All SR SIT DSM Summary Tables - EIS

2025-07-16

##### ’

## EIS

### Population Abundance, Growth

**Table** **:** Table EIS.1. Predicted annual total spring-run spawner abundance in the Central Valley, including both natural- and hatchery-origin fish.

| Year | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1980 | 14888 | 14882 (0) | 14889 (0) | 14889 (0) | 14888 (0) | 14888 (0) | 14890 (0) | 14881 (0) | 14888 (0) |
| 1981 | 13045 | 13048 (0) | 13046 (0) | 13046 (0) | 13046 (0) | 13046 (0) | 13043 (0) | 13046 (0) | 13046 (0) |
| 1982 | 13095 | 13118 (0.2) | 13097 (0) | 13097 (0) | 13108 (0.1) | 13134 (0.3) | 13114 (0.1) | 13125 (0.2) | 13132 (0.3) |
| 1983 | 15807 | 15867 (0.4) | 15817 (0.1) | 15817 (0.1) | 15837 (0.2) | 15886 (0.5) | 15888 (0.5) | 15876 (0.4) | 15883 (0.5) |
| 1984 | 15748 | 15788 (0.3) | 15758 (0.1) | 15758 (0.1) | 15765 (0.1) | 15778 (0.2) | 15823 (0.5) | 15787 (0.2) | 15783 (0.2) |
| 1985 | 14598 | 14609 (0.1) | 14602 (0) | 14602 (0) | 14600 (0) | 14594 (0) | 14660 (0.4) | 14608 (0.1) | 14595 (0) |
| 1986 | 12859 | 12860 (0) | 12859 (0) | 12859 (0) | 12854 (0) | 12864 (0) | 12917 (0.5) | 12855 (0) | 12853 (0) |
| 1987 | 14295 | 14325 (0.2) | 14337 (0.3) | 14337 (0.3) | 14330 (0.2) | 14364 (0.5) | 14434 (1) | 14271 (-0.2) | 14288 (0) |
| 1988 | 19578 | 19605 (0.1) | 19665 (0.4) | 19665 (0.4) | 19667 (0.5) | 19722 (0.7) | 19850 (1.4) | 19548 (-0.2) | 19603 (0.1) |
| 1989 | 18233 | 18176 (-0.3) | 18287 (0.3) | 18287 (0.3) | 18303 (0.4) | 18357 (0.7) | 18452 (1.2) | 18225 (0) | 18305 (0.4) |
| 1990 | 13540 | 13512 (-0.2) | 13554 (0.1) | 13555 (0.1) | 13596 (0.4) | 13607 (0.5) | 13631 (0.7) | 13569 (0.2) | 13660 (0.9) |
| 1991 | 13973 | 14029 (0.4) | 14019 (0.3) | 14018 (0.3) | 14070 (0.7) | 14078 (0.8) | 14210 (1.7) | 14055 (0.6) | 14175 (1.4) |
| 1992 | 15275 | 15379 (0.7) | 15454 (1.2) | 15401 (0.8) | 15458 (1.2) | 15495 (1.4) | 15731 (3) | 15395 (0.8) | 15507 (1.5) |
| 1993 | 16087 | 16256 (1.1) | 16381 (1.8) | 16236 (0.9) | 16316 (1.4) | 16334 (1.5) | 16459 (2.3) | 16194 (0.7) | 16246 (1) |
| 1994 | 18042 | 18148 (0.6) | 18217 (1) | 18117 (0.4) | 18116 (0.4) | 18117 (0.4) | 18209 (0.9) | 18088 (0.3) | 18081 (0.2) |
| 1995 | 16889 | 16874 (-0.1) | 16891 (0) | 16903 (0.1) | 16836 (-0.3) | 16841 (-0.3) | 16995 (0.6) | 16878 (-0.1) | 16871 (-0.1) |
| 1996 | 14759 | 14726 (-0.2) | 14747 (-0.1) | 14769 (0.1) | 14727 (-0.2) | 14745 (-0.1) | 14871 (0.8) | 14741 (-0.1) | 14758 (0) |
| 1997 | 18116 | 18135 (0.1) | 18123 (0) | 18120 (0) | 18113 (0) | 18124 (0) | 18249 (0.7) | 18123 (0) | 18136 (0.1) |
| 1998 | 19405 | 19435 (0.2) | 19402 (0) | 19405 (0) | 19401 (0) | 19398 (0) | 19547 (0.7) | 19424 (0.1) | 19435 (0.2) |
| 1999 | 17937 | 17934 (0) | 17940 (0) | 17940 (0) | 17942 (0) | 17940 (0) | 18048 (0.6) | 17956 (0.1) | 17962 (0.1) |

