APPENDIX A

Decision Rules Used to Designate Urban, Rural, Local and Nonlocal

Urban/Rural

- 1. Urban includes all towns with 1990 U.S. Census populations of 2,500 or more.
- 2. Communities are designated urban even though their populations are under 2,500 if they lie within an "urbanized area." Urbanized areas are defined as all communities and places connected by highway to urban centers with populations of 6,000 or more <u>and</u> lying <u>within</u> a 20-mile radius of the urban center (for cities from 6,000 to 20,000 population) or a 40-mile radius (for cities of more than 20,000). The radius is measured from the center of the city as denoted by the city location point on maps, rather than from the city limits. An exception to the radius rule is that the Anchorage "urbanized area" does not extend north of Knik Arm nor south of Turnagain Arm.

The cities of 6,000 to 20,000 population are Ketchikan, Kenai, Kodiak and Sitka. The cities above 20,000 are Anchorage, Fairbanks and Juneau.

Table 1 represents annual counts of yearend permits held by each urban community. The table is split into two groups to illustrate sensitivity to the urban/rural threshold level. For example, if the threshold level was set at a population of 4,000 people instead of 2,500, the first group of communities listed in Table 1 would be re-classified as rural. This would result in a gain of 1,462 rural permits by yearend 2000.

Local/Nonlocal

1. On the coast, local/nonlocal boundaries are based on Fish and Game salmon management areas. Exceptions include communities which have been within more than one Fish and Game management area as a result of the movement of Fish and Game boundaries since 1975. These communities have been made local to both areas (see below). In addition, Cape Yakataga and Port Heiden are "overlap" areas that can contain more than one assigned permit and management area designation. Residents of these two areas will be local for both relevant overlap areas. Lastly, residences in both Southeast and Yakutat are designated local to the hand and power troll fisheries.

Communities Local to More Than One Alaska Department of Fish and Game Management Area

Community Local Management Areas

Port Heiden Bristol Bay/ Peninsula/ Aleutians

Cape Newenham Bristol Bay/ Kuskokwim

Communities Local to More Than One ADF&G Management Area (continued)

Community Local Management Areas

Cape Yakataga Prince William Sound/ Yakutat Cape Romanzof Kuskokwim/ Lower Yukon Chevak Kuskokwim/ Lower Yukon Hooper Bay Kuskokwim/ Lower Yukon Kuskokwim/ Lower Yukon Igiak Scammon Bay Kuskokwim/ Lower Yukon St. Michael Lower Yukon/ Norton Sound Stebbins Lower Yukon/ Norton Sound

- 2. The Upper and Lower Yukon and Kuskokwim River fishery areas are based on immediate river drainages. The Lower Yukon area extends up the Yukon River to just above Holy Cross. The Upper Yukon "local" area extends up the Koyukuk tributary as far as Huslia, the Chandalar as far as Venetie and the Tanana to Delta Junction, 30 miles beyond the upper limits of commercial fishing on that river. The Kuskokwim local area extends 30 miles upriver beyond the limit of commercial fishing on that river and includes the Stony River tributary as far as Lime Village and the Holitna River as far as Kasheglok.
- 3. The Bristol Bay area extends inland up the Nushagak River and includes the entire Tikchik Lake system as well as Lake Iliamna and Lake Clark.
- 4. The Cook Inlet local area includes all but the eastern edge of the Anchorage Borough. The line dividing the Cook Inlet and Prince William Sound ADF&G regulatory areas is extended inland directly north. That is, the line runs from Cape Fairfield at 148°50′W, north to 61°32′N (just north of Bodenburg Butte and south of Palmer) and thence west to 150°30′W (to the community of Susitna) and thereafter follows, at a little distance inland, the western shore of Cook Inlet, ending at Cape Douglas.
- 5. The Prince William Sound area extends up the Copper River to the confluence of the Bremner River. Taking in the census subareas of Prince William Sound and Cordova, but not the Copper River subarea. It excludes the interior Copper River as well as the Edgerton, Richardson and Glenn Highway communities.
- 6. Local/Nonlocal boundaries for the Westward Herring Fisheries is based on ADF&G regulatory districts rather than entire management areas. Hering stocks in Western Alaska are managed and permitted specific to these districts. The local definitions for these fisheries are based on the districts as defined in 1993 ADF&G Commercial Herring Fishing Regulations and extend 30 miles beyond those district boundaries. The districts therein are defined as waters bounded by specified coastline features or latitudes. The local/nonlocal definition includes population centers on the coast within those boundaries as well as within a 30 mile radius extending inland and beyond the northern and southern district boundaries. Because the Nelson

