# Appendix J: Preseason forecasts including 2019 and postseason estimates for PSC model stocks, 1999-2018

Note: there was no CTC consensus on the 2015 and 2016 model calibrations (CLB 1503 and 1601). Outputs from CLB 1503 were used by the Commission to configure AABM fisheries in 2015. Abundances indices for AABM fisheries generated from CLB 1601 were accepted by the Commission. For each stock group in Appendix J, preseason PSC Model forecasts for 2015 are from CLB 1503 and forecasts for 2016 are from CLB 1601.

Data in Appendix J are used to evaluate Chinook Model and Agency Forecasts. The following terminology is used:

* Model Forecast. The Model forecast for a stock is from that year’s calibration (e.g., 2019 is from CLB1905). These data do not change from year-to-year and can be found in a given year’s model calibration out files. [source: stage 2 checkCLB.out file]
* Agency Forecast. The Agency forecast for a stock is what was provided to the CTC for use with that year’s Model calibration. These data do not change from year-to-year and can be found in a given year’s model calibration input file. [source: OCNyear.FCS files]
* Postseason Return. The postseason return is the most up to date estimate of either the terminal return or the escapement, depending on how the stock is reported in the FCS file. [source: checkCLB.out or FCS file]

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| AKS1 | 1999 | 11,866 | NA | 12,219 | NA | NA | 97% |
| (Alaska SSE) | 2000 | 18,967 | NA | 16,164 | NA | NA | 117% |
|  | 2001 | 22,130 | NA | 21,590 | NA | NA | 103% |
|  | 2002 | 15,650 | NA | 18,679 | NA | NA | 84% |
|  | 2003 | 22,316 | NA | 14,576 | NA | NA | 153% |
|  | 2004 | 11,880 | NA | 17,107 | NA | NA | 69% |
|  | 2005 | 25,204 | NA | 15,235 | NA | NA | 165% |
|  | 2006 | 17,966 | NA | 20,730 | NA | NA | 87% |
|  | 2007 | 25,653 | NA | 15,012 | NA | NA | 171% |
|  | 2008 | 14,626 | NA | 13,780 | NA | NA | 106% |
|  | 2009 | 14,362 | NA | 10,463 | NA | NA | 137% |
|  | 2010 | 16,445 | NA | 15,674 | NA | NA | 105% |
|  | 2011 | 17,065 | NA | 11,808 | NA | NA | 145% |
|  | 2012 | 12,557 | NA | 6,731 | NA | NA | 187% |
|  | 2013 | 4,838 | NA | 8,175 | NA | NA | 59% |
|  | 2014 | 4,239 | NA | 10,587 | NA | NA | 40% |
|  | 2015 | 6,812 | NA | 9,961 | NA | NA | 68% |
|  | 2016 | 7,099 | NA | 5,997 | NA | NA | 118% |
|  | 2017 | 4,896 | NA | 4,600 | NA | NA | 106% |
|  | 2018 | 4,971 | NA | 8,875 | NA | NA | 56% |
|  | 2019 | 8,185 | NA | NA | NA | NA | NA |
|  | AVG |  |  |  | NA | NA | 109% |
| NTH2 | 1999 | 149,387 | NA | 154,294 | NA | NA | 97% |
| (North/ | 2000 | 159,818 | NA | 188,482 | NA | NA | 85% |
| Central BC) | 2001 | 189,088 | NA | 212,075 | NA | NA | 89% |
|  | 2002 | 228,073 | NA | 147,769 | NA | NA | 154% |
|  | 2003 | 154,103 | NA | 165,223 | NA | NA | 93% |
|  | 2004 | 171,070 | NA | 153,494 | NA | NA | 111% |
|  | 2005 | 154,552 | NA | 132,480 | NA | NA | 117% |
|  | 2006 | 132,710 | NA | 151,915 | NA | NA | 87% |
|  | 2007 | 156,017 | NA | 123,388 | NA | NA | 126% |
|  | 2008 | 131,262 | NA | 112,038 | NA | NA | 117% |
|  | 2009 | 119,761 | NA | 126,901 | NA | NA | 94% |
|  | 2010 | 136,998 | NA | 114,904 | NA | NA | 119% |
|  | 2011 | 119,323 | NA | 95,091 | NA | NA | 125% |
|  | 2012 | 98,010 | NA | 81,097 | NA | NA | 121% |
|  | 2013 | 86,819 | NA | 96,349 | NA | NA | 90% |
|  | 2014 | 94,878 | NA | 97,188 | NA | NA | 98% |
|  | 2015 | 95,587 | NA | 154,141 | NA | NA | 62% |
|  | 2016 | 146,607 | NA | 102,650 | NA | NA | 143% |
|  | 2017 | 108,254 | 104,935 | 56,483 | 103% | 186% | 192% |
|  | 2018 | 90,891 | 101,362 | 92,967 | 90% | 109% | 98% |
|  | 2019 |  |  |  | 103% | NA | NA |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| RBH+RBT2 | 1999 | 77,836 | 68,400 | 105,402 | 114% | 65% | 74% |
| (WCVI | 2000 | 21,040 | 15,040 | 39,227 | 140% | 38% | 54% |
| Hatchery + | 2001 | 33,702 | 30,633 | 89,209 | 110% | 34% | 38% |
| Natural) | 2002 | 128,068 | 109,882 | 167,548 | 117% | 66% | 76% |
|  | 2003 | 111,430 | 105,801 | 217,662 | 105% | 49% | 51% |
|  | 2004 | 166,548 | 144,180 | 261,827 | 116% | 55% | 64% |
|  | 2005 | 244,768 | 218,840 | 157,906 | 112% | 139% | 155% |
|  | 2006 | 152,483 | 138,878 | 197,866 | 110% | 70% | 77% |
|  | 2007 | 151,925 | 117,321 | 121,232 | 129% | 97% | 125% |
|  | 2008 | 67,347 | 60,255 | 99,325 | 112% | 61% | 68% |
|  | 2009 | 76,063 | 58,382 | 92,944 | 130% | 63% | 82% |
|  | 2010 | 75,748 | 61,586 | 95,366 | 123% | 65% | 79% |
|  | 2011 | 98,929 | 74,708 | 163,010 | 132% | 46% | 61% |
|  | 2012 | 70,838 | 54,765 | 81,925 | 129% | 67% | 86% |