##### ’

**Table** **:** Table EIS.2. Predicted annual natural-origin spring-run spawner abundance in the Central Valley.

| Year | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1980 | 9562 | 9557 (-0.1) | 9566 (0) | 9566 (0) | 9562 (0) | 9563 (0) | 9566 (0) | 9559 (0) | 9562 (0) |
| 1981 | 7713 | 7714 (0) | 7713 (0) | 7713 (0) | 7714 (0) | 7713 (0) | 7711 (0) | 7713 (0) | 7713 (0) |
| 1982 | 7773 | 7796 (0.3) | 7776 (0) | 7776 (0) | 7786 (0.2) | 7811 (0.5) | 7792 (0.2) | 7802 (0.4) | 7809 (0.5) |
| 1983 | 10483 | 10544 (0.6) | 10494 (0.1) | 10494 (0.1) | 10515 (0.3) | 10565 (0.8) | 10564 (0.8) | 10555 (0.7) | 10562 (0.8) |
| 1984 | 10424 | 10465 (0.4) | 10433 (0.1) | 10433 (0.1) | 10440 (0.2) | 10453 (0.3) | 10498 (0.7) | 10460 (0.3) | 10459 (0.3) |
| 1985 | 9263 | 9275 (0.1) | 9268 (0.1) | 9268 (0.1) | 9267 (0) | 9261 (0) | 9329 (0.7) | 9274 (0.1) | 9263 (0) |
| 1986 | 7536 | 7539 (0) | 7535 (0) | 7535 (0) | 7531 (-0.1) | 7541 (0.1) | 7595 (0.8) | 7533 (0) | 7532 (-0.1) |
| 1987 | 8961 | 8991 (0.3) | 9004 (0.5) | 9004 (0.5) | 8996 (0.4) | 9029 (0.8) | 9102 (1.6) | 8938 (-0.3) | 8955 (-0.1) |
| 1988 | 14247 | 14272 (0.2) | 14330 (0.6) | 14330 (0.6) | 14332 (0.6) | 14388 (1) | 14517 (1.9) | 14215 (-0.2) | 14272 (0.2) |
| 1989 | 12898 | 12843 (-0.4) | 12953 (0.4) | 12953 (0.4) | 12969 (0.6) | 13021 (1) | 13119 (1.7) | 12891 (-0.1) | 12972 (0.6) |
| 1990 | 8210 | 8182 (-0.3) | 8225 (0.2) | 8226 (0.2) | 8266 (0.7) | 8278 (0.8) | 8301 (1.1) | 8238 (0.3) | 8329 (1.4) |
| 1991 | 8639 | 8695 (0.6) | 8688 (0.6) | 8688 (0.6) | 8738 (1.1) | 8745 (1.2) | 8874 (2.7) | 8721 (0.9) | 8841 (2.3) |
| 1992 | 9941 | 10047 (1.1) | 10123 (1.8) | 10067 (1.3) | 10127 (1.9) | 10161 (2.2) | 10399 (4.6) | 10060 (1.2) | 10174 (2.3) |
| 1993 | 10764 | 10930 (1.5) | 11058 (2.7) | 10909 (1.3) | 10990 (2.1) | 11011 (2.3) | 11134 (3.4) | 10869 (1) | 10923 (1.5) |
| 1994 | 12707 | 12816 (0.9) | 12885 (1.4) | 12784 (0.6) | 12782 (0.6) | 12784 (0.6) | 12876 (1.3) | 12754 (0.4) | 12747 (0.3) |
| 1995 | 11564 | 11550 (-0.1) | 11567 (0) | 11579 (0.1) | 11514 (-0.4) | 11518 (-0.4) | 11673 (0.9) | 11556 (-0.1) | 11547 (-0.1) |
| 1996 | 9436 | 9405 (-0.3) | 9426 (-0.1) | 9446 (0.1) | 9405 (-0.3) | 9425 (-0.1) | 9548 (1.2) | 9419 (-0.2) | 9436 (0) |
| 1997 | 12791 | 12811 (0.2) | 12798 (0.1) | 12796 (0) | 12788 (0) | 12801 (0.1) | 12924 (1) | 12799 (0.1) | 12813 (0.2) |
| 1998 | 14081 | 14110 (0.2) | 14081 (0) | 14081 (0) | 14078 (0) | 14075 (0) | 14222 (1) | 14103 (0.2) | 14112 (0.2) |
| 1999 | 12613 | 12611 (0) | 12617 (0) | 12616 (0) | 12618 (0) | 12615 (0) | 12724 (0.9) | 12631 (0.1) | 12634 (0.2) |

