

Appendix 4G

Attachment 3: Flow Results (CalSim 3)

Appendix 4G

Attachment 3: Flow Results (CalSim 3)

The following results of the CalSim 3 model are included for river flow conditions for the following scenarios:

- Baseline Conditions (Updated) (040424)
- Alternative 1 plus Cumulative Projects (102023)

| Title | Model Parameter | Table Numbers | Figure Numbers |
|------------------------------------------|------------------------|------------------------|-----------------------|
| Sacramento River Flow at Freeport | C_SAC048 ¹ | 4G-3-1-1a to 4G-3-1-1c | 4G-3-1a to 4G-3-1r |
| Yolo Bypass Flow | C_YBP020 ¹ | 4G-3-2-1a to 4G-3-2-1c | 4G-3-2a to 4G-3-2r |
| San Joaquin River at Vernalis | C_SJR070 ¹ | 4G-3-3-1a to 4G-3-3-1c | 4G-3-3a to 4G-3-3r |
| San Joaquin River at Vernalis (60-20-20) | C_SJR070 ¹ | 4G-3-4-1a to 4G-3-4-1c | 4G-3-4a to 4G-3-4f |
| Mokelumne River below Cosumnes | C_MOK019 | 4G-3-5-1a to 4G-3-5-1c | 4G-3-5a to 4G-3-5r |
| Old and Middle River Flow | C_OMR014 ¹ | 4G-3-6-1a to 4G-3-6-1c | 4G-3-6a to 4G-3-6r |
| Qwest | QWESTFLOW ¹ | 4G-3-7-1a to 4G-3-7-1c | 4G-3-7a to 4G-3-7r |
| Delta Outflow | NDOI ¹ | 4G-3-8-1a to 4G-3-8-1c | 4G-3-8a to 4G-3-8r |

Note:

¹ Parameter has been post-processed for the Alternative 1 plus Cumulative Projects scenario.

Report formats:

- Monthly tables comparing two scenarios (exceedance values, long-term average, and average by water year type).
- Monthly pattern charts (long-term average and average by water year type) including all scenarios.
- Monthly exceedance charts (all months) including all scenarios.

Table 4G-3-1-1a. Sacramento River Flow at Freeport, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 10% Exceedance | 15,836 | 22,456 | 50,214 | 62,194 | 69,277 | 65,843 | 52,801 | 43,765 | 28,055 | 22,868 | 19,017 | 20,490 |
| 20% Exceedance | 14,437 | 15,164 | 33,046 | 51,801 | 60,195 | 52,978 | 36,838 | 33,365 | 22,001 | 22,161 | 18,411 | 19,874 |
| 30% Exceedance | 13,720 | 14,235 | 24,010 | 33,898 | 49,108 | 41,592 | 25,288 | 22,681 | 16,255 | 20,603 | 18,072 | 18,439 |
| 40% Exceedance | 13,073 | 13,723 | 18,057 | 26,550 | 36,508 | 32,477 | 20,069 | 16,947 | 14,089 | 19,946 | 17,555 | 16,690 |
| 50% Exceedance | 11,780 | 13,122 | 15,189 | 21,734 | 27,577 | 24,024 | 16,406 | 15,383 | 13,659 | 19,273 | 16,744 | 15,582 |
| 60% Exceedance | 9,956 | 11,536 | 14,470 | 19,403 | 21,753 | 21,550 | 12,544 | 12,900 | 13,244 | 18,546 | 15,851 | 13,492 |
| 70% Exceedance | 8,559 | 10,320 | 12,759 | 14,574 | 18,511 | 18,662 | 11,262 | 11,427 | 12,731 | 17,072 | 14,263 | 11,058 |
| 80% Exceedance | 7,400 | 9,082 | 10,410 | 12,404 | 16,158 | 14,899 | 10,779 | 10,784 | 11,439 | 15,175 | 11,602 | 9,932 |
| 90% Exceedance | 6,617 | 7,335 | 9,322 | 10,943 | 13,228 | 12,271 | 9,452 | 8,851 | 10,087 | 11,173 | 8,898 | 8,891 |
| Full Simulation Period Average^a | 11,712 | 14,113 | 22,654 | 29,700 | 35,939 | 32,604 | 23,408 | 20,585 | 17,102 | 18,467 | 15,490 | 14,989 |
| Wet Water Years (30%) | 14,209 | 19,122 | 38,333 | 49,632 | 58,897 | 51,638 | 41,547 | 34,746 | 25,705 | 19,828 | 17,643 | 19,755 |
| Above Normal Water Years (11%) | 10,776 | 12,892 | 19,063 | 40,685 | 44,419 | 44,391 | 26,264 | 23,033 | 18,474 | 21,171 | 18,985 | 19,113 |
| Below Normal Water Years (21%) | 11,909 | 13,808 | 16,626 | 22,295 | 28,700 | 26,846 | 17,617 | 17,024 | 13,914 | 21,106 | 17,475 | 15,024 |
| Dry Water Years (22%) | 11,277 | 12,059 | 16,252 | 15,858 | 22,058 | 20,188 | 12,675 | 12,069 | 13,104 | 18,208 | 13,676 | 10,906 |
| Critical Water Years (16%) | 8,011 | 8,786 | 12,441 | 13,529 | 15,650 | 13,441 | 9,792 | 8,735 | 9,706 | 10,948 | 8,943 | 8,786 |

Table 4G-3-1-1b. Sacramento River Flow at Freeport, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 10% Exceedance | 15,861 | 21,748 | 51,067 | 62,534 | 69,269 | 65,793 | 53,849 | 44,748 | 27,405 | 22,440 | 18,838 | 21,945 |
| 20% Exceedance | 14,688 | 15,650 | 33,760 | 51,677 | 61,179 | 53,000 | 38,998 | 35,371 | 21,972 | 21,530 | 18,254 | 20,752 |
| 30% Exceedance | 13,812 | 14,355 | 23,990 | 34,593 | 49,070 | 41,184 | 27,043 | 23,953 | 16,243 | 20,723 | 17,830 | 19,226 |
| 40% Exceedance | 13,224 | 13,714 | 18,135 | 27,308 | 37,652 | 32,639 | 21,407 | 18,718 | 14,329 | 19,498 | 17,300 | 17,369 |
| 50% Exceedance | 11,725 | 13,101 | 15,326 | 21,977 | 28,083 | 24,270 | 18,080 | 16,721 | 13,693 | 18,973 | 16,840 | 16,102 |
| 60% Exceedance | 10,167 | 11,429 | 14,466 | 19,398 | 21,869 | 21,597 | 14,486 | 15,132 | 13,276 | 18,143 | 15,840 | 12,921 |
| 70% Exceedance | 9,253 | 10,396 | 12,728 | 14,680 | 18,837 | 18,742 | 13,069 | 13,894 | 12,854 | 16,875 | 14,574 | 11,451 |
| 80% Exceedance | 7,825 | 9,168 | 10,301 | 12,440 | 16,563 | 15,184 | 12,246 | 13,175 | 12,385 | 15,033 | 10,732 | 10,216 |
| 90% Exceedance | 6,615 | 7,433 | 9,402 | 10,988 | 12,956 | 12,490 | 10,797 | 10,581 | 9,531 | 10,828 | 8,887 | 8,910 |
| Full Simulation Period Average^a | 11,907 | 14,221 | 22,845 | 29,886 | 36,268 | 32,708 | 24,916 | 22,313 | 17,203 | 18,214 | 15,302 | 15,499 |
| Wet Water Years (30%) | 14,436 | 19,373 | 38,753 | 49,824 | 59,075 | 51,574 | 42,553 | 35,933 | 25,800 | 19,897 | 17,780 | 20,703 |
| Above Normal Water Years (11%) | 10,695 | 13,062 | 19,264 | 41,079 | 45,312 | 44,312 | 28,025 | 25,155 | 18,652 | 21,067 | 18,523 | 20,495 |
| Below Normal Water Years (21%) | 12,012 | 13,890 | 16,896 | 22,562 | 28,905 | 26,933 | 19,722 | 18,990 | 14,368 | 20,588 | 17,226 | 14,867 |
| Dry Water Years (22%) | 11,507 | 12,198 | 16,327 | 15,933 | 21,909 | 20,628 | 14,635 | 14,636 | 13,250 | 17,660 | 13,243 | 11,305 |
| Critical Water Years (16%) | 8,412 | 8,573 | 12,249 | 13,605 | 16,696 | 13,543 | 10,660 | 9,739 | 9,243 | 10,740 | 8,749 | 8,901 |

Table 4G-3-1-1c. Sacramento River Flow at Freeport, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|-------------|-------------|------------|--------------|------------|--------------|--------------|-------------|-------------|-------------|--------------|
| 10% Exceedance | 25 | -708 | 853 | 340 | -8 | -50 | 1,048 | 983 | -650 | -428 | -179 | 1,454 |
| 20% Exceedance | 250 | 486 | 714 | -124 | 984 | 22 | 2,161 | 2,007 | -29 | -631 | -157 | 878 |
| 30% Exceedance | 92 | 120 | -20 | 696 | -38 | -407 | 1,755 | 1,273 | -12 | 120 | -241 | 787 |
| 40% Exceedance | 152 | -9 | 77 | 759 | 1,144 | 162 | 1,338 | 1,771 | 240 | -448 | -255 | 679 |
| 50% Exceedance | -55 | -21 | 137 | 243 | 507 | 246 | 1,675 | 1,338 | 34 | -300 | 96 | 520 |
| 60% Exceedance | 212 | -107 | -4 | -5 | 116 | 46 | 1,942 | 2,232 | 32 | -402 | -12 | -571 |
| 70% Exceedance | 695 | 75 | -32 | 106 | 326 | 81 | 1,806 | 2,467 | 123 | -197 | 311 | 394 |
| 80% Exceedance | 426 | 86 | -109 | 36 | 405 | 286 | 1,467 | 2,390 | 945 | -142 | -870 | 285 |
| 90% Exceedance | -2 | 98 | 80 | 45 | -272 | 219 | 1,345 | 1,730 | -555 | -344 | -12 | 19 |
| Full Simulation Period Average^a | 195 | 108 | 191 | 186 | 329 | 104 | 1,508 | 1,727 | 102 | -253 | -188 | 510 |
| Wet Water Years (30%) | 227 | 251 | 421 | 192 | 178 | -63 | 1,006 | 1,186 | 95 | 69 | 137 | 948 |
| Above Normal Water Years (11%) | -81 | 170 | 201 | 394 | 893 | -79 | 1,762 | 2,123 | 178 | -104 | -462 | 1,382 |
| Below Normal Water Years (21%) | 103 | 82 | 269 | 267 | 205 | 87 | 2,104 | 1,966 | 454 | -518 | -249 | -157 |
| Dry Water Years (22%) | 229 | 139 | 75 | 75 | -149 | 440 | 1,960 | 2,566 | 146 | -547 | -434 | 399 |
| Critical Water Years (16%) | 401 | -213 | -193 | 76 | 1,045 | 102 | 869 | 1,004 | -463 | -208 | -194 | 116 |

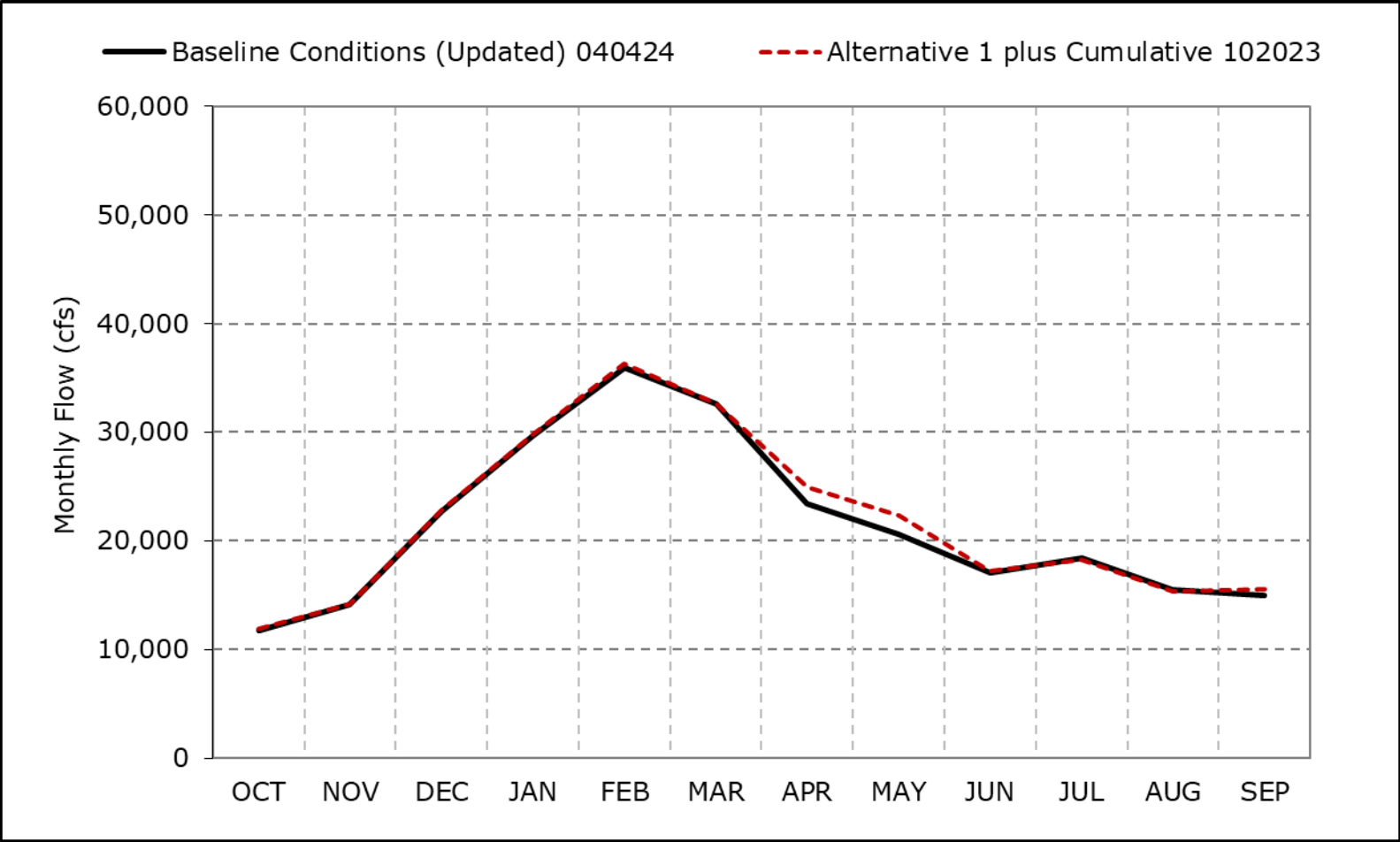
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

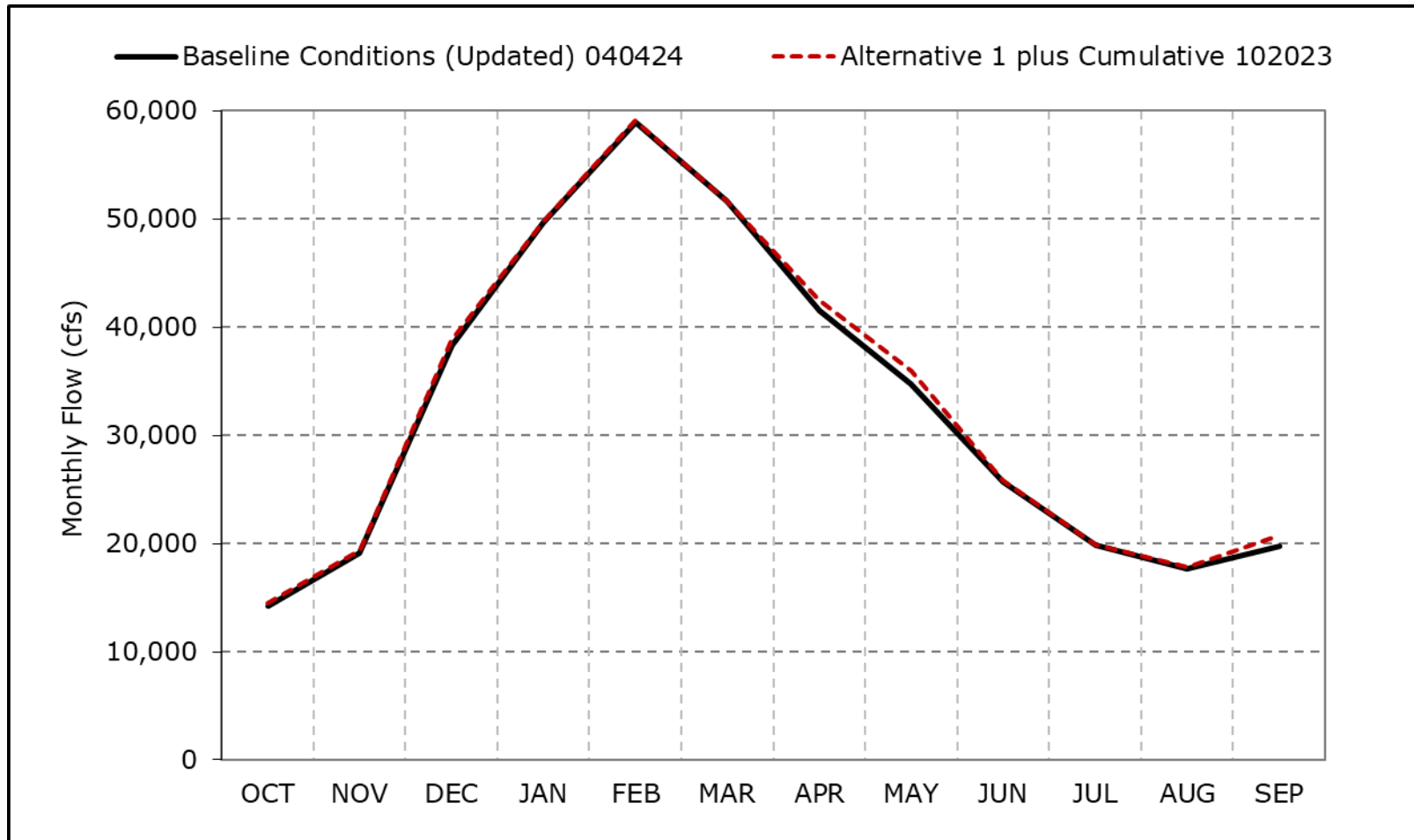
* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-1a. Sacramento River Flow at Freeport, Long-Term Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1b. Sacramento River Flow at Freeport, Wet Year Average Flow

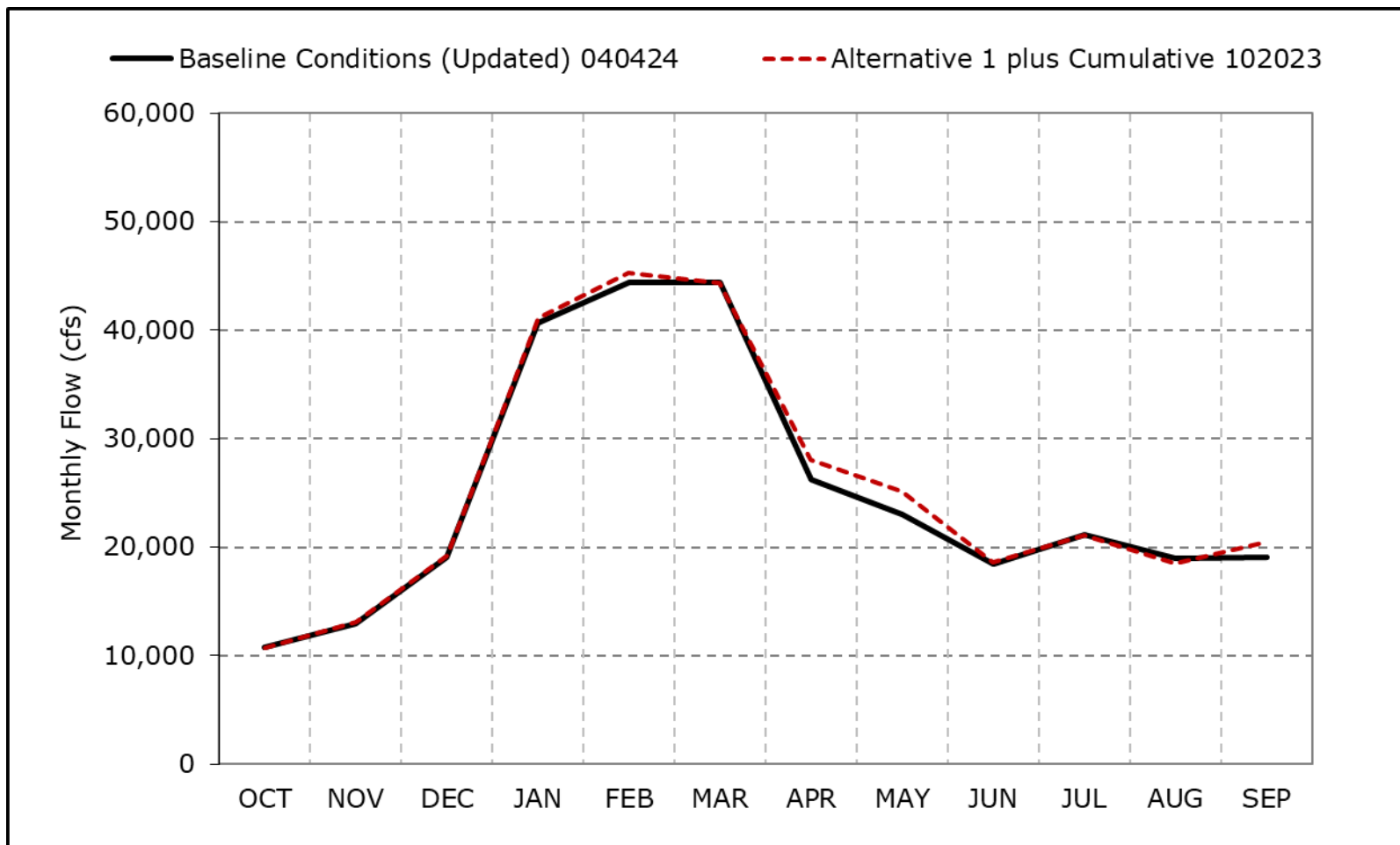


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

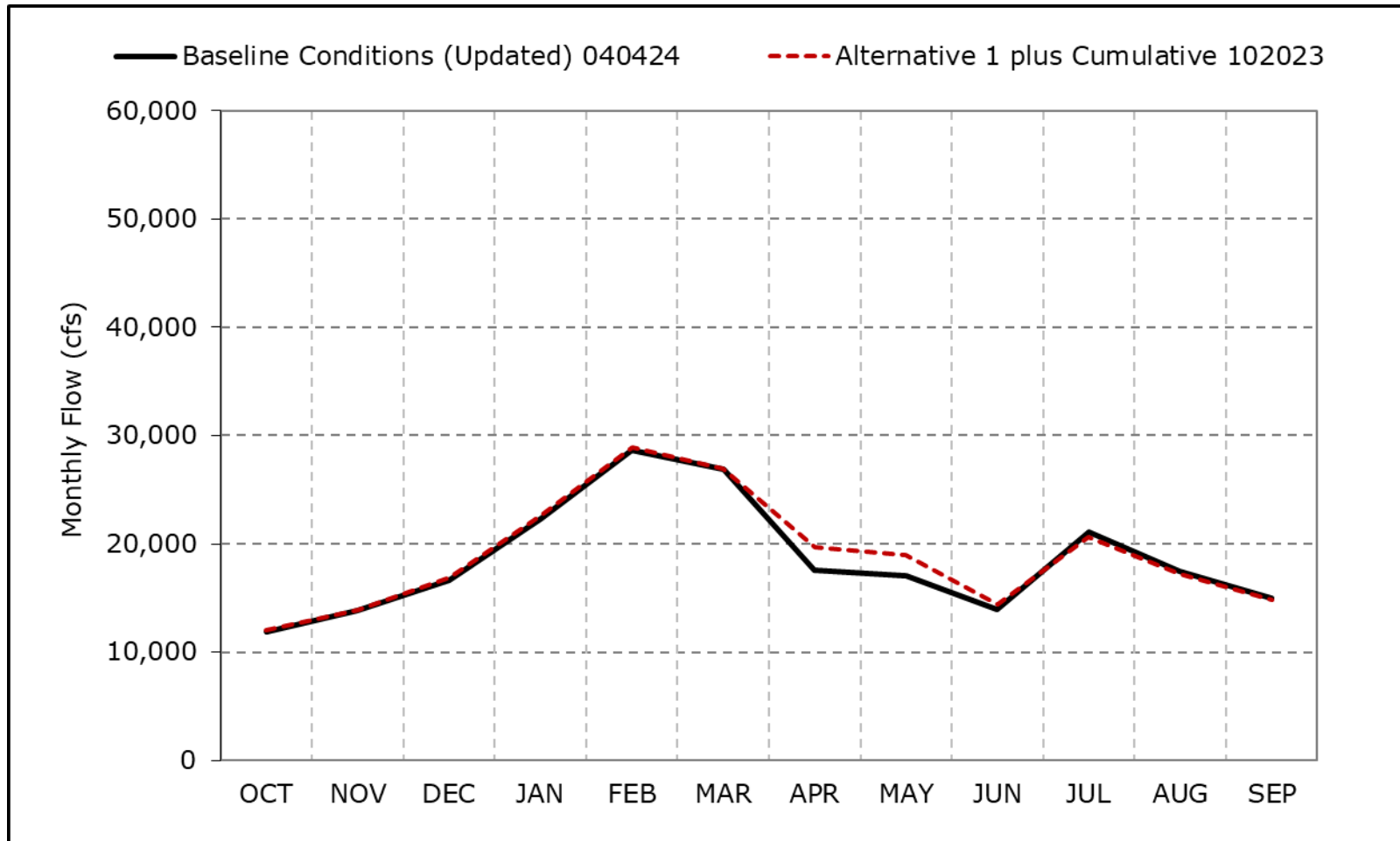
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1c. Sacramento River Flow at Freeport, Above Normal Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1d. Sacramento River Flow at Freeport, Below Normal Year Average Flow

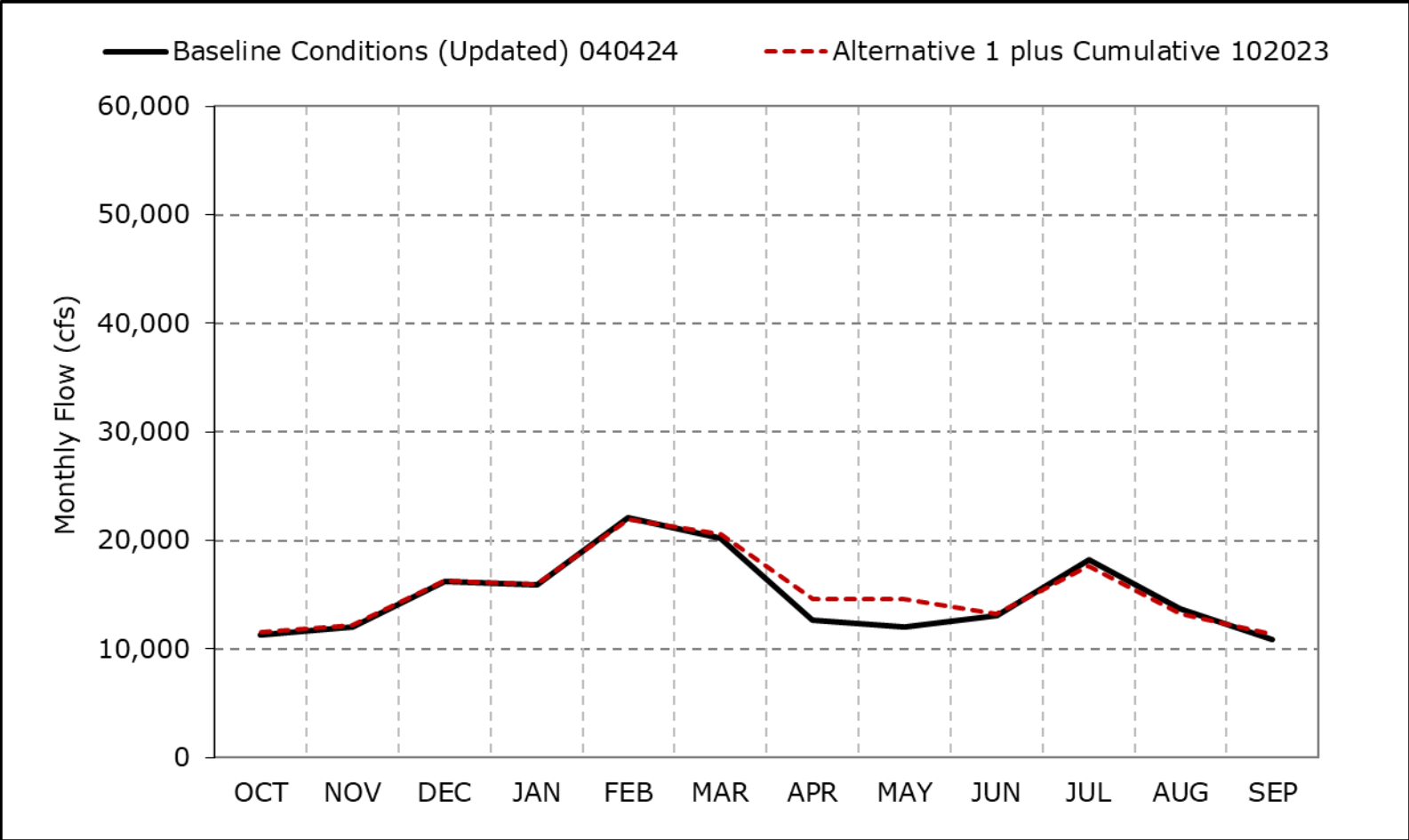


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

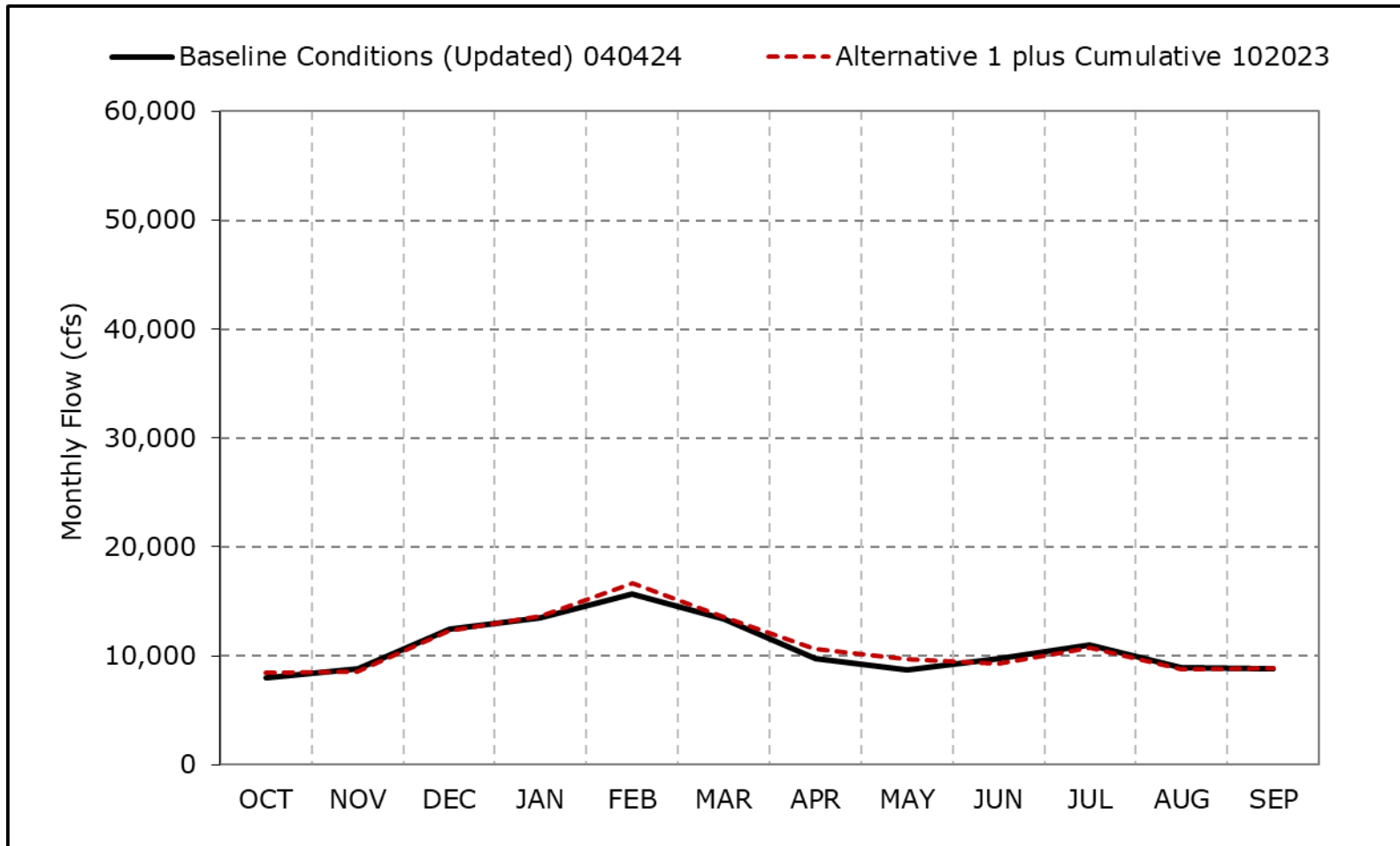
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1e. Sacramento River Flow at Freeport, Dry Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
 *These results are displayed with water year - year type sorting.
 *All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1f. Sacramento River Flow at Freeport, Critical Year Average Flow

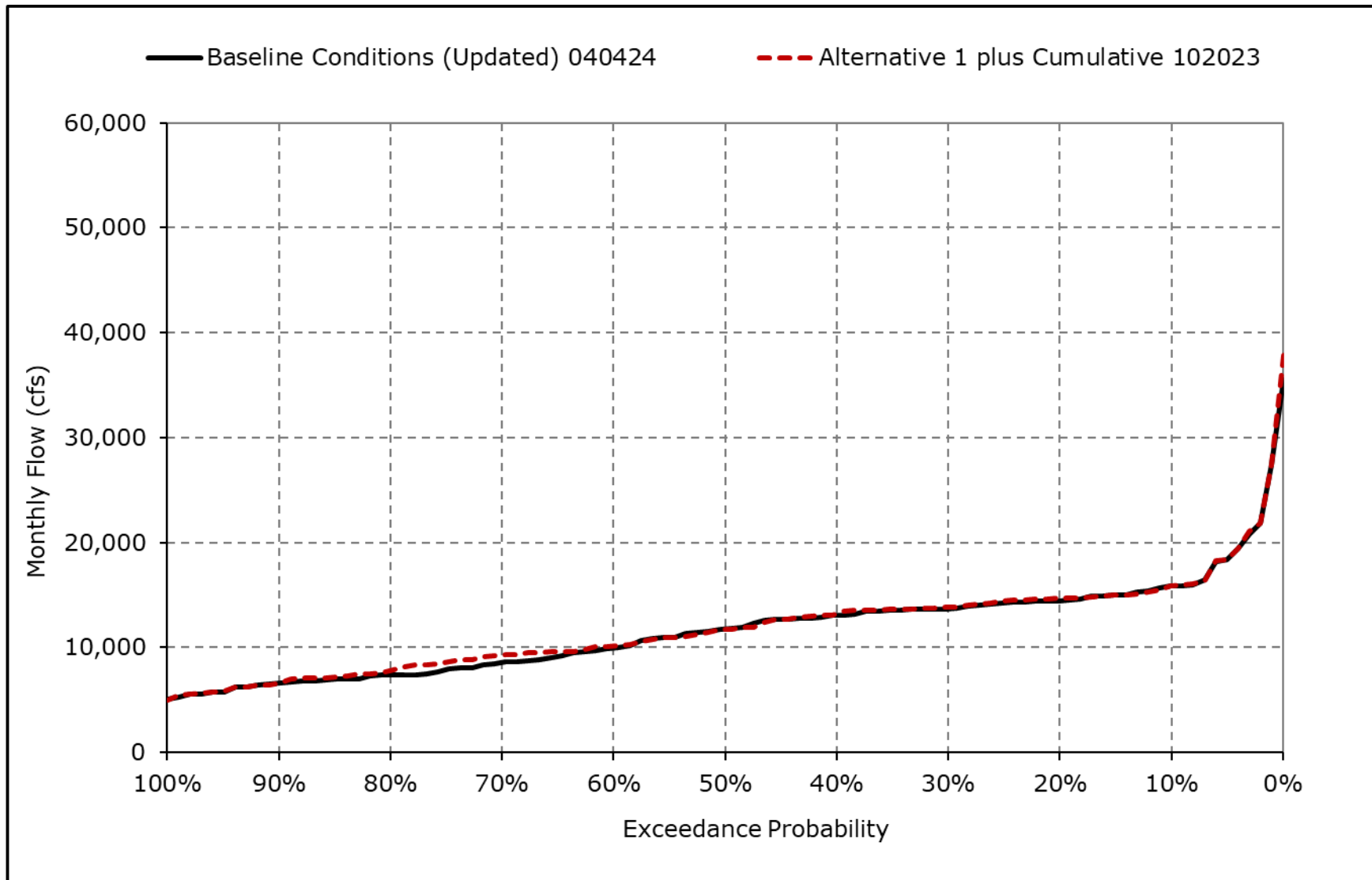


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

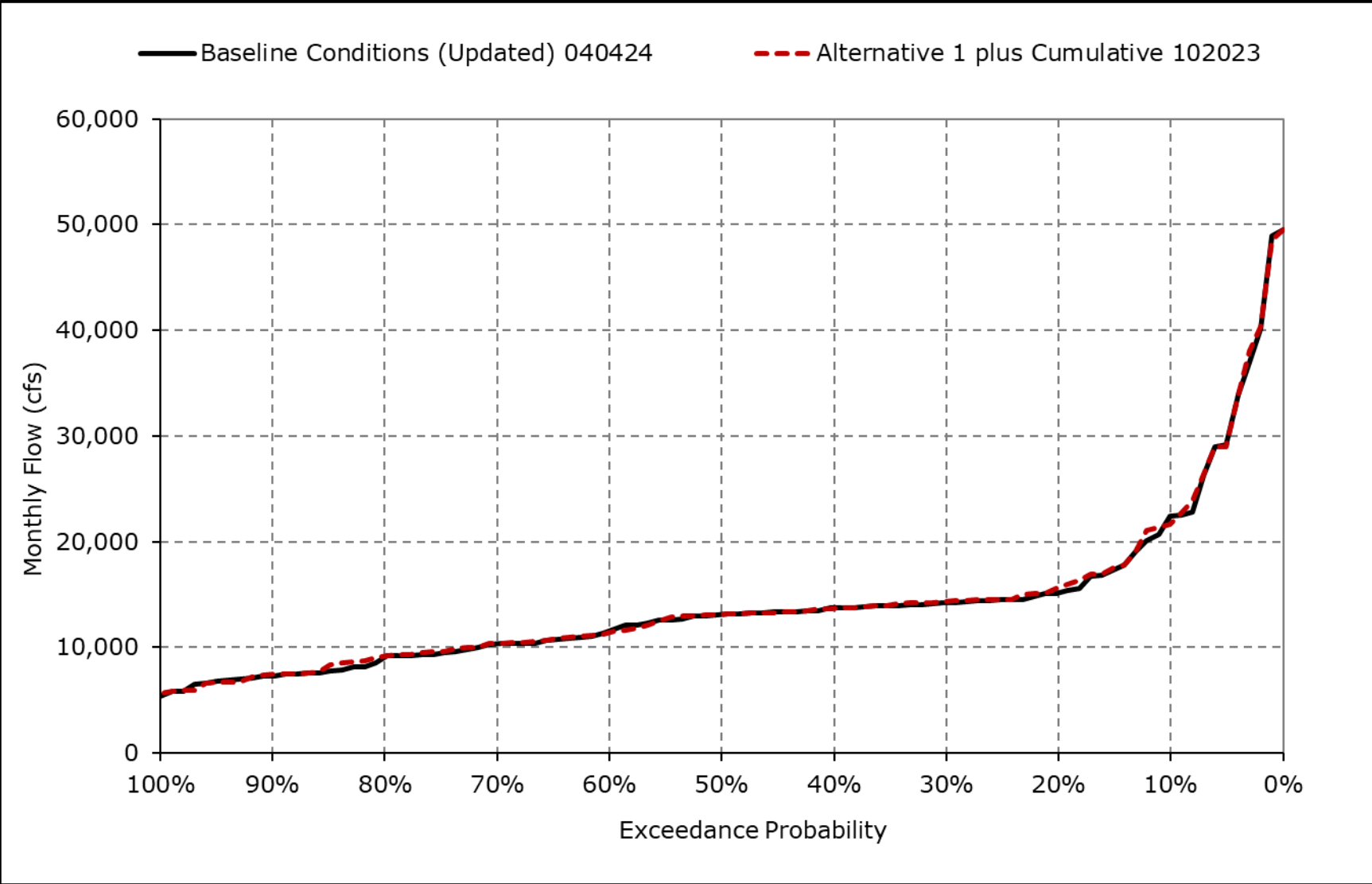
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1g. Sacramento River Flow at Freeport, October