|  | 2013 | 32,180 | NA4 | 181,234 | NA | NA | 18% |
|  | 2014 | 205,989 | 216,727 | 121,694 | 95% | 178% | 169% |
|  | 2015 | 91,710 | 105,003 | 209,375 | 87% | 50% | 44% |
|  | 2016 | 235,776 | 224,119 | 172,857 | 105% | 130% | 136% |
|  | 2017 | 172,885 | 163,568 | 187,108 | 106% | 87% | 92% |
|  | 2018 | 154,182 | 158,357 | 181,128 | 97% | 87% | 85% |
|  | 2019 | 208,973 | 195,095 | NA | 107% | NA | NA |
|  | AVG |  |  |  | 114% | 76% | 82% |
| GSQ1 | 1999 | 16,450 | NA | 26,783 | NA | NA | 61% |
| (Upper Strait | 2000 | 19,452 | NA | 35,101 | NA | NA | 55% |
| of Georgia) | 2001 | 25,828 | NA | 42,436 | NA | NA | 61% |
|  | 2002 | 41,492 | NA | 41,022 | NA | NA | 101% |
|  | 2003 | 36,882 | NA | 40,500 | NA | NA | 91% |
|  | 2004 | 39,766 | NA | 31,803 | NA | NA | 125% |
|  | 2005 | 38,798 | NA | 28,490 | NA | NA | 136% |
|  | 2006 | 39,171 | NA | 50,989 | NA | NA | 77% |
|  | 2007 | 41,711 | NA | 24,877 | NA | NA | 168% |
|  | 2008 | 30,065 | NA | 19,392 | NA | NA | 155% |
|  | 2009 | 26,173 | NA | 31,323 | NA | NA | 84% |
|  | 2010 | 26,624 | NA | 22,480 | NA | NA | 118% |
|  | 2011 | 23,998 | NA | 18,751 | NA | NA | 128% |
|  | 2012 | 25,756 | NA | 42,830 | NA | NA | 60% |
|  | 2013 | 31,498 | NA | 40,341 | NA | NA | 78% |
|  | 2014 | 30,162 | NA | 41,418 | NA | NA | 73% |
|  | 2015 | 26,699 | NA | 37,253 | NA | NA | 72% |
|  | 2016 | 26,084 | NA | 38,648 | NA | NA | 67% |
|  | 2017 | 40,981 | 39,106 | 52,535 | 105% | 74% | 78% |
|  | 2018 | 50,676 | 49,654 | 31,436 | 102% | 158% | 161% |
|  | 2019 | 35,642 | 36,991 | NA | 96% | NA | NA |
|  | AVG |  |  |  | 101% | 116% | 98% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| GSH2 | 1999 | 22,896 | NA | 23,015 | NA | NA | 99% |
| (Lower Strait | 2000 | 19,165 | NA | 21,322 | NA | NA | 90% |
| of Georgia | 2001 | 17,547 | NA | 29,633 | NA | NA | 59% |
| Hatchery) | 2002 | 25,051 | NA | 22,064 | NA | NA | 114% |
|  | 2003 | 21,222 | NA | 21,496 | NA | NA | 99% |
|  | 2004 | 16,573 | NA | 20,852 | NA | NA | 79% |
|  | 2005 | 21,046 | NA | 25,941 | NA | NA | 81% |
|  | 2006 | 18,169 | NA | 22,109 | NA | NA | 82% |
|  | 2007 | 24,378 | NA | 12,733 | NA | NA | 191% |
|  | 2008 | 11,765 | NA | 12,011 | NA | NA | 98% |
|  | 2009 | 17,551 | NA | 13,380 | NA | NA | 131% |
|  | 2010 | 7,999 | NA | 11,605 | NA | NA | 69% |
|  | 2011 | 14,671 | NA | 11,480 | NA | NA | 128% |
|  | 2012 | 10,104 | NA | 8,462 | NA | NA | 119% |
|  | 2013 | 5,568 | NA | 8,242 | NA | NA | 68% |
|  | 2014 | 6,116 | NA | 15,665 | NA | NA | 39% |
|  | 2015 | 18,566 | NA | 9,888 | NA | NA | 188% |
|  | 2016 | 5,475 | NA | 10,236 | NA | NA | 53% |
|  | 2017 | 10,414 | 11,820 | 14,524 | 88% | 81% | 72% |
|  | 2018 | 13,423 | 11,353 | 11,731 | 118% | 97% | 114% |
|  | 2019 | 8,708 | 10,207 | NA | 85% | NA | NA |
|  | AVG |  |  |  | 97% | 89% | 99% |
| GST1 | 1999 | 14,236 | NA | 8,715 | NA | NA | 163% |
| (Lower Strait | 2000 | 11,094 | NA | 8,223 | NA | NA | 135% |
| of Georgia Natural) | 2001 | 7,955 | NA | 8,569 | NA | NA | 93% |
|  | 2002 | 8,833 | NA | 7,812 | NA | NA | 113% |
|  | 2003 | 8,088 | NA | 5,903 | NA | NA | 137% |
|  | 2004 | 5,157 | NA | 3,642 | NA | NA | 142% |
|  | 2005 | 4,459 | NA | 4,870 | NA | NA | 92% |
|  | 2006 | 4,070 | NA | 4,880 | NA | NA | 83% |
|  | 2007 | 7,782 | NA | 4,778 | NA | NA | 163% |
|  | 2008 | 6,823 | NA | 5,646 | NA | NA | 121% |
|  | 2009 | 5,701 | NA | 3,106 | NA | NA | 184% |
|  | 2010 | 2,972 | NA | 5,763 | NA | NA | 52% |
|  | 2011 | 10,778 | NA | 7,595 | NA | NA | 142% |
|  | 2012 | 11,433 | NA | 6,291 | NA | NA | 182% |
|  | 2013 | 8,267 | NA | 5,440 | NA | NA | 152% |
|  | 2014 | 11,910 | NA | 6,579 | NA | NA | 181% |
|  | 2015 | 13,177 | NA | 9,840 | NA | NA | 134% |
|  | 2016 | 7,469 | NA | 10,639 | NA | NA | 70% |
|  | 2017 | 11,163 | 10,639 | 14,270 | 105% | 75% | 78% |
|  | 2018 | 16,186 | 12,162 | 19,417 | 133% | 63% | 83% |
|  | 2019 | 25,521 | 22,630 | NA | 113% | NA | NA |
|  | AVG |  |  |  | 117% | 69% | 125% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| FRE2 | 1999 | 162,865 | NA | 105,473 | NA | NA | 154% |
| (Fraser Early) | 2000 | 118,058 | NA | 116,233 | NA | NA | 102% |
|  | 2001 | 122,333 | NA | 154,175 | NA | NA | 79% |
|  | 2002 | 170,232 | NA | 189,335 | NA | NA | 90% |
|  | 2003 | 202,363 | NA | 191,700 | NA | NA | 106% |
|  | 2004 | 185,450 | NA | 147,813 | NA | NA | 125% |
|  | 2005 | 151,591 | NA | 135,177 | NA | NA | 112% |
|  | 2006 | 141,517 | NA | 203,460 | NA | NA | 70% |
|  | 2007 | 196,060 | NA | 110,555 | NA | NA | 177% |
|  | 2008 | 128,347 | NA | 149,048 | NA | NA | 86% |