##### ’

**Table** **:** Table EIS.3. Predicted mean lambda (Nt+1/Nt) for total spring-run spawner abundance in the Central Valley, including both natural- and hatchery-origin fish.

| WYT | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| C | 1.072 | 1.072 (0) | 1.072 (0) | 1.072 (0) | 1.072 (0) | 1.072 (0) | 1.074 (0.2) | 1.072 (0) | 1.073 (0.1) |
| D | 0.962 | 0.961 (-0.1) | 0.962 (0) | 0.962 (0) | 0.962 (0) | 0.962 (0) | 0.962 (0) | 0.961 (-0.1) | 0.962 (0) |
| AN | 1.053 | 1.057 (0.4) | 1.06 (0.7) | 1.055 (0.2) | 1.055 (0.2) | 1.054 (0.1) | 1.047 (-0.6) | 1.052 (-0.1) | 1.048 (-0.5) |
| W | 1.013 | 1.013 (0) | 1.013 (0) | 1.013 (0) | 1.013 (0) | 1.013 (0) | 1.014 (0.1) | 1.014 (0.1) | 1.014 (0.1) |
| All | 1.010 | 1.01 (0) | 1.01 (0) | 1.01 (0) | 1.01 (0) | 1.01 (0) | 1.01 (0) | 1.01 (0) | 1.01 (0) |

##### ’

**Table** **:** Table EIS.4. Predicted end lambda (Nt=19/Nt=1) for total spring-run spawner abundance in the Central Valley, including both natural- and hatchery-origin fish.

| NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1.205 | 1.205 (0) | 1.205 (0) | 1.205 (0) | 1.205 (0) | 1.205 (0) | 1.212 (0.6) | 1.206 (0.1) | 1.207 (0.2) |

##### ’

##### ’

##### ’

### Demographic Parameters

**Table** **:** Table EIS.5. Predicted small juvenile rearing survival for spring-run Chinook salmon in the Upper Sacramento River.