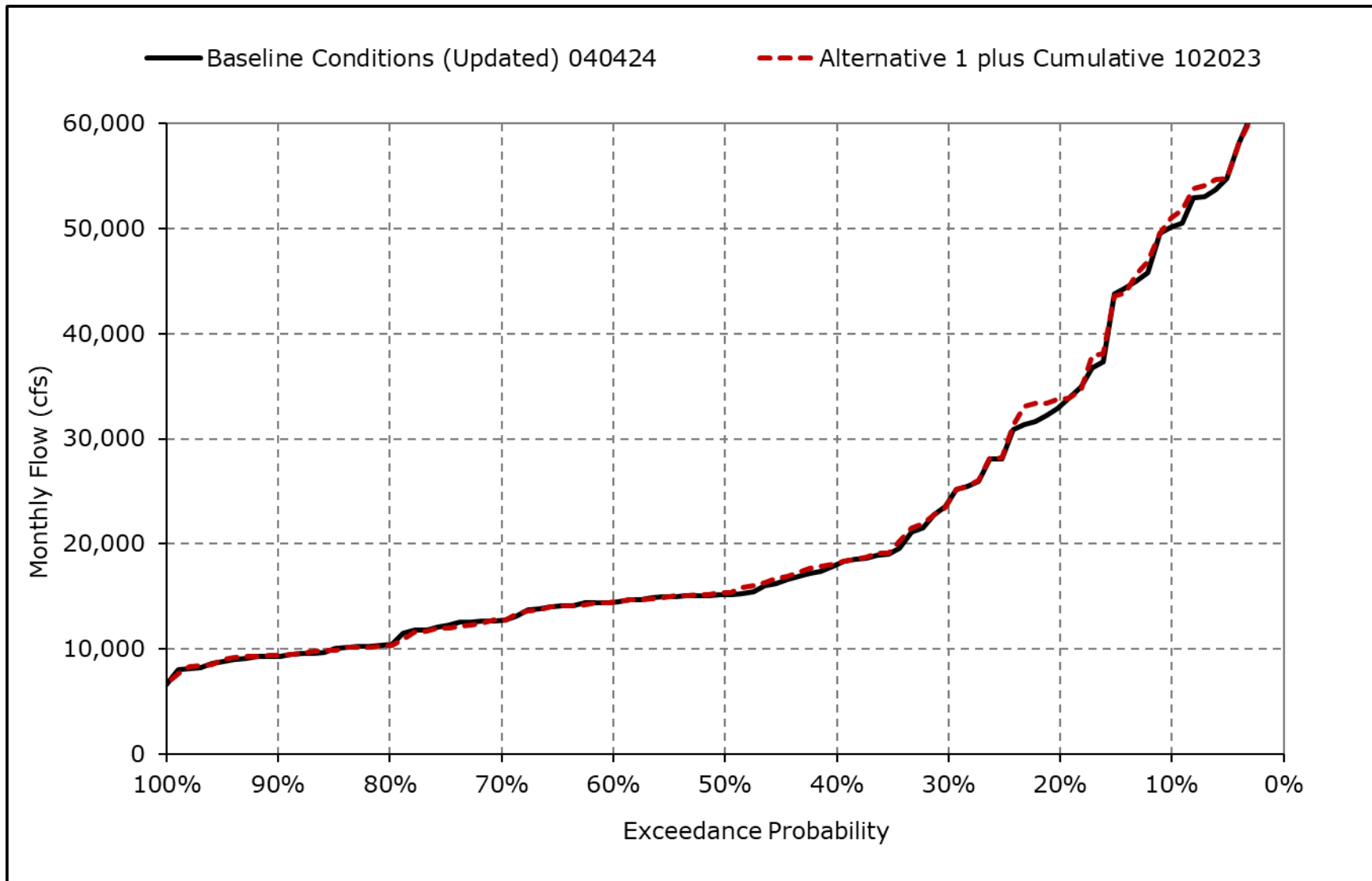
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1h. Sacramento River Flow at Freeport, November



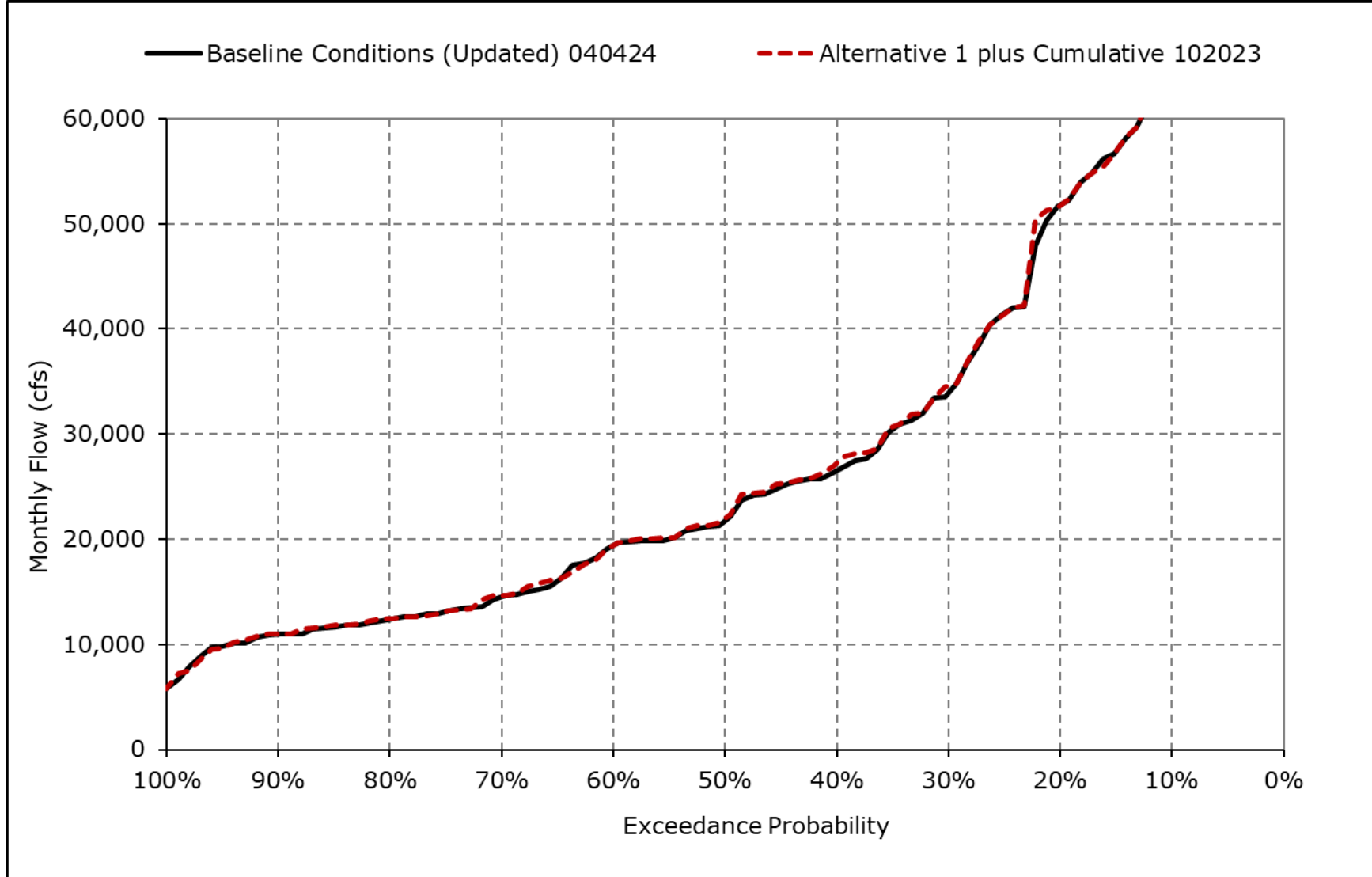
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1i. Sacramento River Flow at Freeport, December



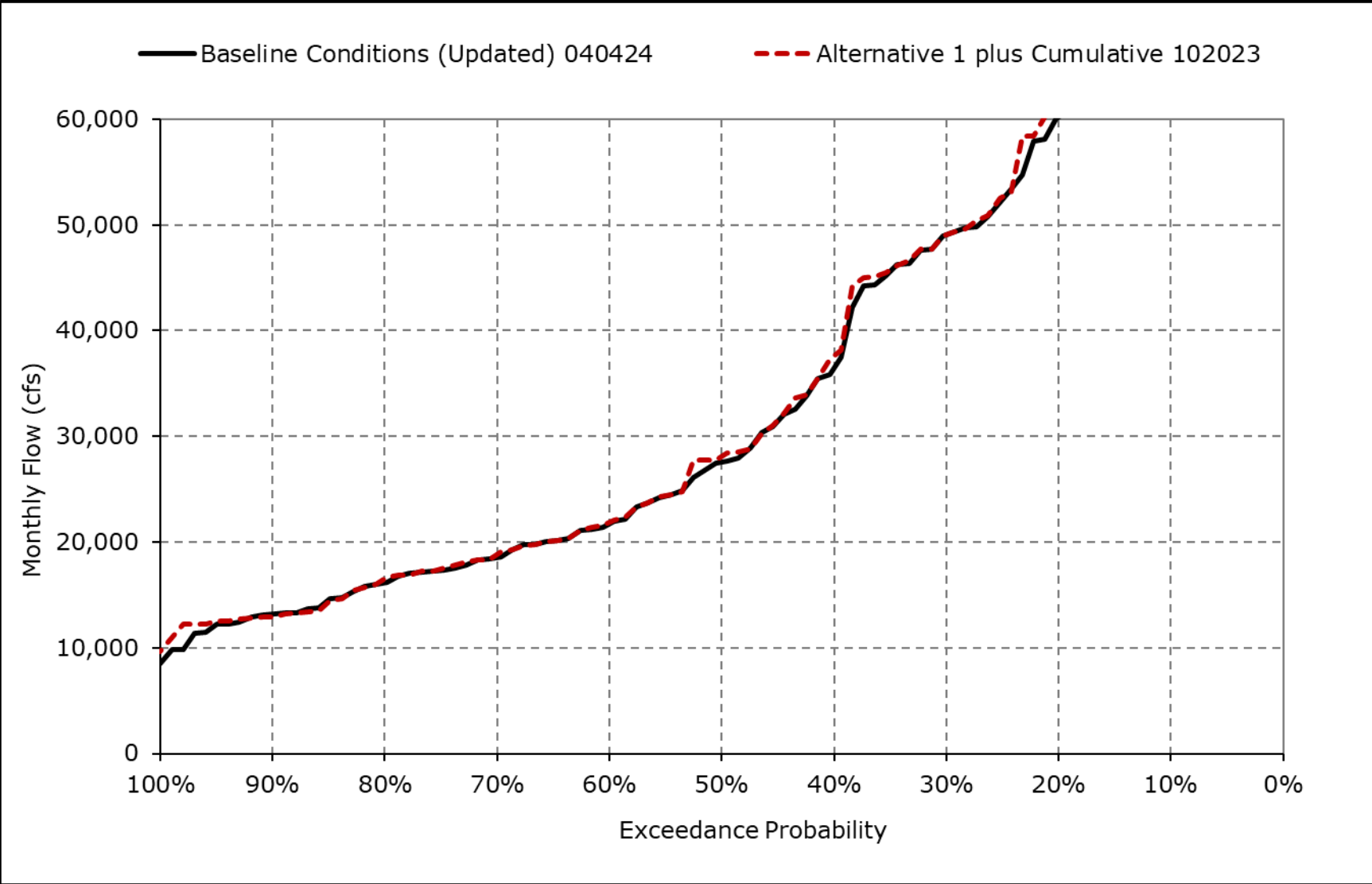
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1j. Sacramento River Flow at Freeport, January



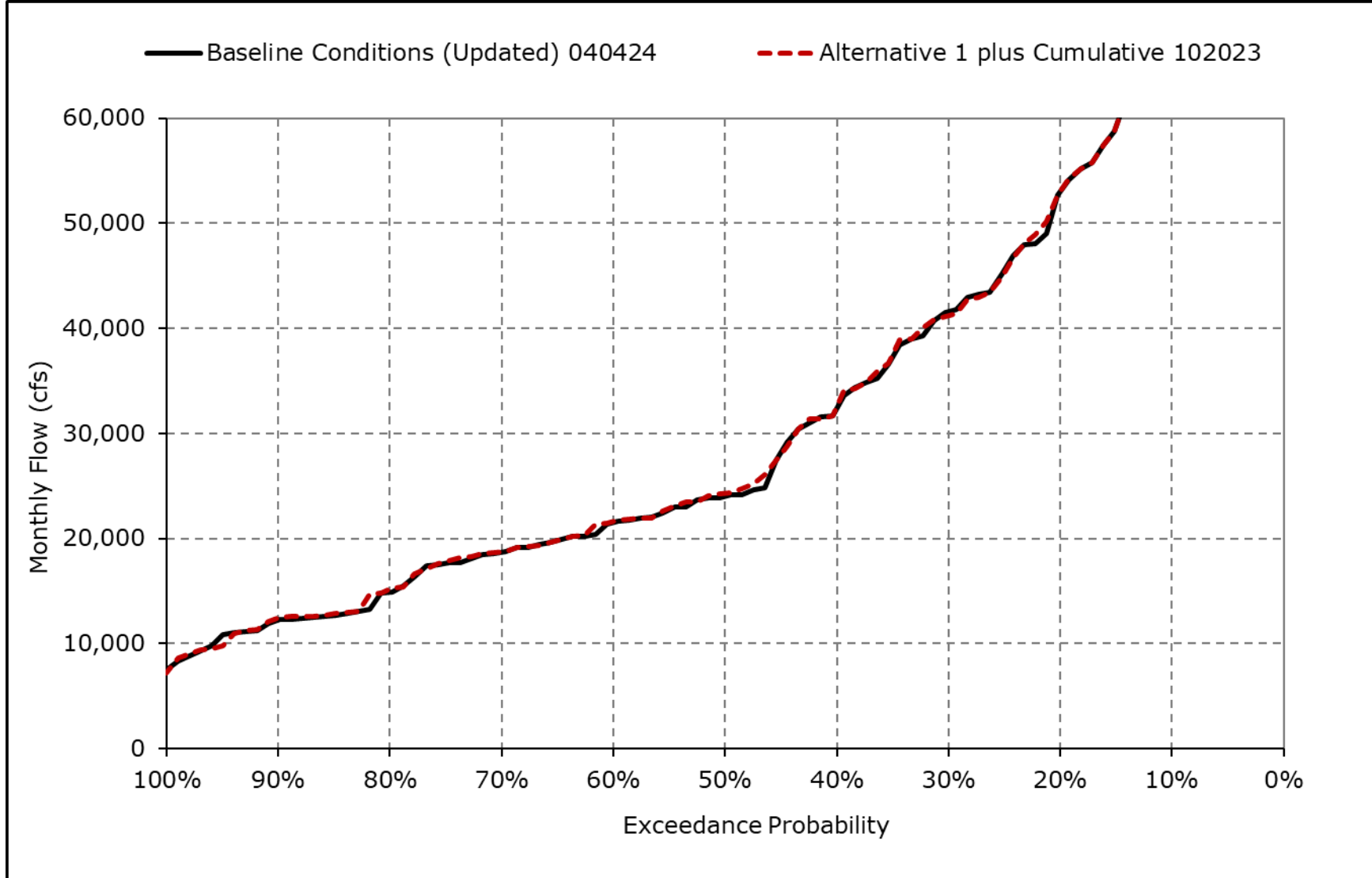
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1k. Sacramento River Flow at Freeport, February



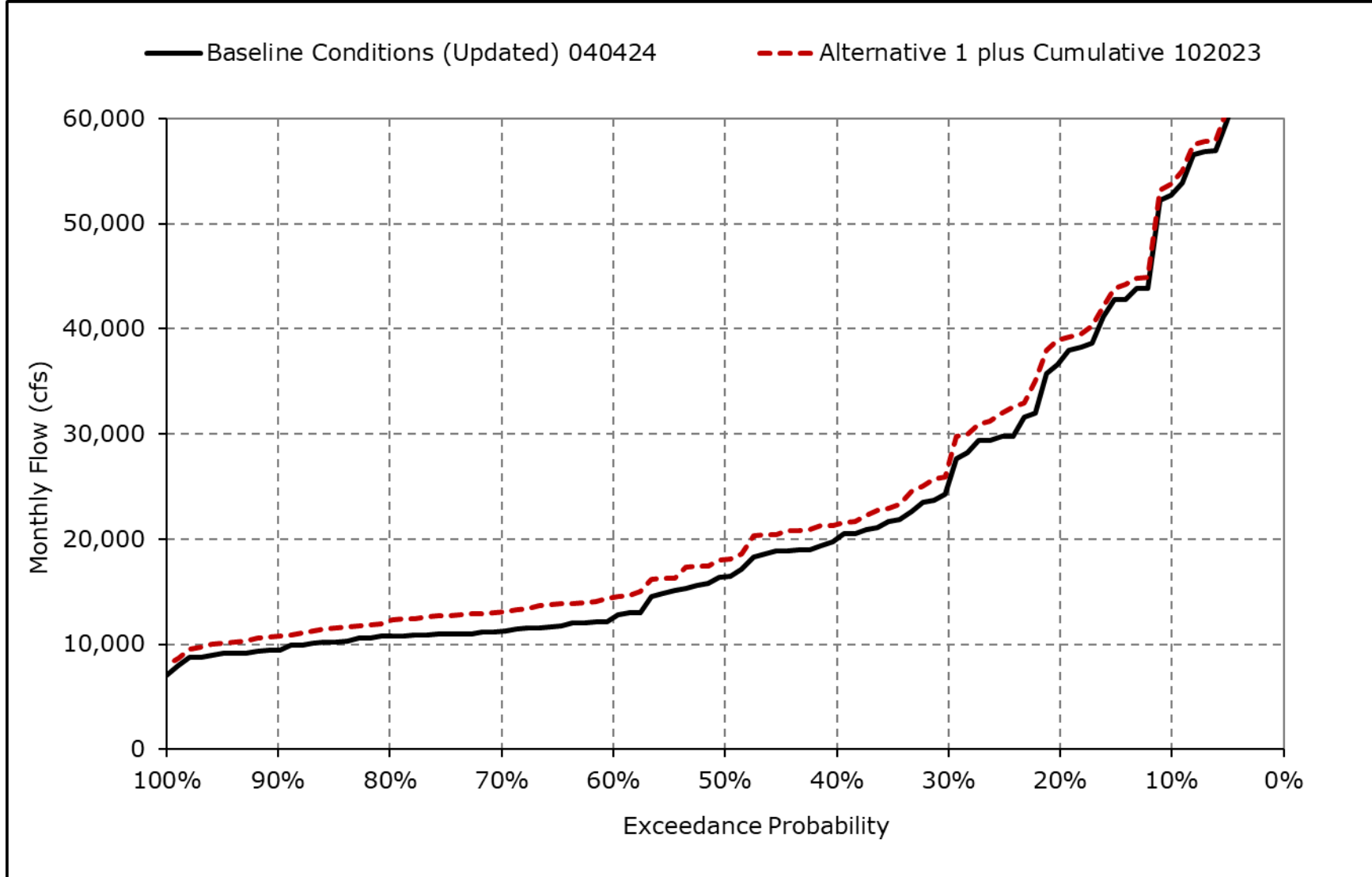
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1I. Sacramento River Flow at Freeport, March



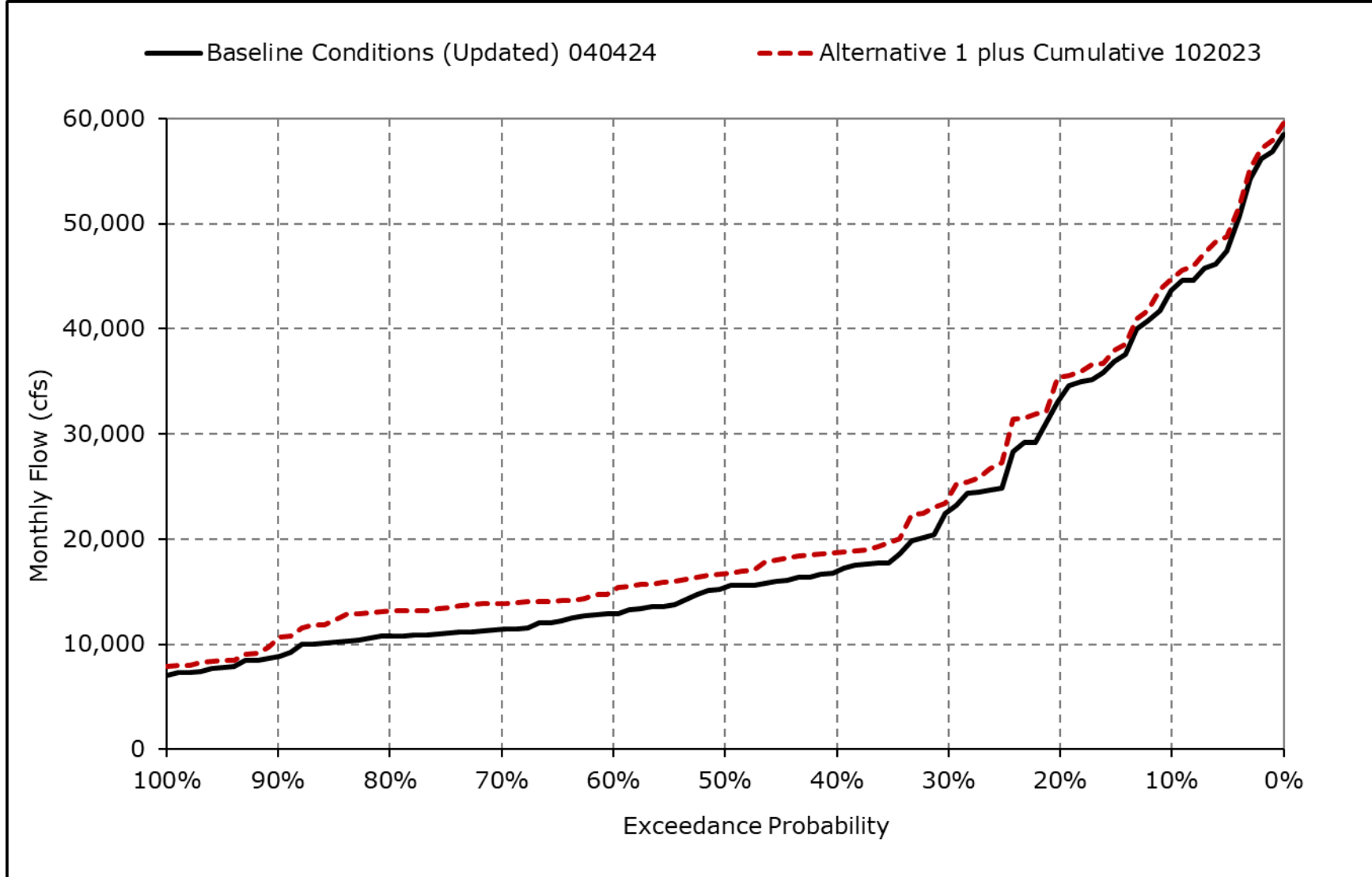
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1m. Sacramento River Flow at Freeport, April



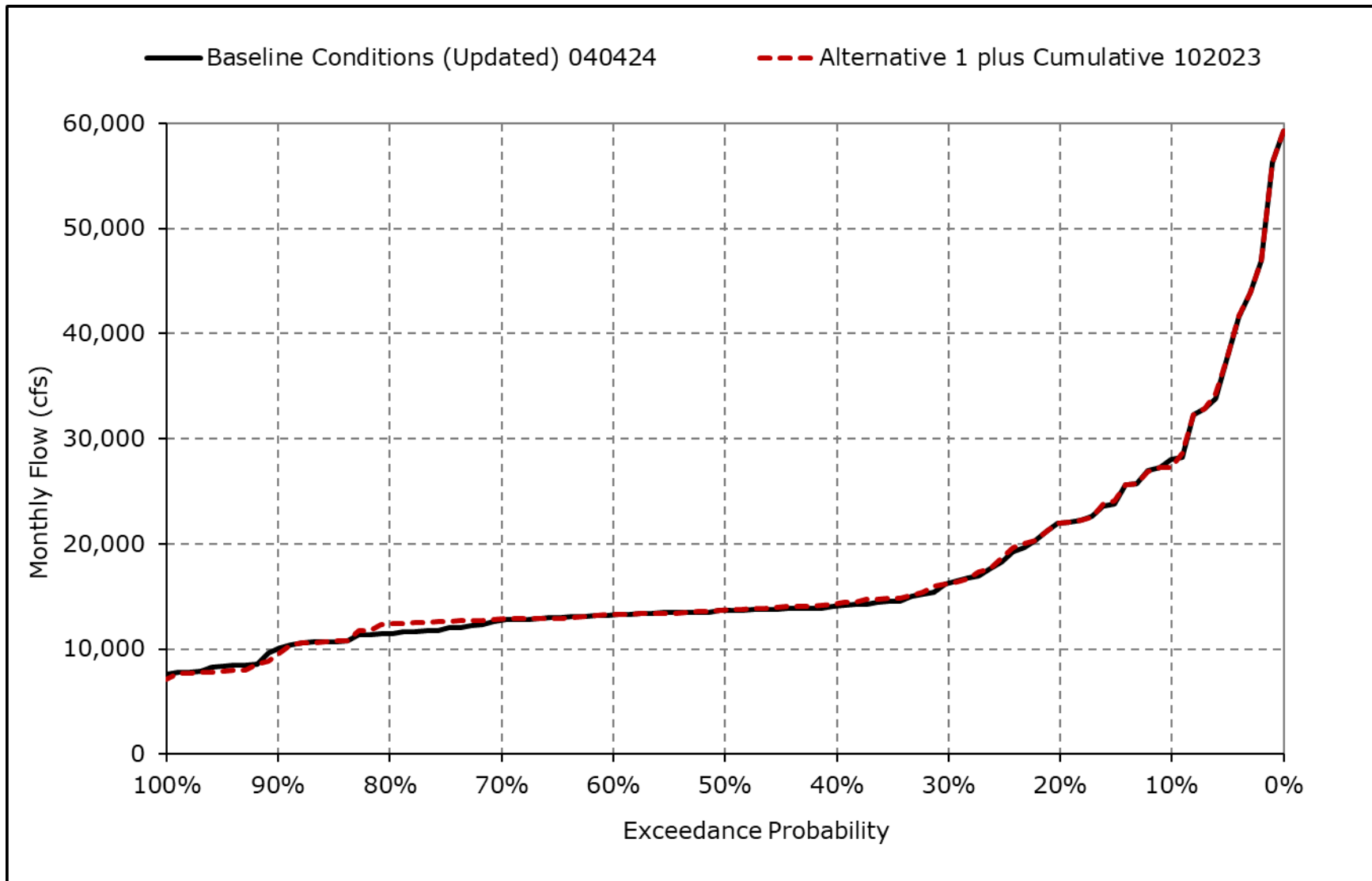
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1n. Sacramento River Flow at Freeport, May



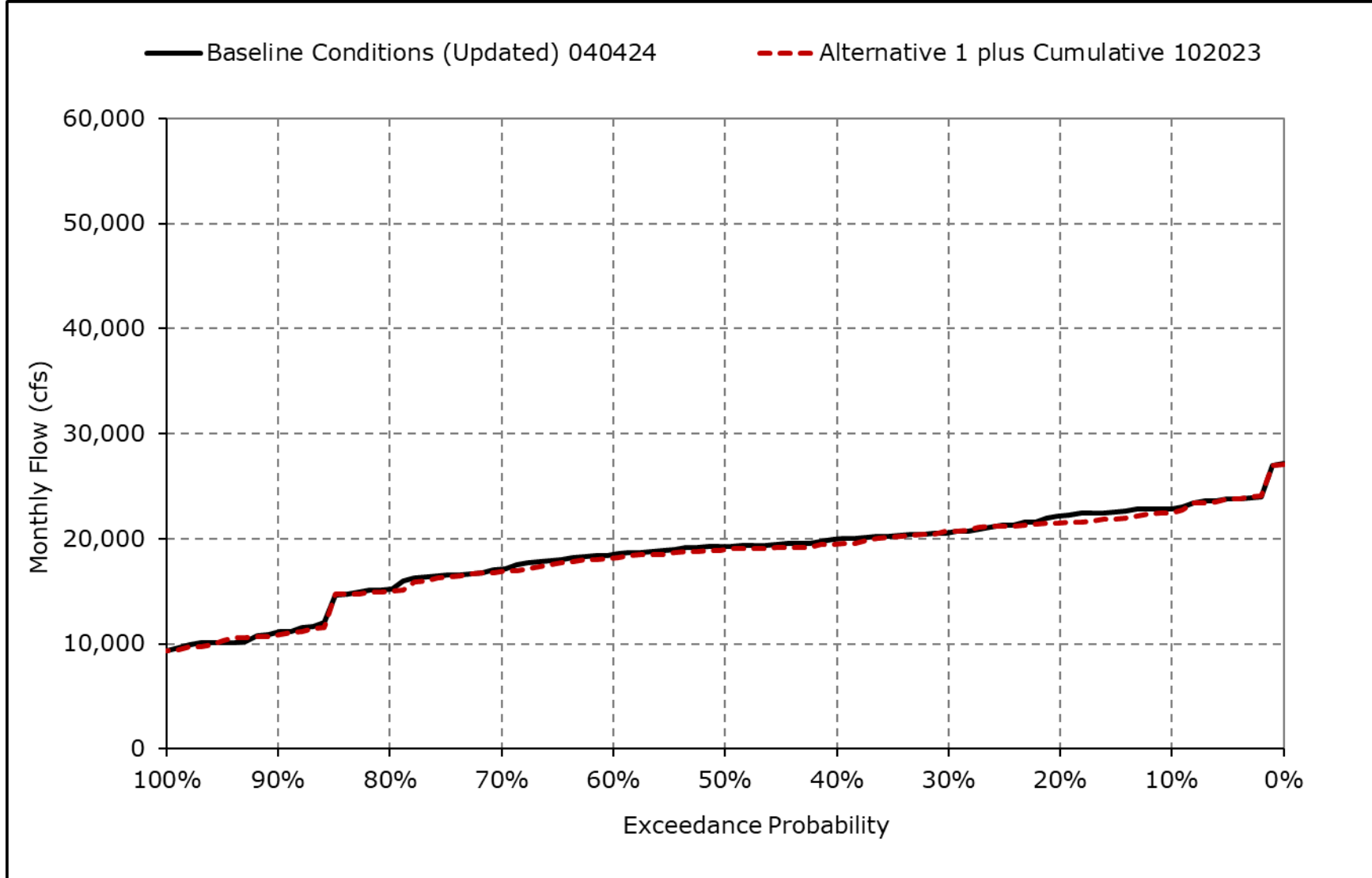
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1o. Sacramento River Flow at Freeport, June



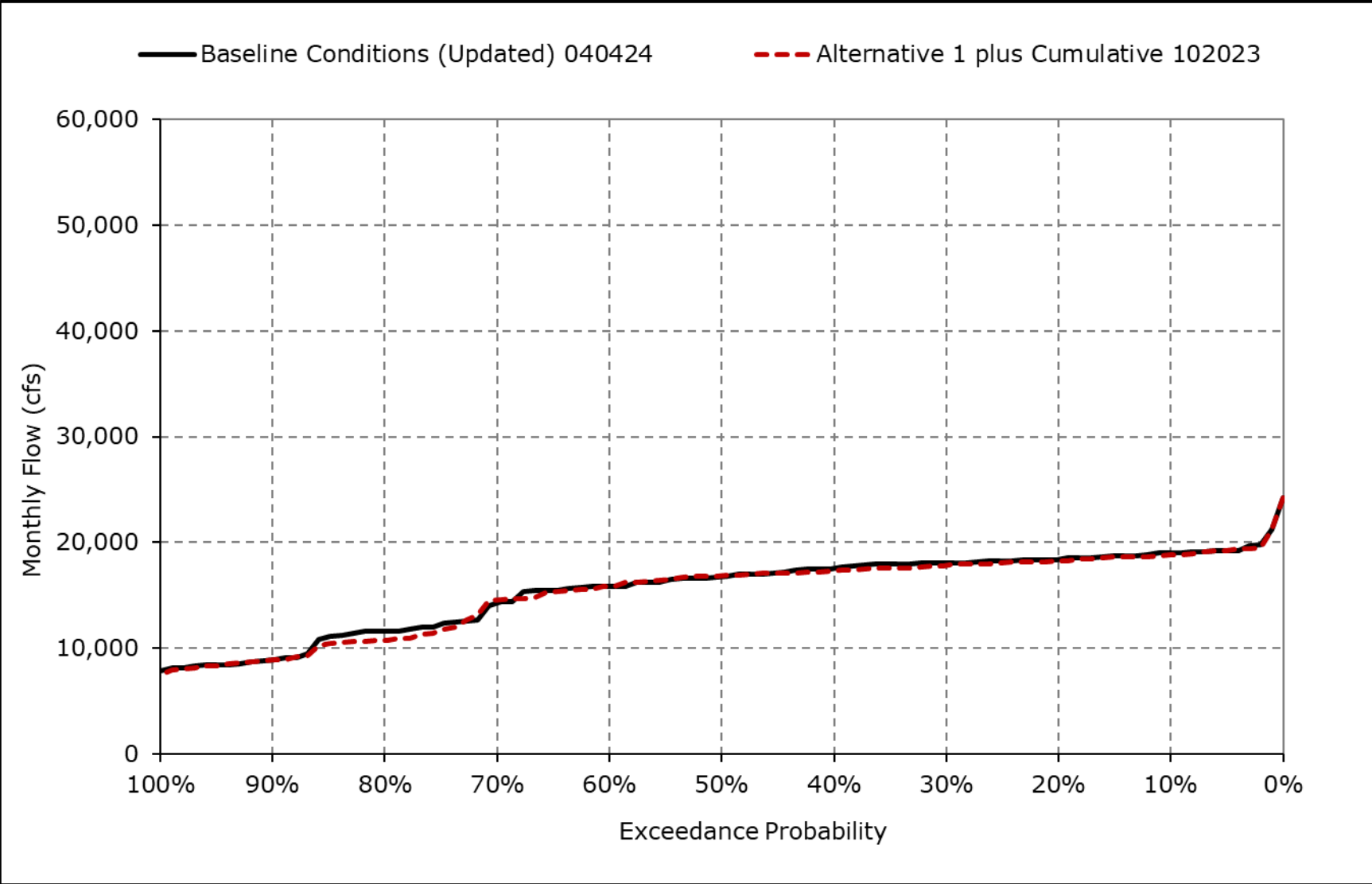
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1p. Sacramento River Flow at Freeport, July