|  | 2009 | 153,593 | NA | 136,201 | NA | NA | 113% |
|  | 2010 | 144,214 | NA | 203,948 | NA | NA | 71% |
|  | 2011 | 174,183 | NA | 161,748 | NA | NA | 108% |
|  | 2012 | 175,729 | NA | 77,285 | NA | NA | 227% |
|  | 2013 | 83,719 | NA | 165,166 | NA | NA | 51% |
|  | 2014 | 176,008 | NA | 159,656 | NA | NA | 110% |
|  | 2015 | 173,286 | NA | 236,551 | NA | NA | 73% |
|  | 2016 | 258,884 | NA | 126,975 | NA | NA | 204% |
|  | 2017 | 180,300 | 184,349 | 105,275 | 98% | 175% | 171% |
|  | 2018 | 147,972 | 156,877 | 84,373 | 94% | 186% | 175% |
|  | 2019 | 127,373 | 138,333 | NA | 92% | NA | NA |
|  | AVG |  |  |  | 95% | 181% | 120% |
| FRL1 | 1999 | 84,686 | 82,650 | 188,873 | 102% | 44% | 45% |
| (Fraser Late) | 2000 | 187,970 | 220,400 | 133,998 | 85% | 164% | 140% |
|  | 2001 | 141,745 | 131,800 | 192,693 | 108% | 68% | 74% |
|  | 2002 | 132,946 | 160,100 | 172,451 | 83% | 93% | 77% |
|  | 2003 | 127,144 | 114,780 | 308,769 | 111% | 37% | 41% |
|  | 2004 | 104,597 | 97,227 | 206,892 | 108% | 47% | 51% |
|  | 2005 | 121,315 | 108,061 | 130,229 | 112% | 83% | 93% |
|  | 2006 | 115,489 | 116,682 | 116,985 | 99% | 100% | 99% |
|  | 2007 | 122,402 | 107,311 | 110,736 | 114% | 97% | 111% |
|  | 2008 | 125,100 | 116,038 | 88,667 | 108% | 131% | 141% |
|  | 2009 | 119,892 | 91,391 | 97,541 | 131% | 94% | 123% |
|  | 2010 | 119,953 | 118,891 | 196,175 | 101% | 61% | 61% |
|  | 2011 | 353,646 | 284,604 | 182,269 | 124% | 156% | 194% |
|  | 2012 | 107,738 | 93,652 | 70,029 | 115% | 134% | 154% |
|  | 2013 | 70,178 | 73,584 | 104,476 | 95% | 70% | 67% |
|  | 2014 | 131,118 | 118,361 | 113,568 | 111% | 104% | 115% |
|  | 2015 | 88,165 | 72,037 | 141,296 | 122% | 51% | 62% |
|  | 2016 | 57,236 | 51,903 | 95,170 | 110% | 55% | 60% |
|  | 2017 | 112,272 | 107,065 | 61,074 | 105% | 175% | 184% |
|  | 2018 | 93,126 | 96,147 | 81,399 | 97% | 118% | 114% |
|  | 2019 | 114,809 | 126,343 | NA | 91% | NA | NA |
|  | AVG |  |  |  | 106% | 94% | 100% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| NKS1 | 1999 | 1,048 | NA | 1,111 | NA | NA | 94% |
| (Nooksack | 2000 | 834 | NA | 1,615 | NA | NA | 52% |
| Spring) | 2001 | 982 | NA | 2,629 | NA | NA | 37% |
|  | 2002 | 1,216 | NA | 4,366 | NA | NA | 28% |
|  | 2003 | 1,301 | NA | 3,448 | NA | NA | 38% |
|  | 2004 | 1,708 | NA | 1,891 | NA | NA | 90% |
|  | 2005 | 1,549 | NA | 2,279 | NA | NA | 68% |
|  | 2006 | 583 | 677 | 1,716 | 86% | 39% | 34% |
|  | 2007 | 582 | 575 | 1,786 | 101% | 32% | 33% |
|  | 2008 | 371 | 378 | 1,714 | 98% | 22% | 22% |
|  | 2009 | 336 | 315 | 2,360 | 107% | 13% | 14% |
|  | 2010 | 374 | 390 | 2,596 | 96% | 15% | 14% |
|  | 2011 | 340 | 309 | 1,348 | 110% | 23% | 25% |
|  | 2012 | 271 | 243 | 1,266 | 112% | 19% | 21% |
|  | 2013 | 1,331 | NA | 1,590 | NA | NA | 84% |
|  | 2014 | 1,361 | 1,273 | 1,606 | 107% | 79% | 85% |
|  | 2015 | 1,192 | 1,119 | 1,852 | 107% | 60% | 64% |
|  | 2016 | 1,308 | 1,324 | 1,880 | 99% | 70% | 70% |
|  | 2017 | 1,297 | 1,291 | 1,291 | 100% | 100% | 100% |
|  | 2018 | 1,342 | 1,389 | 1,389 | 97% | 100% | 97% |
|  | 2019 | 1,419 | 1,508 | NA | 94% | NA | NA |
|  | AVG |  |  |  | 101% | 48% | 54% |
| NKF2 | 1999 | 27,206 | 27,000 | 43,709 | 101% | 62% | 62% |
| (Nooksack/ | 2000 | 21,277 | 19,000 | 35,630 | 112% | 53% | 60% |
| Samish Fall | 2001 | 33,974 | 36,450 | 71,437 | 93% | 51% | 48% |
| Fingerling) | 2002 | 50,361 | 54,420 | 62,519 | 93% | 87% | 81% |
|  | 2003 | 48,259 | 45,750 | 33,339 | 105% | 137% | 145% |
|  | 2004 | 37,980 | 34,200 | 18,118 | 111% | 189% | 210% |
|  | 2005 | 19,808 | 19,523 | 20,703 | 101% | 94% | 96% |
|  | 2006 | 16,795 | 16,899 | 38,455 | 99% | 44% | 44% |
|  | 2007 | 22,086 | 18,834 | 39,390 | 117% | 48% | 56% |
|  | 2008 | 34,392 | 35,271 | 33,750 | 98% | 105% | 102% |
|  | 2009 | 26,072 | 23,014 | 25,884 | 113% | 89% | 101% |
|  | 2010 | 32,061 | 32,627 | 41,239 | 98% | 79% | 78% |
|  | 2011 | 39,144 | 37,902 | 40,678 | 103% | 93% | 96% |
|  | 2012 | 45,719 | 43,973 | 41,557 | 104% | 106% | 110% |
|  | 2013 | 50,065 | 48,257 | 37,525 | 104% | 129% | 133% |
|  | 2014 | 46,771 | 44,046 | 32,053 | 106% | 137% | 146% |
|  | 2015 | 40,315 | 39,739 | 23,696 | 101% | 168% | 170% |
|  | 2016 | 29,171 | 28,611 | 21,226 | 102% | 135% | 137% |
|  | 2017 | 21,922 | 21,997 | 24,590 | 100% | 89% | 89% |
|  | 2018 | 26,637 | 25,231 | 25,231 | 106% | 100% | 106% |
|  | 2019 | 23,105 | 21,339 | NA | 108% | NA | NA |
|  | AVG |  |  |  | 104% | 100% | 103% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| SKG2 | 1999 | 8,967 | 7,600 | 5,139 | 118% | 148% | 174% |