| WYT | Month | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| All | 11 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02195056 | 0.02185941 |
| All | 12 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02203990 | 0.02207069 |
| All | 1 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02210708 | 0.02210506 |
| All | 2 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.021 | 0.02049189 | 0.02049053 |
| All | 3 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.02036345 | 0.02035703 |
| All | 4 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.020 | 0.01925991 | 0.01931259 |
| All | 5 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.01884529 | 0.01906498 |
| C | 11 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02194703 | 0.02182228 |
| C | 12 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02200818 | 0.02207555 |
| C | 1 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02210069 | 0.02209991 |
| C | 2 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.02048491 | 0.02048018 |
| C | 3 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.02011296 | 0.02010727 |
| C | 4 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.020 | 0.01887883 | 0.01916274 |
| C | 5 | 0.019 | 0.019 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.01952989 | 0.01952623 |
| D | 11 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02195712 | 0.02195889 |
| D | 12 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02201845 | 0.02206027 |
| D | 1 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02209899 | 0.02209504 |
| D | 2 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.02047728 | 0.02047805 |
| D | 3 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.02043862 | 0.02041679 |
| D | 4 | 0.018 | 0.019 | 0.018 | 0.018 | 0.019 | 0.018 | 0.019 | 0.01857468 | 0.01850175 |
| D | 5 | 0.018 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.01790020 | 0.01870200 |
| AN | 11 | 0.022 | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 | 0.02161395 | 0.02132970 |
| AN | 12 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02205574 | 0.02206501 |
| AN | 1 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02211400 | 0.02211316 |
| AN | 2 | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 | 0.02050396 | 0.02050366 |
| AN | 3 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.02048514 | 0.02048507 |
| AN | 4 | 0.019 | 0.020 | 0.019 | 0.019 | 0.019 | 0.019 | 0.020 | 0.01945712 | 0.01947241 |
| AN | 5 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.01914700 | 0.01920377 |
| W | 11 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02202441 | 0.02195355 |
| W | 12 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02206353 | 0.02207388 |
| W | 1 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.02211269 | 0.02211058 |
| W | 2 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.021 | 0.02049959 | 0.02049891 |
| W | 3 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.02044216 | 0.02044077 |
| W | 4 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.020 | 0.01973233 | 0.01972070 |
| W | 5 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 | 0.01881796 | 0.01893922 |

##### ’

**Table** **:** Table EIS.6. Predicted smolt migratory survival for spring-run Chinook salmon in the Upper-mid Sacramento River.

| WYT | Month | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| All | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997448 | 0.9997498 |
| All | 12 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996159 | 0.9996149 |
| All | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996211 | 0.9996283 |
| All | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997474 | 0.9997391 |
| All | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998523 | 0.9998603 |
| All | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997673 | 0.9997726 |
| All | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996570 | 0.9996606 |
| C | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996341 | 0.9996522 |
| C | 12 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.9994067 | 0.9994067 |
| C | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9995601 | 0.9995799 |
| C | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997334 | 0.9997004 |
| C | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997749 | 0.9998134 |
| C | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996560 | 0.9996975 |
| C | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9995992 | 0.9996337 |
| D | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997244 | 0.9997315 |
| D | 12 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.9994810 | 0.9994919 |
| D | 1 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.9993756 | 0.9993748 |
| D | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996643 | 0.9996641 |
| D | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998417 | 0.9998341 |
| D | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998025 | 0.9997649 |
| D | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997143 | 0.9996526 |
| AN | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997811 | 0.9997162 |
| AN | 12 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997321 | 0.9996980 |
| AN | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996788 | 0.9997049 |
| AN | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997833 | 0.9997833 |
| AN | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9999435 | 0.9999432 |
| AN | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997509 | 0.9997925 |
| AN | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9995697 | 0.9996434 |
| W | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998072 | 0.9998197 |
| W | 12 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997663 | 0.9997669 |
| W | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997512 | 0.9997507 |
| W | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997841 | 0.9997840 |
| W | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998796 | 0.9998796 |
| W | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998171 | 0.9998133 |
| W | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996830 | 0.9996828 |

##### ’

**Table** **:** Table EIS.7. Predicted smolt migratory survival for spring-run Chinook salmon in the Lower-mid Sacramento River.