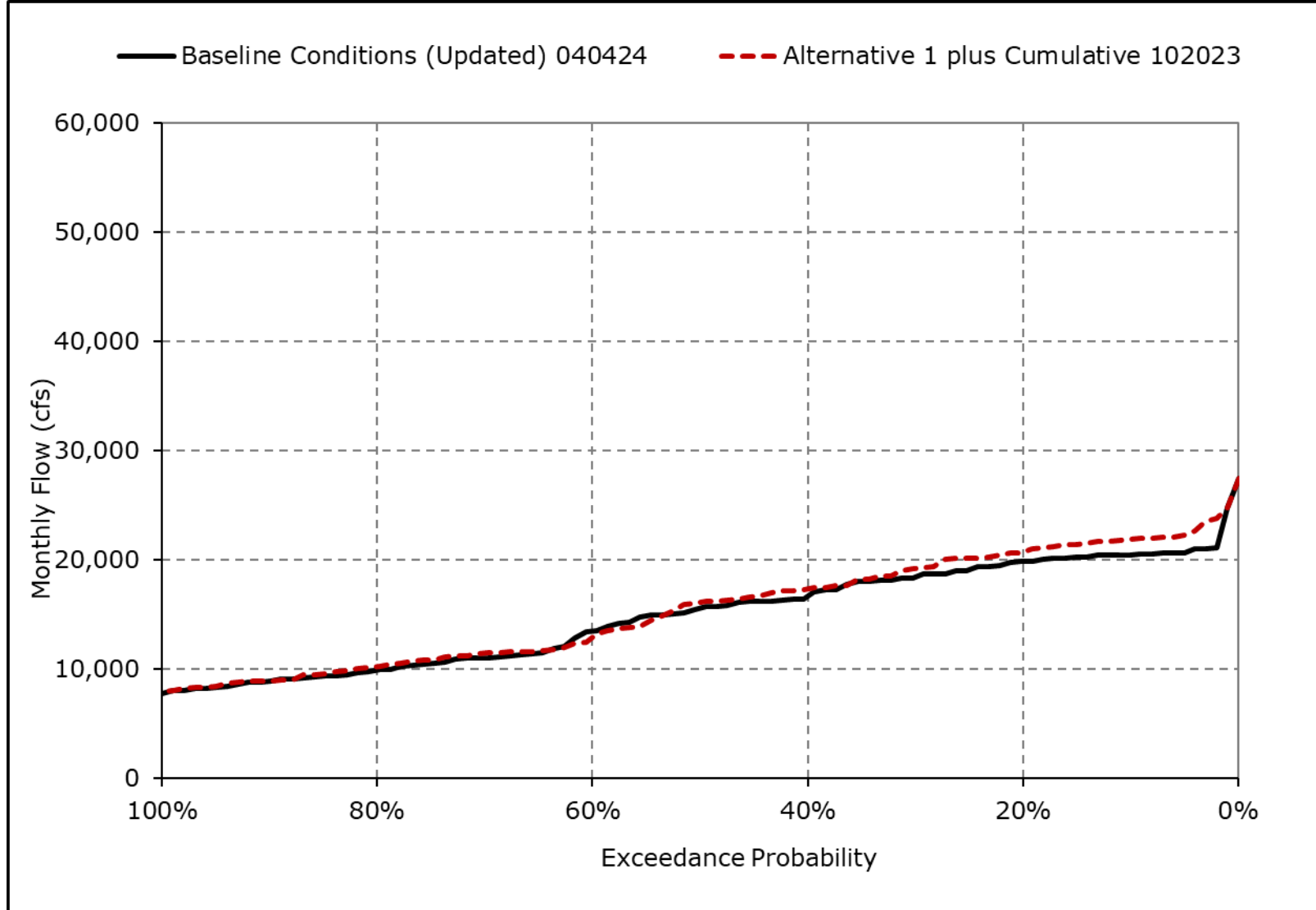
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1q. Sacramento River Flow at Freeport, August



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1r. Sacramento River Flow at Freeport, September



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Table 4G-3-2-1a. Yolo Bypass Flow, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|------------|------------|------------|------------|
| 10% Exceedance | 199 | 884 | 11,566 | 30,800 | 46,555 | 23,646 | 3,221 | 1,121 | 504 | 285 | 216 | 284 |
| 20% Exceedance | 120 | 373 | 6,385 | 12,551 | 15,705 | 7,550 | 1,799 | 602 | 357 | 267 | 200 | 265 |
| 30% Exceedance | 108 | 278 | 1,572 | 4,987 | 9,565 | 4,188 | 1,029 | 514 | 293 | 260 | 196 | 257 |
| 40% Exceedance | 88 | 188 | 882 | 2,776 | 6,113 | 2,713 | 677 | 427 | 257 | 254 | 193 | 250 |
| 50% Exceedance | 81 | 136 | 444 | 1,741 | 2,678 | 1,345 | 377 | 311 | 249 | 250 | 190 | 241 |
| 60% Exceedance | 70 | 120 | 273 | 856 | 1,737 | 689 | 272 | 270 | 243 | 245 | 188 | 226 |
| 70% Exceedance | 61 | 104 | 165 | 408 | 681 | 498 | 248 | 244 | 236 | 239 | 183 | 205 |
| 80% Exceedance | 54 | 88 | 113 | 229 | 393 | 273 | 231 | 229 | 224 | 232 | 179 | 199 |
| 90% Exceedance | 45 | 76 | 93 | 133 | 208 | 130 | 208 | 193 | 210 | 217 | 166 | 176 |
| Full Simulation Period Average^a | 164 | 675 | 4,175 | 10,086 | 14,260 | 8,301 | 2,142 | 636 | 323 | 252 | 192 | 239 |
| Wet Water Years (30%) | 320 | 1,654 | 11,131 | 27,303 | 36,759 | 22,184 | 5,939 | 1,181 | 509 | 297 | 225 | 280 |
| Above Normal Water Years (11%) | 122 | 290 | 2,044 | 10,748 | 14,283 | 9,160 | 1,100 | 635 | 281 | 245 | 188 | 235 |
| Below Normal Water Years (21%) | 111 | 405 | 1,249 | 2,016 | 4,987 | 1,887 | 606 | 571 | 270 | 215 | 173 | 230 |
| Dry Water Years (22%) | 95 | 184 | 1,030 | 777 | 2,134 | 845 | 347 | 273 | 222 | 245 | 184 | 228 |
| Critical Water Years (16%) | 65 | 134 | 764 | 743 | 902 | 352 | 223 | 199 | 215 | 230 | 169 | 188 |

Table 4G-3-2-1b. Yolo Bypass Flow, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|------------|------------|------------|------------|
| 10% Exceedance | 182 | 1,395 | 12,563 | 30,805 | 46,566 | 23,542 | 3,195 | 1,120 | 510 | 285 | 217 | 284 |
| 20% Exceedance | 119 | 396 | 5,929 | 12,496 | 15,955 | 7,653 | 1,804 | 598 | 363 | 267 | 204 | 266 |
| 30% Exceedance | 108 | 282 | 1,608 | 5,036 | 9,556 | 4,402 | 1,033 | 522 | 296 | 262 | 197 | 258 |
| 40% Exceedance | 88 | 210 | 891 | 2,475 | 6,025 | 2,665 | 681 | 427 | 258 | 256 | 194 | 250 |
| 50% Exceedance | 80 | 155 | 473 | 1,600 | 2,531 | 1,334 | 385 | 319 | 251 | 251 | 190 | 241 |
| 60% Exceedance | 69 | 132 | 277 | 869 | 1,739 | 715 | 282 | 272 | 244 | 247 | 188 | 230 |
| 70% Exceedance | 61 | 118 | 183 | 417 | 683 | 495 | 250 | 251 | 236 | 243 | 182 | 216 |
| 80% Exceedance | 53 | 106 | 122 | 235 | 417 | 304 | 233 | 236 | 225 | 235 | 179 | 203 |
| 90% Exceedance | 44 | 90 | 103 | 141 | 204 | 138 | 208 | 203 | 212 | 225 | 166 | 175 |
| Full Simulation Period Average^a | 173 | 712 | 4,209 | 10,137 | 14,226 | 8,272 | 2,158 | 640 | 326 | 256 | 194 | 241 |
| Wet Water Years (30%) | 365 | 1,739 | 11,214 | 27,540 | 36,706 | 21,997 | 5,990 | 1,186 | 511 | 299 | 227 | 281 |
| Above Normal Water Years (11%) | 79 | 303 | 2,088 | 10,803 | 14,342 | 9,293 | 1,100 | 637 | 284 | 247 | 188 | 235 |
| Below Normal Water Years (21%) | 111 | 419 | 1,261 | 1,900 | 4,970 | 1,881 | 611 | 570 | 271 | 220 | 181 | 235 |
| Dry Water Years (22%) | 94 | 203 | 1,112 | 785 | 2,094 | 898 | 350 | 281 | 230 | 253 | 182 | 231 |
| Critical Water Years (16%) | 66 | 156 | 659 | 720 | 824 | 365 | 219 | 202 | 214 | 232 | 169 | 189 |

Table 4G-3-2-1c. Yolo Bypass Flow, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|-----------|-------------|-------------|------------|-------------|-----------|----------|-----------|----------|-----------|----------|
| 10% Exceedance | -17 | 511 | 997 | 4 | 10 | -105 | -26 | -1 | 5 | 0 | 1 | 1 |
| 20% Exceedance | -1 | 23 | -456 | -55 | 250 | 104 | 4 | -4 | 6 | 0 | 4 | 1 |
| 30% Exceedance | 0 | 5 | 35 | 49 | -9 | 214 | 3 | 8 | 4 | 2 | 1 | 1 |
| 40% Exceedance | 0 | 22 | 9 | -301 | -88 | -48 | 4 | 0 | 1 | 1 | 1 | 0 |
| 50% Exceedance | 0 | 19 | 29 | -141 | -147 | -11 | 9 | 8 | 1 | 1 | 0 | 0 |
| 60% Exceedance | -1 | 13 | 4 | 13 | 2 | 26 | 9 | 2 | 1 | 1 | 0 | 4 |
| 70% Exceedance | 1 | 14 | 18 | 9 | 2 | -3 | 2 | 7 | 0 | 4 | 0 | 11 |
| 80% Exceedance | -1 | 18 | 9 | 6 | 24 | 31 | 1 | 7 | 1 | 2 | 0 | 4 |
| 90% Exceedance | -1 | 14 | 10 | 8 | -4 | 7 | 0 | 10 | 2 | 8 | 0 | -1 |
| Full Simulation Period Average^a | 9 | 38 | 34 | 51 | -34 | -29 | 16 | 4 | 3 | 4 | 2 | 2 |
| Wet Water Years (30%) | 45 | 85 | 84 | 237 | -52 | -187 | 51 | 6 | 2 | 2 | 2 | 1 |
| Above Normal Water Years (11%) | -43 | 14 | 45 | 55 | 59 | 133 | 0 | 2 | 3 | 3 | 0 | 0 |
| Below Normal Water Years (21%) | 0 | 14 | 11 | -116 | -16 | -6 | 6 | 0 | 1 | 5 | 8 | 5 |
| Dry Water Years (22%) | -1 | 19 | 83 | 9 | -40 | 53 | 2 | 8 | 8 | 8 | -2 | 3 |
| Critical Water Years (16%) | 1 | 22 | -105 | -23 | -78 | 13 | -4 | 3 | -2 | 2 | 0 | 0 |

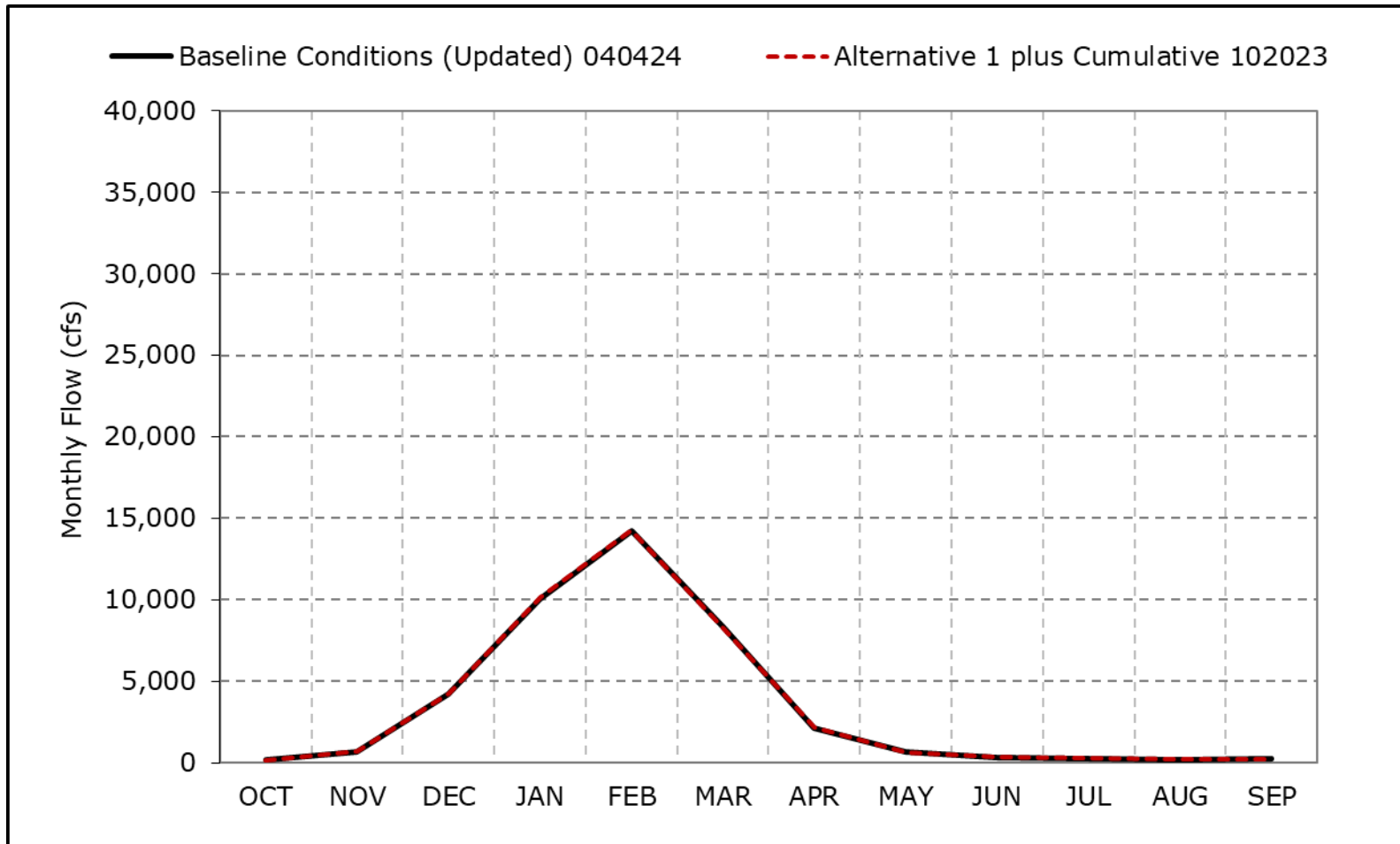
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-2a. Yolo Bypass Flow, Long-Term Average Flow

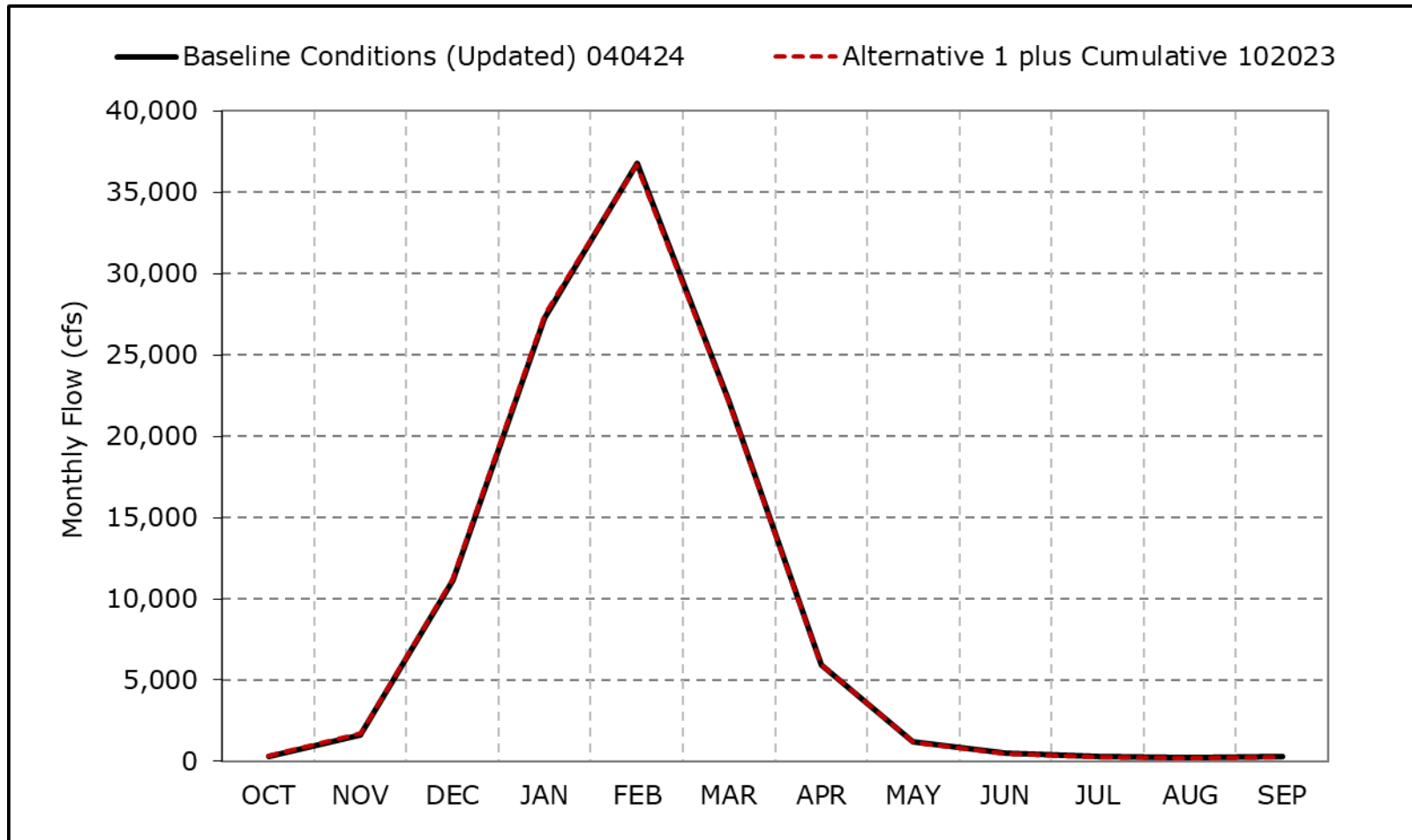


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2b. Yolo Bypass Flow, Wet Year Average Flow

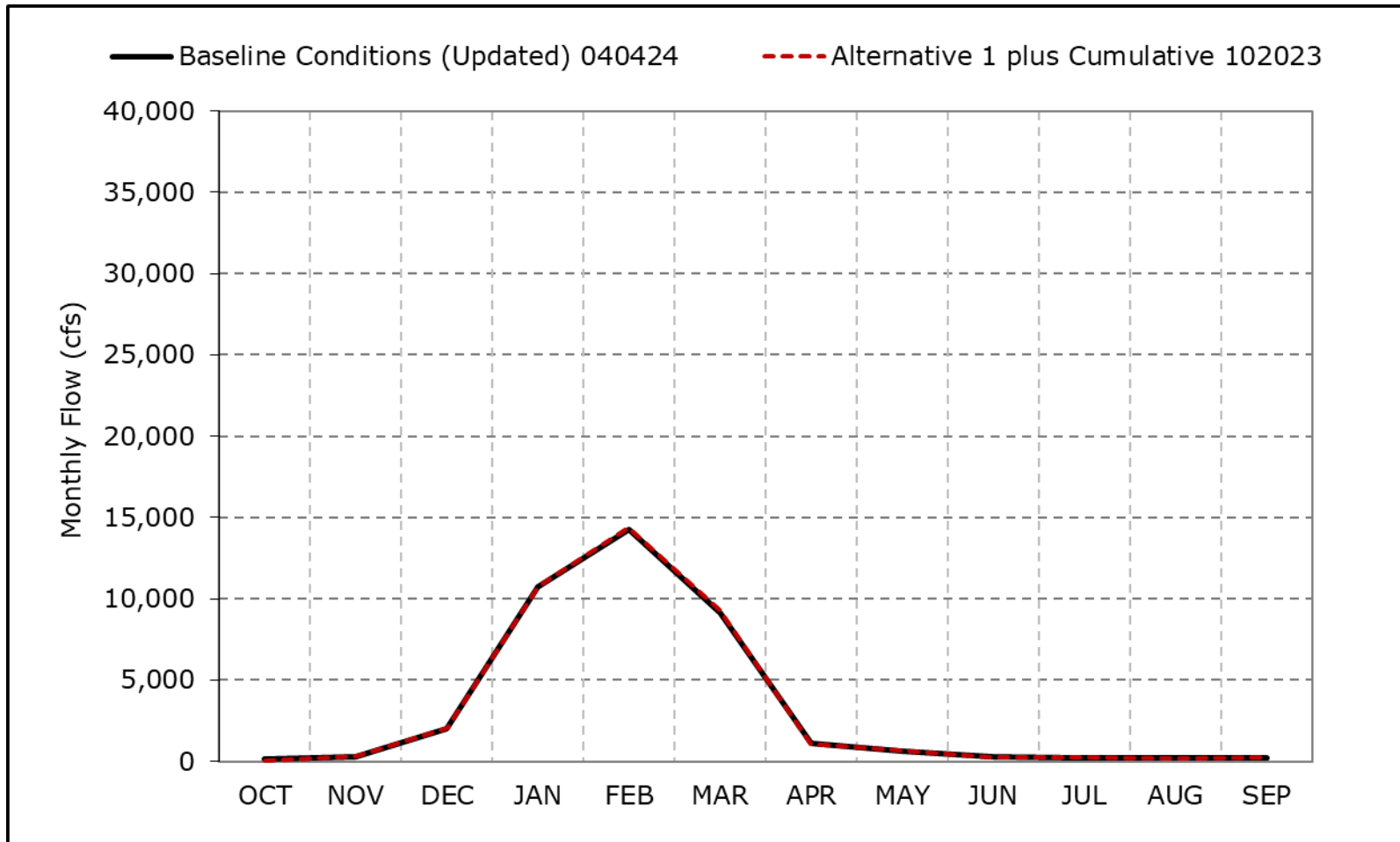


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2c. Yolo Bypass Flow, Above Normal Year Average Flow

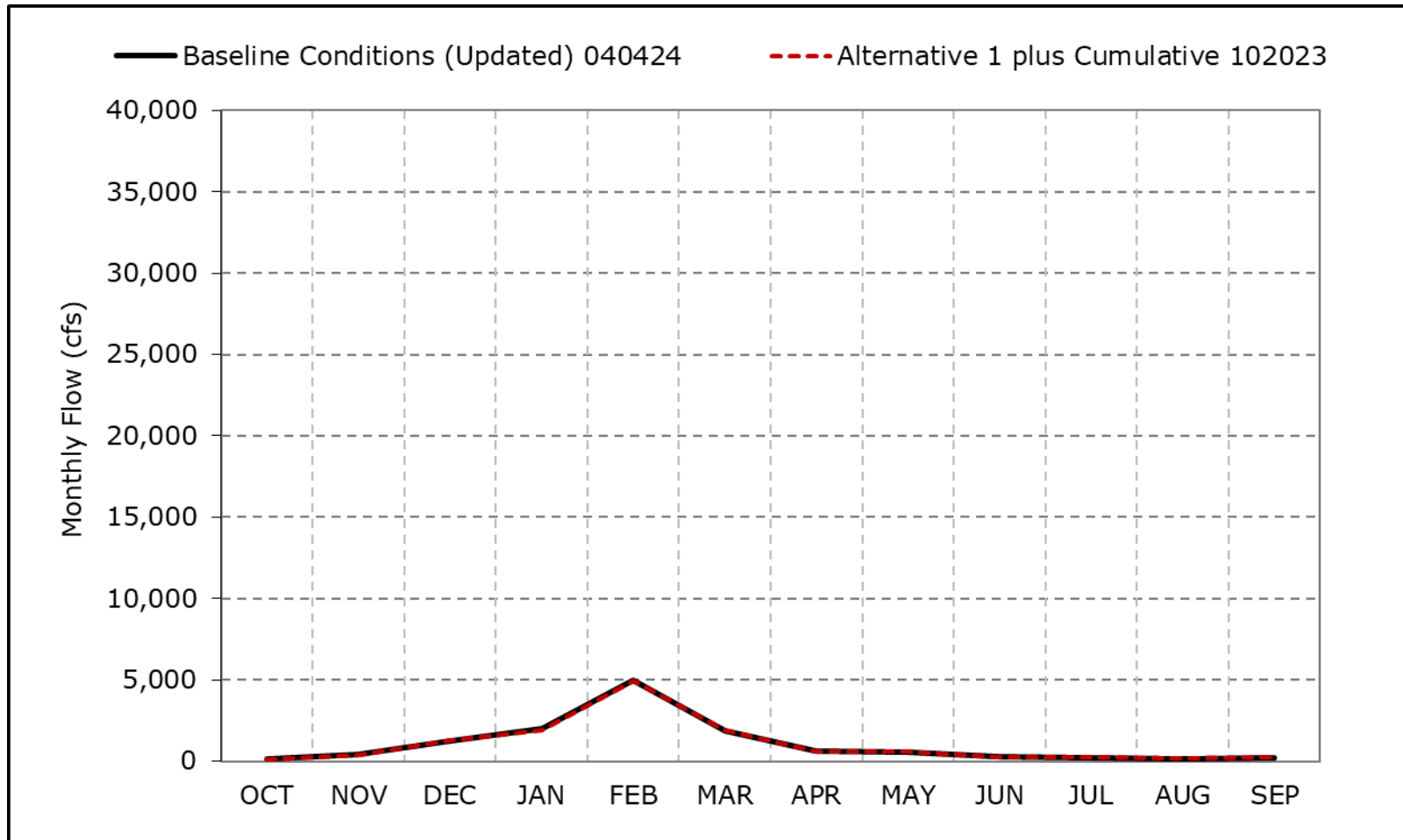


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2d. Yolo Bypass Flow, Below Normal Year Average Flow

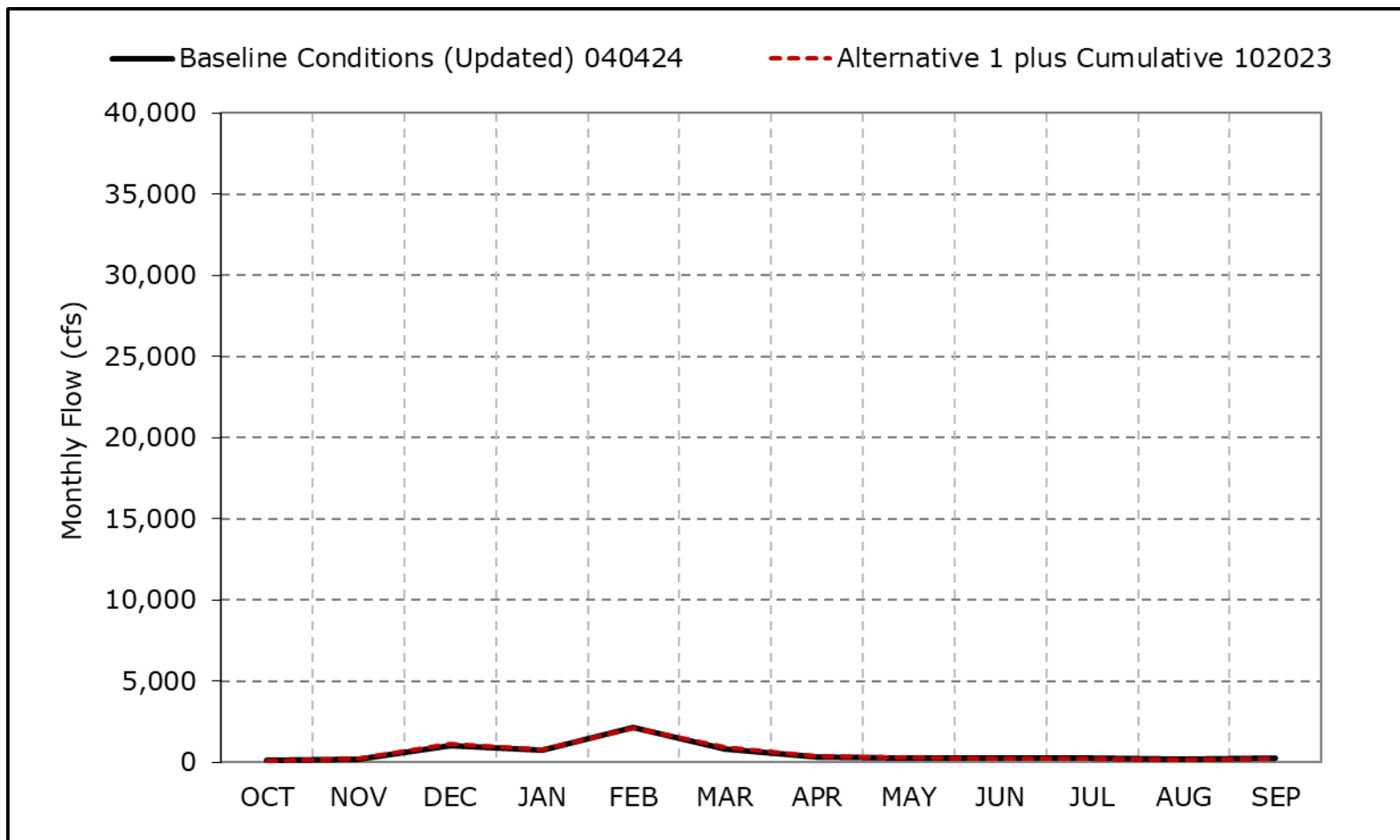


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2e. Yolo Bypass Flow, Dry Year Average Flow

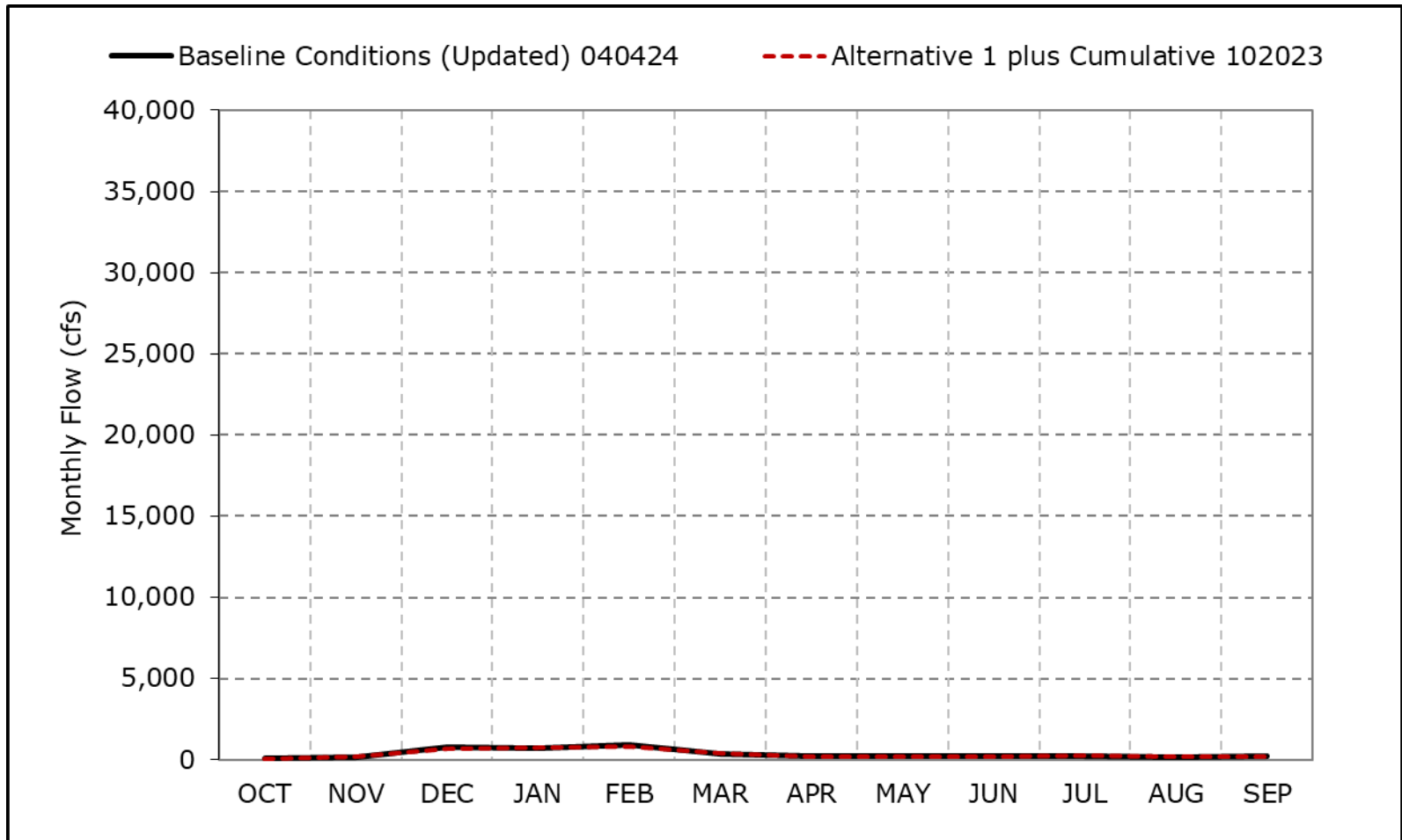


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2f. Yolo Bypass Flow, Critical Year Average Flow

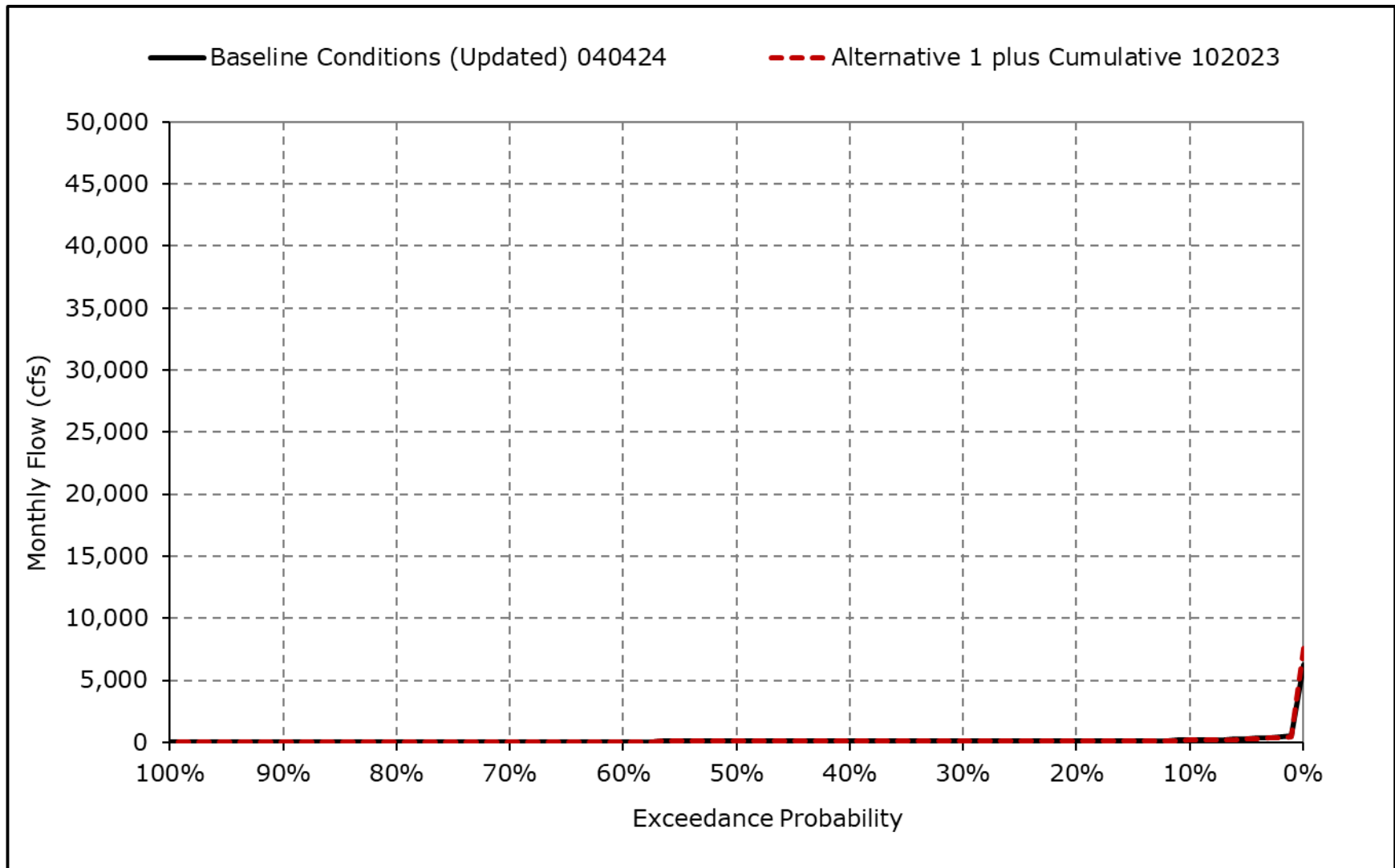


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

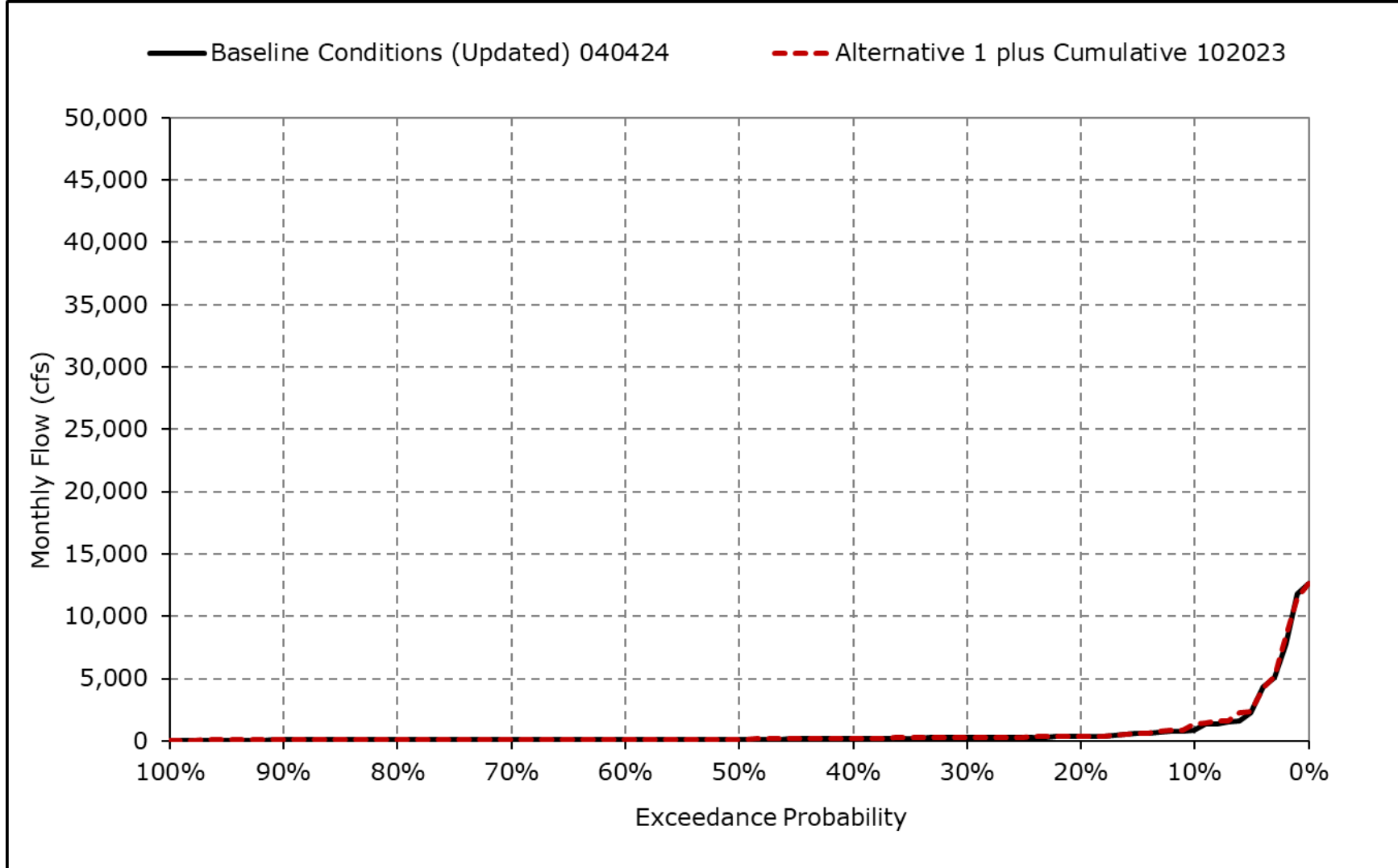
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2g. Yolo Bypass Flow, October