| (Skagit | 2000 | 6,988 | 7,300 | 16,266 | 96% | 45% | 43% |
| Summer/ | 2001 | 9,064 | 9,183 | 14,193 | 99% | 65% | 64% |
| Fall Wild) | 2002 | 12,635 | 13,455 | 18,114 | 94% | 74% | 70% |
|  | 2003 | 11,906 | 11,348 | 10,583 | 105% | 107% | 113% |
|  | 2004 | 18,761 | 20,359 | 22,144 | 92% | 92% | 85% |
|  | 2005 | 16,220 | 19,493 | 22,784 | 83% | 86% | 71% |
|  | 2006 | 22,402 | 21,811 | 21,246 | 103% | 103% | 105% |
|  | 2007 | 12,324 | 14,252 | 12,646 | 86% | 113% | 97% |
|  | 2008 | 18,598 | 18,302 | 14,254 | 102% | 128% | 130% |
|  | 2009 | 22,193 | 20,400 | 10,977 | 109% | 186% | 202% |
|  | 2010 | 9,894 | 11,853 | 7,926 | 83% | 150% | 125% |
|  | 2011 | 12,556 | 13,044 | 8,382 | 96% | 156% | 150% |
|  | 2012 | 10,020 | 8,337 | 15,422 | 120% | 54% | 65% |
|  | 2013 | 7,287 | 13,018 | 13,312 | 56% | 98% | 55% |
|  | 2014 | 15,221 | 17,874 | 12,777 | 85% | 140% | 119% |
|  | 2015 | 9,820 | 11,387 | 13,315 | 86% | 86% | 74% |
|  | 2016 | 14,336 | 14,361 | 17,426 | 100% | 82% | 82% |
|  | 2017 | 15,947 | 14,429 | 14,800 | 111% | 97% | 108% |
|  | 2018 | 11,765 | 12,565 | 12,178 | 94% | 103% | 97% |
|  | 2019 | 13,639 | 13,630 | NA | 100% | NA | NA |
|  | AVG |  |  |  | 96% | 106% | 101% |
| STL1 | 1999 | 1,303 | NA | 1,436 | NA | NA | 91% |
| (Stillaguamish | 2000 | 1,370 | 1,500 | 2,074 | 91% | 72% | 66% |
| Summer/Fall | 2001 | 1,328 | 1,360 | 1,729 | 98% | 79% | 77% |
| Wild) | 2002 | 1,372 | 1,449 | 2,007 | 95% | 72% | 68% |
|  | 2003 | 1,860 | 2,050 | 1,307 | 91% | 157% | 142% |
|  | 2004 | 1,795 | NA | 1,912 | NA | NA | 94% |
|  | 2005 | 1,377 | NA | 1,363 | NA | NA | 101% |
|  | 2006 | 1,113 | 1,169 | 1,612 | 95% | 73% | 69% |
|  | 2007 | 1,424 | 1,510 | 870 | 94% | 174% | 164% |
|  | 2008 | 689 | 637 | 1,914 | 108% | 33% | 36% |
|  | 2009 | 1,268 | 1,086 | 1,061 | 117% | 102% | 120% |
|  | 2010 | 898 | 817 | 1,358 | 110% | 60% | 66% |
|  | 2011 | 812 | 783 | 1,345 | 104% | 58% | 60% |
|  | 2012 | 569 | 395 | 1,750 | 144% | 23% | 33% |
|  | 2013 | 1,393 | 1,328 | 1,469 | 105% | 90% | 95% |
|  | 2014 | 1,000 | 850 | 721 | 118% | 118% | 139% |
|  | 2015 | 514 | 525 | 709 | 98% | 74% | 72% |
|  | 2016 | 346 | 299 | 1,053 | 116% | 28% | 33% |
|  | 2017 | 360 | 266 | 1,070 | 135% | 25% | 34% |
|  | 2018 | 1,421 | 1,474 | 665 | 96% | 222% | 214% |
|  | 2019 | 460 | 376 | NA | 122% | NA | NA |
|  | AVG |  |  |  | 108% | 86% | 89% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| SNO2 | 1999 | 5,804 | 5,600 | 2,524 | 104% | 222% | 230% |
| (Snohomish | 2000 | 5,997 | 6,000 | 3,269 | 100% | 184% | 183% |
| Wild) | 2001 | 5,876 | 5,760 | 6,742 | 102% | 85% | 87% |
|  | 2002 | 6,524 | 6,700 | 7,422 | 97% | 90% | 88% |
|  | 2003 | 6,033 | 5,450 | 5,786 | 111% | 94% | 104% |
|  | 2004 | 12,845 | 15,700 | 10,994 | 82% | 143% | 117% |
|  | 2005 | 10,161 | NA | 4,963 | NA | NA | 205% |
|  | 2006 | 7,824 | 8,729 | 7,180 | 90% | 122% | 109% |
|  | 2007 | 11,153 | 12,289 | 2,832 | 91% | 434% | 394% |
|  | 2008 | 6,103 | 6,541 | 6,986 | 93% | 94% | 87% |
|  | 2009 | 8,503 | 8,410 | 1,830 | 101% | 460% | 465% |
|  | 2010 | 8,050 | 9,858 | 3,488 | 82% | 283% | 231% |
|  | 2011 | 8,281 | 7,600 | 1,414 | 109% | 537% | 586% |
|  | 2012 | 2,506 | 2,775 | 3,361 | 90% | 83% | 75% |
|  | 2013 | 3,835 | 3,161 | 2,684 | 121% | 118% | 143% |
|  | 2014 | 3,416 | 3,327 | 2,375 | 103% | 140% | 144% |
|  | 2015 | 3,809 | 4,159 | 2,329 | 92% | 179% | 164% |
|  | 2016 | 3,586 | 3,339 | 4,386 | 107% | 76% | 82% |
|  | 2017 | 3,775 | 3,412 | 4,199 | 111% | 81% | 90% |
|  | 2018 | 3,825 | 3,460 | 3,082 | 111% | 112% | 124% |
|  | 2019 | 3,013 | 2,780 | NA | 108% | NA | NA |
|  | AVG |  |  |  | 100% | 186% | 185% |
| PSF+PSY2,3 | 1999 | 66,260 | 69,285 | 146,471 | 96% | 47% | 45% |
| (Puget Sound | 2000 | 67,306 | 69,800 | 100,425 | 96% | 70% | 67% |
| Fingerling + | 2001 | 102,899 | 105,955 | 145,822 | 97% | 73% | 71% |
| Yearling) | 2002 | 114,889 | 124,608 | 147,447 | 92% | 85% | 78% |
|  | 2003 | 114,275 | 133,850 | 144,177 | 85% | 93% | 79% |
|  | 2004 | 127,902 | 132,300 | 143,731 | 97% | 92% | 89% |
|  | 2005 | 104,084 | 110,542 | 155,325 | 94% | 71% | 67% |
|  | 2006 | 107,292 | 113,486 | 191,623 | 95% | 59% | 56% |
|  | 2007 | 127,115 | 135,714 | 221,341 | 94% | 61% | 57% |
|  | 2008 | 166,071 | 159,200 | 160,626 | 104% | 99% | 103% |
|  | 2009 | 138,299 | 133,187 | 136,695 | 104% | 97% | 101% |
|  | 2010 | 138,238 | 140,074 | 144,296 | 99% | 97% | 96% |
|  | 2011 | 172,415 | 168,642 | 155,941 | 102% | 108% | 111% |
|  | 2012 | 153,462 | 153,989 | 192,714 | 100% | 80% | 80% |
|  | 2013 | 189,645 | 184,783 | 182,276 | 103% | 101% | 104% |