Island and Nunivak Island districts overlap with respect to latitude and because pre-limitation permitting combined these fisheries, they will share the same local communities for the purposes of this study.

Comparison of Urban/Rural and Local/Nonlocal Standards in this Report With Those in Dr. Steve Langdon's Permit Transfer Study

Beginning with the 1990 edition of this report, a population of 2,500 has been used in conjunction with 1990 Census figures for the threshold distinguishing urban from rural. Langdon¹ used a threshold of 2,000 and 1978 population estimates obtained from the Alaska Department of Community and Economic Development. Towns that differ in urban/rural designations from Langdon's work and this study are:

| <u>TOWN</u> | LANGDON | <u>CFEC</u> |
|-------------|----------------|-------------|
| Cordova | Urban | Rural |
| Wrangell | Urban | Rural |
| Girdwood | Rural | Urban |
| Nikiski | Rural | Urban |
| Sterling | Rural | Urban |
| Unalaska | Rural | Urban |

The designation of local fishery areas in this report differs from the version Langdon used in that substantial areas of interior Alaska are declared "nonlocal" to any fishery on the assumption that these areas are not truly economically or traditionally oriented to commercial coastal or river fisheries. Certain offshore islands of the Bering Sea (St. Lawrence, St. George, St. Paul, St. Matthew and Little Diomede) are also "nonlocal" to any commercial fisheries under limitation.

-

¹ See Langdon, "Transfer Patterns in Alaska Limited Fisheries," 1980.

TABLE 1, APPENDIX A. Permits Held by Alaska Urban Locals and Non-locals by City and Year, 1975-2000

