anadromous Water Catalog Number of Waterway 111-50-10500-2003-3054-3XXX

Name of Waterway Little McGinnis Creek USGS name Local name X

Addition X Deletion Correction Backup Information X

For Office Use

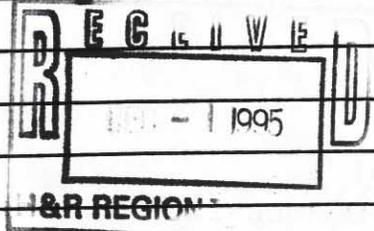
| | | |
|--|--|------------------------|
| Nomination # <u>96 043</u> | <u>Jana Heath Handert</u> Regional Supervisor | <u>1-19-96</u> Date |
| Revision Year: <u> </u> | <u>Dean W. Olykes</u> | <u>2/5/96</u> |
| Revision to: Atlas <u> </u> Catalog <u> </u> | <u>N/A</u> | <u> </u> |
| Both <u> </u> | Drafted | Date |
| Revision Code: <u>F-1</u> | | |

OBSERVATION INFORMATION

| Species | Date(s) Observed | Spawning | Rearing | Migration | Anadromous |
|--------------------|------------------|-----------|---------|-----------|------------|
| <u>Coho Salmon</u> | <u>10/6/95</u> | <u>43</u> | | | |
| | <u>10/13/95</u> | <u>36</u> | | | |
| | <u>10/16/95</u> | <u>11</u> | | | |
| | | | | | |

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as any other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: See Attachment



ALASKA DEPT. OF FISH & GAME

Name of Observer (please print) Brian J. Glynn JAN 24 1996
 Date: 11/30/95 Signature: Brian J. Glynn
 Address: PO Box 211196
Auke Bay, Alaska 99821

REGION II HABITAT AND RESTORATION DIVISION

This certifies that in my best professional judgement and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: Mark Johnson
Jamie Schimpf

Supporting documentation for submission of Anadromous Waterway 111-50-10500-2003-3XXX

Little McGinnis Creek flows into the east side of upper Montana Creek approximately 1/4 mile downstream of the confluence of Montana and McGinnis creeks. Since the late 1970's, it has been included in an annual survey of the entire Montana/McGinnis Creek drainage and it is considered to be one of the major tributaries for coho salmon spawning in this system.

The numbers of coho salmon observed during escapement surveys of Montana/McGinnis Creek is reported as a total of the number of coho seen throughout the entire drainage. The individual number observed in Little McGinnis Creek was not always separately recorded. However; the number of coho salmon observed in Little McGinnis Creek during the 1995 surveys are listed in the following table:

Coho salmon observed in Little McGinnis Creek during escapement surveys in 1995.

| <u>Survey Date</u> | <u>Live Coho</u> | <u>Dead Coho</u> | <u>Total</u> | <u>Observers</u> |
|--------------------|------------------|------------------|--------------|----------------------------|
| 10/6/95 | 23 | 20 | 43 | Brian Glynn, Suzanne Crete |
| 10/13/95 | 28 | 8 | 36 | BrianGlynn, Mark Schwan |
| 10/16/95 | 8 | 3 | 11 | Brian Glynn, Edgar Jones |

A general description of the characteristics of Little McGinnis Creek is given on page 85 of the document Juneau Fish Habitat Assessment, (Alaska Department of Fish and Game, March 1995).

Chapter 41

Montana Creek

Anadromous Stream Catalog Number:
111-50-10500-2003

Location: Lat. 58°22'54" N.
Long. 134°35'47" W.
(west side of Mendenhall Valley)