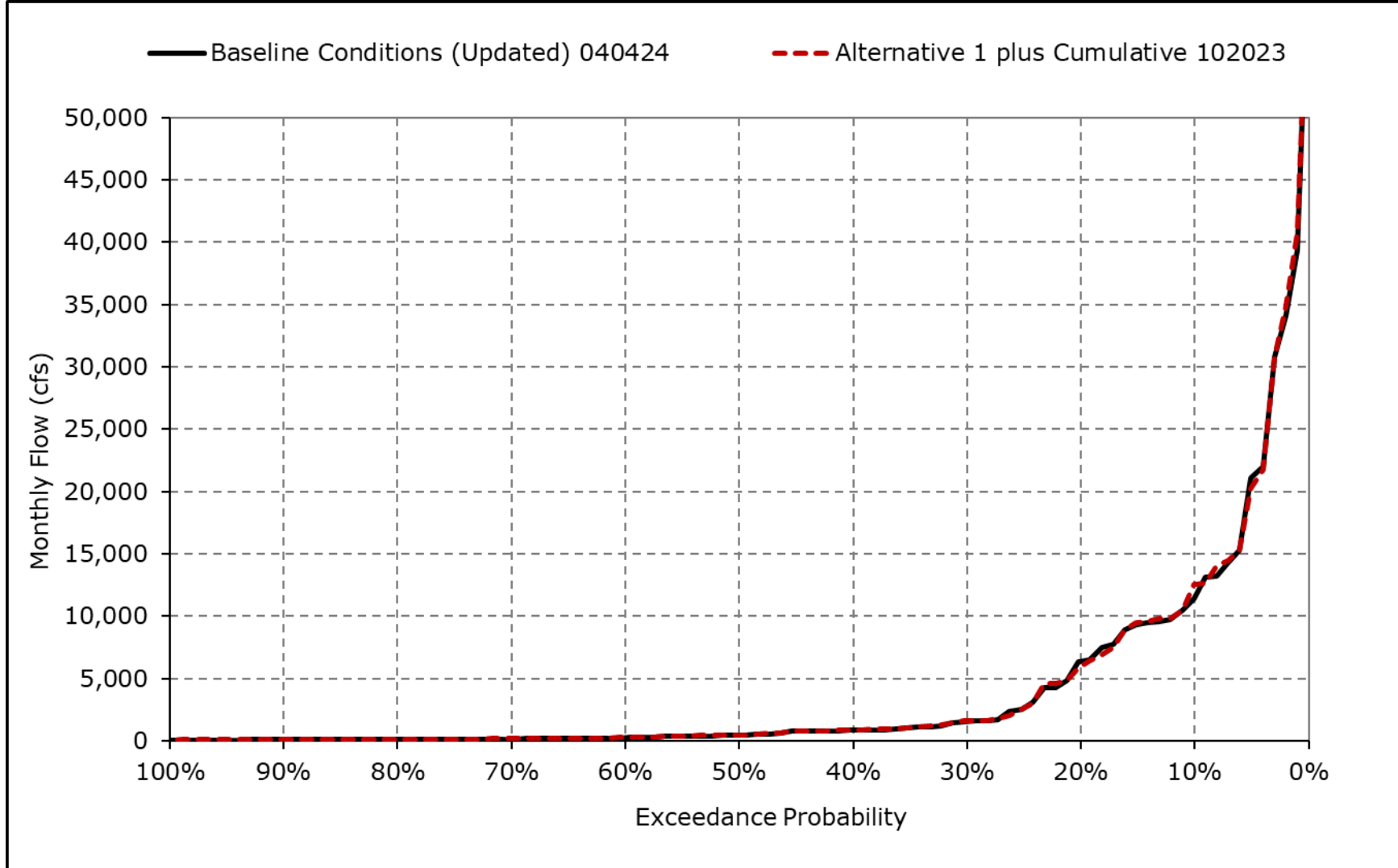
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2h. Yolo Bypass Flow, November



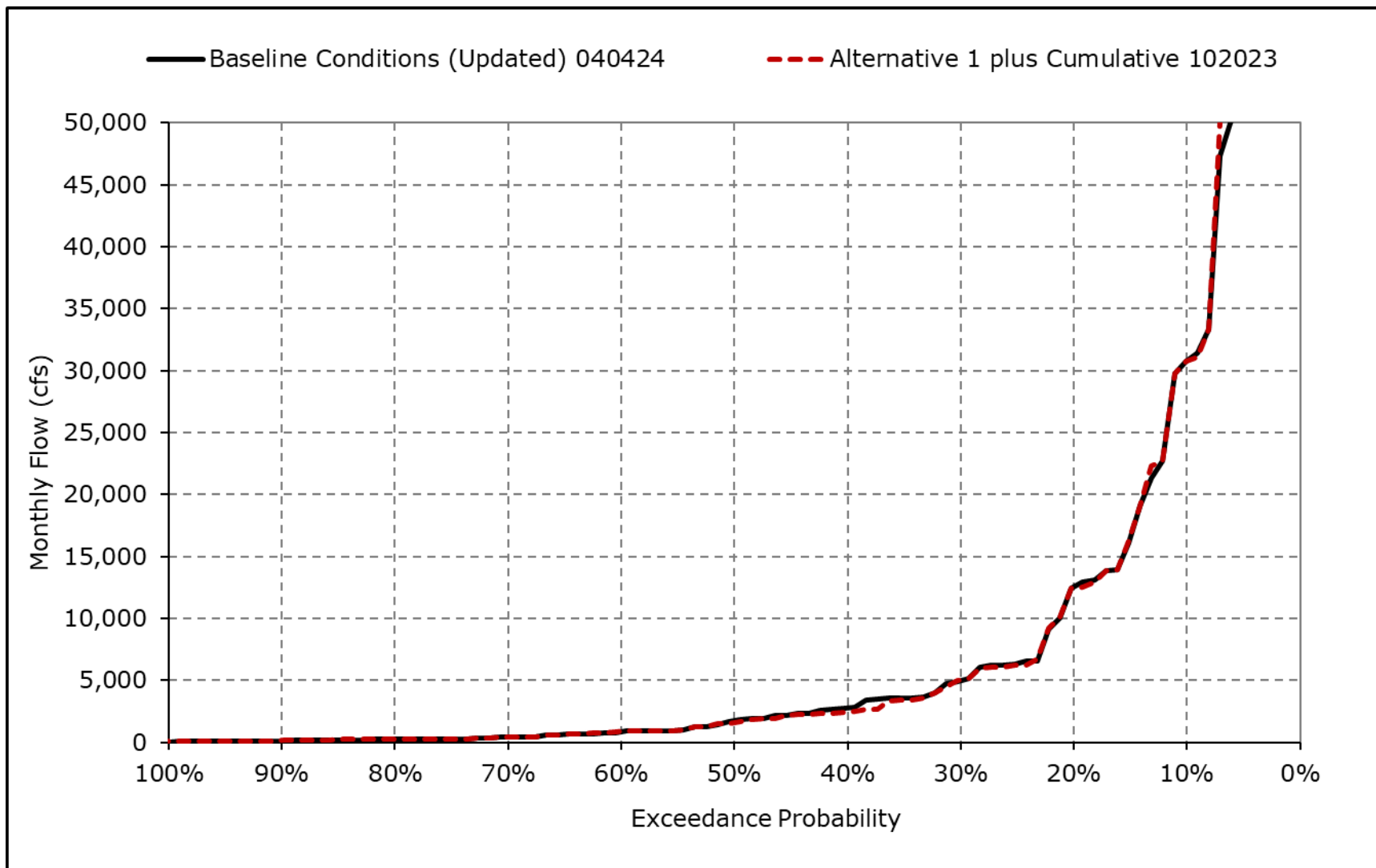
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2i. Yolo Bypass Flow, December



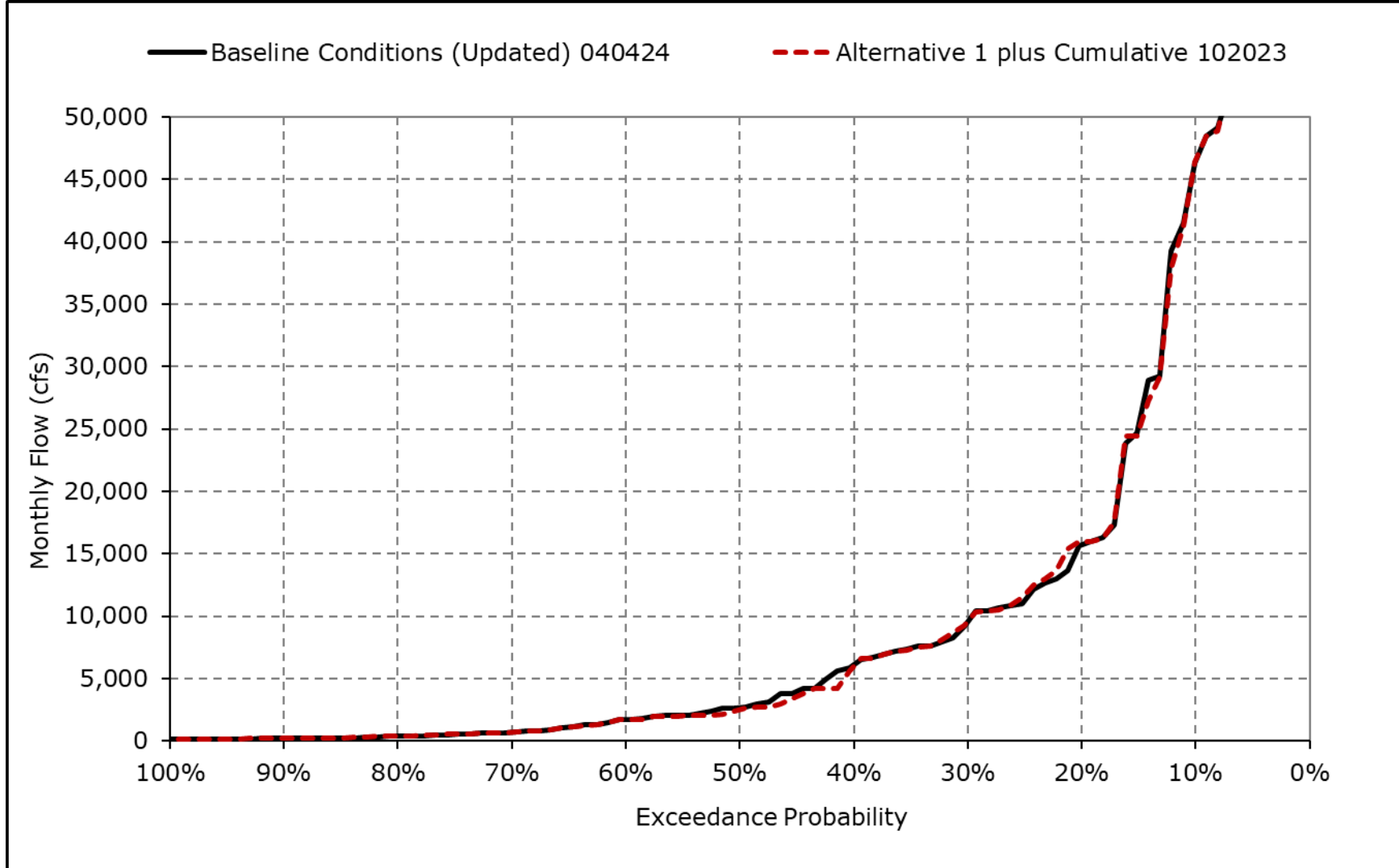
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2j. Yolo Bypass Flow, January



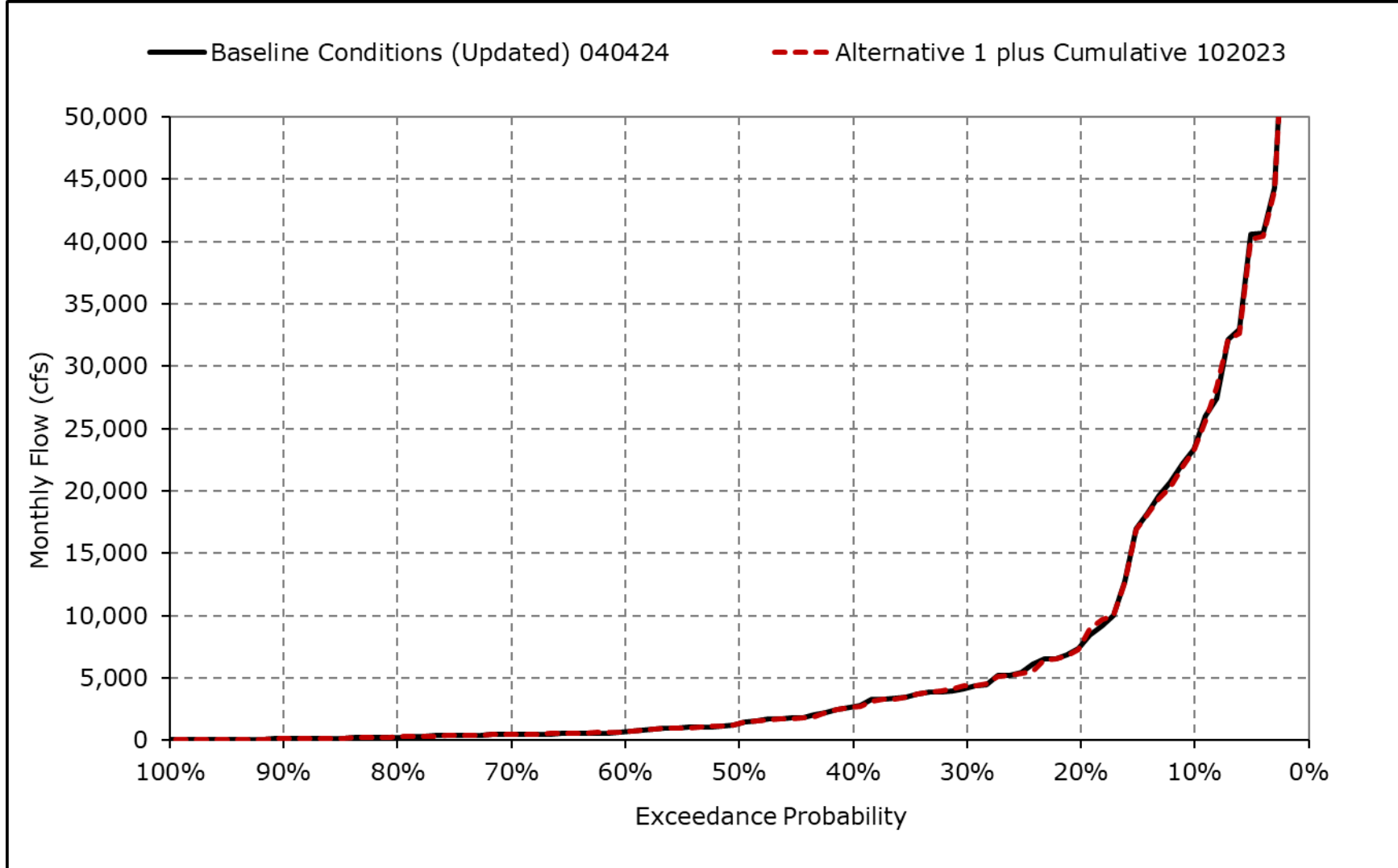
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2k. Yolo Bypass Flow, February



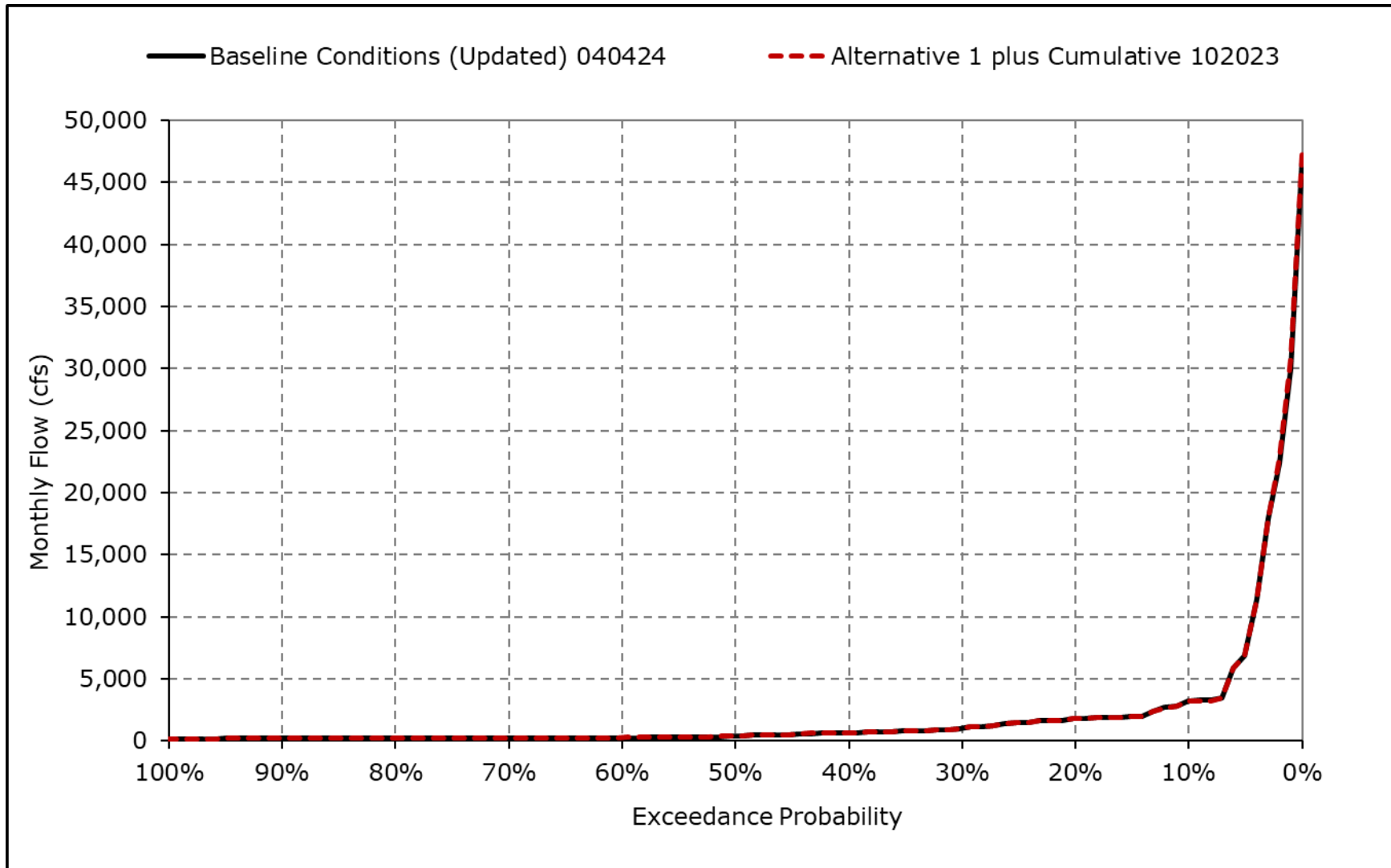
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2I. Yolo Bypass Flow, March



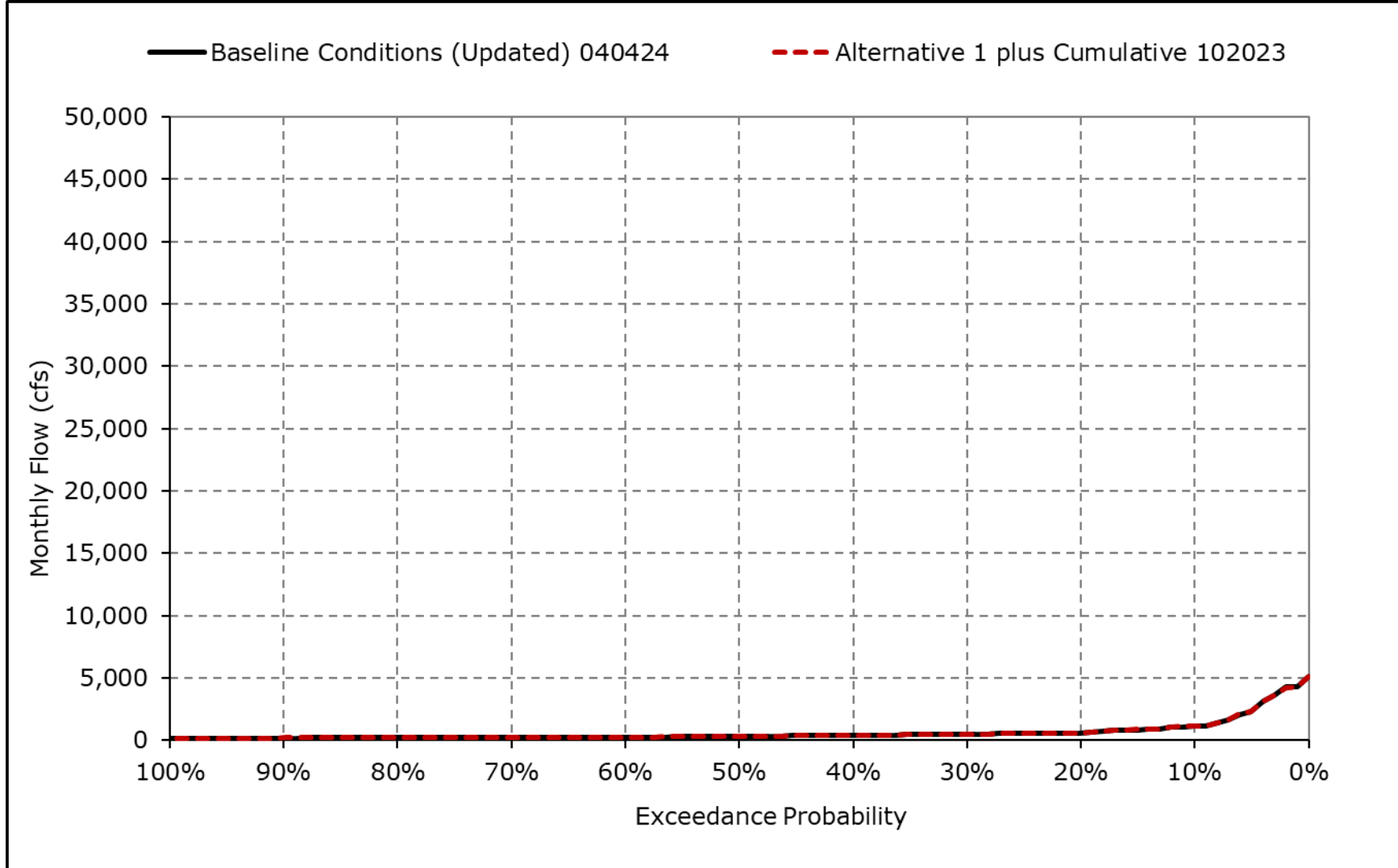
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2m. Yolo Bypass Flow, April



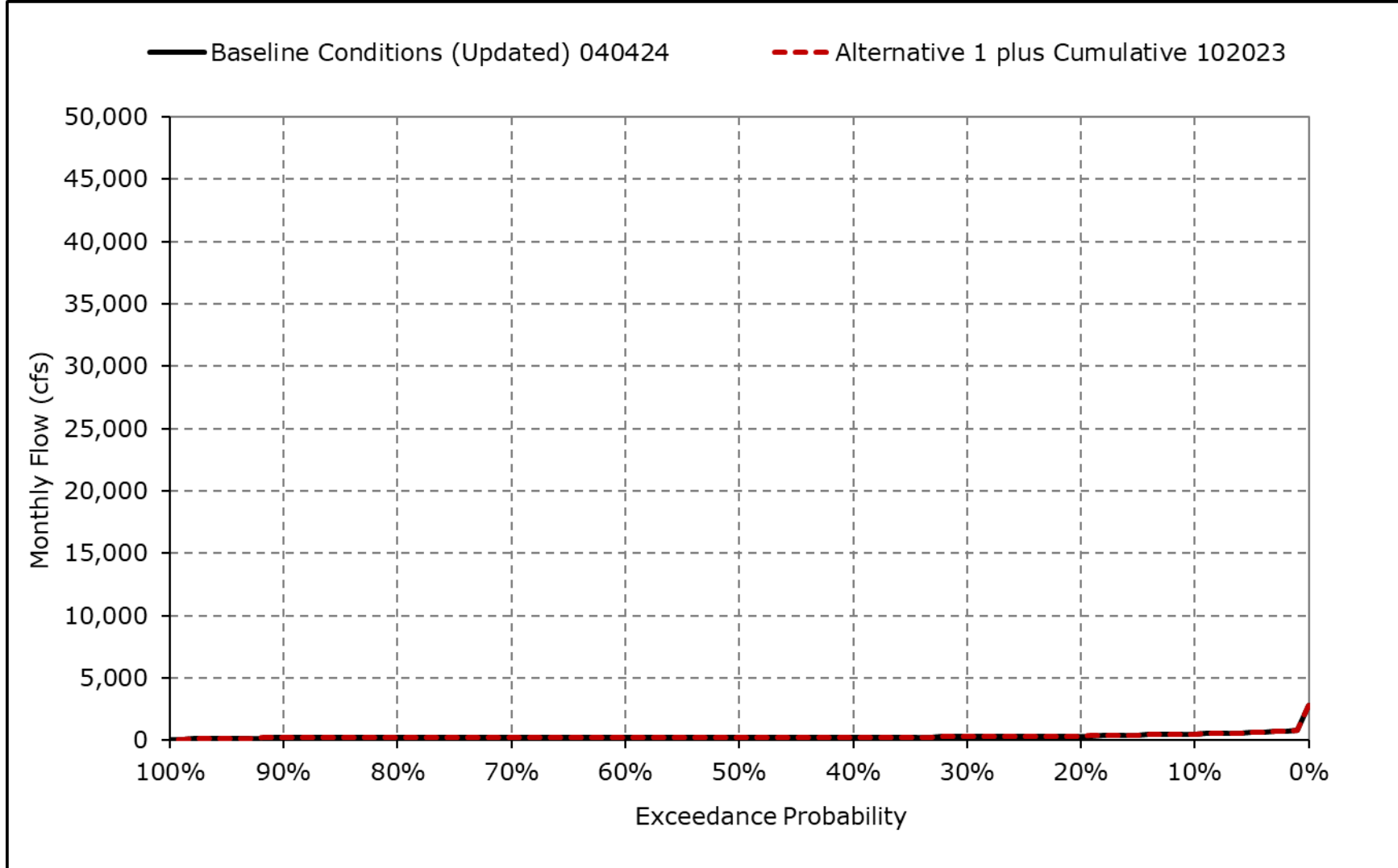
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2n. Yolo Bypass Flow, May



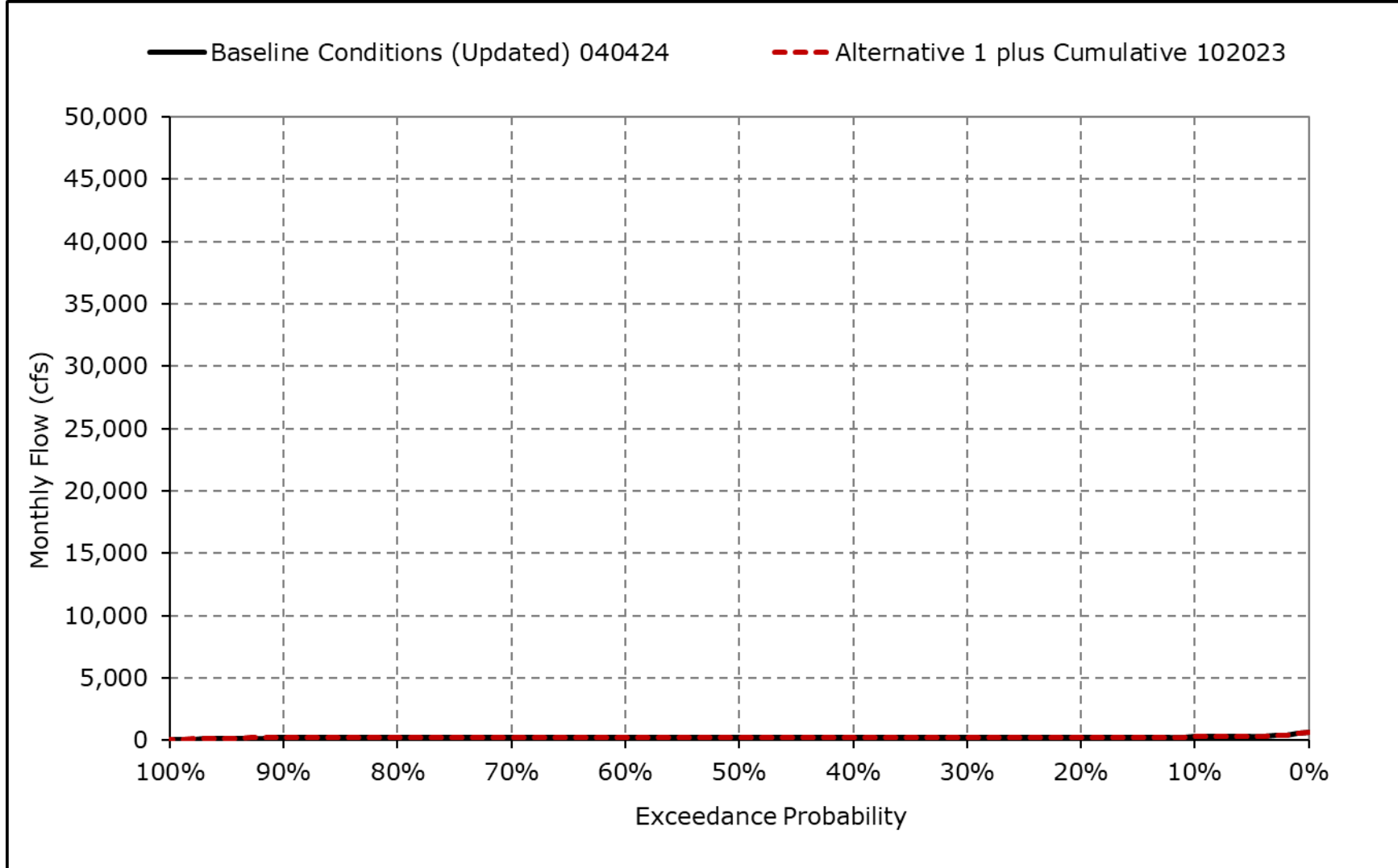
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2o. Yolo Bypass Flow, June



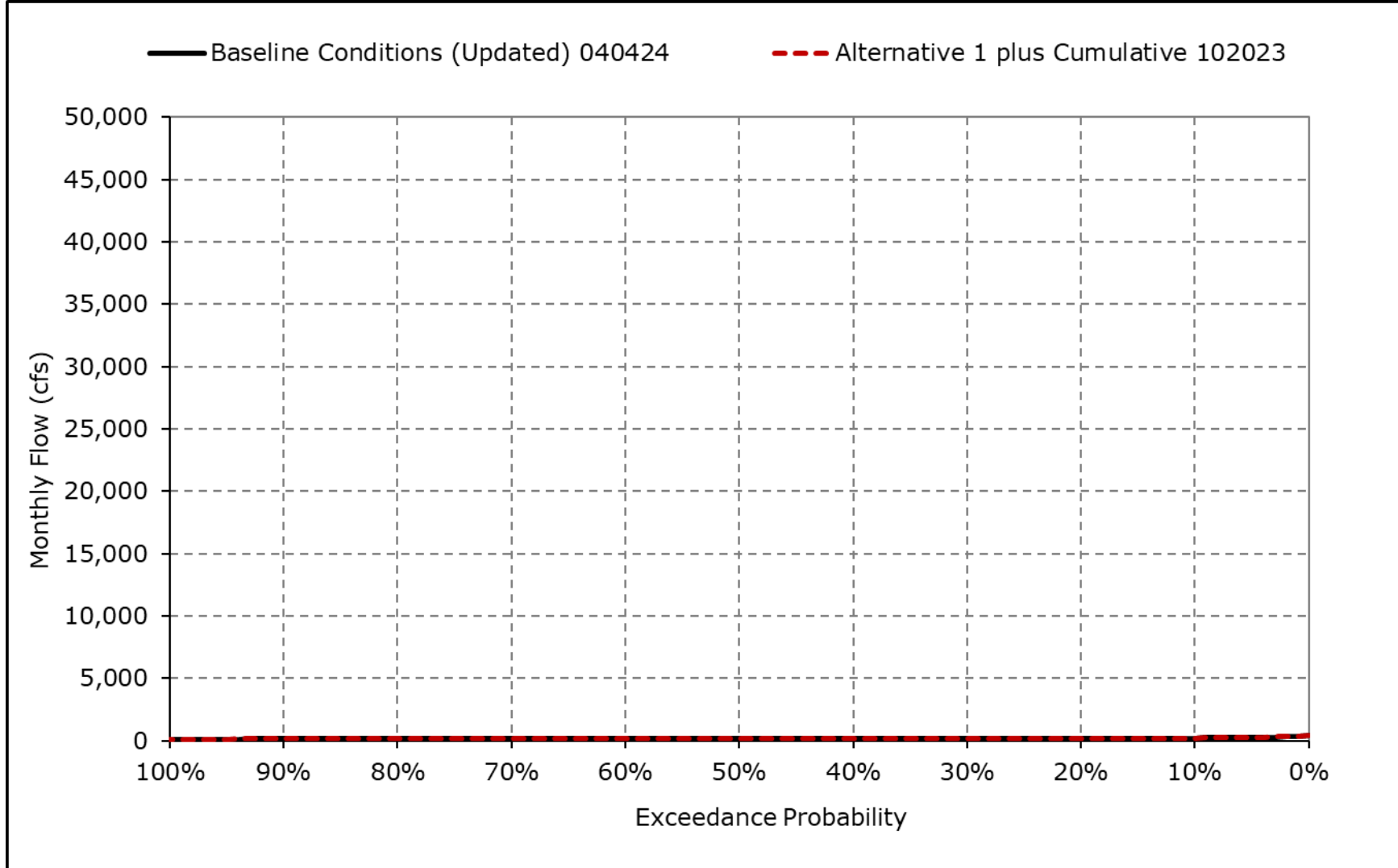
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2p. Yolo Bypass Flow, July



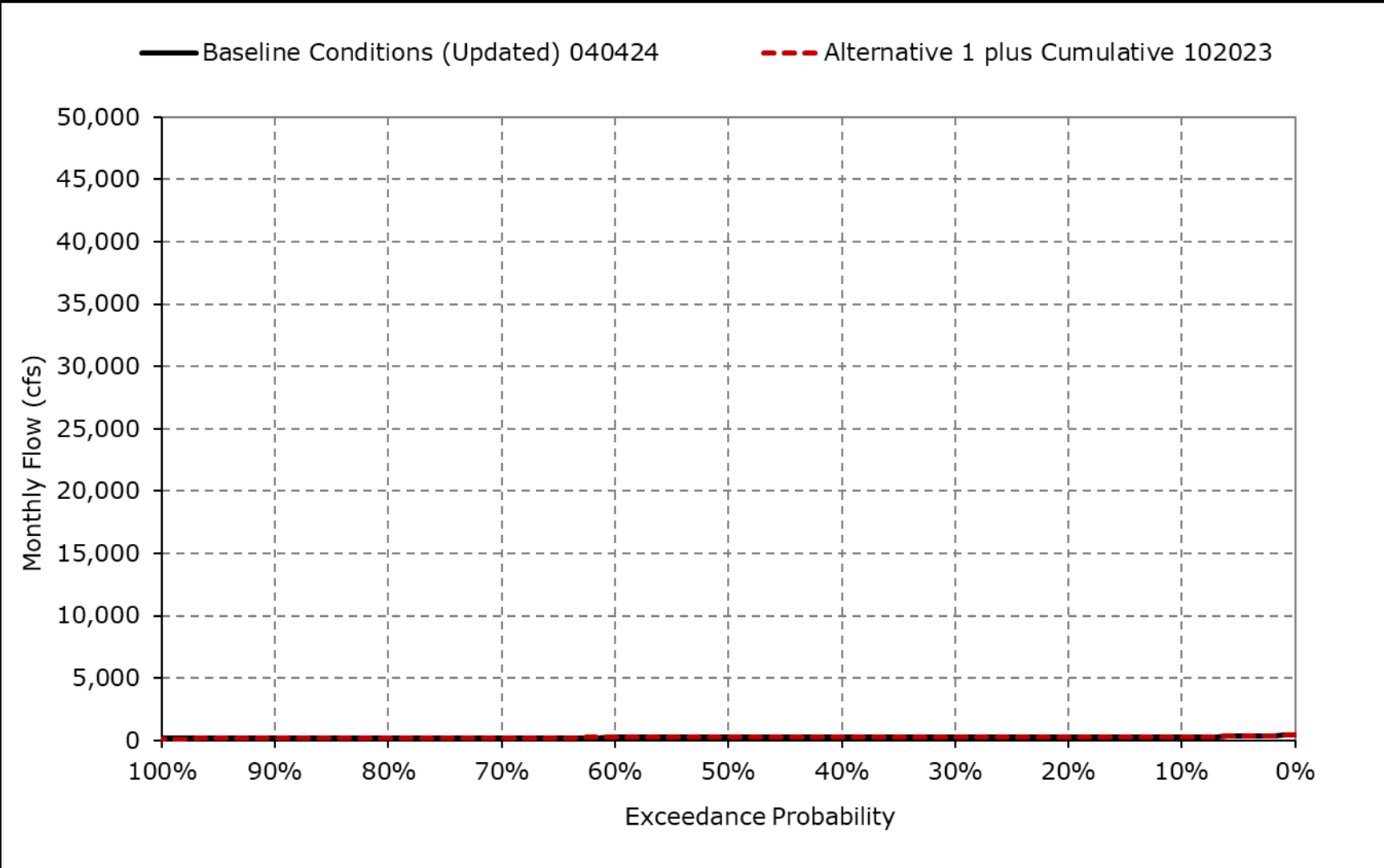
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2q. Yolo Bypass Flow, August