| WYT | Month | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| All | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998196 | 0.9998265 |
| All | 12 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996826 | 0.9996815 |
| All | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996517 | 0.9996595 |
| All | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997825 | 0.9997746 |
| All | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998782 | 0.9998857 |
| All | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998345 | 0.9998384 |
| All | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998562 | 0.9998565 |
| C | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997342 | 0.9997597 |
| C | 12 | 0.999 | 1.000 | 0.999 | 1.000 | 1.000 | 0.999 | 1.000 | 0.9995112 | 0.9995100 |
| C | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9995729 | 0.9995926 |
| C | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997513 | 0.9997199 |
| C | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997931 | 0.9998291 |
| C | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997308 | 0.9997607 |
| C | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997961 | 0.9998054 |
| D | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998176 | 0.9998213 |
| D | 12 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9995705 | 0.9995790 |
| D | 1 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.999 | 0.9994265 | 0.9994272 |
| D | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9996890 | 0.9996890 |
| D | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998604 | 0.9998532 |
| D | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998663 | 0.9998355 |
| D | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998941 | 0.9998677 |
| AN | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998512 | 0.9998056 |
| AN | 12 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997770 | 0.9997517 |
| AN | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997055 | 0.9997308 |
| AN | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998214 | 0.9998214 |
| AN | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9999547 | 0.9999544 |
| AN | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998291 | 0.9998594 |
| AN | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998166 | 0.9998436 |
| W | 11 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998608 | 0.9998705 |
| W | 12 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998066 | 0.9998067 |
| W | 1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9997836 | 0.9997841 |
| W | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998327 | 0.9998327 |
| W | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9999164 | 0.9999163 |
| W | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998791 | 0.9998781 |
| W | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.9998816 | 0.9998827 |

##### ’

**Table** **:** Table EIS.8. Predicted smolt migratory survival for spring-run Chinook salmon in the Lower Sacramento River.

| WYT | Month | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| All | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998361 | 0.9998396 |
| All | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997132 | 0.9997095 |
| All | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997212 | 0.9997281 |
| All | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998233 | 0.9998151 |
| All | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998950 | 0.9999034 |
| All | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998444 | 0.9998486 |
| All | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998965 | 0.9998963 |
| C | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997584 | 0.9997727 |
| C | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9995194 | 0.9995124 |
| C | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9996071 | 0.9996251 |
| C | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997487 | 0.9997159 |
| C | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997943 | 0.9998332 |
| C | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997457 | 0.9997746 |
| C | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998480 | 0.9998547 |
| D | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998418 | 0.9998431 |
| D | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9996802 | 0.9996835 |
| D | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9995830 | 0.9995829 |
| D | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997249 | 0.9997249 |
| D | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998667 | 0.9998599 |
| D | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998814 | 0.9998542 |
| D | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9999266 | 0.9999072 |
| AN | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998586 | 0.9998161 |
| AN | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997920 | 0.9997679 |
| AN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9997242 | 0.9997489 |
| AN | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9999000 | 0.9999000 |
| AN | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9999738 | 0.9999735 |
| AN | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998379 | 0.9998656 |
| AN | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998670 | 0.9998836 |
| W | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998716 | 0.9998804 |
| W | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998179 | 0.9998175 |
| W | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998453 | 0.9998453 |
| W | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998915 | 0.9998915 |
| W | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9999461 | 0.9999461 |
| W | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9998842 | 0.9998834 |
| W | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9999166 | 0.9999174 |