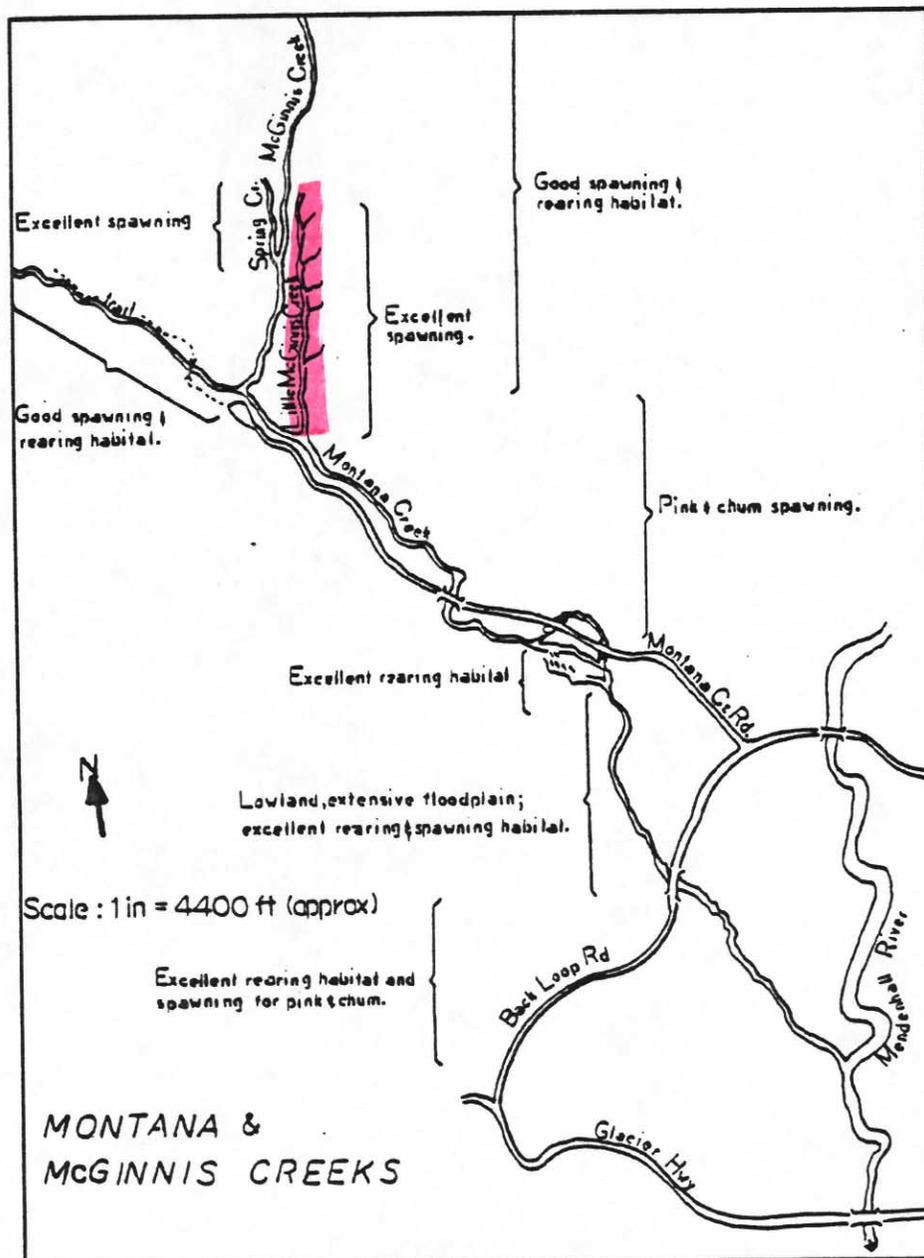


Figure 41.1 Montana Creek.

Description

Montana Creek is the largest tributary to the Mendenhall River. It originates in a high mountain meadow and flows for approximately 8 miles before entering the Mendenhall River about 1 mile upstream from Glacier Highway (figure 41.1).

The watershed drains a 15-square-mile-area. The stream gradient varies from steep in the upper drainage to low in the lower section. The water is clear with a brownish tint.

McGinnis Creek (Chapter 37) is the main tributary of Montana Creek and actually provides more water to the Montana Creek system than the headwaters of Montana Creek.

Little McGinnis Creek (unofficial name) enters Montana Creek about 1/4 mile downstream from the end of the Montana Creek road. It is a clear, spring-fed stream approximately 3/4 mile long and 6 feet wide at its mouth.

Fish Species Present

Montana Creek has wild stocks of coho, pink, chum, and sockeye salmon, cutthroat and rainbow/steelhead trout, and Dolly Varden.

King salmon adults straying from the Mendenhall Ponds salmon rearing facility spawned in Montana Creek from 1976 through 1978, but they did not produce a self-perpetuating run.

Montana Creek has a very small run of wild steelhead. In 1976, 1986 and 1987, steelhead smolts were released into Montana Creek to provide new sport fisheries; however, the releases were not successful, and viable fisheries failed to develop.

Montana Creek fish populations have been documented through minnow trap surveys and salmon escapement counts. Minnow fish trap data for Montana Creek are presented in table 41.1.