| | Assigned | | | | | | | | | | | | | | |
|-------------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | ulation* | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
| SEWARD | 2699 | 47 | 45 | 59 | 52 | 55 | 52 | 51 | 58 | 65 | 67 | 69 | 72 | 66 | 64 |
| NIKISKI | 2743 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 9 | 25 | 34 | 42 | 45 |
| KOTZEBUE | 2743 | 0 | 90 | 126 | 133 | 139 | 148 | 151 | 152 | 154 | 154 | 156 | 154 | 151 | 154 |
| PALMER | 2866 | 22 | 24 | 30 | 33 | 38 | 38 | 39 | 39 | 44 | 44 | 48 | 48 | 54 | 46 |
| UNALASKA | 3089 | 1 | 1 | 3 | 4 | 3 | 4 | 4 | 4 | 7 | 5 | 6 | 7 | 5 | 2 |
| PETERSBURG | 3207 | 140 | 148 | 178 | 191 | 195 | 199 | 210 | 279 | 419 | 418 | 420 | 432 | 440 | 440 |
| BARROW | 3469 | 140 | 140 | 178 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 1 | 2 | 3 |
| NOME | 3500 | 3 | 13 | 16 | 19 | 23 | 26 | 33 | 37 | 34 | 33 | 35 | 33 | 35 | 31 |
| | | 103 | 123 | 163 | 179 | 203 | 216 | 214 | | 222 | | 254 | 270 | | |
| HOMER STEPLING | 3660 | | | | | | | | 217 | | 233 | | | 289 | 311 |
| STERLING | 3802 | 4 | 8 | 10 | 6 | 6 | 8 | 9 | 9 | 9 | 12 | 13 | 15 | 16 | 16 |
| Subtotal | | 321 | 453 | 586 | 618 | 663 | 691 | 711 | 796 | 956 | 978 | 1027 | 1066 | 1100 | 1112 |
| ESTER | 147 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| SALCHA | 354 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 |
| SAXMAN | 369 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| TWO RIVERS | 453 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| FRITZ CREEK | 1426 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| NORTH POLE | 1456 | 0 | 1 | 3 | 4 | 3 | 3 | 3 | 2 | 4 | 5 | 10 | 13 | 11 | 13 |
| DUTCH HARBOR | 3089 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 2 | 1 | 1 | 1 |
| SOLDOTNA | 3482 | 86 | 111 | 129 | 127 | 140 | 149 | 153 | 147 | 157 | 160 | 153 | 154 | 160 | 164 |
| WASILLA | 4028 | 11 | 8 | 12 | 16 | 18 | 22 | 29 | 33 | 33 | 43 | 54 | 59 | 54 | 64 |
| VALDEZ | 4068 | 23 | 38 | 33 | 31 | 29 | 31 | 35 | 38 | 39 | 37 | 39 | 42 | 39 | 38 |
| ADAK | 4633 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BETHEL | 4674 | 15 | 148 | 174 | 174 | 176 | 182 | 183 | 190 | 192 | 190 | 196 | 201 | 194 | 191 |
| KENAI | 6327 | 202 | 216 | 220 | 228 | 222 | 218 | 212 | 234 | 249 | 239 | 239 | 237 | 231 | 231 |
| KODIAK | 6365 | 274 | 323 | 357 | 355 | 355 | 346 | 366 | 386 | 387 | 406 | 446 | 445 | 443 | 430 |
| KETCHIKAN | 8263 | 203 | 220 | 229 | 229 | 243 | 237 | 232 | 279 | 475 | 457 | 441 | 424 | 419 | 397 |
| WARD COVE | 8263 | 7 | 11 | 14 | 15 | 14 | 13 | 15 | 23 | 47 | 42 | 43 | 46 | 52 | 52 |
| MT EDGECUMBE | 8588 | 2 | 2 | 2 | 3 | 2 | 3 | 5 | 20 | 47 | 41 | 10 | 4 | 3 | 1 |
| SITKA | 8588 | 133 | 145 | 162 | 157 | 158 | 163 | 156 | 210 | 356 | 378 | 401 | 417 | 412 | 411 |
| COLLEGE | 11249 | 4 | 5 | 1 | 1 | 1 | 3 | 3 | 4 | 6 | 5 | 4 | 2 | 3 | 3 |
| AUKE BAY | 26751 | 6 | 8 | 12 | 13 | 16 | 18 | 20 | 26 | 59 | 61 | 64 | 67 | 61 | 58 |
| DOUGLAS | 26751 | 30 | 35 | 37 | 35 | 35 | 35 | 32 | 49 | 83 | 77 | 76 | 77 | 74 | 73 |
| JUNEAU | 26751 | 172 | 176 | 184 | 208 | 215 | 224 | 227 | 328 | 564 | 558 | 508 | 485 | 465 | 454 |
| FAIRBANKS | 30843 | 27 | 35 | 44 | 47 | 42 | 59 | 67 | 86 | 102 | 105 | 108 | 114 | 112 | 111 |
| ANCHORAGE | 226338 | 433 | 517 | 554 | 570 | 577 | 600 | 640 | 690 | 717 | 699 | 669 | 656 | 640 | 640 |
| BIRCHWOOD | 226338 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BIRD CREEK | 226338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHUGIAK | 226338 | 16 | 24 | 24 | 19 | 20 | 24 | 28 | 29 | 38 | 37 | 41 | 41 | 35 | 39 |
| EAGLE RIVER | 226338 | 36 | 38 | 38 | 47 | 48 | 51 | 48 | 43 | 45 | 46 | 45 | 55 | 61 | 56 |
| EKLUTNA | 226338 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ELMENDORF | 226338 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| AFB | 220330 | | Ū | 1 | 1 | 2 | 1 | Ü | Ū | Ü | v | Ü | _ | Ü | Ü |
| FT RICHARDSON | 226338 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| GIRDWOOD | 226338 | 1 | 3 | 3 | 4 | 4 | 5 | 7 | 9 | 7 | 7 | 6 | 7 | 10 | 11 |
| INDIAN | 226338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SPENARD | 226338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| Subtotal | | 1683 | 2065 | 2233 | 2284 | 2320 | 2387 | 2462 | 2829 | 3612 | 3596 | 3557 | 3552 | 3488 | 3447 |
| Grand Total | | 2004 | 2518 | 2819 | 2902 | 2983 | 3078 | 3173 | 3625 | 4568 | 4574 | 4584 | 4618 | 4588 | 4559 |
| | | | | | | | | | | | | | | | |