##### ’

**Table** **:** Table EIS.9. Predicted smolt migratory survival for spring-run Chinook salmon in the North Delta.

| WYT | Month | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| All | 11 | 0.919 | 0.919 | 0.920 | 0.919 | 0.920 | 0.920 | 0.919 | 0.9198259 | 0.9200278 |
| All | 12 | 0.920 | 0.921 | 0.920 | 0.921 | 0.920 | 0.920 | 0.921 | 0.9206429 | 0.9205473 |
| All | 1 | 0.923 | 0.923 | 0.923 | 0.923 | 0.922 | 0.923 | 0.923 | 0.9231204 | 0.9232121 |
| All | 2 | 0.930 | 0.930 | 0.929 | 0.929 | 0.929 | 0.929 | 0.930 | 0.9295246 | 0.9291782 |
| All | 3 | 0.930 | 0.930 | 0.930 | 0.930 | 0.930 | 0.930 | 0.930 | 0.9298677 | 0.9299986 |
| All | 4 | 0.922 | 0.924 | 0.924 | 0.923 | 0.924 | 0.924 | 0.924 | 0.9232384 | 0.9236611 |
| All | 5 | 0.919 | 0.919 | 0.919 | 0.919 | 0.919 | 0.920 | 0.920 | 0.9192953 | 0.9196585 |
| C | 11 | 0.911 | 0.912 | 0.913 | 0.911 | 0.914 | 0.914 | 0.910 | 0.9120685 | 0.9134193 |
| C | 12 | 0.912 | 0.915 | 0.912 | 0.913 | 0.912 | 0.912 | 0.913 | 0.9122963 | 0.9118622 |
| C | 1 | 0.916 | 0.915 | 0.917 | 0.915 | 0.914 | 0.917 | 0.917 | 0.9170310 | 0.9169973 |
| C | 2 | 0.926 | 0.926 | 0.926 | 0.926 | 0.925 | 0.926 | 0.926 | 0.9256069 | 0.9245824 |
| C | 3 | 0.924 | 0.924 | 0.924 | 0.924 | 0.925 | 0.924 | 0.925 | 0.9241206 | 0.9247258 |
| C | 4 | 0.912 | 0.917 | 0.917 | 0.915 | 0.917 | 0.918 | 0.916 | 0.9150037 | 0.9157999 |
| C | 5 | 0.910 | 0.911 | 0.912 | 0.912 | 0.912 | 0.913 | 0.911 | 0.9117319 | 0.9130471 |
| D | 11 | 0.921 | 0.919 | 0.920 | 0.920 | 0.921 | 0.921 | 0.921 | 0.9201954 | 0.9196356 |
| D | 12 | 0.917 | 0.917 | 0.918 | 0.918 | 0.917 | 0.917 | 0.918 | 0.9173583 | 0.9179579 |
| D | 1 | 0.914 | 0.915 | 0.915 | 0.915 | 0.915 | 0.915 | 0.915 | 0.9140456 | 0.9141647 |
| D | 2 | 0.923 | 0.923 | 0.923 | 0.923 | 0.923 | 0.923 | 0.924 | 0.9234289 | 0.9229934 |
| D | 3 | 0.928 | 0.927 | 0.928 | 0.928 | 0.928 | 0.928 | 0.928 | 0.9276155 | 0.9276214 |
| D | 4 | 0.919 | 0.919 | 0.919 | 0.919 | 0.920 | 0.921 | 0.921 | 0.9200373 | 0.9209553 |
| D | 5 | 0.917 | 0.918 | 0.917 | 0.917 | 0.917 | 0.917 | 0.912 | 0.9168641 | 0.9167985 |
| AN | 11 | 0.916 | 0.912 | 0.917 | 0.917 | 0.917 | 0.918 | 0.914 | 0.9174075 | 0.9163272 |
| AN | 12 | 0.917 | 0.921 | 0.917 | 0.917 | 0.917 | 0.917 | 0.919 | 0.9211889 | 0.9202431 |
| AN | 1 | 0.928 | 0.928 | 0.928 | 0.928 | 0.928 | 0.928 | 0.929 | 0.9277133 | 0.9282922 |
| AN | 2 | 0.934 | 0.934 | 0.934 | 0.934 | 0.934 | 0.934 | 0.934 | 0.9338269 | 0.9338500 |
| AN | 3 | 0.934 | 0.934 | 0.934 | 0.934 | 0.934 | 0.934 | 0.935 | 0.9342772 | 0.9340925 |
| AN | 4 | 0.927 | 0.926 | 0.927 | 0.927 | 0.927 | 0.927 | 0.929 | 0.9267696 | 0.9273398 |
| AN | 5 | 0.921 | 0.922 | 0.921 | 0.921 | 0.921 | 0.922 | 0.926 | 0.9209418 | 0.9219497 |
| W | 11 | 0.925 | 0.924 | 0.924 | 0.924 | 0.924 | 0.924 | 0.924 | 0.9245088 | 0.9246959 |
| W | 12 | 0.927 | 0.927 | 0.927 | 0.927 | 0.927 | 0.927 | 0.927 | 0.9266183 | 0.9265907 |
| W | 1 | 0.929 | 0.930 | 0.929 | 0.929 | 0.929 | 0.929 | 0.930 | 0.9295159 | 0.9295568 |
| W | 2 | 0.933 | 0.933 | 0.933 | 0.933 | 0.933 | 0.933 | 0.933 | 0.9334541 | 0.9334421 |
| W | 3 | 0.933 | 0.933 | 0.933 | 0.933 | 0.933 | 0.933 | 0.933 | 0.9330817 | 0.9330748 |
| W | 4 | 0.928 | 0.928 | 0.928 | 0.928 | 0.928 | 0.928 | 0.930 | 0.9284512 | 0.9284134 |
| W | 5 | 0.924 | 0.924 | 0.924 | 0.924 | 0.924 | 0.924 | 0.926 | 0.9242119 | 0.9240935 |