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2r. Yolo Bypass Flow, September



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Table 4G-3-3-1a. San Joaquin River at Vernalis, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|
| 10% Exceedance | 3,745 | 2,791 | 4,101 | 7,308 | 11,298 | 13,134 | 13,819 | 10,607 | 11,467 | 5,768 | 4,628 | 3,532 |
| 20% Exceedance | 3,332 | 2,397 | 2,730 | 4,281 | 8,152 | 7,835 | 9,112 | 6,663 | 5,419 | 3,345 | 2,287 | 1,993 |
| 30% Exceedance | 3,007 | 2,324 | 2,227 | 3,337 | 5,269 | 6,556 | 7,660 | 5,416 | 3,327 | 2,121 | 1,713 | 1,606 |
| 40% Exceedance | 2,126 | 2,101 | 1,925 | 2,712 | 3,940 | 4,562 | 5,869 | 4,348 | 2,590 | 1,789 | 1,554 | 1,469 |
| 50% Exceedance | 1,864 | 1,872 | 1,783 | 2,221 | 3,161 | 3,108 | 4,256 | 3,509 | 2,047 | 1,487 | 1,460 | 1,383 |
| 60% Exceedance | 1,749 | 1,584 | 1,644 | 2,059 | 2,502 | 2,702 | 3,332 | 2,702 | 1,760 | 1,299 | 1,237 | 1,266 |
| 70% Exceedance | 1,661 | 1,478 | 1,530 | 1,893 | 2,295 | 2,408 | 2,964 | 2,447 | 1,633 | 1,185 | 1,101 | 1,158 |
| 80% Exceedance | 1,555 | 1,371 | 1,348 | 1,757 | 2,129 | 2,224 | 2,638 | 2,071 | 1,440 | 925 | 925 | 989 |
| 90% Exceedance | 1,374 | 1,304 | 1,255 | 1,647 | 1,949 | 2,126 | 2,285 | 1,710 | 1,183 | 743 | 750 | 848 |
| Full Simulation Period Average^a | 2,387 | 2,098 | 2,616 | 3,912 | 5,584 | 5,844 | 6,426 | 5,131 | 4,241 | 2,502 | 1,906 | 1,683 |
| Wet Water Years (30%) | 2,738 | 2,684 | 4,492 | 7,533 | 10,543 | 11,408 | 11,912 | 9,653 | 8,998 | 5,122 | 3,546 | 2,747 |
| Above Normal Water Years (11%) | 2,174 | 1,932 | 2,050 | 3,566 | 6,062 | 5,875 | 6,754 | 5,160 | 3,976 | 2,322 | 1,762 | 1,659 |
| Below Normal Water Years (21%) | 2,606 | 2,131 | 2,014 | 2,515 | 4,153 | 4,238 | 5,228 | 4,146 | 2,674 | 1,680 | 1,411 | 1,387 |
| Dry Water Years (22%) | 2,296 | 1,806 | 1,723 | 1,975 | 2,366 | 2,420 | 2,854 | 2,336 | 1,566 | 1,116 | 1,093 | 1,147 |
| Critical Water Years (16%) | 1,712 | 1,471 | 1,506 | 1,857 | 2,258 | 2,207 | 2,398 | 1,769 | 1,237 | 696 | 700 | 827 |

Table 4G-3-3-1b. San Joaquin River at Vernalis, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|
| 10% Exceedance | 3,751 | 2,801 | 4,102 | 7,315 | 11,306 | 12,743 | 14,280 | 10,691 | 11,476 | 5,782 | 4,636 | 3,539 |
| 20% Exceedance | 3,352 | 2,404 | 2,738 | 4,289 | 8,161 | 7,853 | 9,768 | 7,419 | 5,452 | 3,514 | 2,302 | 2,000 |
| 30% Exceedance | 3,013 | 2,336 | 2,237 | 3,344 | 5,278 | 6,564 | 8,460 | 6,435 | 3,370 | 2,384 | 1,743 | 1,616 |
| 40% Exceedance | 2,133 | 2,117 | 1,939 | 2,722 | 3,948 | 4,564 | 7,299 | 5,489 | 2,615 | 1,926 | 1,592 | 1,487 |
| 50% Exceedance | 1,874 | 1,896 | 1,793 | 2,228 | 3,163 | 3,100 | 5,734 | 4,979 | 2,068 | 1,663 | 1,504 | 1,407 |
| 60% Exceedance | 1,812 | 1,594 | 1,663 | 2,043 | 2,494 | 2,710 | 4,481 | 3,897 | 1,793 | 1,366 | 1,306 | 1,284 |
| 70% Exceedance | 1,672 | 1,483 | 1,541 | 1,901 | 2,328 | 2,415 | 3,609 | 2,955 | 1,651 | 1,250 | 1,160 | 1,215 |
| 80% Exceedance | 1,573 | 1,400 | 1,363 | 1,754 | 2,136 | 2,216 | 3,048 | 2,476 | 1,489 | 1,084 | 978 | 1,028 |
| 90% Exceedance | 1,431 | 1,311 | 1,253 | 1,654 | 1,973 | 2,127 | 2,703 | 2,099 | 1,194 | 764 | 794 | 871 |
| Full Simulation Period Average^a | 2,403 | 2,110 | 2,629 | 3,916 | 5,575 | 5,847 | 7,209 | 5,873 | 4,266 | 2,604 | 1,947 | 1,709 |
| Wet Water Years (30%) | 2,755 | 2,697 | 4,519 | 7,551 | 10,559 | 11,425 | 12,519 | 10,215 | 9,017 | 5,170 | 3,557 | 2,758 |
| Above Normal Water Years (11%) | 2,215 | 1,957 | 2,065 | 3,511 | 5,911 | 5,840 | 7,796 | 6,109 | 3,990 | 2,482 | 1,787 | 1,680 |
| Below Normal Water Years (21%) | 2,611 | 2,141 | 2,022 | 2,523 | 4,160 | 4,245 | 6,301 | 5,179 | 2,714 | 1,867 | 1,480 | 1,434 |
| Dry Water Years (22%) | 2,328 | 1,826 | 1,733 | 1,987 | 2,369 | 2,418 | 3,655 | 3,106 | 1,582 | 1,206 | 1,126 | 1,159 |
| Critical Water Years (16%) | 1,700 | 1,465 | 1,501 | 1,858 | 2,267 | 2,208 | 2,930 | 2,283 | 1,277 | 766 | 778 | 879 |

Table 4G-3-3-1c. San Joaquin River at Vernalis, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|-----------|-----------|------------|-------------|------------|--------------|--------------|-----------|------------|-----------|-----------|
| 10% Exceedance | 5 | 9 | 1 | 7 | 8 | -390 | 462 | 84 | 10 | 13 | 8 | 7 |
| 20% Exceedance | 20 | 6 | 9 | 8 | 9 | 18 | 657 | 756 | 33 | 169 | 16 | 6 |
| 30% Exceedance | 6 | 13 | 10 | 7 | 8 | 7 | 800 | 1,019 | 43 | 263 | 30 | 10 |
| 40% Exceedance | 8 | 15 | 14 | 11 | 8 | 2 | 1,429 | 1,141 | 25 | 138 | 37 | 19 |
| 50% Exceedance | 10 | 23 | 10 | 7 | 2 | -8 | 1,478 | 1,469 | 20 | 176 | 45 | 24 |
| 60% Exceedance | 63 | 10 | 18 | -17 | -8 | 8 | 1,148 | 1,195 | 33 | 67 | 69 | 18 |
| 70% Exceedance | 11 | 5 | 10 | 8 | 33 | 7 | 645 | 508 | 18 | 65 | 59 | 57 |
| 80% Exceedance | 18 | 29 | 15 | -3 | 7 | -8 | 410 | 405 | 49 | 159 | 53 | 39 |
| 90% Exceedance | 56 | 7 | -2 | 7 | 25 | 1 | 418 | 388 | 11 | 22 | 44 | 23 |
| Full Simulation Period Average^a | 16 | 12 | 13 | 4 | -8 | 2 | 783 | 742 | 25 | 102 | 40 | 26 |
| Wet Water Years (30%) | 17 | 13 | 27 | 18 | 16 | 17 | 608 | 562 | 19 | 48 | 12 | 10 |
| Above Normal Water Years (11%) | 41 | 25 | 15 | -55 | -150 | -35 | 1,041 | 949 | 14 | 160 | 25 | 20 |
| Below Normal Water Years (21%) | 5 | 10 | 9 | 9 | 7 | 7 | 1,073 | 1,033 | 40 | 188 | 68 | 47 |
| Dry Water Years (22%) | 33 | 19 | 10 | 12 | 4 | -3 | 801 | 770 | 16 | 90 | 33 | 12 |
| Critical Water Years (16%) | -12 | -6 | -5 | 1 | 9 | 1 | 532 | 514 | 40 | 70 | 78 | 52 |

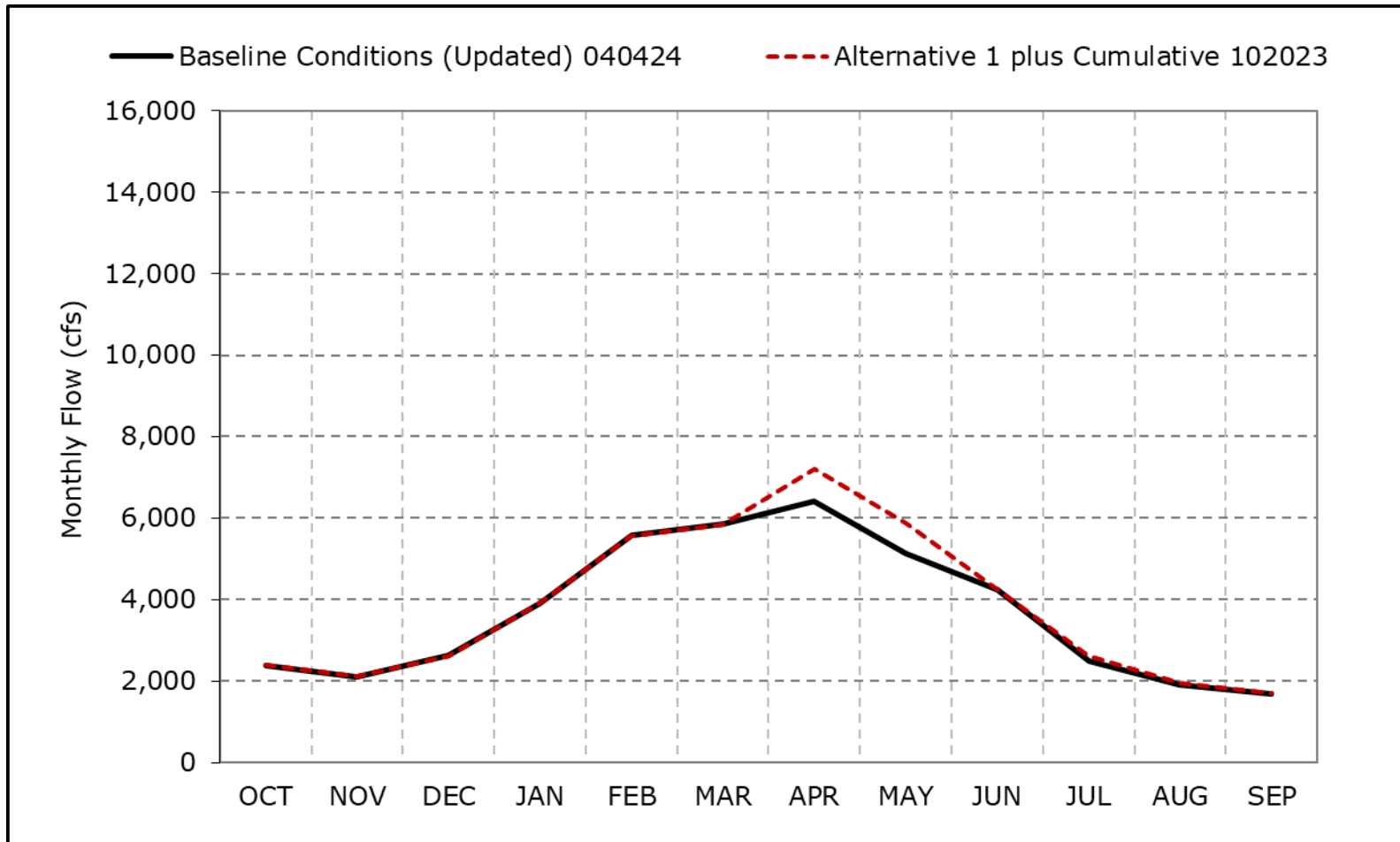
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-3a. San Joaquin River at Vernalis, Long-Term Average Flow

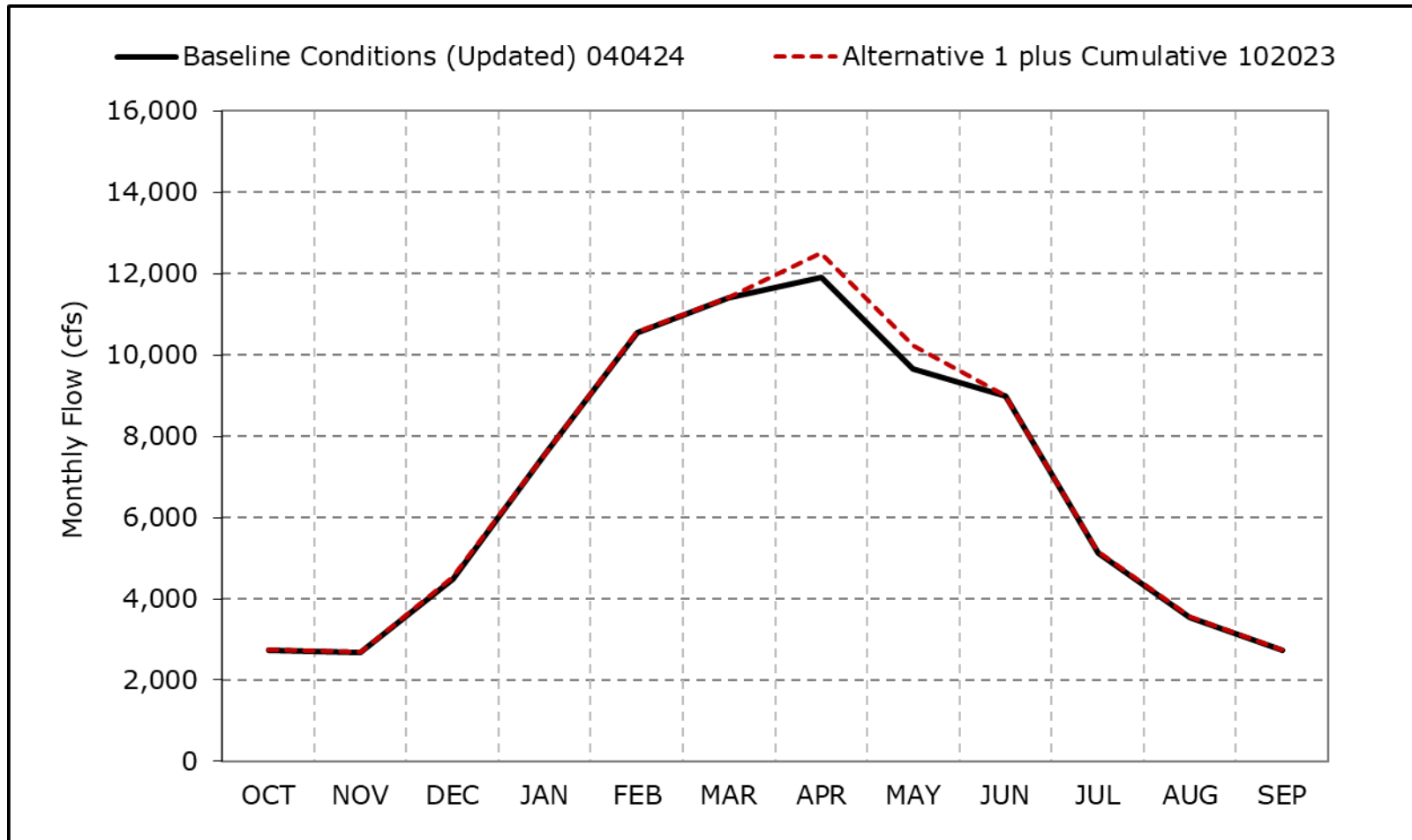


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3b. San Joaquin River at Vernalis, Wet Year Average Flow

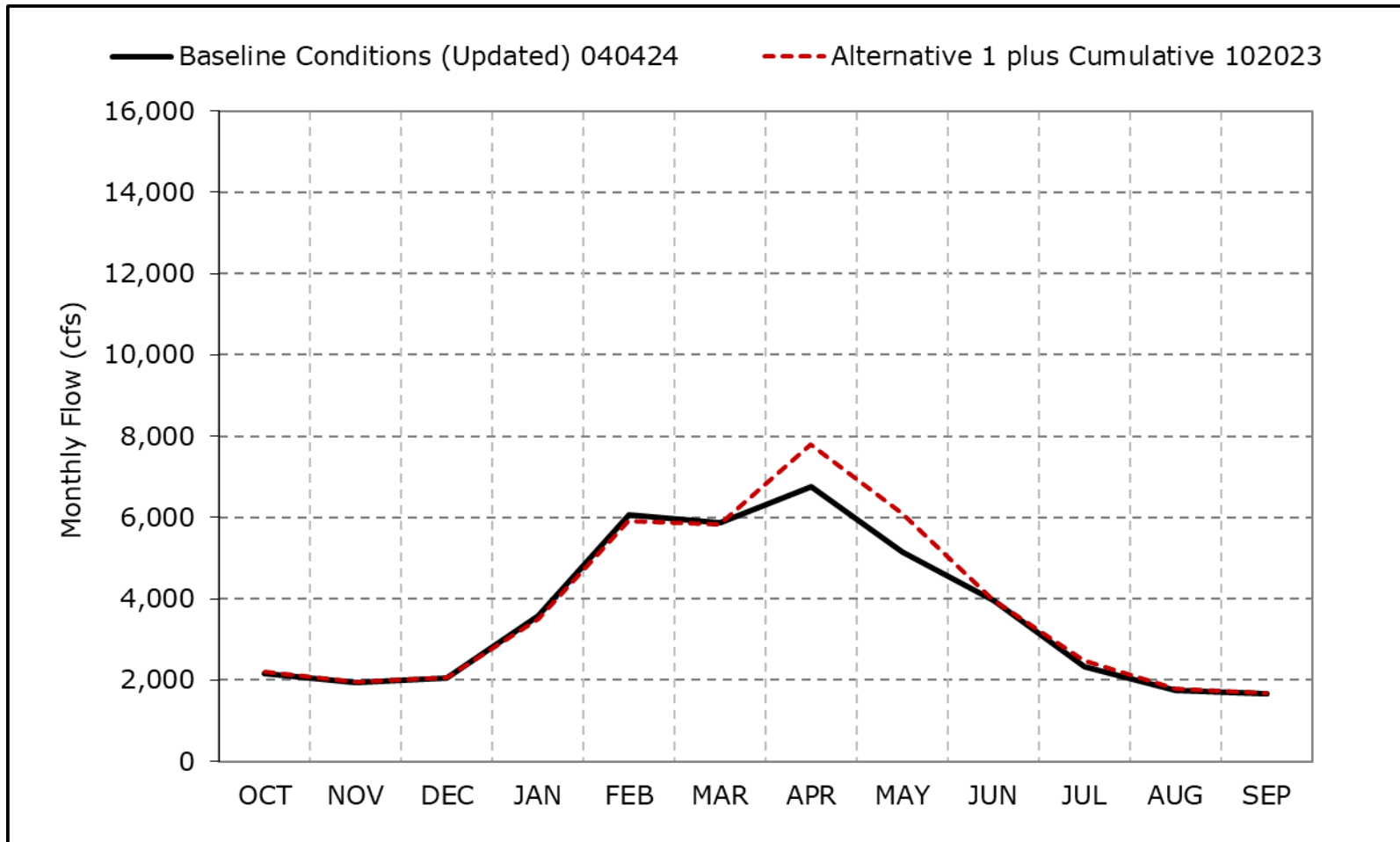


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3c. San Joaquin River at Vernalis, Above Normal Year Average Flow

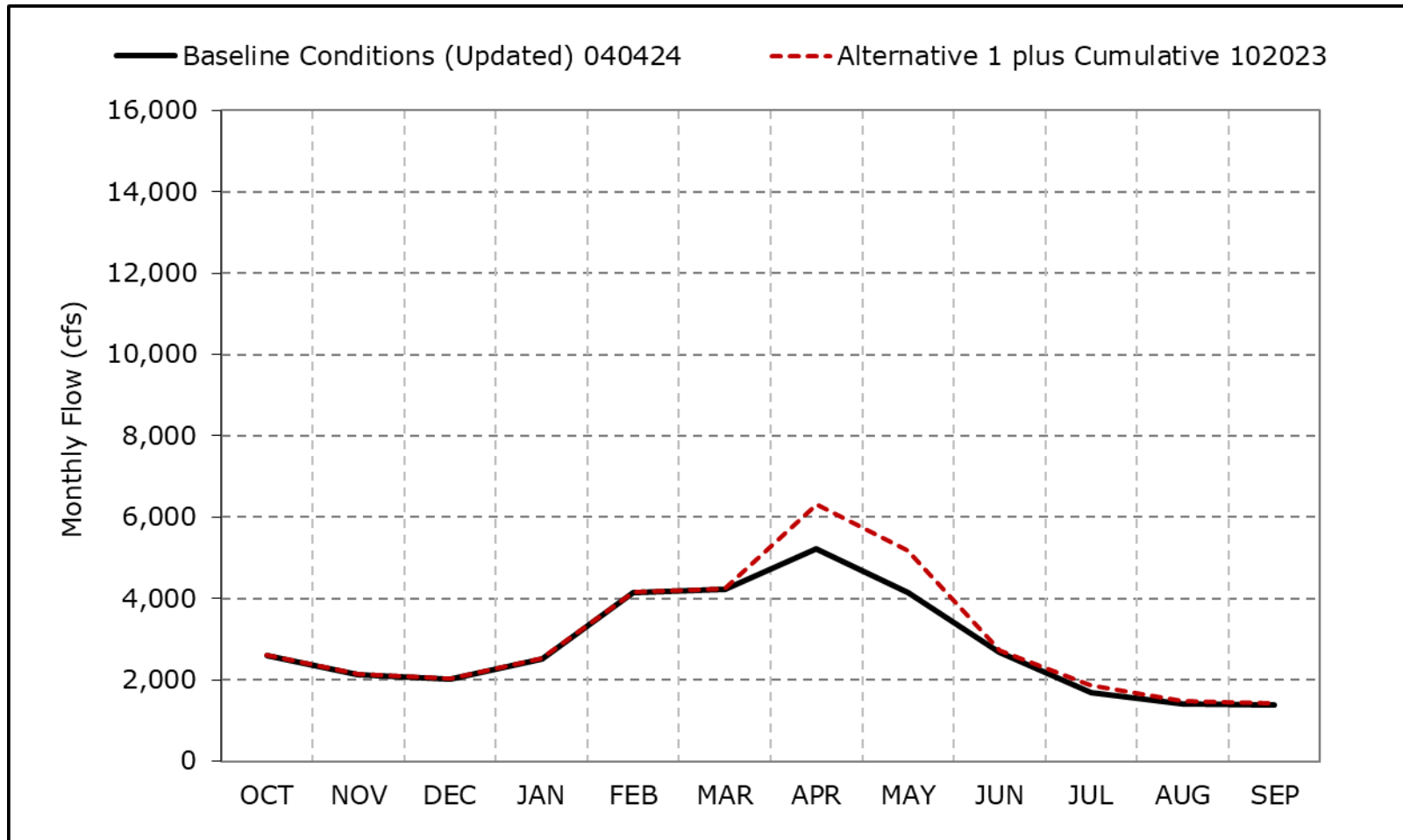


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3d. San Joaquin River at Vernalis, Below Normal Year Average Flow

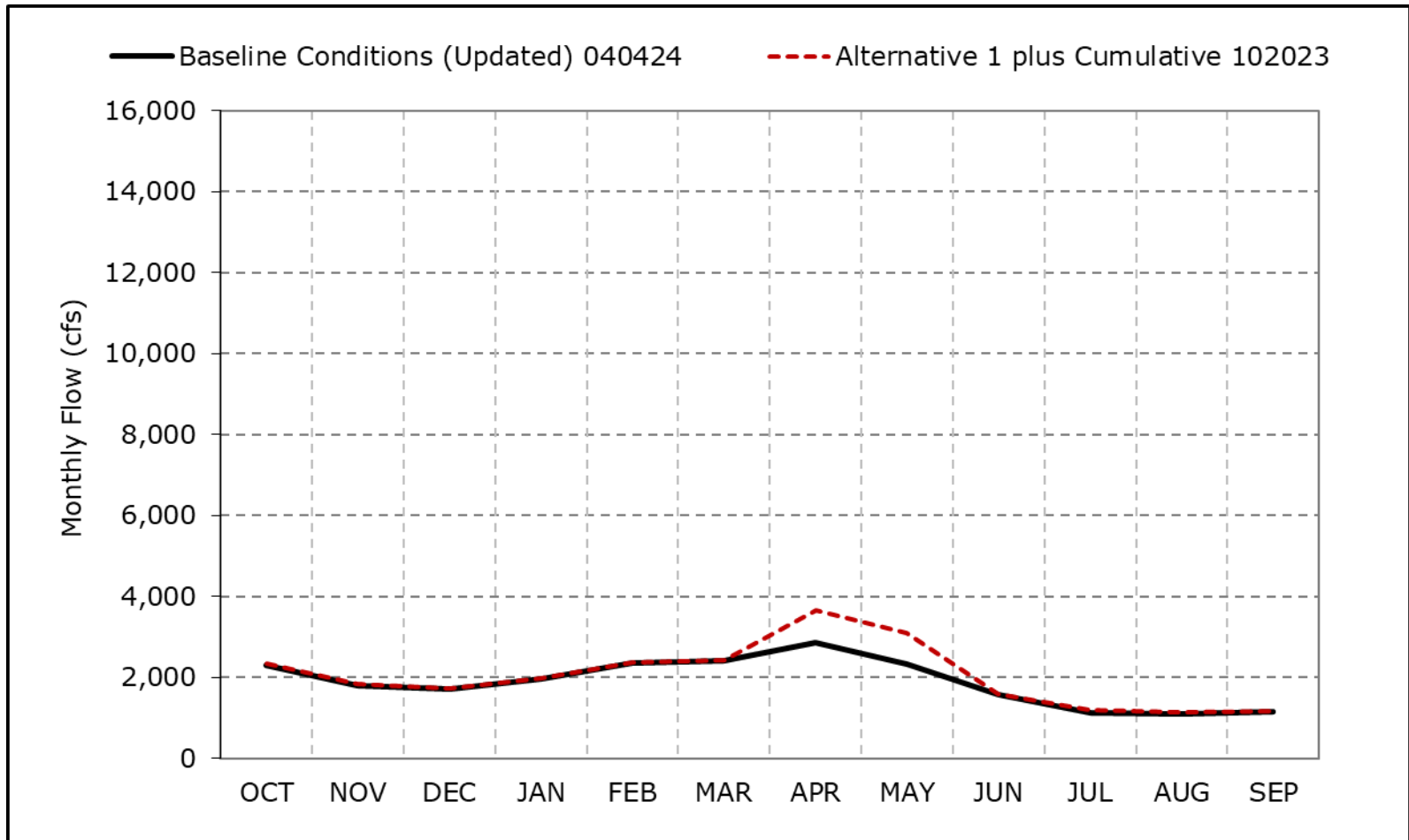


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3e. San Joaquin River at Vernalis, Dry Year Average Flow

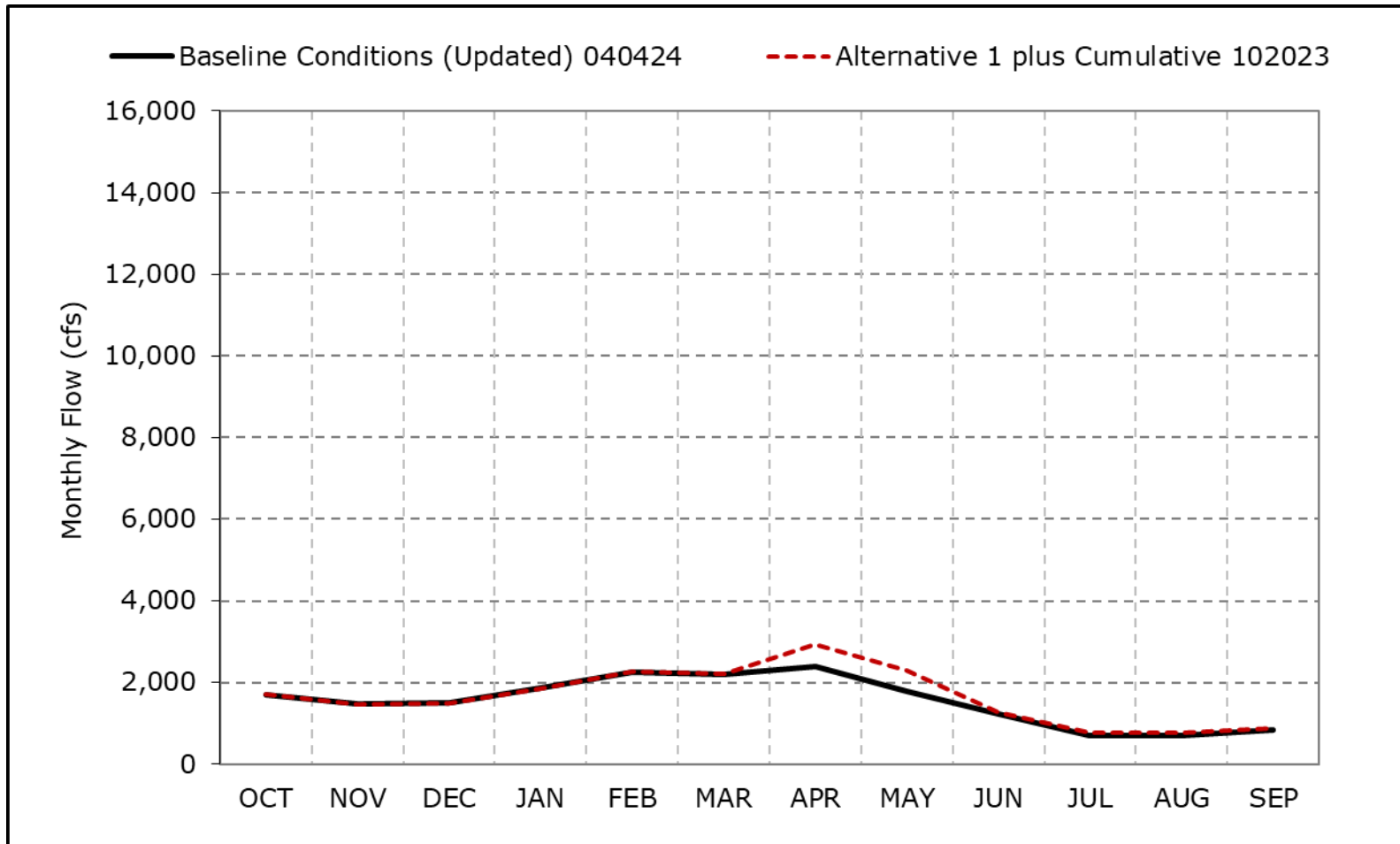


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3f. San Joaquin River at Vernalis, Critical Year Average Flow

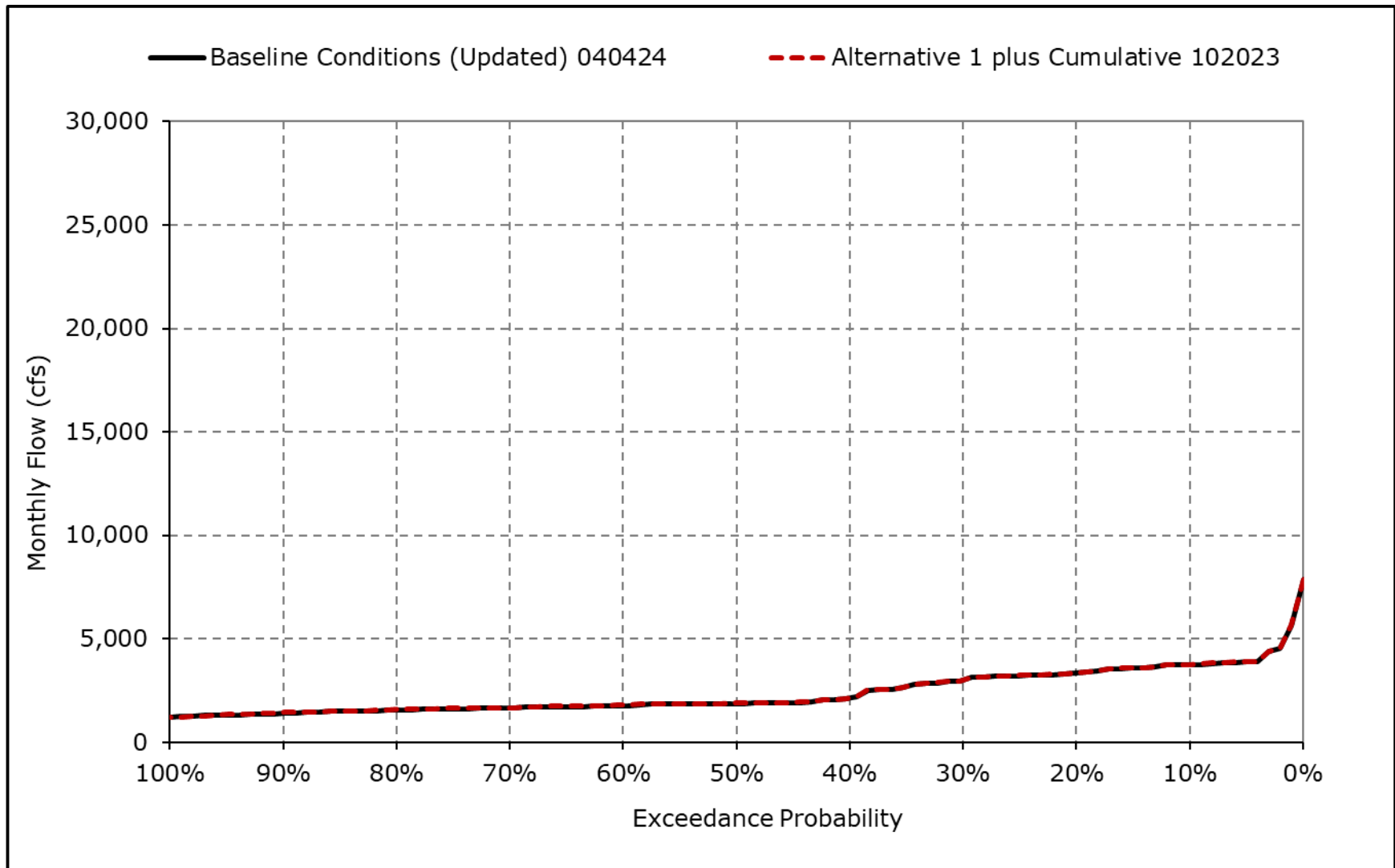


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

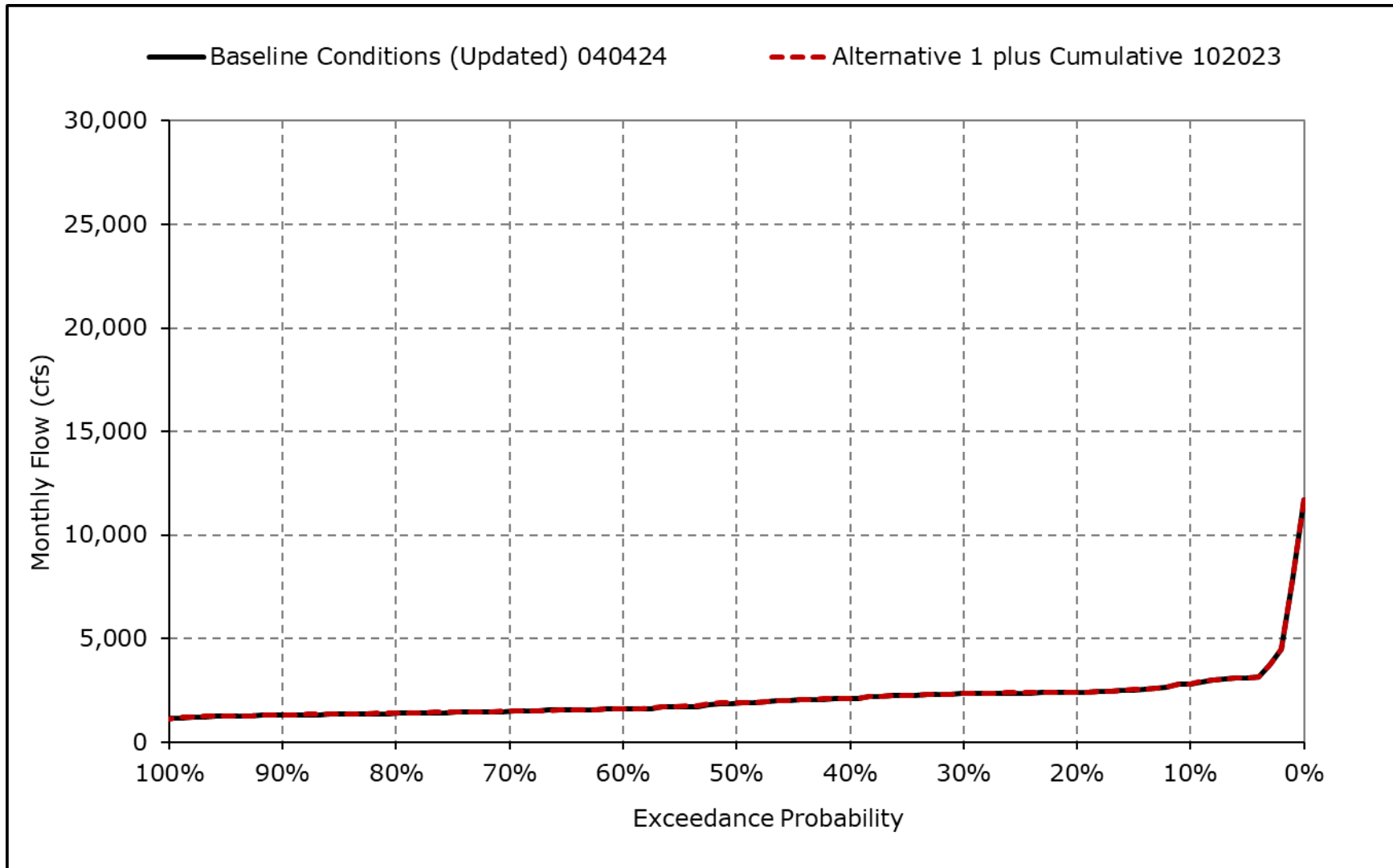
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3g. San Joaquin River at Vernalis, October