^{*} The 1990 U.S. Census is the source of the assigned city populations. Suburban areas have been assigned the city population figures of adjacent urban communities.

TABLE 1, APPENDIX A. Permits Held by Alaska Urban Locals and Non-locals by City and Year, 1975-2000

| | 1000 | 1000 | 1001 | 1005 | 4000 | 1001 | 400= | 1005 | 400= | 1000 | 1000 | • • • • • | Initial | |
|---------------|------|------|------|------|------|------|------|------|------|------|------|-----------|---------|--------|
| City | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Level | Change |
| SEWARD | 64 | 65 | 56 | 55 | 55 | 50 | 48 | 51 | 48 | 52 | 49 | 57 | 98 | -41 |
| NIKISKI | 41 | 43 | 43 | 45 | 42 | 49 | 53 | 54 | 57 | 56 | 54 | 56 | 3 | 53 |
| KOTZEBUE | 157 | 153 | 147 | 144 | 142 | 140 | 139 | 136 | 136 | 126 | 125 | 126 | 158 | -32 |
| PALMER | 53 | 54 | 56 | 60 | 63 | 64 | 70 | 64 | 66 | 66 | 67 | 66 | 32 | 34 |
| UNALASKA | 2 | 2 | 3 | 2 | 4 | 4 | 5 | 3 | 3 | 6 | 4 | 5 | 2 | 3 |
| PETERSBURG | 445 | 455 | 445 | 446 | 458 | 457 | 453 | 454 | 554 | 598 | 616 | 621 | 572 | 49 |
| BARROW | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 6 | 5 | 7 | 7 | 8 | 2 | 6 |
| NOME | 29 | 36 | 33 | 35 | 30 | 34 | 32 | 34 | 34 | 34 | 28 | 30 | 34 | -4 |
| HOMER | 330 | 350 | 363 | 361 | 359 | 376 | 405 | 417 | 467 | 479 | 471 | 480 | 249 | 231 |
| STERLING | 13 | 14 | 12 | 10 | 10 | 11 | 12 | 15 | 16 | 17 | 14 | 13 | 8 | 5 |
| STERENTO | 13 | | 12 | 10 | 10 | | 12 | 10 | 10 | 17 | | 13 | | |
| Subtotal | 1138 | 1177 | 1162 | 1162 | 1167 | 1189 | 1221 | 1234 | 1386 | 1441 | 1435 | 1462 | 1158 | 304 |
| ESTER | 5 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 1 |
| SALCHA | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 4 |
| SAXMAN | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 |
| TWO RIVERS | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| FRITZ CREEK | 3 | 2 | 5 | 7 | 6 | 7 | 7 | 8 | 9 | 8 | 9 | 8 | 3 | 5 |
| NORTH POLE | 13 | 12 | 13 | 12 | 13 | 16 | 15 | 15 | 12 | 13 | 9 | 8 | 4 | 4 |
| DUTCH HARBOR | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 0 | 2 |
| SOLDOTNA | 153 | 150 | 149 | 148 | 147 | 139 | 143 | 129 | 139 | 141 | 142 | 148 | 109 | 39 |
| WASILLA | 66 | 83 | 96 | 87 | 98 | 97 | 104 | 93 | 102 | 101 | 117 | 112 | 25 | 87 |