##### ’

**Table** **:** Table EIS.10. Predicted smolt migratory survival for spring-run Chinook salmon in the South Delta.

| WYT | Month | NAA | Alt1 | Alt2wTUCPwoVA | Alt2woTUCPwoVA | Alt2woTUCPDeltaVA | Alt2woTUCPAllVA | Alt3 | Alt4 | Action5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| All | 11 | 0.329 | 0.323 | 0.330 | 0.329 | 0.333 | 0.332 | 0.326 | 0.3319283 | 0.3298108 |
| All | 12 | 0.379 | 0.387 | 0.381 | 0.383 | 0.380 | 0.379 | 0.389 | 0.3846347 | 0.3839326 |
| All | 1 | 0.438 | 0.439 | 0.442 | 0.438 | 0.438 | 0.442 | 0.445 | 0.4400147 | 0.4413519 |
| All | 2 | 0.470 | 0.468 | 0.469 | 0.469 | 0.463 | 0.469 | 0.469 | 0.4705475 | 0.4640654 |
| All | 3 | 0.469 | 0.466 | 0.467 | 0.468 | 0.469 | 0.468 | 0.473 | 0.4683637 | 0.4698004 |
| All | 4 | 0.365 | 0.370 | 0.372 | 0.369 | 0.372 | 0.378 | 0.387 | 0.3698849 | 0.3731113 |
| All | 5 | 0.345 | 0.348 | 0.347 | 0.347 | 0.346 | 0.349 | 0.359 | 0.3463451 | 0.3489942 |
| C | 11 | 0.251 | 0.247 | 0.254 | 0.253 | 0.257 | 0.253 | 0.244 | 0.2535977 | 0.2573367 |
| C | 12 | 0.278 | 0.290 | 0.278 | 0.286 | 0.279 | 0.277 | 0.288 | 0.2783746 | 0.2786249 |
| C | 1 | 0.323 | 0.317 | 0.333 | 0.319 | 0.319 | 0.334 | 0.334 | 0.3340512 | 0.3333093 |
| C | 2 | 0.366 | 0.357 | 0.361 | 0.362 | 0.340 | 0.362 | 0.357 | 0.3627318 | 0.3429583 |
| C | 3 | 0.346 | 0.342 | 0.342 | 0.342 | 0.347 | 0.344 | 0.349 | 0.3430606 | 0.3501440 |
| C | 4 | 0.248 | 0.277 | 0.275 | 0.261 | 0.272 | 0.279 | 0.265 | 0.2611065 | 0.2661660 |
| C | 5 | 0.250 | 0.257 | 0.259 | 0.259 | 0.258 | 0.266 | 0.257 | 0.2581781 | 0.2656341 |
| D | 11 | 0.324 | 0.315 | 0.319 | 0.319 | 0.331 | 0.330 | 0.327 | 0.3225785 | 0.3145642 |
| D | 12 | 0.323 | 0.322 | 0.331 | 0.331 | 0.323 | 0.322 | 0.329 | 0.3228597 | 0.3294718 |