Table 41.1. Summary of rearing fish trapping results for Montana Creek.

| DATE | STREAM/LOCATION | NO. TRAPS | SPECIES CAUGHT | | |
|----------|----------------------------|-----------|----------------|--------------|-----------------|
| | | | COHO SALMON | DOLLY VARDEN | CUTTHROAT TROUT |
| 08/03/70 | various points | 20 | 102 | 130 | 5 |
| 10/05/77 | rifle range area | 10 | 266 | 103 | 1 |
| 09/10/84 | above Mendenhall Loop Rd. | 8 | 393 | 3 | 1 |
| 09/11/84 | Beaver Slough | 7 | 495 | 99 | 0 |
| 09/11/84 | Montana Creek Rd. slough | 1 | 109 | 12 | 0 |
| 09/17/84 | above Montana Creek bridge | 7 | 112 | 33 | 0 |

Salmon escapement counts have been conducted on Montana Creek on an infrequent basis since 1960 (table 41.2). Montana Creek is a very important producer of coho and chum salmon for Juneau area fisheries. A Dolly Varden mark and recapture population study conducted on Montana Creek in

1983 revealed that at least 19,000 Dolly Varden (ranging in length from about 6 inches and larger) utilized Montana Creek during the summer season. This study, and the existing information on rearing fish, indicates that Montana Creek is a major producer of Dolly Varden in the Juneau area.

Table 41.2. Salmon escapement counts for Montana Creek. Counts include McGinnis Creek, Spring Creek, Little McGinnis Creek, and Montana Creek upstream from Back Loop Road bridge.

| DATE | COHO | CHUM | PINK | SOCKEYE | CHINOOK |
|------|--------------|-------------|------------|------------|----------|
| 1960 | ... | many | ... | ... | ... |
| 1962 | ... | 100 (8/10) | ... | ... | ... |
| 1966 | ... | 331 (7/22) | ... | ... | ... |
| 1967 | ... | 400 (8/11) | ... | ... | ... |
| 1968 | ... | 800 (7/12) | ... | ... | ... |
| 1969 | ... | 500 (7/23) | ... | ... | ... |
| 1975 | ... | 80 (7/22) | 50 (7/22) | ... | ... |
| 1976 | ... | 25 (7/16) | 0 | ... | 33 |
| 1977 | ... | 440 (7/26) | 8 (8/09) | ... | 348 |
| 1978 | 7 (11/30) | ... | 0 | ... | ... |
| 1979 | ... | 614 (7/08) | 0 | ... | ... |
| 1980 | ... | 451 (8/31) | 0 | ... | ... |
| 1981 | 227 (10/27) | ... | 0 | ... | 17 |
| 1982 | 545 (10/20) | ... | 0 | ... | ... |
| 1983 | 636 (10/10) | 1 (8/31) | 917 (8/31) | 210 (8/31) | ... |
| 1984 | 581 (10/29) | ... | 0 | ... | ... |
| 1985 | 810 (10/08) | 2647 | 876 (7/30) | ... | ... |
| 1986 | 60 (10/20) | 320 (7/30) | ... | ... | ... |
| 1987 | 314 (10/08) | 2913 (8/07) | 773 (8/07) | ... | ... |
| 1988 | 164 (10/21) | 1397 (7/22) | ... | ... | ... |
| 1989 | 566 (10/23) | 925 (7/19) | 114 (8/11) | 10 (7/17) | ... |
| 1990 | 1711 (10/03) | 305 (8/01) | 4 (8/30) | ... | 3 (8/30) |
| 1991 | 1425 (10/16) | 197 (8/07) | 23 (8/14) | ... | 4 (8/07) |

In 1952 and 1953, Montana Creek was seeded with nearly 180,000 eyed king salmon eggs, in an attempt to develop a king salmon run in the stream. The effort, however, was not successful. From 1986 through 1989, Montana Creek was stocked with over 144,000 king salmon smolts which had been reared at Snettisham Hatchery. Montana Creek lacked a good "holding" area in which to imprint the king salmon smolts, and consequently, returns from the smolt releases were poor. The king salmon stocking program in Montana Creek ended in 1989.

Approximately 31,000 steelhead smolts (total) were stocked into Montana Creek in 1986 and 1987, but returns were poor, and only a small return of adults to the stream was generated for one year. In 1990, approximately 6,000 steelhead smolts from Snettisham Hatchery were released into Montana Creek, and returns from this release are not expected until at least 1992.