|  | 2014 | 191,307 | 188,039 | 80,047 | 102% | 235% | 239% |
|  | 2015 | 128,255 | 131,300 | 96,003 | 98% | 137% | 134% |
|  | 2016 | 109,207 | 96,430 | 166,953 | 113% | 58% | 65% |
|  | 2017 | 142,320 | 144,238 | 286,815 | 99% | 50% | 50% |
|  | 2018 | 214,806 | 202,186 | 230,196 | 106% | 88% | 93% |
|  | 2019 | 208,195 | 187,516 | NA | 111% | NA | NA |
|  | AVG |  |  |  | 99% | 90% | 89% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| PSN2,3 | 1999 | 28,536 | 28,400 | 23,215 | 100% | 122% | 123% |
| (Puget Sound | 2000 | 15,364 | 10,000 | 17,882 | 154% | 56% | 86% |
| Natural) | 2001 | 19,938 | 18,900 | 26,107 | 105% | 72% | 76% |
|  | 2002 | 20,008 | 19,801 | 25,009 | 101% | 79% | 80% |
|  | 2003 | 25,743 | 26,600 | 9,233 | 97% | 288% | 279% |
|  | 2004 | 24,616 | 23,200 | 16,023 | 106% | 145% | 154% |
|  | 2005 | 22,208 | 17,715 | 10,903 | 125% | 162% | 204% |
|  | 2006 | 20,182 | 21,301 | 13,095 | 95% | 163% | 154% |
|  | 2007 | 18,964 | 17,014 | 12,094 | 111% | 141% | 157% |
|  | 2008 | 23,118 | 21,100 | 18,637 | 110% | 113% | 124% |
|  | 2009 | 24,698 | 23,073 | 10,066 | 107% | 229% | 245% |
|  | 2010 | 14,734 | 15,128 | 8,139 | 97% | 186% | 181% |
|  | 2011 | 18,115 | 15,997 | 8,033 | 113% | 199% | 226% |
|  | 2012 | 14,396 | 13,860 | 10,578 | 104% | 131% | 136% |
|  | 2013 | 12,079 | 8,767 | 8,407 | 138% | 104% | 144% |
|  | 2014 | 9,253 | 8,125 | 8,201 | 114% | 99% | 113% |
|  | 2015 | 7,797 | 7,478 | 10,439 | 104% | 72% | 75% |
|  | 2016 | 7,801 | 7,066 | 9,590 | 110% | 74% | 81% |
|  | 2017 | 8,901 | 8,040 | 13,470 | 111% | 60% | 66% |
|  | 2018 | 10,149 | 9,045 | 7,827 | 112% | 116% | 130% |
|  | 2019 | 10,479 | 10,163 | NA | 103% | NA | NA |
|  | AVG |  |  |  | 110% | 131% | 142% |
| WCH2 | 1999 | 35,221 | 42,752 | 13,535 | 82% | 316% | 260% |
| (Washington | 2000 | 16,244 | NA | 22,571 | NA | NA | 72% |
| Coastal | 2001 | 15,792 | NA | 23,166 | NA | NA | 68% |
| Hatchery) | 2002 | 23,678 | NA | 34,243 | NA | NA | 69% |
|  | 2003 | 20,755 | 18,222 | 41,766 | 114% | 44% | 50% |
|  | 2004 | 28,900 | NA | 39,651 | NA | NA | 73% |
|  | 2005 | 28,626 | NA | 40,458 | NA | NA | 71% |
|  | 2006 | 36,950 | NA | 51,155 | NA | NA | 72% |
|  | 2007 | 41,801 | 40,497 | 22,669 | 103% | 179% | 184% |
|  | 2008 | 34,841 | 31,251 | 26,397 | 111% | 118% | 132% |
|  | 2009 | 41,756 | 42,595 | 38,162 | 98% | 112% | 109% |
|  | 2010 | 38,347 | NA | 41,498 | NA | NA | 92% |
|  | 2011 | 38,208 | NA | 63,942 | NA | NA | 60% |
|  | 2012 | 45,128 | 44,300 | 40,311 | 102% | 110% | 112% |
|  | 2013 | 33,629 | 25,304 | 44,091 | 133% | 57% | 76% |
|  | 2014 | 40,866 | 42,907 | 51,226 | 95% | 84% | 80% |
|  | 2015 | 42,604 | 38,120 | 54,902 | 112% | 69% | 78% |
|  | 2016 | 57,443 | 52,174 | 31,983 | 110% | 163% | 180% |
|  | 2017 | 47,587 | 47,079 | 43,191 | 101% | 109% | 110% |
|  | 2018 | 49,042 | 47,194 | 43,359 | 104% | 109% | 113% |
|  | 2019 | 35,258 | 25,521 | NA | 138% | NA | NA |
|  | AVG |  |  |  | 108% | 122% | 103% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| WCN2 | 1999 | 42,107 | 43,780 | 25,065 | 96% | 175% | 168% |
| (Washington | 2000 | 34,741 | NA | 26,507 | NA | NA | 131% |
| Coastal | 2001 | 34,563 | 35,306 | 34,747 | 98% | 102% | 99% |
| Natural) | 2002 | 33,902 | 33,489 | 36,183 | 101% | 93% | 94% |
|  | 2003 | 32,785 | NA | 39,947 | NA | NA | 82% |
|  | 2004 | 28,185 | NA | 57,917 | NA | NA | 49% |
|  | 2005 | 34,857 | NA | 41,461 | NA | NA | 84% |
|  | 2006 | 43,866 | NA | 38,246 | NA | NA | 115% |
|  | 2007 | 35,695 | 32,362 | 26,270 | 110% | 123% | 136% |
|  | 2008 | 32,187 | 26,923 | 31,219 | 120% | 86% | 103% |
|  | 2009 | 35,485 | 31,318 | 27,215 | 113% | 115% | 130% |
|  | 2010 | 39,215 | NA | 40,293 | NA | NA | 97% |
|  | 2011 | 32,205 | NA | 49,824 | NA | NA | 65% |
|  | 2012 | 45,153 | 41,500 | 40,637 | 109% | 102% | 111% |
|  | 2013 | 35,464 | 34,023 | 34,086 | 104% | 100% | 104% |
|  | 2014 | 44,952 | 46,275 | 32,459 | 97% | 143% | 138% |
|  | 2015 | 48,297 | 50,360 | 52,225 | 96% | 96% | 92% |
|  | 2016 | 48,034 | 41,095 | 27,085 | 117% | 152% | 177% |
|  | 2017 | 39,456 | 36,705 | 36,854 | 107% | 100% | 107% |
|  | 2018 | 37,884 | 33,973 | 38,721 | 112% | 88% | 98% |
|  | 2019 | 37,364 | 30,768 | NA | 121% | NA | NA |
|  | AVG |  |  |  | 107% | 113% | 109% |
| CWS2 | 1999 | 3,363 | 3,950 | 4,799 | 85% | 82% | 70% |
| (Cowlitz | 2000 | 4,922 | 6,050 | 6,132 | 81% | 99% | 80% |
| Spring) | 2001 | 3,684 | 4,849 | 7,182 | 76% | 68% | 51% |
|  | 2002 | 5,534 | 6,800 | 11,644 | 81% | 58% | 48% |
|  | 2003 | 9,550 | 11,700 | 25,584 | 82% | 46% | 37% |