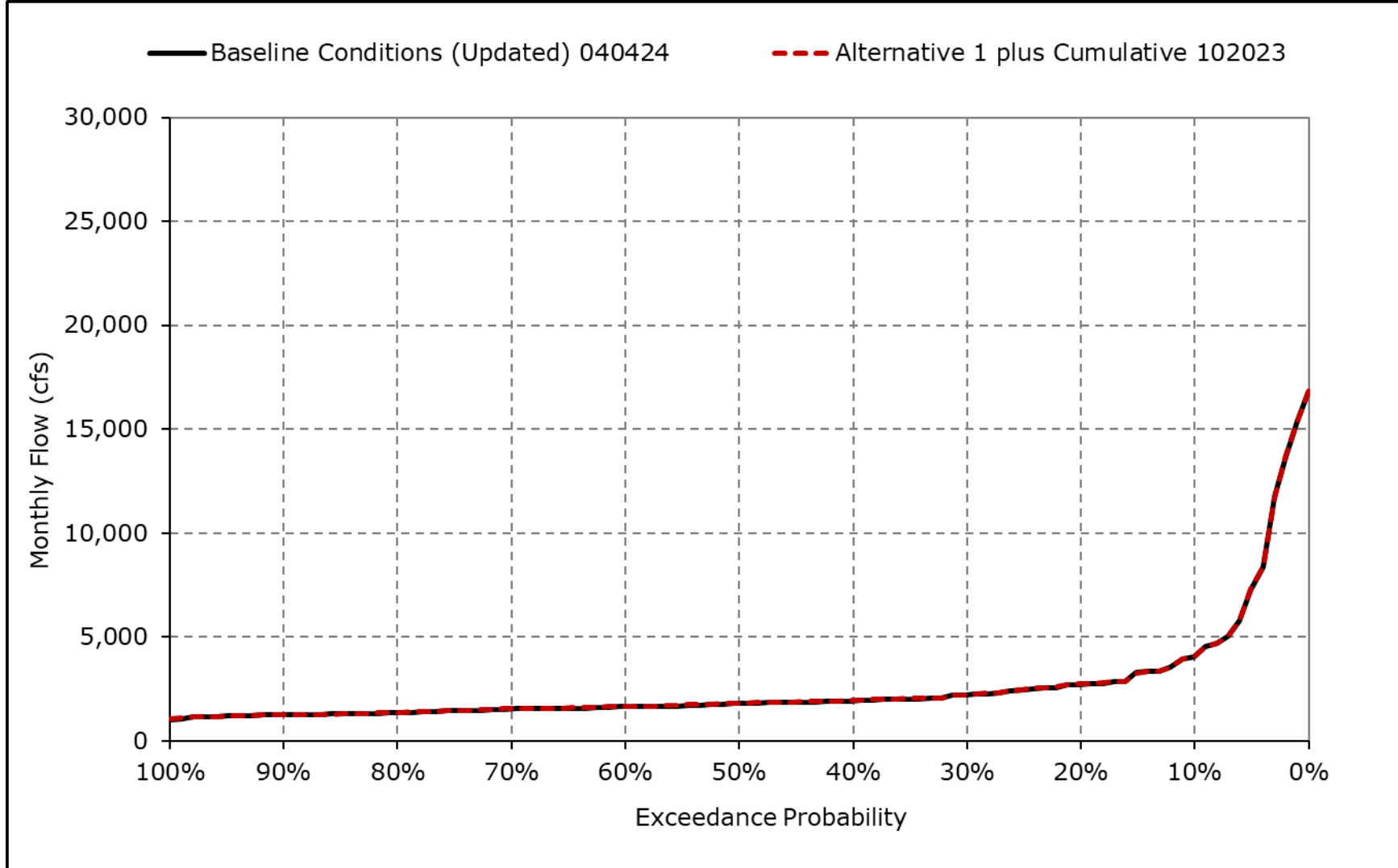
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3h. San Joaquin River at Vernalis, November



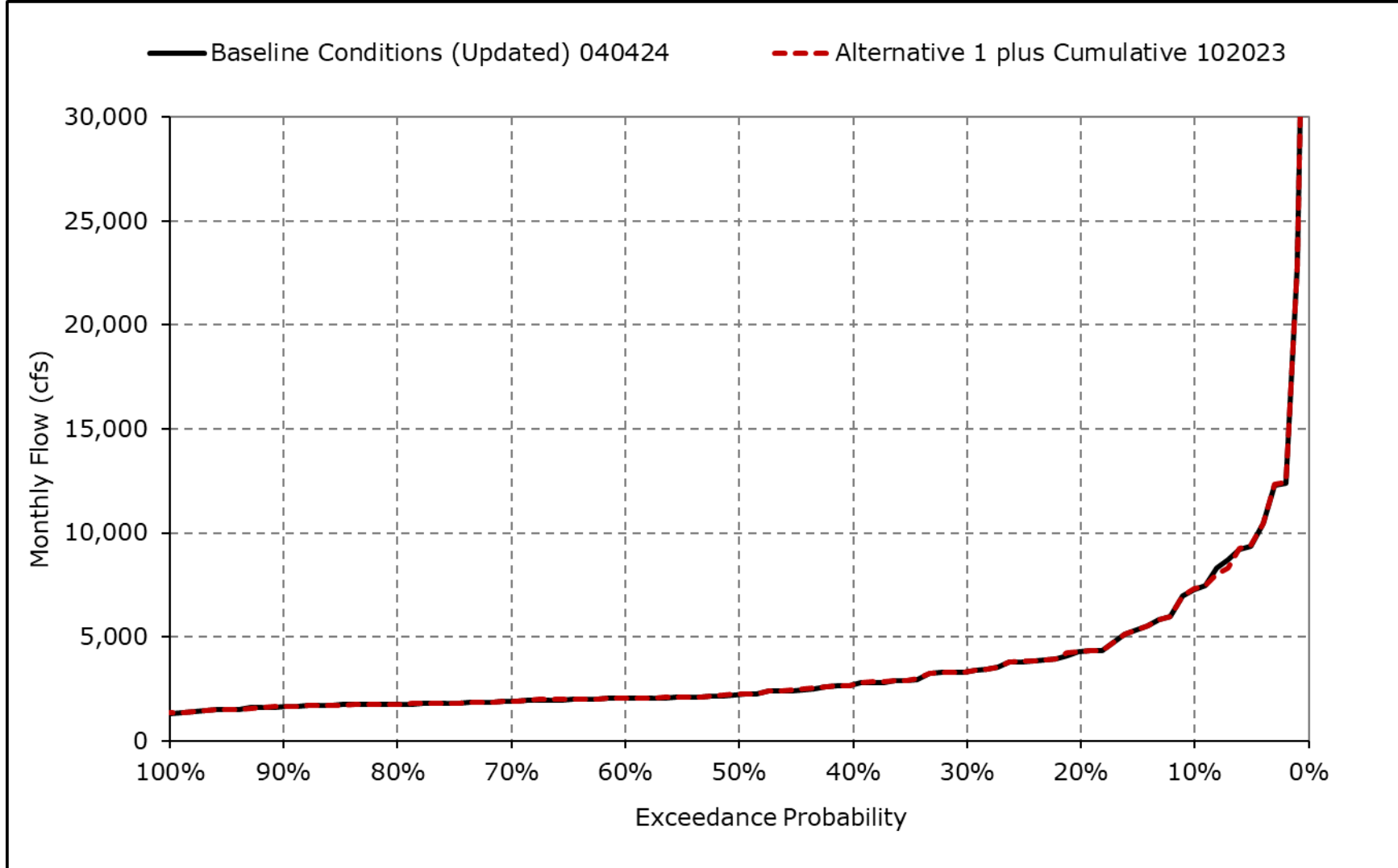
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3i. San Joaquin River at Vernalis, December



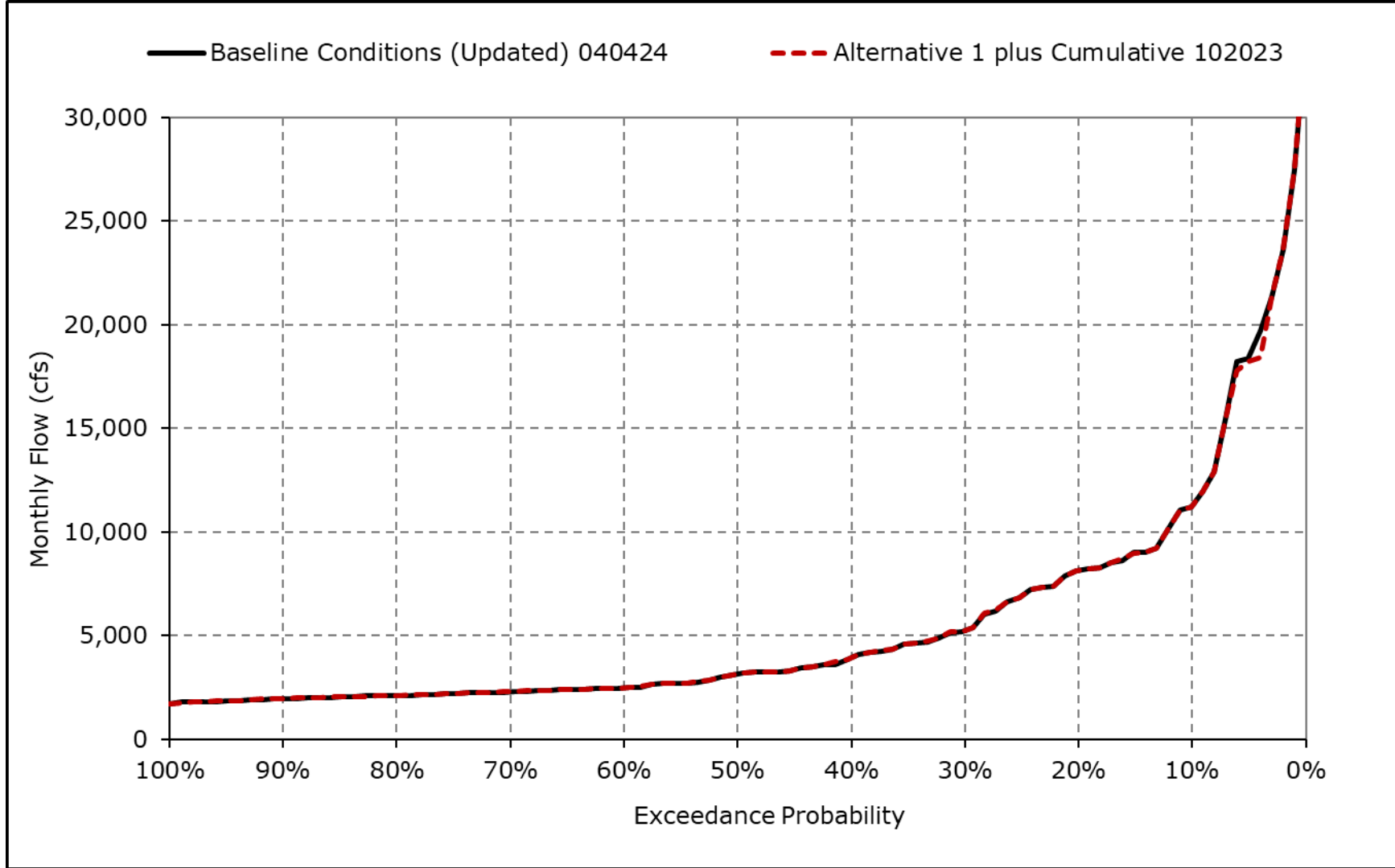
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3j. San Joaquin River at Vernalis, January



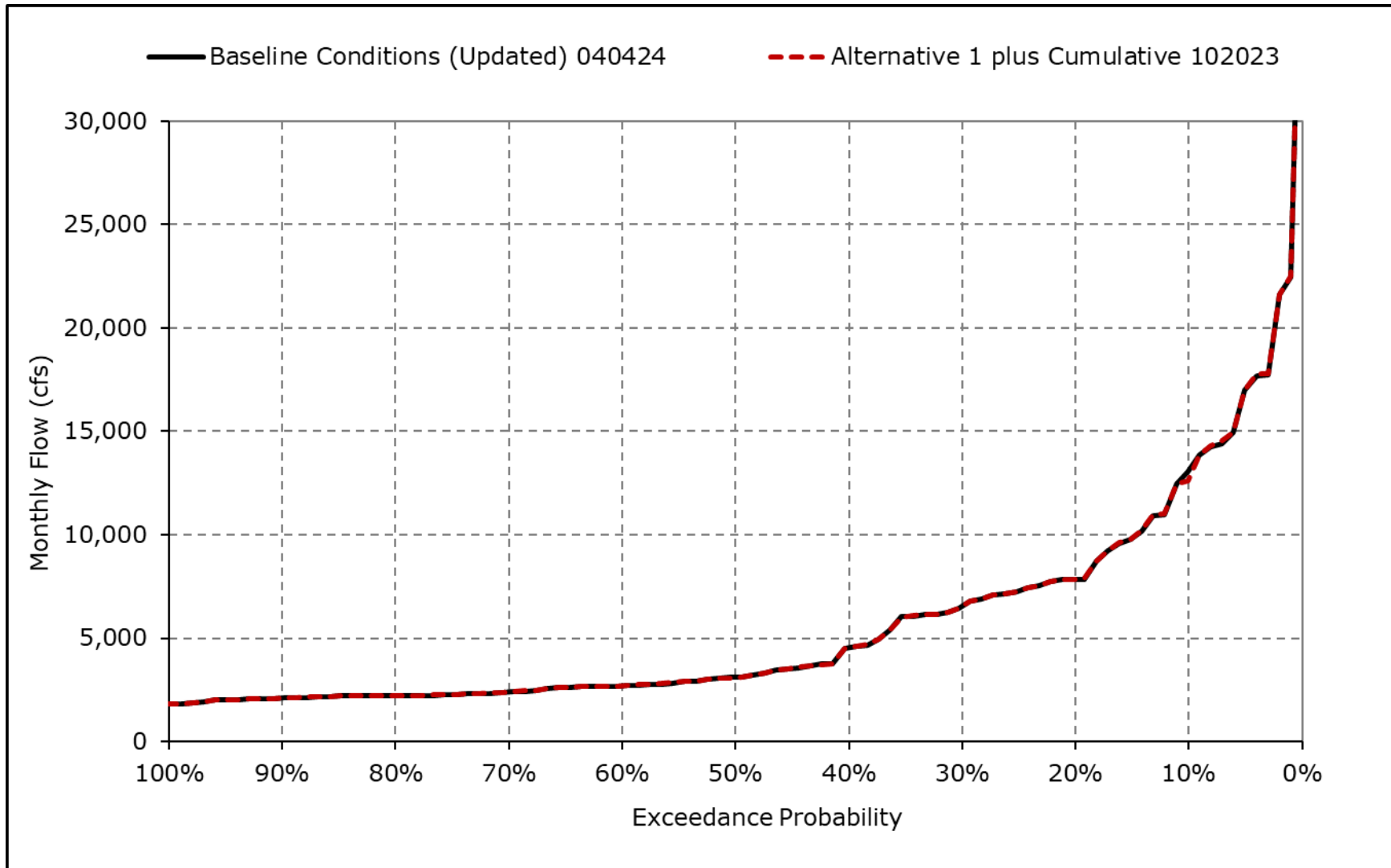
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3k. San Joaquin River at Vernalis, February



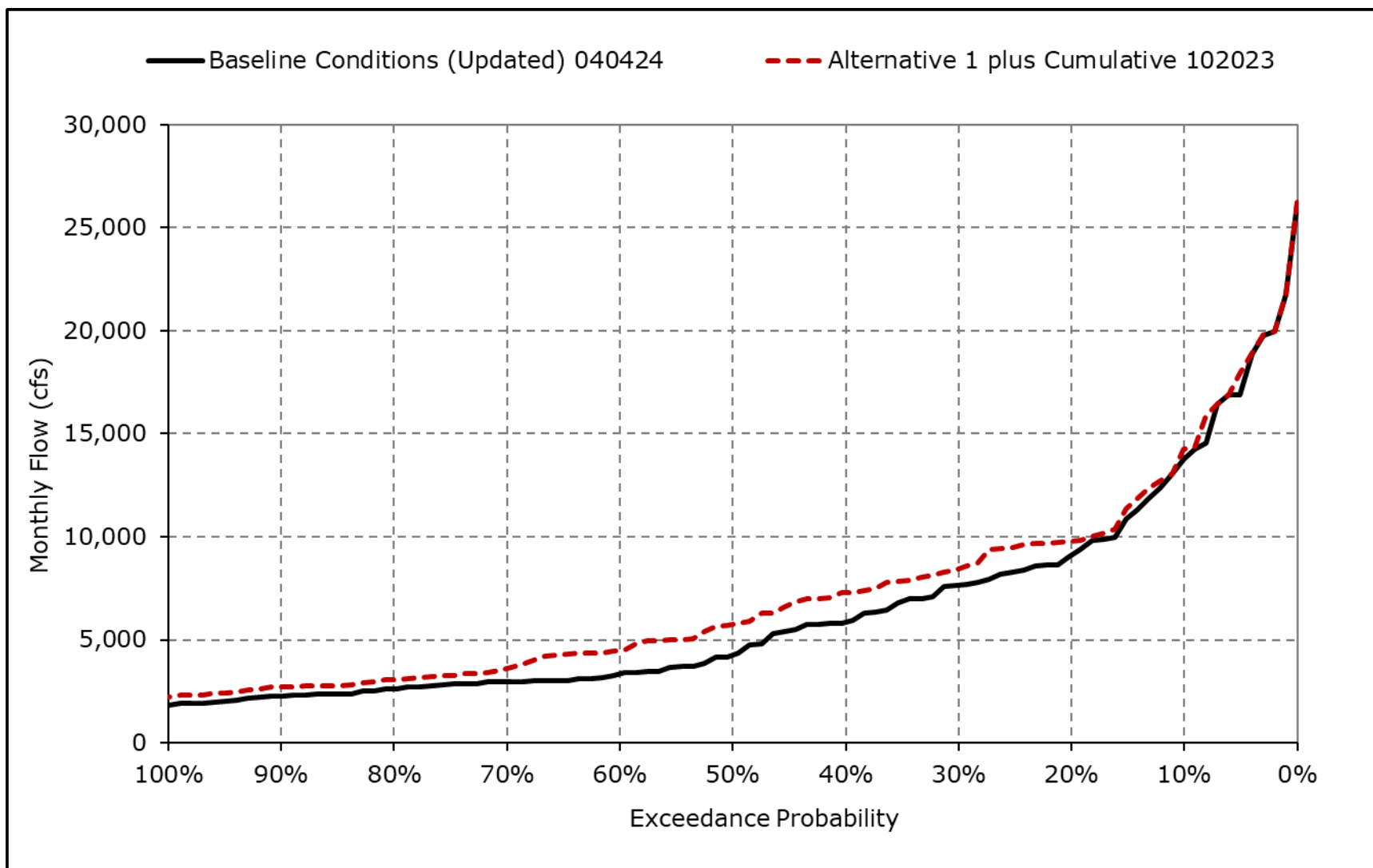
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3I. San Joaquin River at Vernalis, March



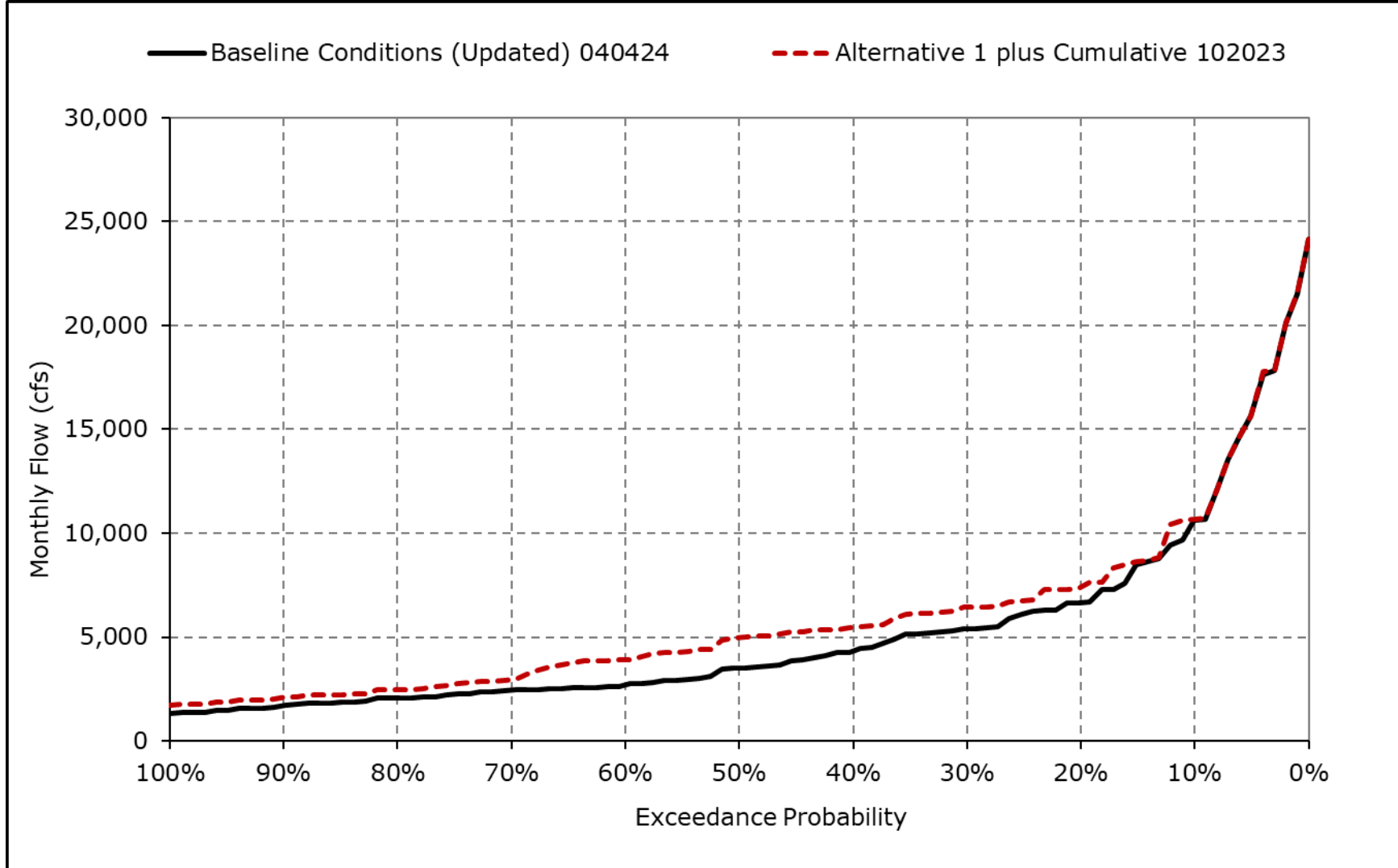
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3m. San Joaquin River at Vernalis, April



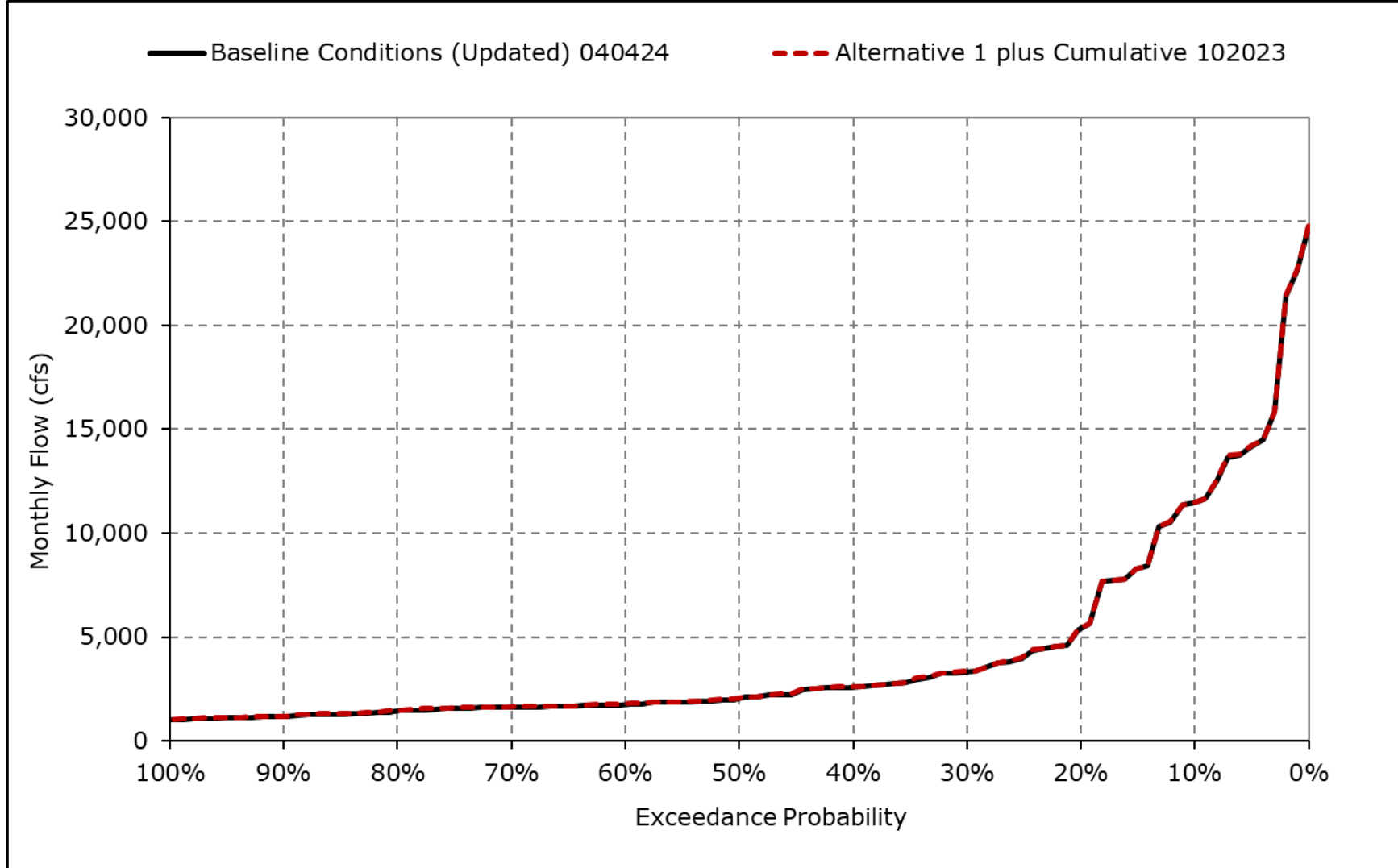
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3n. San Joaquin River at Vernalis, May



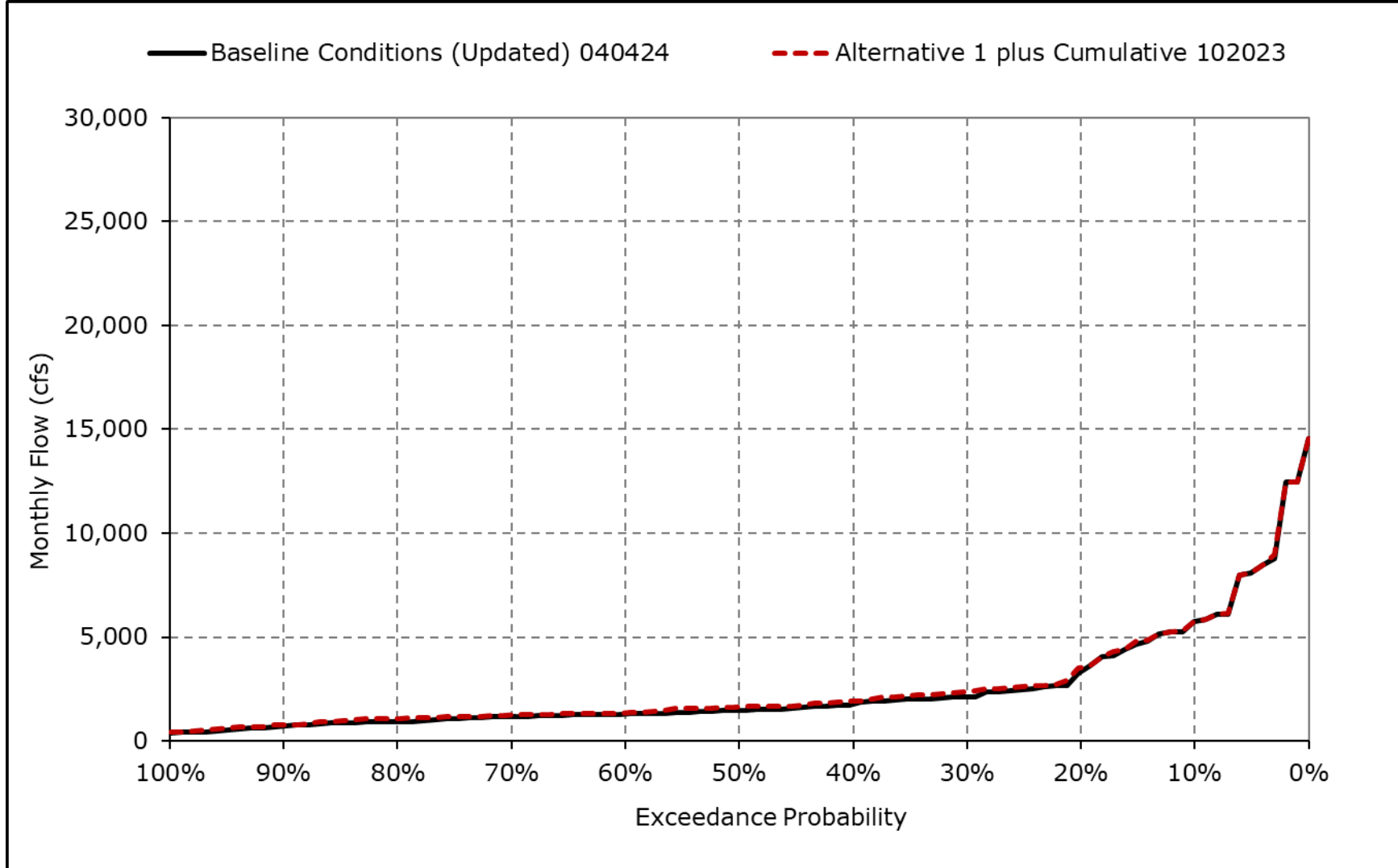
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3o. San Joaquin River at Vernalis, June



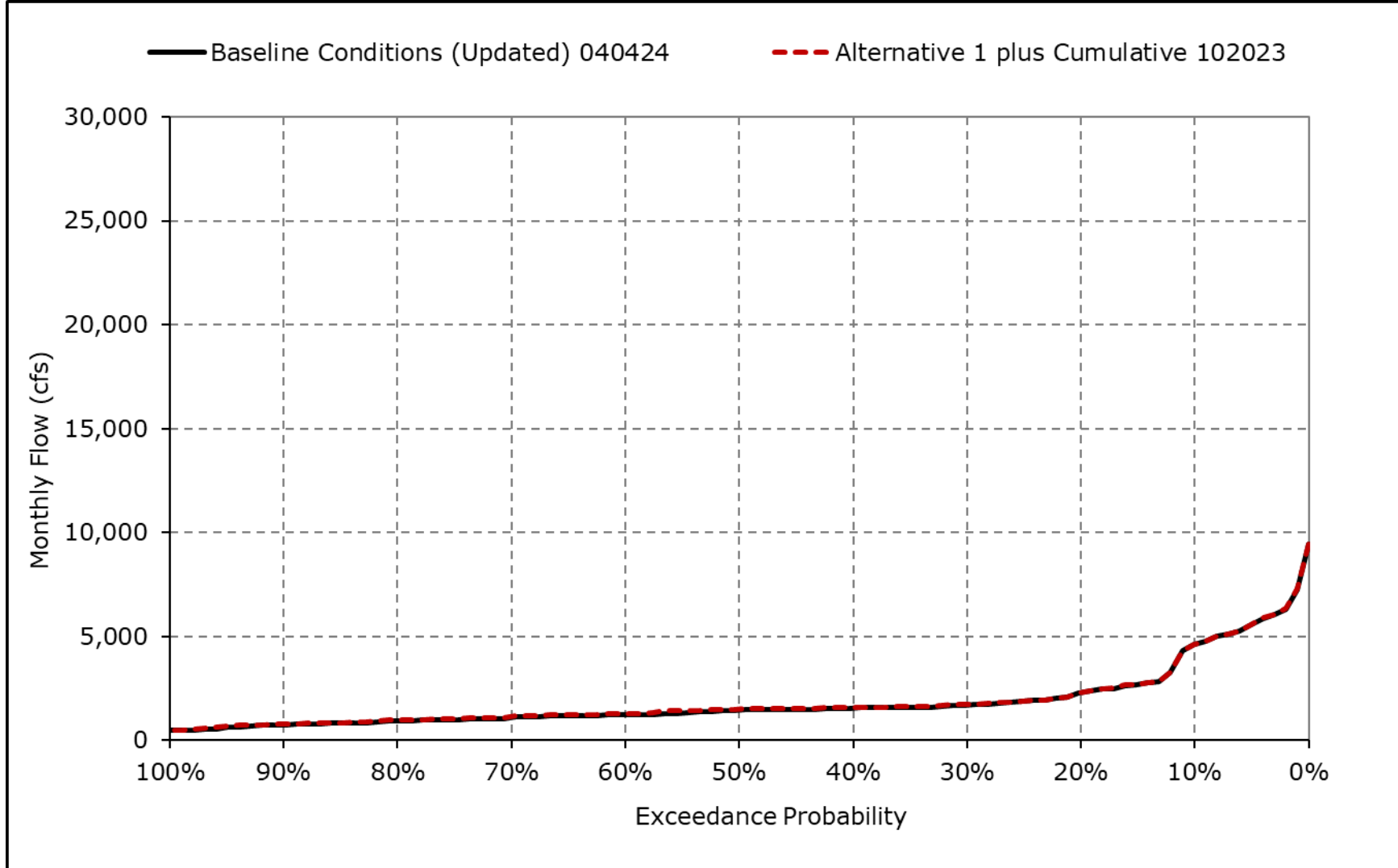
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3p. San Joaquin River at Vernalis, July



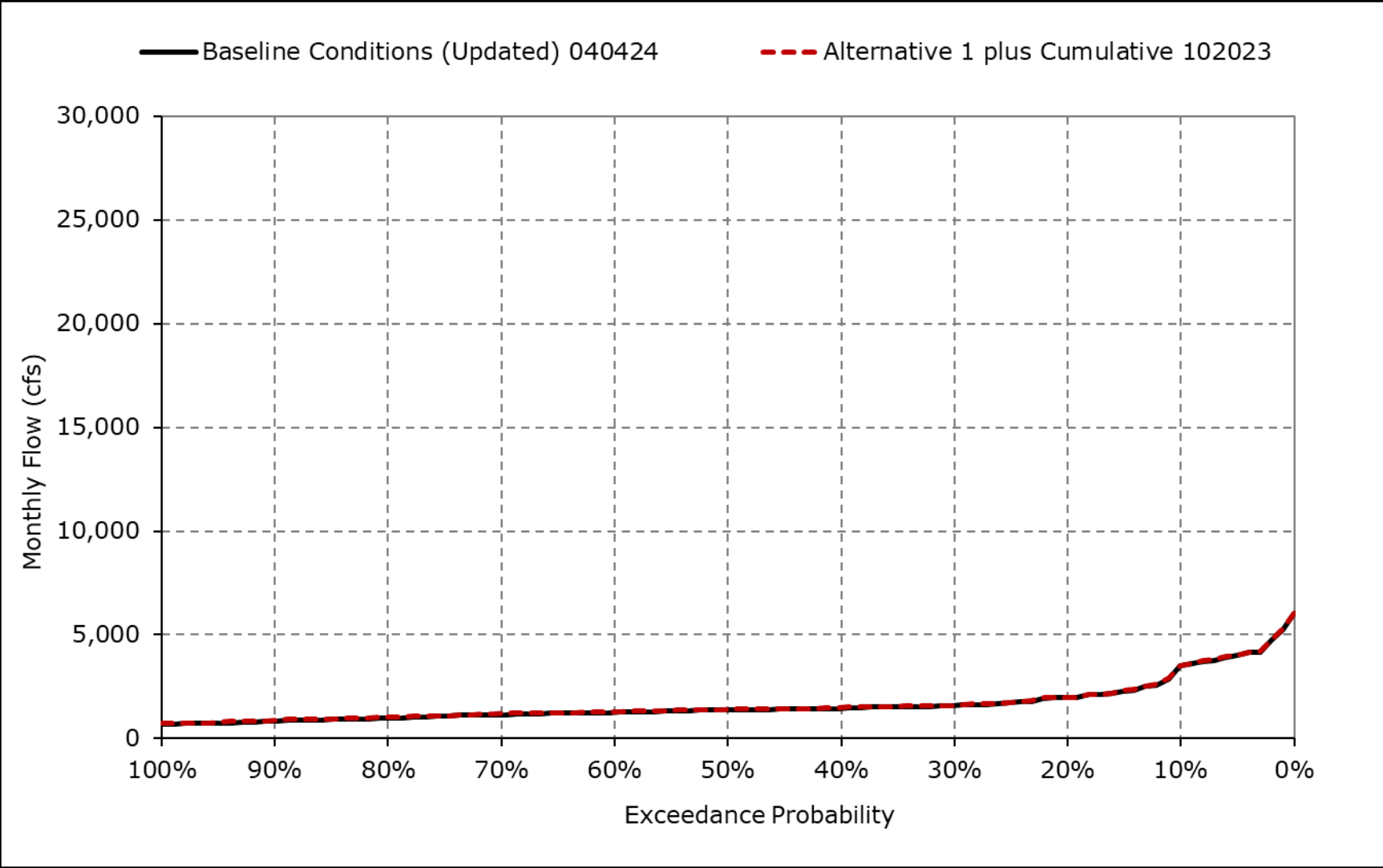
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3q. San Joaquin River at Vernalis, August