Steelhead enhancement for the Juneau area is on hold until further planning and research are conducted; however, Montana Creek remains a likely release site for steelhead.

Fish Habitat

The Montana Creek drainage provides a wide variety of fish habitat. In the upper reaches, the water flows fast, and there are numerous pools with excellent overhead and instream woody cover.

In the middle section, the gradient is lower and the pools are larger. In the lower section, the gradient is low, and the stream provides excellent rearing conditions for coho salmon and cutthroat trout.

Chum and coho salmon, Dolly Varden, and cutthroat trout spawn in the middle and upper reaches, with the heaviest spawning occurring in the upper mainstem of Montana, Little McGinnis, and McGinnis Creeks.

Numerous small inlets are found in the wetlands adjacent to the lower mainstem and they provide excellent seasonal rearing habitat.

Public Use

Montana Creek has been a favorite location for sport fishing for many years. Conservative Dolly Varden fishing regulations reduced angling effort for a period of years, and Montana Creek is the only stream open to sport fishing that prohibits the use of bait and is restricted to the use of artificial lures only.

Montana Creek presently provides 1,500 to over 2,000 angler hours of places to fish for wild trout and salmon on the Juneau road system. Angling effort and sport catch data for Montana Creek are presented in table 41.3.

Attempts to provide enhanced king salmon and steelhead trout fisheries at Montana Creek were unsuccessful.

The ADF&G Sport Fish Division, in cooperation with the City and Borough of Juneau (CBJ), constructed an angler access trail from the mouth of Montana Creek upstream to the rifle range bridge in 1989. This trail is used extensively, both by anglers and by hikers. Montana Creek and its adjacent flood plains are also used by

the public for outdoor study. The Montana Creek trail, constructed by ADF&G and CBJ, extends from the Mendenhall River to the upper bridge on Montana Creek and is a very popular hiking trail.

Land Ownership

Montana Creek heads on U.S. Forest Service property and flows through state, private, and CBJ holdings. At the present time, CBJ is proceeding with acquisition of land from the mouth of Montana Creek upstream to the Mendenhall Loop Road to use for public recreation.

Land Use

A gravel road runs adjacent to Montana Creek for almost 2 miles. Sedimentation from the road currently poses the greatest habitat problem to Montana Creek.

There is some recreational gold mining activity in Montana Creek. Panning is allowed any time of year; however, the use of small dredges is only allowed during the month of June.

In the future, Montana Creek will be subjected to many land use activities that could impact its fisheries values. CBJ owns large parcels of stream bank property, and it would be advanta-

geous for CBJ to hold the property for public recreation uses.

Conclusion

Montana Creek is an excellent producer of fish, provides excellent public access, and presently receives a high level of public use. The stream is located close to the densely populated areas in Mendenhall Valley and provides excellent opportunities for development of new fisheries through the release of hatchery-reared smolts. Future land use development could have major impacts on the stream and its fishery values.

Recommendations

Montana Creek should be designated a top priority fish stream and given protective status to maintain its excellent fishery values and public access. Proposals for streamside development must be critically reviewed to prevent degradation of its habitat values.

The feasibility of excavating a streamside salmon smolt release facility should be determined. Such a pond would provide an excellent facility for imprinting hatchery-reared chinook and steelhead smolt to the Montana Creek system, and it would provide additional rearing habitat. ■

Table 41.3. Angler effort and harvest data at Montana Creek, by species and sampling period, for years 1983, 1985, 1986, and 1987.

| YEAR | SAMPLE PERIOD | ROD HOURS | DOLLY VARDEN | CHUM SALMON | PINK SALMON | COHO SALMON | CUTTHROAT TROUT |
|--------------|----------------|--------------|--------------|-------------|-------------|-------------|-----------------|
| 1983 | 04/23-10/01/83 | 1,262 | 315 | 0 | 211 | 0 | 0 |
| 1985 | 07/08-10/27/85 | 529 | 653 | 64 | 10 | 0 | 0 |
| 1986 | 07/07-09/29/86 | 1,750 | 343 | 17 | 0 | 0 | 127 |
| 1987 | 04/20-10/11/87 | 2,316 | 292 | 0 | 0 | 26 | 93 |
| TOTAL | | 5,857 | 1,603 | 81 | 221 | 26 | 220 |