| D | 1 | 0.324 | 0.327 | 0.331 | 0.331 | 0.331 | 0.330 | 0.330 | 0.3229247 | 0.3229595 |
| D | 2 | 0.343 | 0.343 | 0.342 | 0.342 | 0.341 | 0.340 | 0.351 | 0.3475676 | 0.3398873 |
| D | 3 | 0.412 | 0.413 | 0.413 | 0.413 | 0.413 | 0.414 | 0.429 | 0.4146228 | 0.4144992 |
| D | 4 | 0.310 | 0.309 | 0.310 | 0.310 | 0.313 | 0.329 | 0.327 | 0.3170989 | 0.3219523 |
| D | 5 | 0.308 | 0.308 | 0.306 | 0.306 | 0.300 | 0.301 | 0.272 | 0.3030137 | 0.3030333 |
| AN | 11 | 0.272 | 0.259 | 0.290 | 0.287 | 0.290 | 0.292 | 0.264 | 0.2897605 | 0.2750910 |
| AN | 12 | 0.308 | 0.343 | 0.306 | 0.305 | 0.306 | 0.306 | 0.331 | 0.3540850 | 0.3384759 |
| AN | 1 | 0.492 | 0.500 | 0.495 | 0.496 | 0.494 | 0.497 | 0.505 | 0.4833883 | 0.4957151 |
| AN | 2 | 0.566 | 0.565 | 0.565 | 0.565 | 0.565 | 0.565 | 0.565 | 0.5652119 | 0.5654905 |
| AN | 3 | 0.559 | 0.555 | 0.554 | 0.559 | 0.553 | 0.550 | 0.563 | 0.5577645 | 0.5551765 |
| AN | 4 | 0.402 | 0.392 | 0.399 | 0.401 | 0.399 | 0.411 | 0.452 | 0.4006676 | 0.4123588 |
| AN | 5 | 0.342 | 0.348 | 0.341 | 0.341 | 0.340 | 0.351 | 0.413 | 0.3413836 | 0.3536070 |
| W | 11 | 0.388 | 0.382 | 0.386 | 0.386 | 0.386 | 0.385 | 0.385 | 0.3889713 | 0.3890104 |
| W | 12 | 0.477 | 0.479 | 0.477 | 0.477 | 0.477 | 0.477 | 0.485 | 0.4779125 | 0.4767431 |
| W | 1 | 0.539 | 0.542 | 0.539 | 0.539 | 0.539 | 0.539 | 0.544 | 0.5412846 | 0.5419136 |
| W | 2 | 0.564 | 0.564 | 0.564 | 0.564 | 0.564 | 0.564 | 0.563 | 0.5640663 | 0.5639985 |
| W | 3 | 0.542 | 0.539 | 0.542 | 0.542 | 0.542 | 0.542 | 0.542 | 0.5419946 | 0.5418820 |
| W | 4 | 0.446 | 0.445 | 0.447 | 0.447 | 0.447 | 0.447 | 0.468 | 0.4469373 | 0.4465411 |
| W | 5 | 0.415 | 0.416 | 0.416 | 0.416 | 0.415 | 0.415 | 0.443 | 0.4156878 | 0.4147073 |

##### ’