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-3r. San Joaquin River at Vernalis, September



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Table 4G-3-4-1a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|
| 10% Exceedance | 3,745 | 2,791 | 4,101 | 7,308 | 11,298 | 13,134 | 13,819 | 10,607 | 11,467 | 5,768 | 4,628 | 3,532 |
| 20% Exceedance | 3,332 | 2,397 | 2,730 | 4,281 | 8,152 | 7,835 | 9,112 | 6,663 | 5,419 | 3,345 | 2,287 | 1,993 |
| 30% Exceedance | 3,007 | 2,324 | 2,227 | 3,337 | 5,269 | 6,556 | 7,660 | 5,416 | 3,327 | 2,121 | 1,713 | 1,606 |
| 40% Exceedance | 2,126 | 2,101 | 1,925 | 2,712 | 3,940 | 4,562 | 5,869 | 4,348 | 2,590 | 1,789 | 1,554 | 1,469 |
| 50% Exceedance | 1,864 | 1,872 | 1,783 | 2,221 | 3,161 | 3,108 | 4,256 | 3,509 | 2,047 | 1,487 | 1,460 | 1,383 |
| 60% Exceedance | 1,749 | 1,584 | 1,644 | 2,059 | 2,502 | 2,702 | 3,332 | 2,702 | 1,760 | 1,299 | 1,237 | 1,266 |
| 70% Exceedance | 1,661 | 1,478 | 1,530 | 1,893 | 2,295 | 2,408 | 2,964 | 2,447 | 1,633 | 1,185 | 1,101 | 1,158 |
| 80% Exceedance | 1,555 | 1,371 | 1,348 | 1,757 | 2,129 | 2,224 | 2,638 | 2,071 | 1,440 | 925 | 925 | 989 |
| 90% Exceedance | 1,374 | 1,304 | 1,255 | 1,647 | 1,949 | 2,126 | 2,285 | 1,710 | 1,183 | 743 | 750 | 848 |
| Full Simulation Period Average^a | 2,387 | 2,098 | 2,616 | 3,912 | 5,584 | 5,844 | 6,426 | 5,131 | 4,241 | 2,502 | 1,906 | 1,683 |
| Wet Water Years (25%) | 2,508 | 2,211 | 3,864 | 7,853 | 11,648 | 12,999 | 13,347 | 11,025 | 10,618 | 5,895 | 3,977 | 3,046 |
| Above Normal Water Years (17%) | 2,543 | 2,681 | 3,541 | 4,308 | 6,463 | 5,728 | 7,118 | 5,282 | 3,772 | 2,286 | 1,719 | 1,598 |
| Below Normal Water Years (14%) | 2,465 | 2,139 | 2,324 | 2,455 | 3,823 | 3,817 | 4,952 | 3,939 | 2,211 | 1,469 | 1,390 | 1,311 |
| Dry Water Years (16%) | 2,640 | 2,065 | 1,825 | 2,175 | 2,461 | 2,741 | 3,209 | 2,598 | 1,711 | 1,234 | 1,146 | 1,160 |
| Critical Water Years (28%) | 1,999 | 1,643 | 1,538 | 1,873 | 2,301 | 2,313 | 2,402 | 1,820 | 1,292 | 843 | 864 | 1,001 |

Table 4G-3-4-1b. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|
| 10% Exceedance | 3,751 | 2,801 | 4,102 | 7,315 | 11,306 | 12,743 | 14,280 | 10,691 | 11,476 | 5,782 | 4,636 | 3,539 |
| 20% Exceedance | 3,352 | 2,404 | 2,738 | 4,289 | 8,161 | 7,853 | 9,768 | 7,419 | 5,452 | 3,514 | 2,302 | 2,000 |
| 30% Exceedance | 3,013 | 2,336 | 2,237 | 3,344 | 5,278 | 6,564 | 8,460 | 6,435 | 3,370 | 2,384 | 1,743 | 1,616 |
| 40% Exceedance | 2,133 | 2,117 | 1,939 | 2,722 | 3,948 | 4,564 | 7,299 | 5,489 | 2,615 | 1,926 | 1,592 | 1,487 |
| 50% Exceedance | 1,874 | 1,896 | 1,793 | 2,228 | 3,163 | 3,100 | 5,734 | 4,979 | 2,068 | 1,663 | 1,504 | 1,407 |
| 60% Exceedance | 1,812 | 1,594 | 1,663 | 2,043 | 2,494 | 2,710 | 4,481 | 3,897 | 1,793 | 1,366 | 1,306 | 1,284 |
| 70% Exceedance | 1,672 | 1,483 | 1,541 | 1,901 | 2,328 | 2,415 | 3,609 | 2,955 | 1,651 | 1,250 | 1,160 | 1,215 |
| 80% Exceedance | 1,573 | 1,400 | 1,363 | 1,754 | 2,136 | 2,216 | 3,048 | 2,476 | 1,489 | 1,084 | 978 | 1,028 |
| 90% Exceedance | 1,431 | 1,311 | 1,253 | 1,654 | 1,973 | 2,127 | 2,703 | 2,099 | 1,194 | 764 | 794 | 871 |
| Full Simulation Period Average^a | 2,403 | 2,110 | 2,629 | 3,916 | 5,575 | 5,847 | 7,209 | 5,873 | 4,266 | 2,604 | 1,947 | 1,709 |
| Wet Water Years (25%) | 2,537 | 2,228 | 3,898 | 7,846 | 11,592 | 13,002 | 13,712 | 11,328 | 10,640 | 5,958 | 3,991 | 3,059 |
| Above Normal Water Years (17%) | 2,553 | 2,692 | 3,548 | 4,317 | 6,478 | 5,732 | 8,271 | 6,369 | 3,801 | 2,448 | 1,751 | 1,620 |
| Below Normal Water Years (14%) | 2,474 | 2,144 | 2,327 | 2,461 | 3,828 | 3,822 | 6,336 | 5,270 | 2,231 | 1,624 | 1,422 | 1,334 |
| Dry Water Years (16%) | 2,670 | 2,085 | 1,839 | 2,191 | 2,465 | 2,741 | 4,211 | 3,582 | 1,736 | 1,347 | 1,220 | 1,210 |
| Critical Water Years (28%) | 2,003 | 1,648 | 1,540 | 1,877 | 2,308 | 2,315 | 2,909 | 2,311 | 1,322 | 912 | 918 | 1,029 |

Table 4G-3-4-1c. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|-----------|-----------|-----------|-----------|------------|----------|--------------|--------------|-----------|------------|-----------|-----------|
| 10% Exceedance | 5 | 9 | 1 | 7 | 8 | -390 | 462 | 84 | 10 | 13 | 8 | 7 |
| 20% Exceedance | 20 | 6 | 9 | 8 | 9 | 18 | 657 | 756 | 33 | 169 | 16 | 6 |
| 30% Exceedance | 6 | 13 | 10 | 7 | 8 | 7 | 800 | 1,019 | 43 | 263 | 30 | 10 |
| 40% Exceedance | 8 | 15 | 14 | 11 | 8 | 2 | 1,429 | 1,141 | 25 | 138 | 37 | 19 |
| 50% Exceedance | 10 | 23 | 10 | 7 | 2 | -8 | 1,478 | 1,469 | 20 | 176 | 45 | 24 |
| 60% Exceedance | 63 | 10 | 18 | -17 | -8 | 8 | 1,148 | 1,195 | 33 | 67 | 69 | 18 |
| 70% Exceedance | 11 | 5 | 10 | 8 | 33 | 7 | 645 | 508 | 18 | 65 | 59 | 57 |
| 80% Exceedance | 18 | 29 | 15 | -3 | 7 | -8 | 410 | 405 | 49 | 159 | 53 | 39 |
| 90% Exceedance | 56 | 7 | -2 | 7 | 25 | 1 | 418 | 388 | 11 | 22 | 44 | 23 |
| Full Simulation Period Average^a | 16 | 12 | 13 | 4 | -8 | 2 | 783 | 742 | 25 | 102 | 40 | 26 |
| Wet Water Years (25%) | 28 | 17 | 34 | -8 | -56 | 3 | 366 | 303 | 22 | 63 | 14 | 13 |
| Above Normal Water Years (17%) | 10 | 11 | 7 | 9 | 15 | 4 | 1,153 | 1,087 | 29 | 162 | 32 | 22 |
| Below Normal Water Years (14%) | 9 | 6 | 3 | 6 | 5 | 5 | 1,384 | 1,331 | 20 | 155 | 32 | 23 |
| Dry Water Years (16%) | 30 | 21 | 14 | 16 | 4 | 0 | 1,002 | 984 | 24 | 112 | 74 | 50 |
| Critical Water Years (28%) | 4 | 6 | 3 | 4 | 7 | 1 | 507 | 490 | 30 | 69 | 54 | 28 |

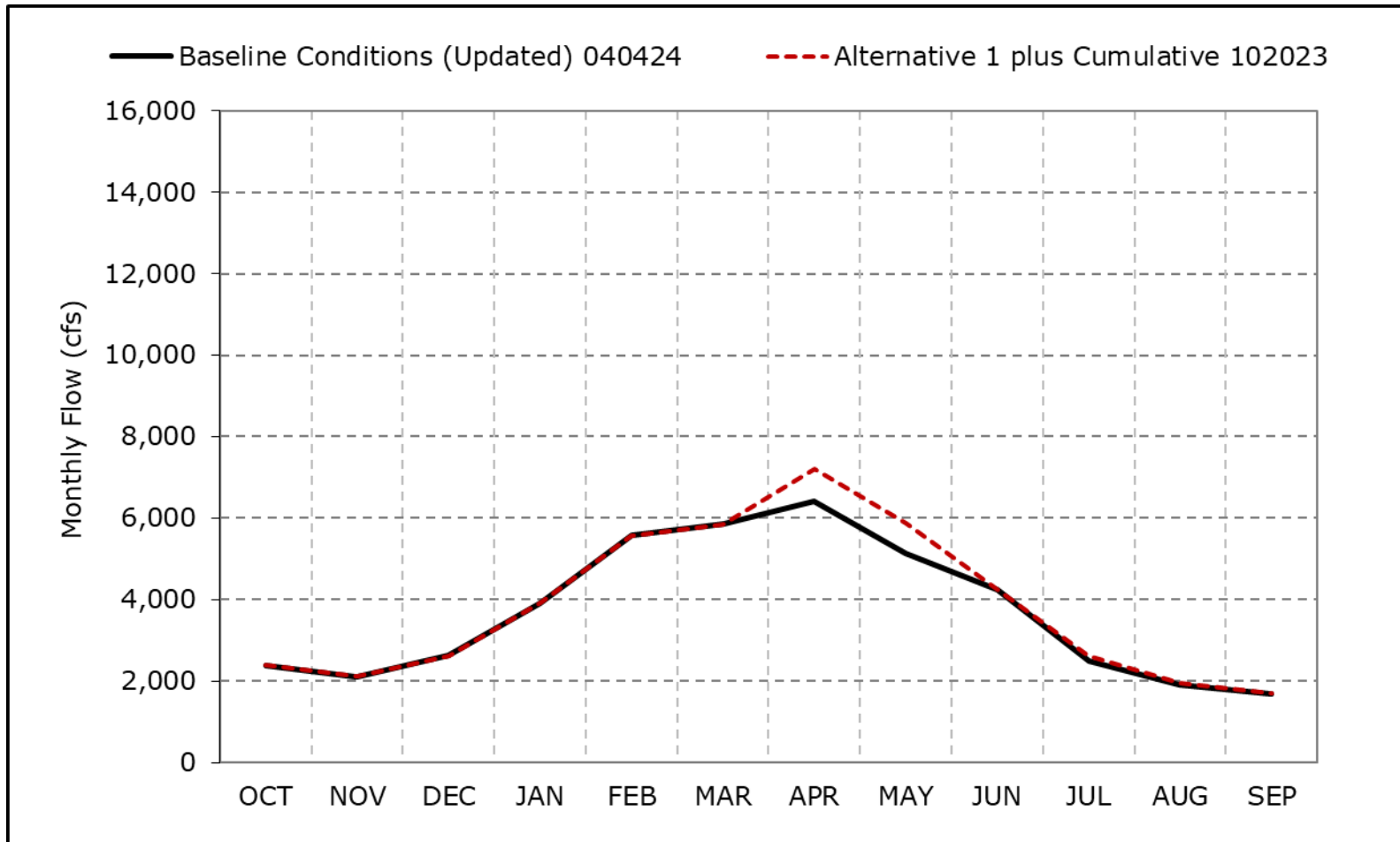
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-4a. San Joaquin River at Vernalis (60-20-20), Long-Term Average Flow

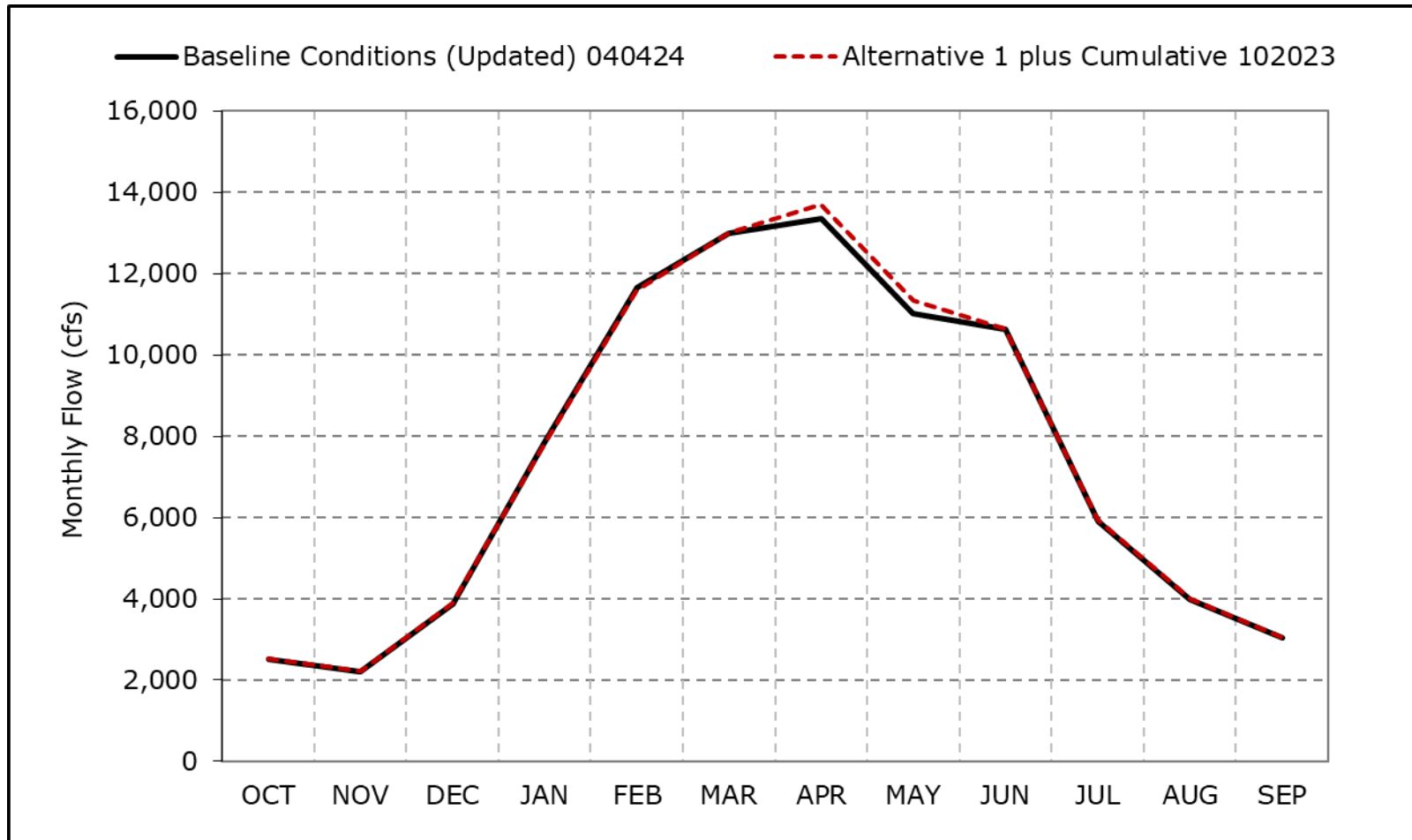


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-4b. San Joaquin River at Vernalis (60-20-20), Wet Year Average Flow

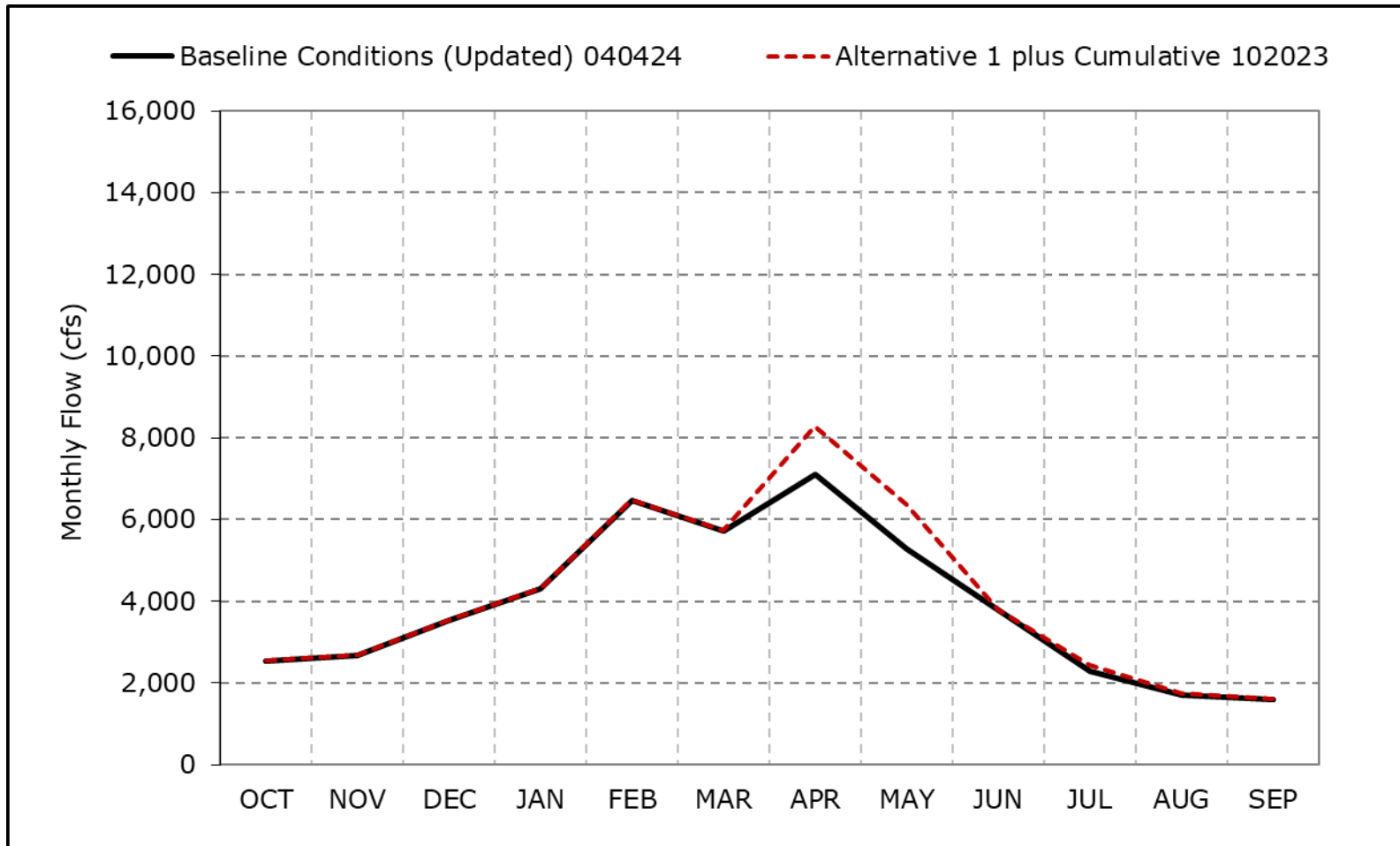


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

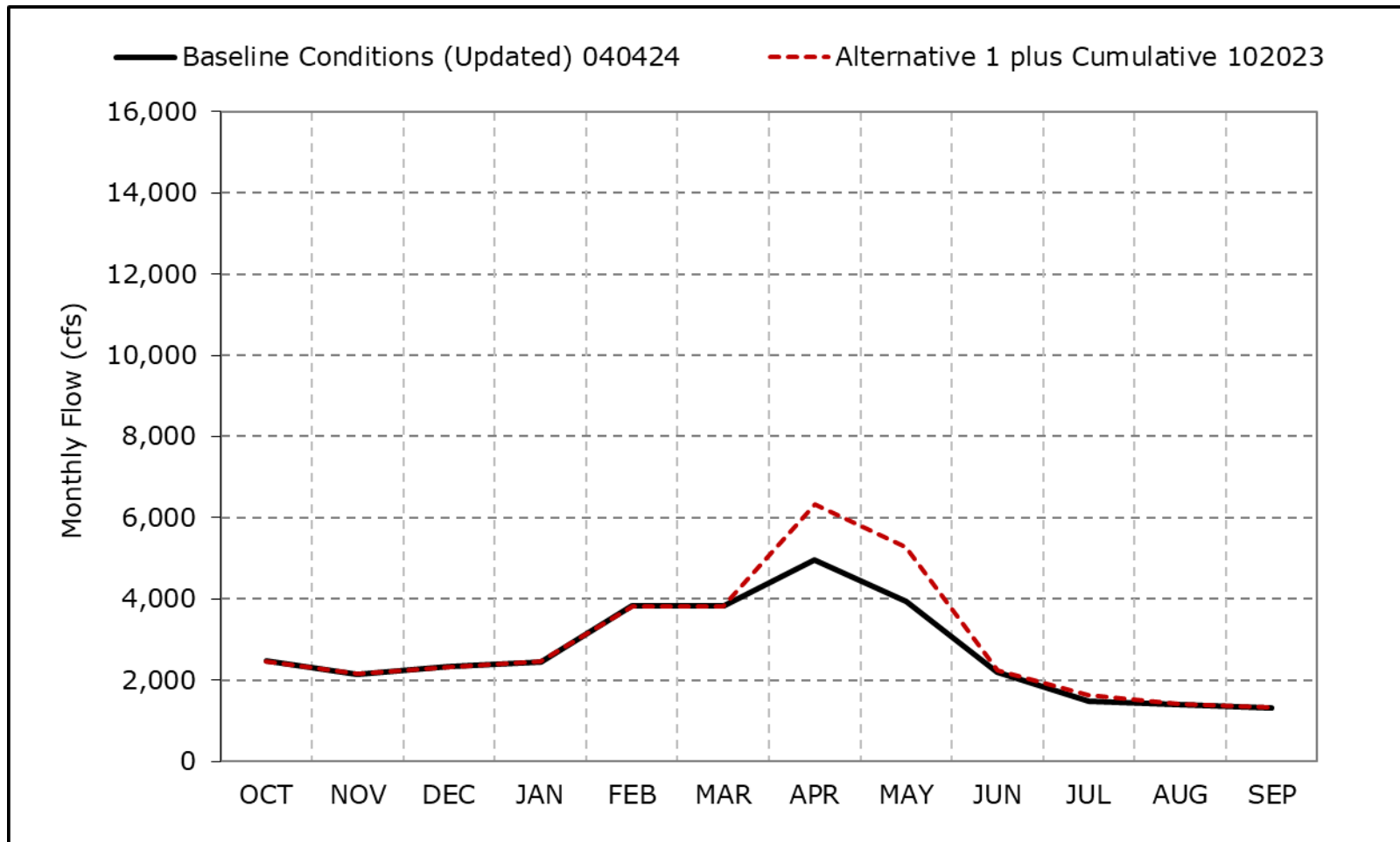
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-4c. San Joaquin River at Vernalis (60-20-20), Above Normal Year Average Flow



*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-4d. San Joaquin River at Vernalis (60-20-20), Below Normal Year Average Flow

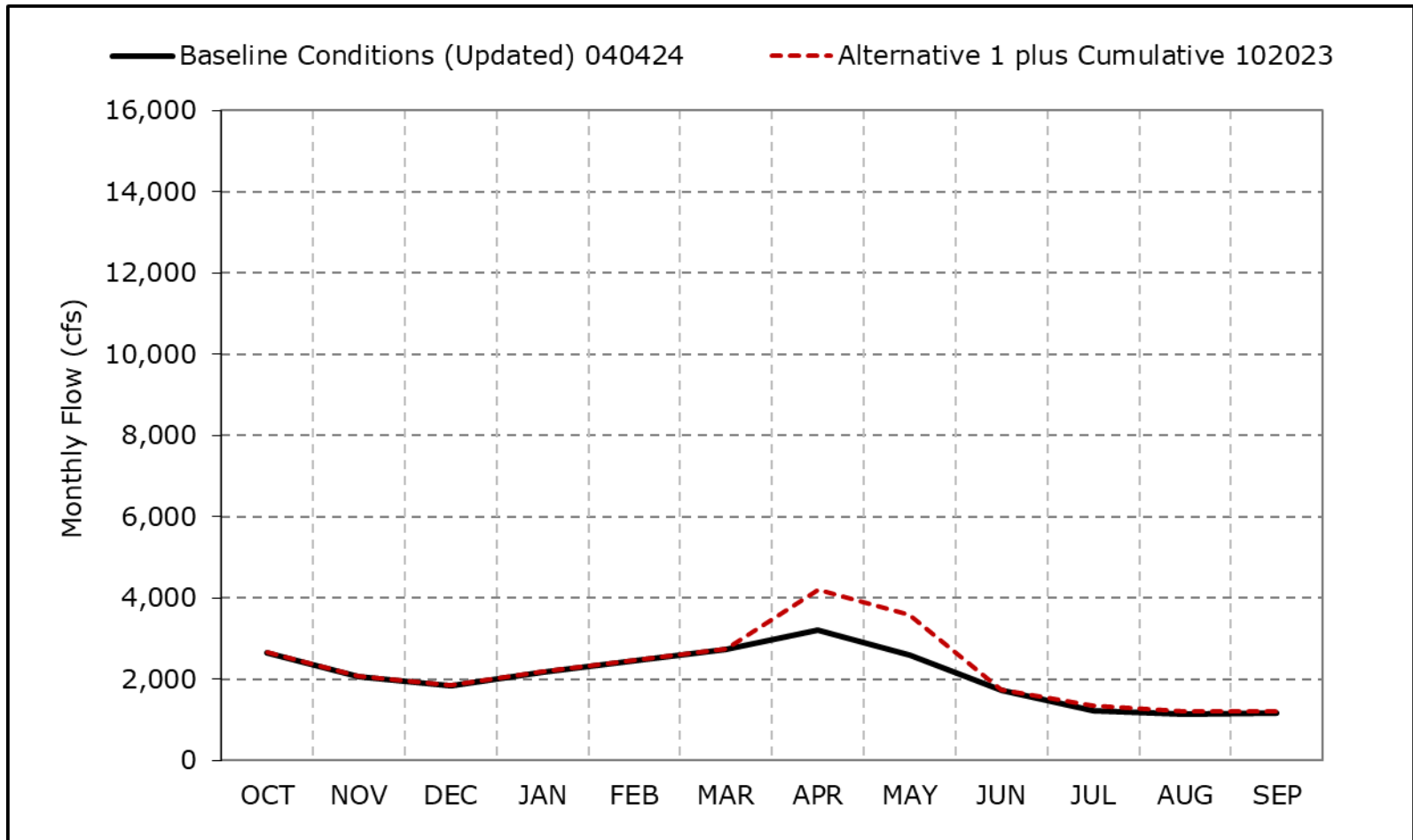


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-4e. San Joaquin River at Vernalis (60-20-20), Dry Year Average Flow

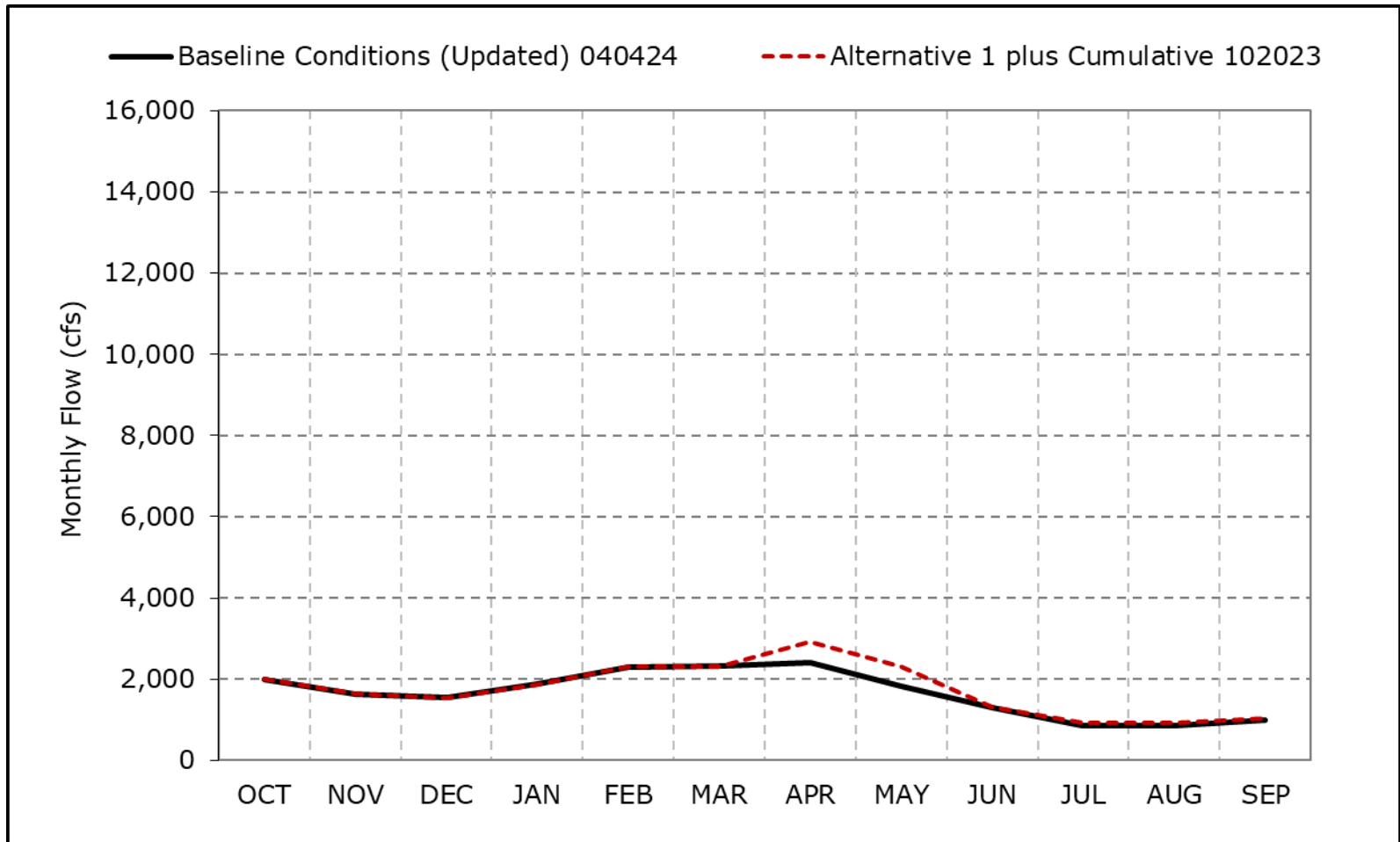


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-4f. San Joaquin River at Vernalis (60-20-20), Critical Year Average Flow



*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Table 4G-3-5-1a. Mokelumne River below Cosumnes, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|
| 10% Exceedance | 550 | 860 | 2,788 | 5,263 | 5,950 | 4,740 | 4,337 | 4,100 | 2,255 | 876 | 753 | 863 |
| 20% Exceedance | 407 | 587 | 1,594 | 3,281 | 3,651 | 3,431 | 2,626 | 2,189 | 1,566 | 770 | 712 | 836 |
| 30% Exceedance | 372 | 444 | 839 | 1,697 | 2,739 | 2,359 | 2,164 | 1,562 | 1,203 | 642 | 662 | 798 |
| 40% Exceedance | 343 | 409 | 636 | 1,286 | 1,969 | 1,718 | 1,700 | 1,131 | 627 | 583 | 629 | 753 |
| 50% Exceedance | 329 | 388 | 531 | 913 | 1,330 | 1,401 | 1,391 | 894 | 460 | 104 | 280 | 666 |
| 60% Exceedance | 312 | 375 | 470 | 687 | 1,033 | 1,174 | 1,041 | 630 | 323 | 82 | 70 | 81 |
| 70% Exceedance | 273 | 345 | 425 | 546 | 806 | 1,021 | 804 | 489 | 168 | 73 | 62 | 63 |
| 80% Exceedance | 230 | 297 | 387 | 469 | 630 | 796 | 641 | 396 | 97 | 59 | 48 | 51 |
| 90% Exceedance | 214 | 241 | 305 | 393 | 482 | 545 | 383 | 198 | 75 | 49 | 38 | 44 |
| Full Simulation Period Average^a | 371 | 600 | 1,278 | 2,024 | 2,486 | 2,222 | 1,930 | 1,501 | 854 | 443 | 371 | 460 |
| Wet Water Years (30%) | 492 | 1,069 | 2,741 | 4,311 | 4,830 | 4,089 | 3,660 | 3,182 | 1,871 | 978 | 728 | 848 |
| Above Normal Water Years (11%) | 313 | 404 | 712 | 2,612 | 2,894 | 2,430 | 1,825 | 1,426 | 937 | 513 | 544 | 689 |
| Below Normal Water Years (21%) | 365 | 492 | 826 | 1,053 | 1,776 | 1,800 | 1,682 | 1,038 | 574 | 290 | 300 | 415 |
| Dry Water Years (22%) | 329 | 389 | 566 | 655 | 1,011 | 1,126 | 942 | 549 | 221 | 111 | 104 | 142 |
| Critical Water Years (16%) | 252 | 286 | 500 | 488 | 771 | 639 | 443 | 313 | 130 | 48 | 41 | 71 |

Table 4G-3-5-1b. Mokelumne River below Cosumnes, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|
| 10% Exceedance | 603 | 849 | 2,648 | 5,261 | 5,790 | 4,735 | 4,336 | 4,086 | 2,252 | 873 | 750 | 861 |
| 20% Exceedance | 523 | 563 | 1,591 | 3,252 | 3,553 | 3,467 | 2,779 | 1,899 | 1,563 | 768 | 710 | 834 |
| 30% Exceedance | 498 | 441 | 838 | 1,696 | 2,730 | 2,364 | 2,314 | 1,490 | 1,023 | 610 | 660 | 796 |
| 40% Exceedance | 480 | 406 | 636 | 1,266 | 1,933 | 1,781 | 1,758 | 1,163 | 562 | 508 | 615 | 750 |
| 50% Exceedance | 458 | 384 | 531 | 913 | 1,330 | 1,435 | 1,587 | 985 | 449 | 99 | 83 | 534 |
| 60% Exceedance | 449 | 366 | 467 | 682 | 1,019 | 1,213 | 1,161 | 716 | 323 | 82 | 68 | 73 |
| 70% Exceedance | 313 | 332 | 424 | 545 | 806 | 1,036 | 864 | 536 | 167 | 73 | 60 | 61 |
| 80% Exceedance | 248 | 288 | 387 | 464 | 629 | 789 | 701 | 442 | 97 | 58 | 47 | 50 |
| 90% Exceedance | 214 | 236 | 297 | 390 | 462 | 564 | 385 | 197 | 74 | 49 | 36 | 44 |
| Full Simulation Period Average^a | 448 | 587 | 1,248 | 2,009 | 2,461 | 2,231 | 2,015 | 1,503 | 831 | 424 | 356 | 448 |
| Wet Water Years (30%) | 581 | 1,050 | 2,668 | 4,291 | 4,779 | 4,097 | 3,772 | 3,123 | 1,843 | 956 | 701 | 845 |
| Above Normal Water Years (11%) | 403 | 391 | 699 | 2,569 | 2,867 | 2,427 | 1,974 | 1,368 | 891 | 443 | 530 | 669 |
| Below Normal Water Years (21%) | 444 | 479 | 807 | 1,046 | 1,758 | 1,818 | 1,761 | 1,097 | 539 | 273 | 277 | 382 |
| Dry Water Years (22%) | 406 | 380 | 559 | 648 | 1,003 | 1,139 | 1,004 | 597 | 210 | 106 | 104 | 141 |
| Critical Water Years (16%) | 293 | 279 | 492 | 481 | 764 | 641 | 473 | 336 | 129 | 48 | 41 | 57 |

Table 4G-3-5-1c. Mokelumne River below Cosumnes, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 10% Exceedance | 53 | -11 | -141 | -2 | -161 | -5 | -2 | -13 | -3 | -3 | -3 | -2 |
| 20% Exceedance | 116 | -24 | -3 | -29 | -97 | 36 | 153 | -289 | -3 | -2 | -2 | -2 |
| 30% Exceedance | 125 | -3 | -1 | -2 | -9 | 5 | 150 | -72 | -180 | -32 | -2 | -2 |
| 40% Exceedance | 138 | -3 | -1 | -20 | -36 | 63 | 59 | 32 | -65 | -75 | -15 | -3 |
| 50% Exceedance | 129 | -4 | 0 | 0 | 0 | 34 | 196 | 91 | -11 | -5 | -196 | -132 |
| 60% Exceedance | 137 | -9 | -2 | -5 | -15 | 39 | 120 | 86 | 0 | 0 | -2 | -8 |
| 70% Exceedance | 40 | -13 | 0 | -1 | 0 | 14 | 61 | 48 | -1 | 0 | -2 | -2 |
| 80% Exceedance | 18 | -9 | 0 | -5 | 0 | -7 | 60 | 46 | 0 | -1 | -2 | -1 |
| 90% Exceedance | 0 | -4 | -7 | -3 | -20 | 19 | 1 | -1 | -1 | 0 | -2 | 0 |
| Full Simulation Period Average^a | 77 | -13 | -30 | -15 | -25 | 9 | 85 | 2 | -24 | -19 | -15 | -12 |
| Wet Water Years (30%) | 89 | -19 | -72 | -20 | -52 | 9 | 112 | -59 | -29 | -22 | -27 | -2 |
| Above Normal Water Years (11%) | 89 | -13 | -13 | -43 | -27 | -3 | 149 | -58 | -46 | -69 | -14 | -19 |
| Below Normal Water Years (21%) | 79 | -13 | -19 | -7 | -18 | 18 | 79 | 59 | -35 | -16 | -23 | -33 |
| Dry Water Years (22%) | 77 | -9 | -7 | -7 | -7 | 14 | 62 | 48 | -11 | -5 | -1 | -1 |
| Critical Water Years (16%) | 41 | -8 | -7 | -7 | -7 | 3 | 30 | 23 | 0 | 0 | 0 | -14 |