| VALDEZ | 34 | 33 | 31 | 31 | 30 | 35 | 34 | 33 | 31 | 37 | 36 | 38 | 57 | -19 |
| ADAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BETHEL | 197 | 199 | 200 | 198 | 199 | 200 | 202 | 199 | 204 | 206 | 206 | 200 | 214 | -14 |
| KENAI | 229 | 217 | 229 | 218 | 214 | 212 | 210 | 214 | 209 | 210 | 215 | 219 | 262 | -43 |
| KODIAK | 428 | 432 | 421 | 436 | 419 | 422 | 428 | 426 | 444 | 449 | 446 | 451 | 471 | -20 |
| KETCHIKAN | 374 | 361 | 355 | 361 | 355 | 331 | 316 | 314 | 318 | 383 | 407 | 387 | 656 | -269 |
| WARD COVE | 54 | 46 | 45 | 46 | 45 | 41 | 39 | 37 | 35 | 46 | 50 | 48 | 60 | -12 |
| MT EDGECUMBE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | -40 |
| SITKA | 423 | 422 | 421 | 421 | 421 | 407 | 414 | 407 | 408 | 454 | 481 | 496 | 442 | 54 |
| COLLEGE | 3 | 3 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | -5 |
| AUKE BAY | 56 | 58 | 59 | 57 | 57 | 61 | 57 | 53 | 52 | 51 | 49 | 47 | 51 | -4 |
| DOUGLAS | 71 | 69 | 68 | 68 | 64 | 63 | 60 | 55 | 57 | 60 | 59 | 59 | 79 | -20 |
| JUNEAU | 442 | 451 | 426 | 401 | 397 | 388 | 378 | 379 | 390 | 397 | 412 | 413 | 645 | -232 |
| FAIRBANKS | 101 | 111 | 108 | 109 | 110 | 113 | 117 | 111 | 106 | 106 | 110 | 116 | 93 | 23 |
| ANCHORAGE | 632 | 678 | 683 | 683 | 692 | 687 | 661 | 656 | 649 | 667 | 695 | 690 | 645 | 45 |
| BIRCHWOOD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | -1 |
| BIRD CREEK | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 0 | 2 |
| CHUGIAK | 39 | 36 | 31 | 34 | 35 | 33 | 32 | 29 | 27 | 28 | 28 | 30 | 25 | 5 |
| EAGLE RIVER | 56 | 51 | 47 | 45 | 42 | 43 | 44 | 41 | 40 | 48 | 45 | 51 | 47 | 4 |
| EKLUTNA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | -1 |
| ELMENDORF AFB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FT RICHARDSON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GIRDWOOD | 13 | 21 | 22 | 22 | 22 | 22 | 22 | 24 | 32 | 34 | 35 | 33 | 4 | 29 |
| INDIAN | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 2 |
| SPENARD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal | 3400 | 3446 | 3423 | 3397 | 3379 | 3327 | 3297 | 3237 | 3280 | 3454 | 3567 | 3568 | 3941 | -373 |
| Subtotal | 3400 | 3440 | 3423 | 3391 | 33/9 | 3332 | 3491 | 3431 | 3280 | 3434 | 3307 | 3308 | 3941 | -3/3 |
| Grand Total | 4538 | 4623 | 4585 | 4559 | 4546 | 4521 | 4518 | 4471 | 4666 | 4895 | 5002 | 5030 | 5099 | -69 |