|  | 2004 | 20,802 | 27,350 | 28,696 | 76% | 95% | 72% |
|  | 2005 | 18,349 | 24,850 | 16,227 | 74% | 153% | 113% |
|  | 2006 | 12,838 | 15,250 | 19,685 | 84% | 77% | 65% |
|  | 2007 | 9,945 | 10,600 | 19,519 | 94% | 54% | 51% |
|  | 2008 | 9,544 | 12,400 | 6,838 | 77% | 181% | 140% |
|  | 2009 | 6,413 | 14,400 | 7,867 | 45% | 183% | 82% |
|  | 2010 | 18,927 | 19,409 | 12,211 | 98% | 159% | 155% |
|  | 2011 | 9,654 | 10,602 | 7,946 | 91% | 133% | 121% |
|  | 2012 | 9,287 | 8,724 | 15,429 | 106% | 57% | 60% |
|  | 2013 | 9,348 | 7,727 | 11,244 | 121% | 69% | 83% |
|  | 2014 | 9,569 | 9,400 | 11,452 | 102% | 82% | 84% |
|  | 2015 | 15,530 | 14,100 | 27,941 | 110% | 50% | 56% |
|  | 2016 | 35,176 | 30,977 | 26,786 | 114% | 116% | 131% |
|  | 2017 | 24,763 | 21,300 | 18,917 | 116% | 113% | 131% |
|  | 2018 | 11,384 | 10,400 | 9,419 | 109% | 110% | 121% |
|  | 2019 | 4,605 | 4,152 | NA | 111% | NA | NA |
|  | AVG |  |  |  | 92% | 99% | 88% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| WSH2 | 1999 | 46,181 | 49,875 | 57,787 | 93% | 86% | 80% |
| (Willamette | 2000 | 57,202 | 61,211 | 61,292 | 93% | 100% | 93% |
| Spring) | 2001 | 59,207 | 59,600 | 85,695 | 99% | 70% | 69% |
|  | 2002 | 73,151 | 77,434 | 127,613 | 94% | 61% | 57% |
|  | 2003 | 108,530 | 112,521 | 132,199 | 96% | 85% | 82% |
|  | 2004 | 113,708 | 112,701 | 157,126 | 101% | 72% | 72% |
|  | 2005 | 105,111 | 122,280 | 68,642 | 86% | 178% | 153% |
|  | 2006 | 48,880 | 52,388 | 64,044 | 93% | 82% | 76% |
|  | 2007 | 44,542 | 61,071 | 43,301 | 73% | 141% | 103% |
|  | 2008 | 20,185 | 40,851 | 32,628 | 49% | 125% | 62% |
|  | 2009 | 44,161 | 41,205 | 42,088 | 107% | 98% | 105% |
|  | 2010 | 70,960 | 66,360 | 118,187 | 107% | 56% | 60% |
|  | 2011 | 117,375 | 109,600 | 85,975 | 107% | 127% | 137% |
|  | 2012 | 105,098 | 88,202 | 70,153 | 119% | 126% | 150% |
|  | 2013 | 58,436 | 65,982 | 53,062 | 89% | 124% | 110% |
|  | 2014 | 58,496 | 64,189 | 51,794 | 91% | 124% | 113% |
|  | 2015 | 54,162 | 55,440 | 87,071 | 98% | 64% | 62% |
|  | 2016 | 73,333 | 70,100 | 49,768 | 105% | 141% | 147% |
|  | 2017 | 38,756 | 40,190 | 53,653 | 96% | 75% | 72% |
|  | 2018 | 48,533 | 56,000 | 39,660 | 87% | 141% | 122% |
|  | 2019 | 43,866 | 42,490 | NA | 103% | NA | NA |
|  | AVG |  |  |  | 95% | 104% | 96% |
| SUM2 | 1999 | 21,653 | 20,900 | 21,867 | 104% | 96% | 99% |
| (Columbia | 2000 | 27,214 | 28,038 | 22,595 | 97% | 124% | 120% |
| River Summer) | 2001 | 27,029 | 24,500 | 52,960 | 110% | 46% | 51% |
|  | 2002 | 70,290 | 77,700 | 89,524 | 90% | 87% | 79% |
|  | 2003 | 97,280 | 87,600 | 83,058 | 111% | 105% | 117% |
|  | 2004 | 83,246 | 78,569 | 65,623 | 106% | 120% | 127% |
|  | 2005 | 66,190 | 62,400 | 60,272 | 106% | 104% | 110% |
|  | 2006 | 75,848 | 78,512 | 77,573 | 97% | 101% | 98% |
|  | 2007 | 56,948 | 45,555 | 37,035 | 125% | 123% | 154% |
|  | 2008 | 50,171 | 52,000 | 55,532 | 96% | 94% | 90% |
|  | 2009 | 68,114 | 70,700 | 53,881 | 96% | 131% | 126% |
|  | 2010 | 81,403 | 88,800 | 72,364 | 92% | 123% | 112% |
|  | 2011 | 89,000 | 91,900 | 80,574 | 97% | 114% | 110% |
|  | 2012 | 91,202 | 91,200 | 58,300 | 100% | 156% | 156% |
|  | 2013 | 72,042 | 73,500 | 67,603 | 98% | 109% | 107% |
|  | 2014 | 69,644 | 67,500 | 78,304 | 103% | 86% | 89% |
|  | 2015 | 76,664 | 73,000 | 126,882 | 105% | 58% | 60% |
|  | 2016 | 105,748 | 93,300 | 91,048 | 113% | 102% | 116% |
|  | 2017 | 75,738 | 63,100 | 68,200 | 120% | 93% | 111% |
|  | 2018 | 70,635 | 67,300 | 42,120 | 105% | 160% | 168% |
|  | 2019 | 39,774 | 35,900 | NA | 111% | NA | NA |
|  | AVG |  |  |  | 104% | 107% | 110% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| BON+CWF2 | 1999 | 26,112 | 34,800 | 39,881 | 75% | 87% | 65% |
| (Bonneville + | 2000 | 17,095 | 23,700 | 26,971 | 72% | 88% | 63% |
| Cowlitz | 2001 | 28,732 | 32,200 | 94,240 | 89% | 34% | 30% |
| Hatcheries) | 2002 | 100,401 | 137,600 | 156,411 | 73% | 88% | 64% |
|  | 2003 | 100,196 | 115,900 | 154,960 | 86% | 75% | 65% |
|  | 2004 | 64,696 | 77,100 | 108,308 | 84% | 71% | 60% |
|  | 2005 | 65,971 | 74,100 | 73,861 | 89% | 100% | 89% |
|  | 2006 | 49,173 | 55,800 | 58,317 | 88% | 96% | 84% |
|  | 2007 | 49,219 | 54,900 | 32,689 | 90% | 168% | 151% |
|  | 2008 | 58,557 | 59,000 | 60,268 | 99% | 98% | 97% |
|  | 2009 | 91,519 | 88,800 | 76,738 | 103% | 116% | 119% |
|  | 2010 | 95,581 | 90,600 | 103,055 | 105% | 88% | 93% |
|  | 2011 | 139,873 | 133,430 | 108,961 | 105% | 122% | 128% |
|  | 2012 | 132,629 | 126,999 | 84,798 | 104% | 150% | 156% |
|  | 2013 | 86,456 | 94,600 | 103,213 | 91% | 92% | 84% |
