| Production Source   |                     |   |                                      |  |  |                                       |                                       |   |
|---|---------------------|---|--------------------------------------|--|--|---------------------------------------|---------------------------------------|---|
| and Stock or Stock Group  |                     | 2019<br>1,009.6                         | 2020<br>268.7                        | 2021<br>1,732.9                          | 2022<br>1,225.9                        | 2023<br>1,135.7                       | 2024<br>636.3                         | Methodology for 2024 Prediction and Source<br>Abundance of all OPI components based on post-season coho FRAM runs;<br>prior to 2008 only fishery impacts south of Leadbetter Point were used<br>(traditional OPI accounting). OPITT, see Chapter III for details. |
| <b>OPI Area Total Abundance</b><br>(California, Oregon Coasts, and<br>Columbia River)                               |                     |   |                                      |  |  |                                       |                                       |   |
| OPI Public<br>Columbia River Early<br>Columbia River Late<br>Coastal N. of Cape Blanco<br>Coastal S. of Cape Blanco | Hatchery            | 933.5<br>545.0<br>360.6<br>12.0<br>15.9 | 185.7<br>130.7<br>50.3<br>2.4<br>2.3 | 1607.9<br>1014.0<br>576.0<br>6.4<br>11.5 | 1003.5<br>592.5<br>404.7<br>1.9<br>4.4 | 896.9<br>481.8<br>404.3<br>3.0<br>7.8 | 403.1<br>227.5<br>173.6<br>0.6<br>1.4 | OPIH: ARIMA-based MAPE weigthed ensemble forecast. Columbia early/late and Coastal proportions based on jacks; Coastal N/S proportions based on smolts.   |
| Lower Columbia River<br>(LCN)   | Natural             | 36.9                                    | 24.8                                 | 39.2                                     | 65.7                                   | 45.5                                  | 87.8                                  | Oregon: recent three year average return; Washingtion: natural smolt production multiplied by 2021 brood marine survival rate. Abundance is subset of early/late hatchery abundance above.  |
| Oregon Coast (OCN)  | Natural             | 76.1                                    | 83.0                                 | 125.0                                    | 222.4                                  | 238.8                                 | 233.2                                 | Rivers: Generalized additive model (GAM) relating ocean recruits to parental spawners and marine environmental variables. See text in Chapter III for details. Lakes: recent three year average abundance.  |
| Washington Coast  |                     |   |                                      |  |  |                                       |                                       |   |
| Willapa   | Natural             | 63.4                                    | 17.9                                 | 19.0                                     | 35.8                                   | 42.7                                  | 29.5                                  | Washington Coast stocks: A variety of methods were used, primarily  |
|   | Hatchery            | 94.0                                    | 51.8                                 | 61.6                                     | 74.7                                   | 111.0                                 | 91.5                                  | based on smolt production and survival. See text in Chapter III for details.  |
| Grays Harbor  | Natural<br>Hatchery | 71.5<br>64.3                            | 50.0<br>42.3                         | 44.8<br>31.7                             | 120.4<br>78.3                          | 102.8<br>111.4                        | 74.9<br>68.2                          |   |
| Quinault  | Natural             | 13.9                                    | 17.5                                 | 15.0                                     | 19.4                                   | 23.6                                  | 25.3                                  |   |
|   | Hatcherv            | 26.9                                    | 27.0                                 | 24.6                                     | 42.7                                   | 30.6                                  | 34.7                                  |   |
|   |                     |   |                                      |  |  |                                       | • · · ·                               |   |
| Queets  | Natural             | 11.1                                    | 7.8                                  | 3.9                                      | 18.2                                   | 12.4                                  | 12.9                                  |   |
|   | Hatchery            | 13.2                                    | 10.9                                 | 11.8                                     | 22.2                                   | 14.9                                  | 18.9                                  |   |
| Hoh   | Natural             | 7.0                                     | 4.2                                  | 3.0                                      | 4.7                                    | 6.5                                   | 4.9                                   |   |