|  | 2014 | 98,459 | 110,000 | 101,827 | 90% | 108% | 97% |
|  | 2015 | 84,204 | 94,900 | 128,705 | 89% | 74% | 65% |
|  | 2016 | 131,890 | 133,700 | 81,860 | 99% | 163% | 161% |
|  | 2017 | 85,726 | 92,400 | 64,628 | 93% | 143% | 133% |
|  | 2018 | 58,162 | 62,450 | 52,962 | 93% | 118% | 110% |
|  | 2019 | 53,077 | 54,460 | NA | 97% | NA | NA |
|  | AVG |  |  |  | 91% | 104% | 96% |
| SPR2 | 1999 | 63,203 | 65,800 | 50,189 | 96% | 131% | 126% |
| (Spring Creek | 2000 | 17,335 | 21,900 | 20,528 | 79% | 107% | 84% |
| Hatchery) | 2001 | 56,089 | 56,600 | 124,954 | 99% | 45% | 45% |
|  | 2002 | 153,070 | 144,400 | 160,836 | 106% | 90% | 95% |
|  | 2003 | 89,116 | 96,900 | 180,592 | 92% | 54% | 49% |
|  | 2004 | 124,820 | 138,000 | 175,245 | 90% | 79% | 71% |
|  | 2005 | 92,021 | 114,100 | 93,145 | 81% | 122% | 99% |
|  | 2006 | 43,421 | 50,000 | 27,918 | 87% | 179% | 156% |
|  | 2007 | 19,421 | 21,800 | 14,549 | 89% | 150% | 133% |
|  | 2008 | 87,109 | 87,200 | 79,433 | 100% | 110% | 110% |
|  | 2009 | 46,652 | 59,300 | 48,970 | 79% | 121% | 95% |
|  | 2010 | 167,251 | 169,000 | 128,554 | 99% | 131% | 130% |
|  | 2011 | 105,900 | 116,400 | 70,531 | 91% | 165% | 150% |
|  | 2012 | 72,135 | 63,800 | 56,947 | 113% | 112% | 127% |
|  | 2013 | 36,276 | 38,000 | 86,703 | 95% | 44% | 42% |
|  | 2014 | 108,724 | 115,100 | 127,586 | 94% | 90% | 85% |
|  | 2015 | 145,389 | 160,500 | 166,359 | 91% | 96% | 87% |
|  | 2016 | 84,230 | 89,600 | 44,555 | 94% | 201% | 189% |
|  | 2017 | 158,396 | 158,400 | 48,880 | 100% | 324% | 324% |
|  | 2018 | 49,921 | 50,100 | 28,942 | 100% | 173% | 172% |
|  | 2019 | 46,728 | 46,000 | NA | 102% | NA | NA |
|  | AVG |  |  |  | 94% | 126% | 119% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| URB2 | 1999 | 173,712 | 147,500 | 165,889 | 118% | 89% | 105% |
| (Columbia | 2000 | 212,317 | 171,100 | 156,553 | 124% | 109% | 136% |
| Upriver | 2001 | 150,973 | 127,200 | 232,491 | 119% | 55% | 65% |
| Bright) | 2002 | 249,721 | 281,000 | 276,948 | 89% | 101% | 90% |
|  | 2003 | 246,890 | 280,400 | 373,191 | 88% | 75% | 66% |
|  | 2004 | 246,943 | 292,200 | 362,804 | 85% | 81% | 68% |
|  | 2005 | 318,535 | 352,200 | 278,339 | 90% | 127% | 114% |
|  | 2006 | 231,319 | 253,900 | 230,390 | 91% | 110% | 100% |
|  | 2007 | 168,594 | 182,400 | 114,064 | 92% | 160% | 148% |
|  | 2008 | 151,839 | 162,500 | 196,881 | 93% | 83% | 77% |
|  | 2009 | 259,415 | 259,900 | 212,047 | 100% | 123% | 122% |
|  | 2010 | 296,816 | 310,800 | 324,908 | 96% | 96% | 91% |
|  | 2011 | 388,138 | 398,200 | 322,234 | 97% | 124% | 120% |
|  | 2012 | 365,693 | 353,500 | 297,827 | 103% | 119% | 123% |
|  | 2013 | 437,422 | 432,500 | 778,254 | 101% | 56% | 56% |
|  | 2014 | 874,989 | 973,300 | 683,461 | 90% | 142% | 128% |
|  | 2015 | 489,123 | 500,300 | 795,915 | 98% | 63% | 61% |
|  | 2016 | 568,210 | 589,000 | 406,572 | 96% | 145% | 140% |
|  | 2017 | 253,016 | 260,000 | 297,124 | 97% | 88% | 85% |
|  | 2018 | 156,926 | 200,100 | 149,040 | 78% | 134% | 105% |
|  | 2019 | 140,870 | 158,400 | NA | 89% | NA | NA |
|  | AVG |  |  |  | 97% | 104% | 100% |
| LYF1 | 1999 | 523 | NA | 905 | NA | NA | 58% |
| (Snake River | 2000 | 1,243 | NA | 1,148 | NA | NA | 108% |
| Wild) | 2001 | 733 | 734 | 5,163 | 100% | 14% | 14% |
| Time series reworked per TAC guidance November 2016 | 2002 | 2,066 | NA | 2,116 | NA | NA | 98% |
|  | 2003 | 2,493 | 2,185 | 3,856 | 114% | 57% | 65% |
|  | 2004 | 4,323 | 3,725 | 2,983 | 116% | 125% | 145% |
|  | 2005 | 4,453 | 4,000 | 2,602 | 111% | 154% | 171% |
|  | 2006 | 8,285 | 3,500 | 2,483 | 237% | 141% | 334% |
|  | 2007 | 3,128 | 2,700 | 2,016 | 116% | 134% | 155% |
|  | 2008 | 2,718 | 2,534 | 2,222 | 107% | 114% | 122% |
|  | 2009 | 5,743 | 6,952 | 1,431 | 83% | 486% | 401% |
|  | 2010 | 2,609 | 2,610 | 9,583 | 100% | 27% | 27% |
|  | 2011 | 9,199 | 8,006 | 7,895 | 115% | 101% | 117% |
|  | 2012 | 10,401 | 8,683 | 12,797 | 120% | 68% | 81% |
|  | 2013 | 15,154 | 14,900 | 20,425 | 102% | 73% | 74% |
|  | 2014 | 31,106 | 31,642 | 14,172 | 98% | 223% | 219% |
|  | 2015 | 18,072 | NA | 16,212 | NA | NA | 111% |
|  | 2016 | 15,912 | 12,800 | 9,772 | 124% | 131% | 163% |
|  | 2017 | 11,091 | 8,100 | 6,996 | 137% | 116% | 159% |
|  | 2018 | 7,603 | 6,113 | 6,133 | 124% | 100% | 124% |
|  | 2019 | 6,814 | 5,435 | NA | 125% | NA | NA |
|  | AVG |  |  |  | 119% | 129% | 137% |

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| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| MCB2 | 1999 | 37,951 | 38,300 | 50,800 | 99% | 75% | 75% |
| (Mid-Columbia | 2000 | 53,460 | 50,600 | 37,200 | 106% | 136% | 144% |
| Bright) | 2001 | 45,055 | 43,500 | 76,600 | 104% | 57% | 59% |
| Post season return | 2002 | 102,085 | 96,200 | 108,400 | 106% | 89% | 94% |
| Reworked per | 2003 | 126,698 | 104,800 | 150,300 | 121% | 70% | 84% |
| TAC guidance | 2004 | 94,895 | 90,400 | 122,600 | 105% | 74% | 77% |
| November 2016 | 2005 | 93,837 | 89,400 | 97,900 | 105% | 91% | 96% |
|  | 2006 | 90,780 | 88,300 | 80,471 | 103% | 110% | 113% |
|  | 2007 | 77,470 | 68,000 | 47,575 | 114% | 143% | 163% |
|  | 2008 | 59,481 | 54,000 | 75,489 | 110% | 72% | 79% |
|  | 2009 | 99,685 | 94,400 | 73,069 | 106% | 129% | 136% |
|  | 2010 | 82,454 | 72,600 | 78,937 | 114% | 92% | 104% |
|  | 2011 | 108,005 | 100,000 | 87,235 | 108% | 115% | 124% |
|  | 2012 | 100,809 | 90,800 | 61,392 | 111% | 148% | 164% |
|  | 2013 | 113,333 | 105,200 | 249,588 | 108% | 42% | 45% |
|  | 2014 | 377,357 | 360,100 | 203,175 | 105% | 177% | 186% |
|  | 2015 | 156,711 | 113,300 | 170,620 | 138% | 66% | 92% |
|  | 2016 | 115,632 | 101,000 | 88,299 | 114% | 114% | 131% |
|  | 2017 | 62,130 | 45,600 | 51,566 | 136% | 88% | 120% |
|  | 2018 | 36,423 | 40,100 | 50,243 | 91% | 80% | 72% |
|  | 2019 | 68,146 | 56,700 | NA | 120% | NA | NA |
|  | AVG |  |  |  | 111% | 98% | 108% |
| LRW2 | 1999 | 3,068 | 2,600 | 3,349 | 118% | 78% | 92% |
| (Lewis River | 2000 | 4,053 | 3,500 | 10,234 | 116% | 34% | 40% |
| Wild) | 2001 | 16,574 | 16,700 | 15,721 | 99% | 106% | 105% |
| Time series | 2002 | 18,910 | 18,200 | 24,948 | 104% | 73% | 76% |
| reworked per TAC | 2003 | 25,820 | 24,600 | 26,021 | 105% | 95% | 99% |
| guidance | 2004 | 24,590 | 24,100 | 22,327 | 102% | 108% | 110% |
| November 2016 | 2005 | 21,937 | 20,200 | 16,767 | 109% | 120% | 131% |
|  | 2006 | 19,818 | 16,600 | 17,896 | 119% | 93% | 111% |
|  | 2007 | 10,306 | 10,100 | 4,276 | 102% | 236% | 241% |
|  | 2008 | 4,479 | 3,800 | 7,120 | 118% | 53% | 63% |
|  | 2009 | 9,363 | 8,500 | 7,533 | 110% | 113% | 124% |
|  | 2010 | 11,034 | 9,700 | 11,491 | 114% | 84% | 96% |
|  | 2011 | 13,429 | 12,500 | 15,376 | 107% | 81% | 87% |
|  | 2012 | 17,806 | 16,200 | 12,112 | 110% | 134% | 147% |
|  | 2013 | 16,713 | 14,200 | 25,841 | 118% | 55% | 65% |
|  | 2014 | 42,365 | 34,200 | 25,805 | 124% | 133% | 164% |
|  | 2015 | 32,374 | 18,900 | 32,403 | 171% | 58% | 100% |
|  | 2016 | 29,122 | 22,200 | 13,034 | 131% | 170% | 223% |
|  | 2017 | 19,063 | 12,500 | 7,838 | 153% | 159% | 243% |
|  | 2018 | 10,044 | 7,600 | 8,272 | 132% | 92% | 121% |
|  | 2019 | 15,345 | 13,700 | NA | 112% | NA | NA |
|  | AVG |  |  |  | 118% | 104% | 122% |

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|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Stock** | **Year** | **Model Forecast** | **Agency Forecast** | **Postseason Return** | **Model Fcst/ Agency Fcst** | **Agency Fcst/ Postseason** | **Model Fcst/ Postseason** |
| ORC1 | 1999 | 65,249 | 72,084 | 82,084 | 91% | 88% | 79% |
| (Oregon | 2000 | 61,457 | 63,259 | 67,771 | 97% | 93% | 91% |
| Coastal) | 2001 | 58,062 | 66,412 | 130,795 | 87% | 51% | 44% |
| Observed return | 2002 | 73,055 | 73,914 | 171,904 | 99% | 43% | 42% |
| reworked per | 2003 | 101,310 | 85,483 | 183,183 | 119% | 47% | 55% |
| ODFW review | 2004 | 135,716 | 131,904 | 138,150 | 103% | 95% | 98% |
| November 2016 | 2005 | 133,886 | 167,213 | 106,632 | 80% | 157% | 126% |
|  | 2006 | 125,550 | 136,373 | 109,112 | 92% | 125% | 115% |
|  | 2007 | 108,338 | 131,195 | 46,242 | 83% | 284% | 234% |
|  | 2008 | 53,417 | 70,101 | 39,887 | 76% | 176% | 134% |
|  | 2009 | 32,254 | 48,072 | 53,550 | 67% | 90% | 60% |
|  | 2010 | 51,234 | 59,806 | 72,206 | 86% | 83% | 71% |
|  | 2011 | 73,043 | 78,199 | 99,247 | 93% | 79% | 74% |
|  | 2012 | 82,789 | 80,749 | 91,655 | 103% | 88% | 90% |
|  | 2013 | 70,385 | 80,095 | 117,203 | 88% | 68% | 60% |
|  | 2014 | 81,984 | 109,029 | 133,614 | 75% | 82% | 61% |
|  | 2015 | 63,642 | 94,715 | 144,548 | 67% | 66% | 44% |
|  | 2016 | 110,710 | 119,374 | 103,788 | 93% | 115% | 107% |
|  | 2017 | 80,529 | 87,243 | 79,462 | 92% | 110% | 101% |
|  | 2018 | 48,149 | 68,939 | 58,615 | 70% | 118% | 82% |
|  | 2019 | 54,063 | 73,721 | NA | 73% | NA | NA |
|  | AVG |  |  |  | 87% | 103% | 89% |

1 Escapement; 2 Terminal Run; 3 Puget Sound returns for 2018 are preliminary postseason projections based on partial return information; 4 An agency forecast was provided in 2013 for the WCVI aggregate (27,339) but the decision was made by the CTC to exclude it from the Model calibration. The Model forecast was 32,180 and both forecasts were large under-forecasts.