TABLE I-2. Preseason ocean abundance adult coho salmon stock forecasts in thousands of fish. (Page 1 of 2)

| Production Source        | _        |       |       |       |       |       |       |   |
|--------------------------|----------|-------|-------|-------|-------|-------|-------|---|
| and Stock or Stock Group |          | 2019  | 2020  | 2021  | 2022  | 2023  | 2024  | Methodology for 2024 Prediction and Source  |
| Quillayute Fall          | Natural  | 14.7  | 9.2   | 7.5   | 12.5  | 13.5  | 10.2  | For all Washington Coast stocks: A variety of methods were used,  |
|                          | Hatchery | 17.0  | 13.0  | 15.1  | 20.3  | 19.1  | 10.3  | primarily based on smolt production and survival. See text in Chapter III for details.  |
| Quillayute Summer        | Natural  | 1.2   | 0.8   | 0.3   | 0.9   | 1.6   | 0.4   |   |
|                          | Hatchery | 3.4   | 3.4   | 3.4   | 4.6   | 3.9   | 2.3   |   |
| North Coast Independent  | Natural  | 8.1   | 5.1   | 4.7   | 18.0  | 13.5  | 4.9   |   |
| Tributaries              | Hatchery | 12.5  | 1.3   | 0.1   | 0.1   | 11.8  | 9.0   |   |
| WA Coast Total           | Natural  | 191.0 | 112.4 | 98.4  | 229.8 | 216.6 | 162.9 |   |
|                          | Hatchery | 231.3 | 149.6 | 148.2 | 243.0 | 302.7 | 234.9 |   |
| Puget Sound              |          |       |       |       |       |       |       |   |
| Strait of Juan de Fuca   | Natural  | 8.8   | 7.5   | 6.7   | 7.3   | 15.6  | 19.7  | For all Puget Sound stocks: A variety of methods were used, primarily   |
|                          | Hatchery | 16.8  | 20.6  | 12.5  | 12.7  | 21.8  | 22.6  | based on smolt production and survival. See text in Chapter III and Joint WDFW and tribal annual reports on Puget Sound Coho Salmon Forecast Methodology for details. |
| Nooksack-Samish          | Natural  | 25.1  | 15.4  | 35.3  | 36.0  | 29.5  | 35.1  |   |
|                          | Hatchery | 59.8  | 42.5  | 54.6  | 73.8  | 66.6  | 72.3  |   |
| Skagit                   | Natural  | 57.9  | 31.0  | 58.4  | 80.4  | 43.1  | 63.4  |   |
|                          | Hatchery | 9.9   | 18.2  | 22.0  | 21.3  | 21.1  | 27.3  |   |
| Stillaguamish            | Natural  | 23.8  | 19.5  | 26.8  | 24.9  | 30.2  | 30.8  |   |
|                          | Hatchery | 2.2   | 2.3   | 4.0   | 1.9   | 1.7   | 0.9   |   |
| Snohomish                | Natural  | 62.6  | 39.0  | 60.0  | 64.2  | 76.5  | 71.6  |   |
|                          | Hatchery | 43.7  | 26.6  | 29.9  | 22.6  | 64.0  | 34.7  |   |
| South Sound              | Natural  | 30.4  | 7.3   | 27.5  | 31.0  | 58.3  | 38.1  |   |
|                          | Hatchery | 180.4 | 164.0 | 192.7 | 208.5 | 218.8 | 201.9 |   |
| Hood Canal               | Natural  | 40.1  | 35.0  | 28.8  | 20.2  | 37.9  | 36.5  |   |
|                          | Hatchery | 87.9  | 72.2  | 55.7  | 61.4  | 74.8  | 67.2  |   |
| Puget Sound Total        | Natural  | 248.8 | 154.6 | 243.5 | 264.0 | 291.2 | 295.3 |   |
|                          | Hatchery | 400.7 | 346.3 | 371.4 | 402.3 | 468.8 | 426.9 |   |

TABLE I-2. Preseason adult coho salmon stock forecasts in thousands of fish. (Page 2 of 2)