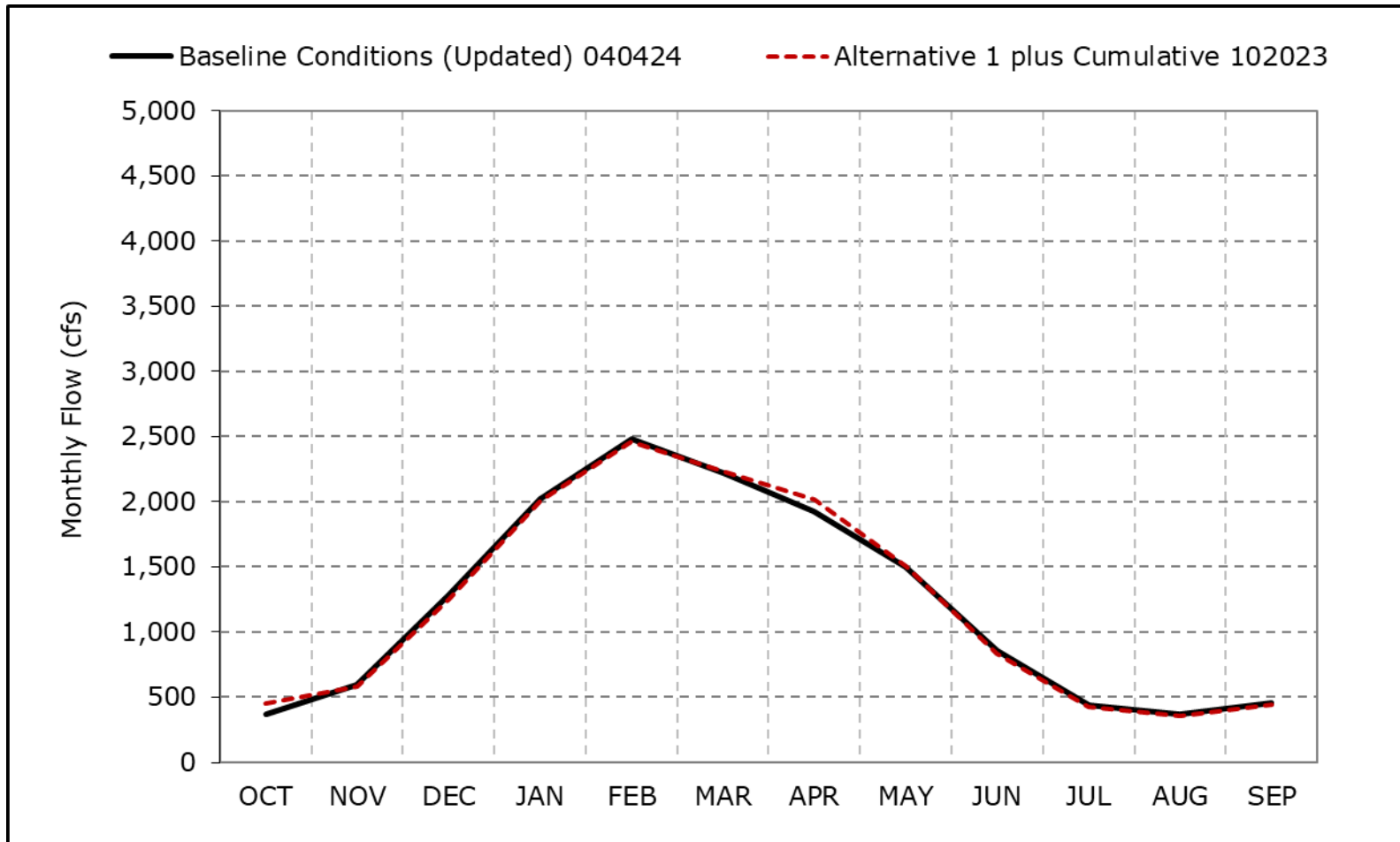
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-5a. Mokelumne River below Cosumnes, Long-Term Average Flow

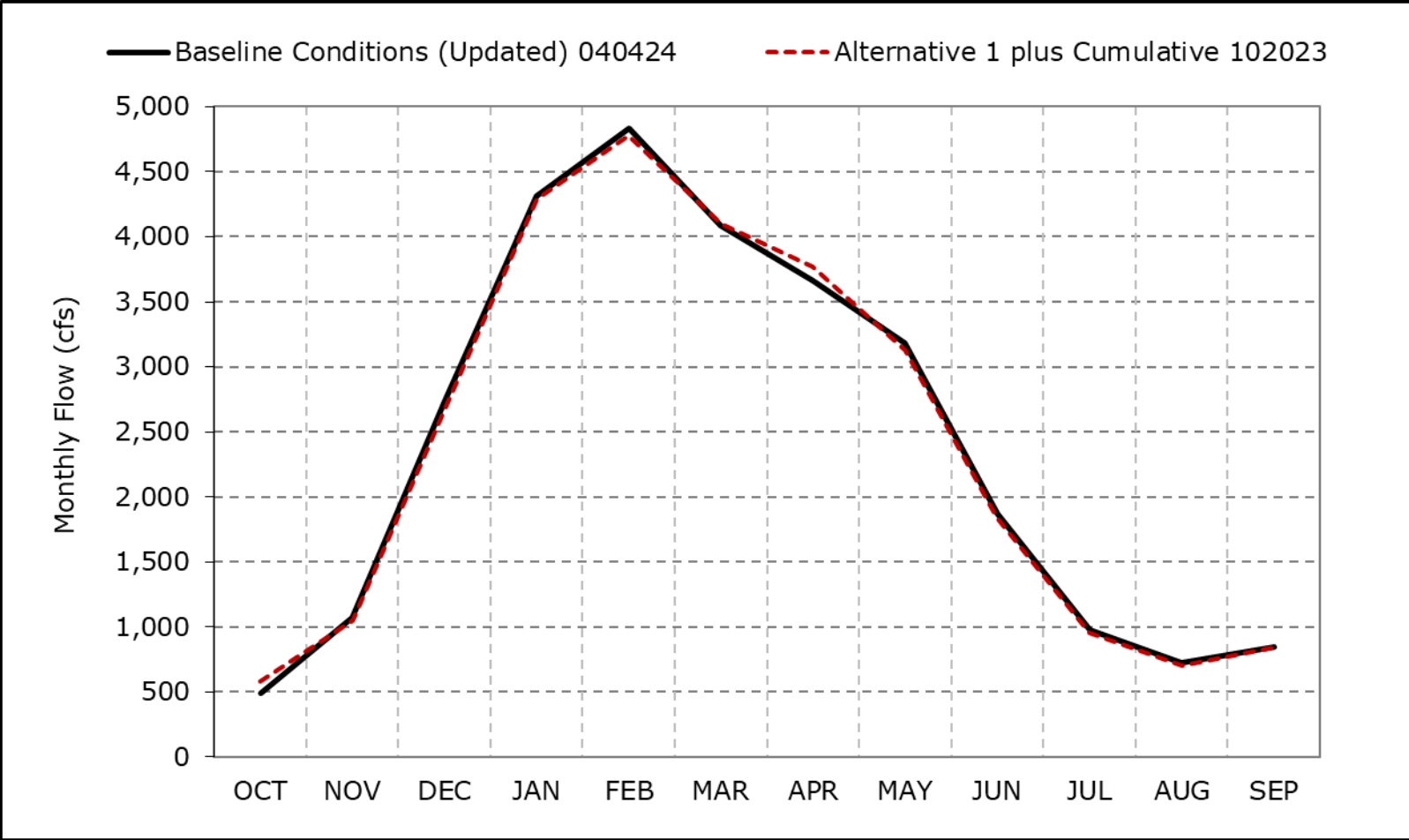


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

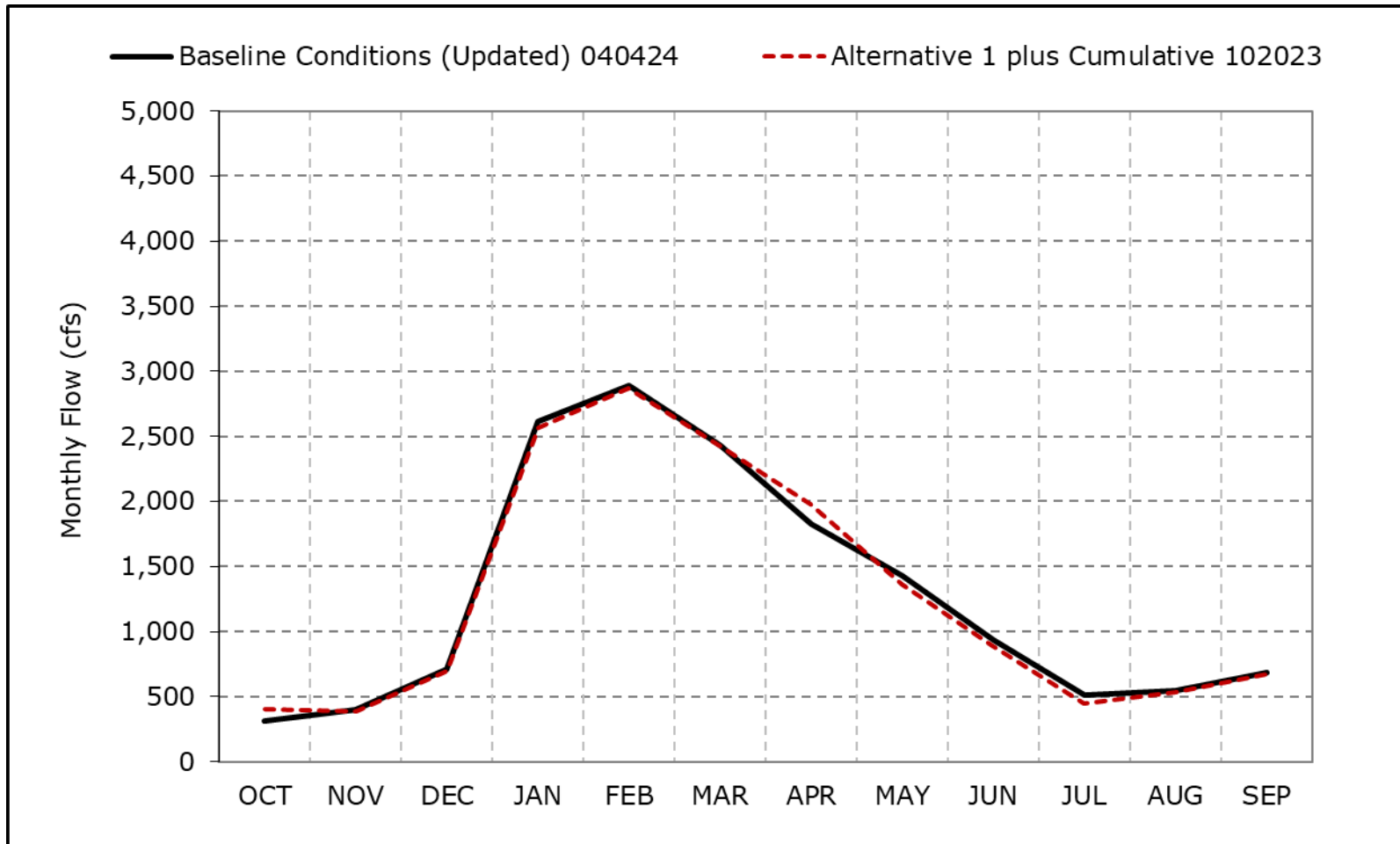
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5b. Mokelumne River below Cosumnes, Wet Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5c. Mokelumne River below Cosumnes, Above Normal Year Average Flow

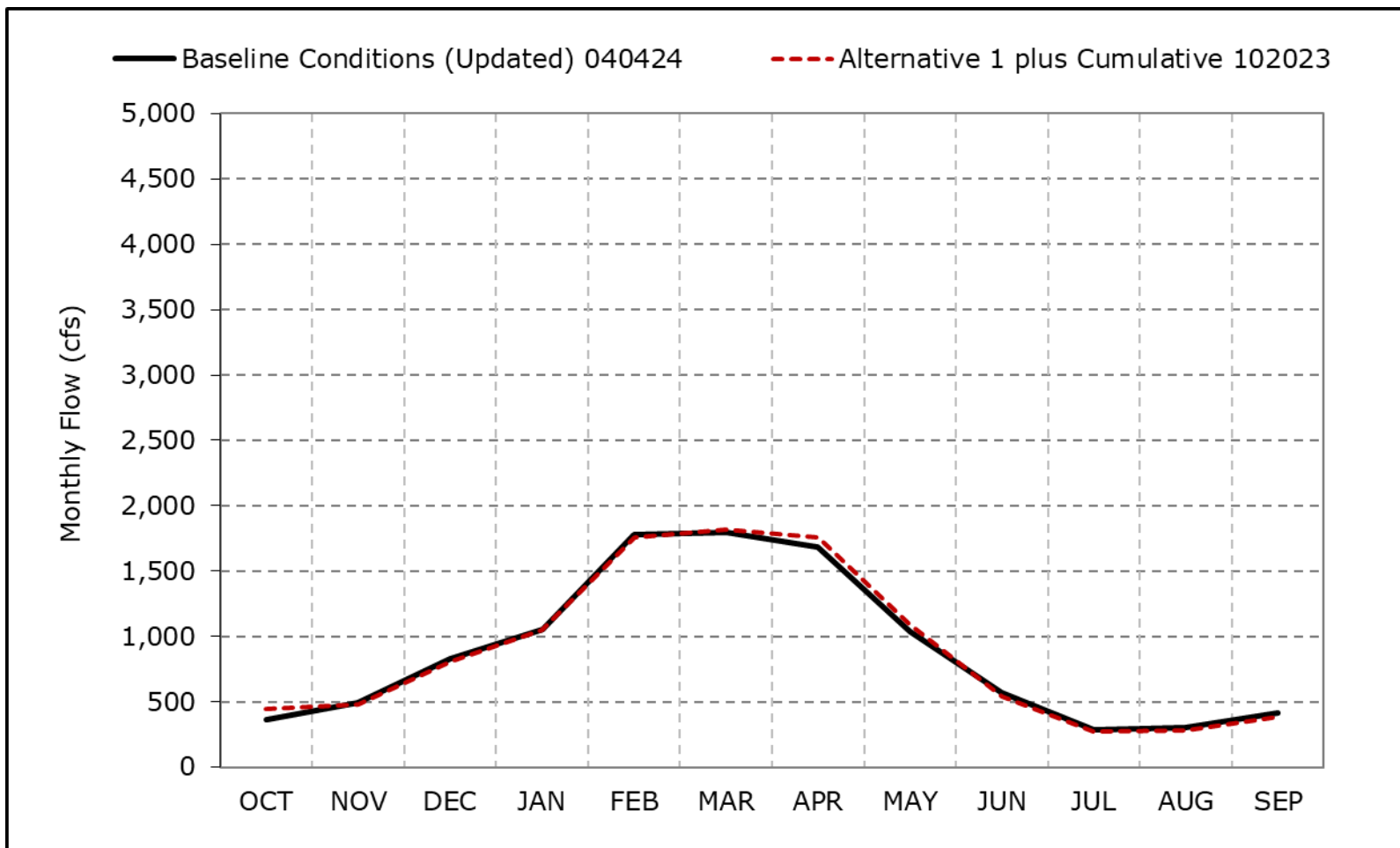


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5d. Mokelumne River below Cosumnes, Below Normal Year Average Flow

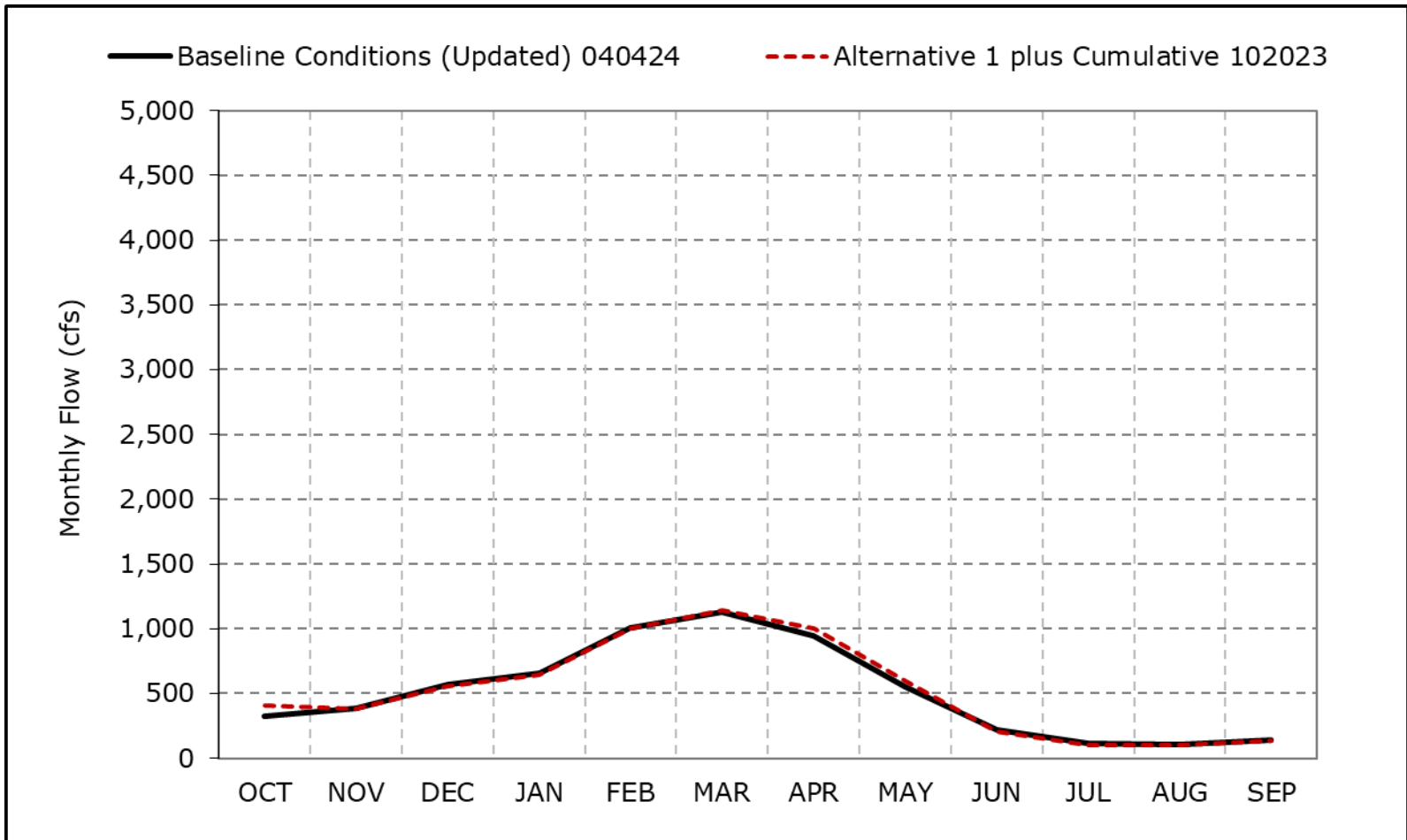


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5e. Mokelumne River below Cosumnes, Dry Year Average Flow

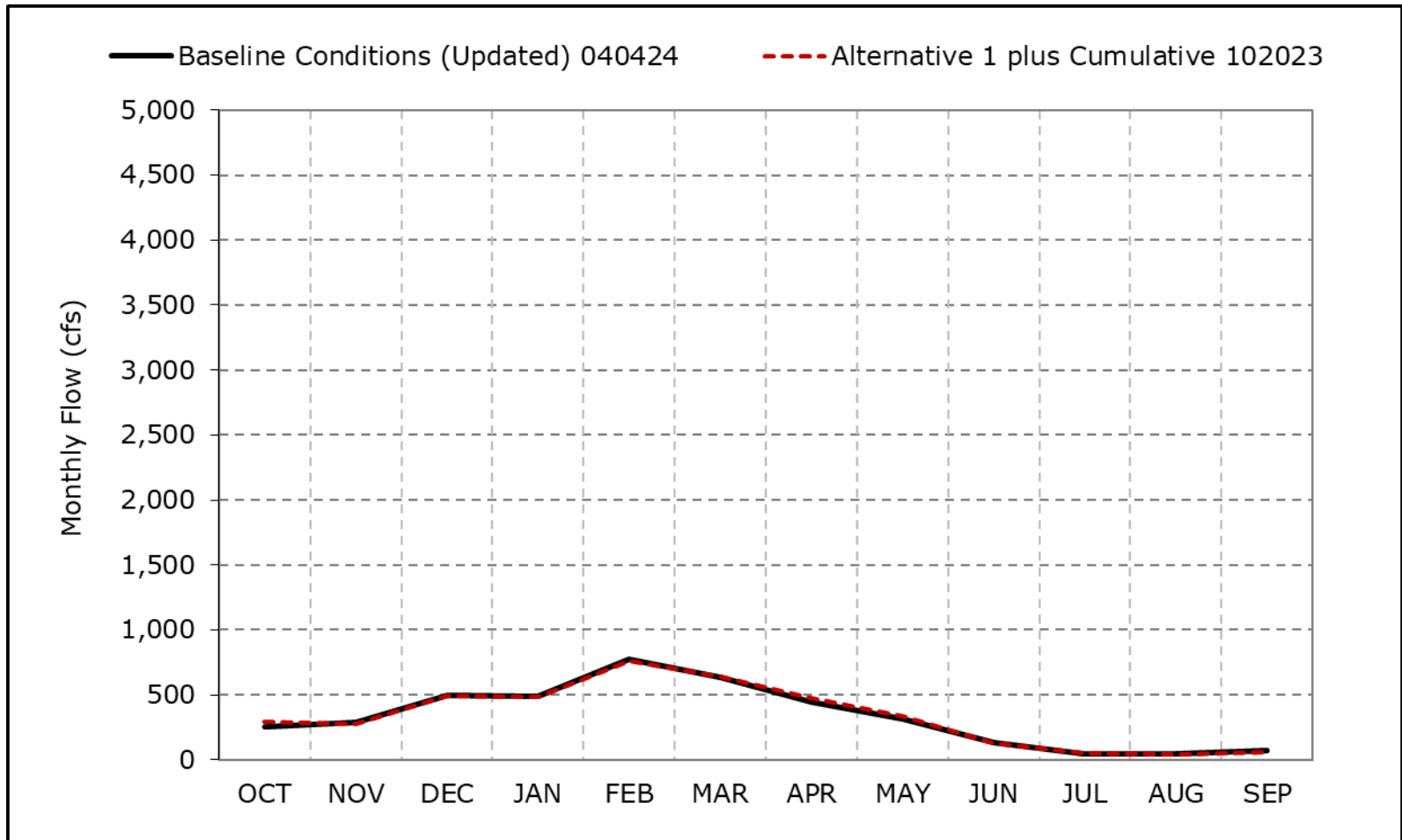


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5f. Mokelumne River below Cosumnes, Critical Year Average Flow

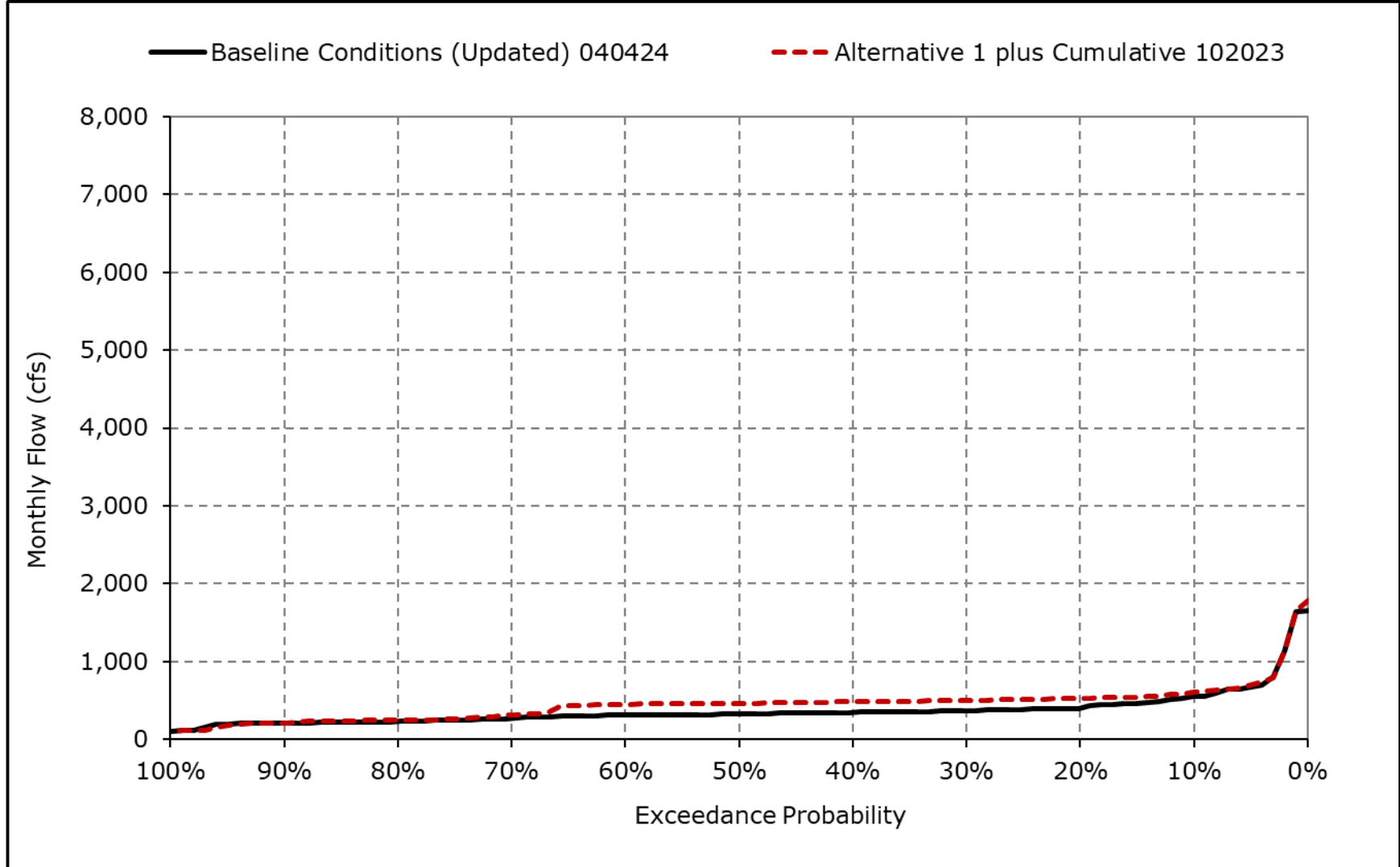


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

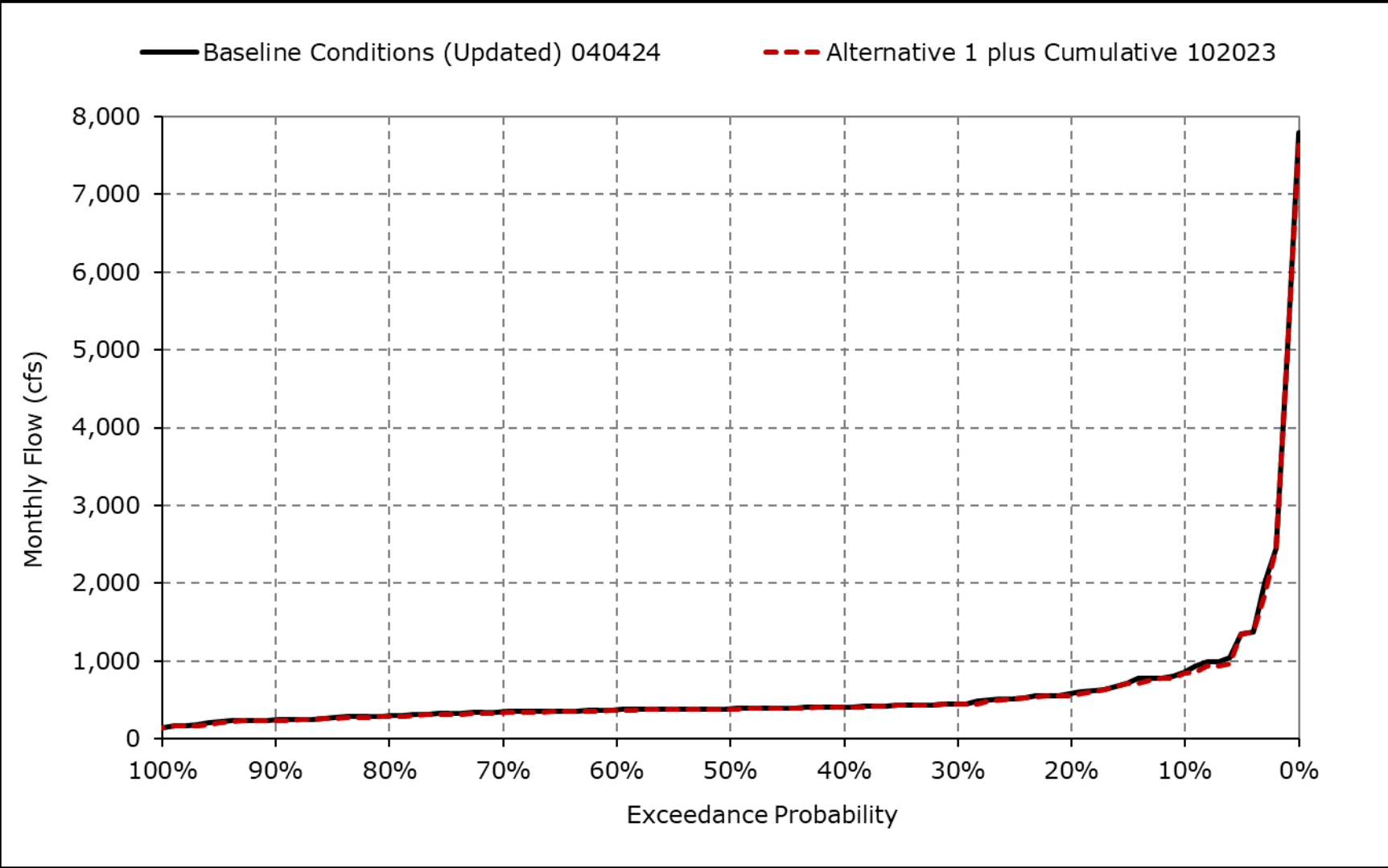
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5g. Mokelumne River below Cosumnes, October



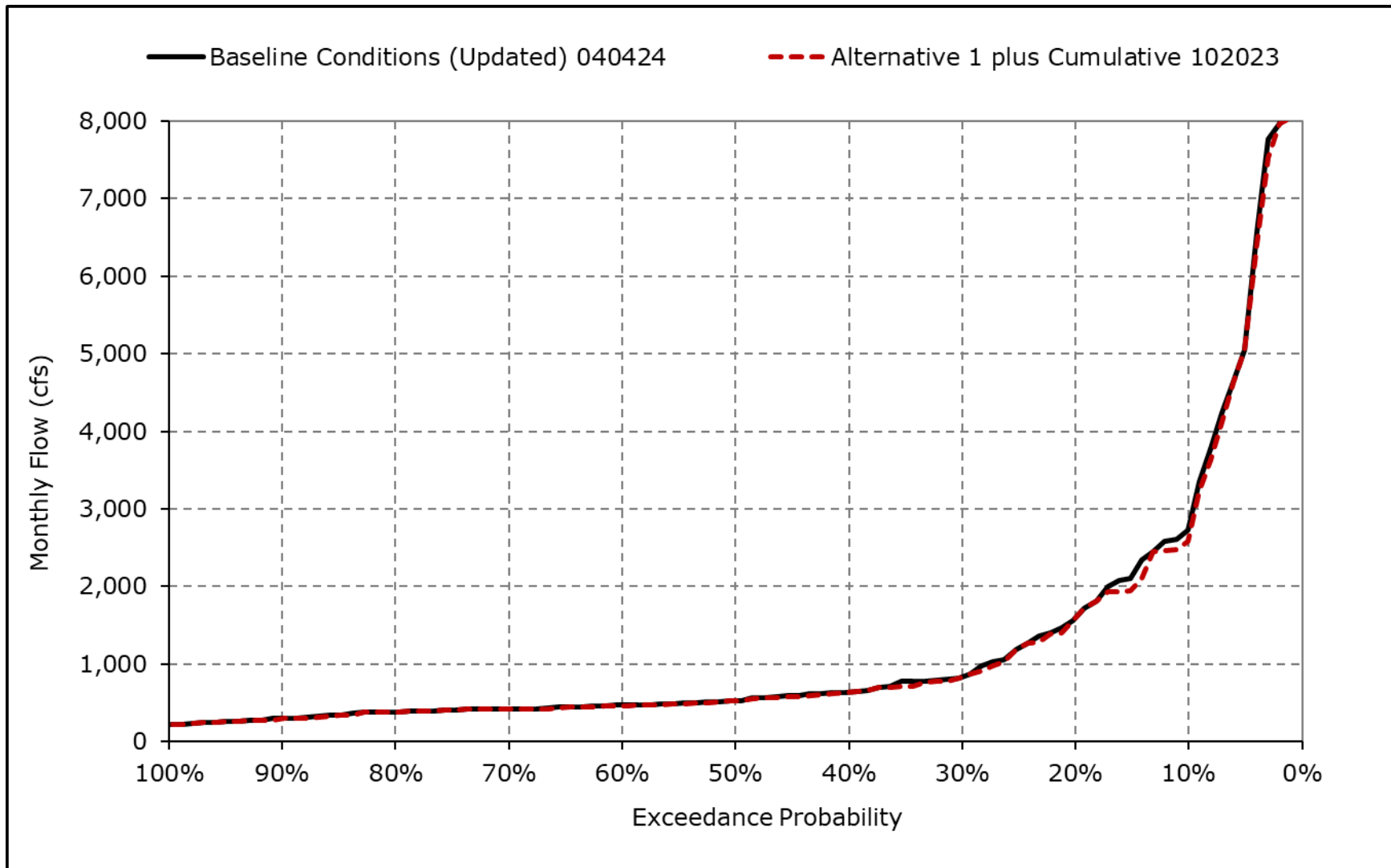
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5h. Mokelumne River below Cosumnes, November



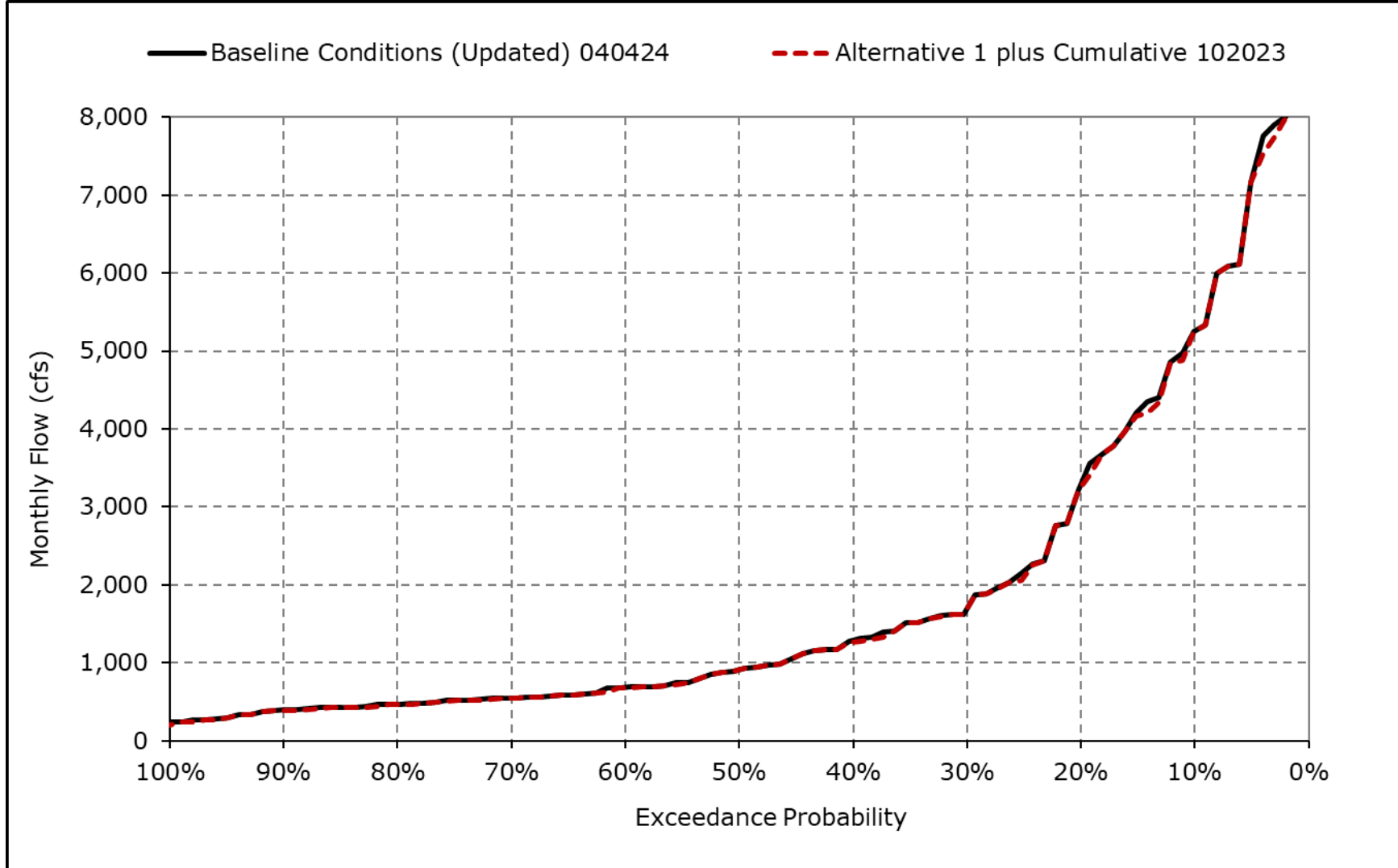
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5i. Mokelumne River below Cosumnes, December



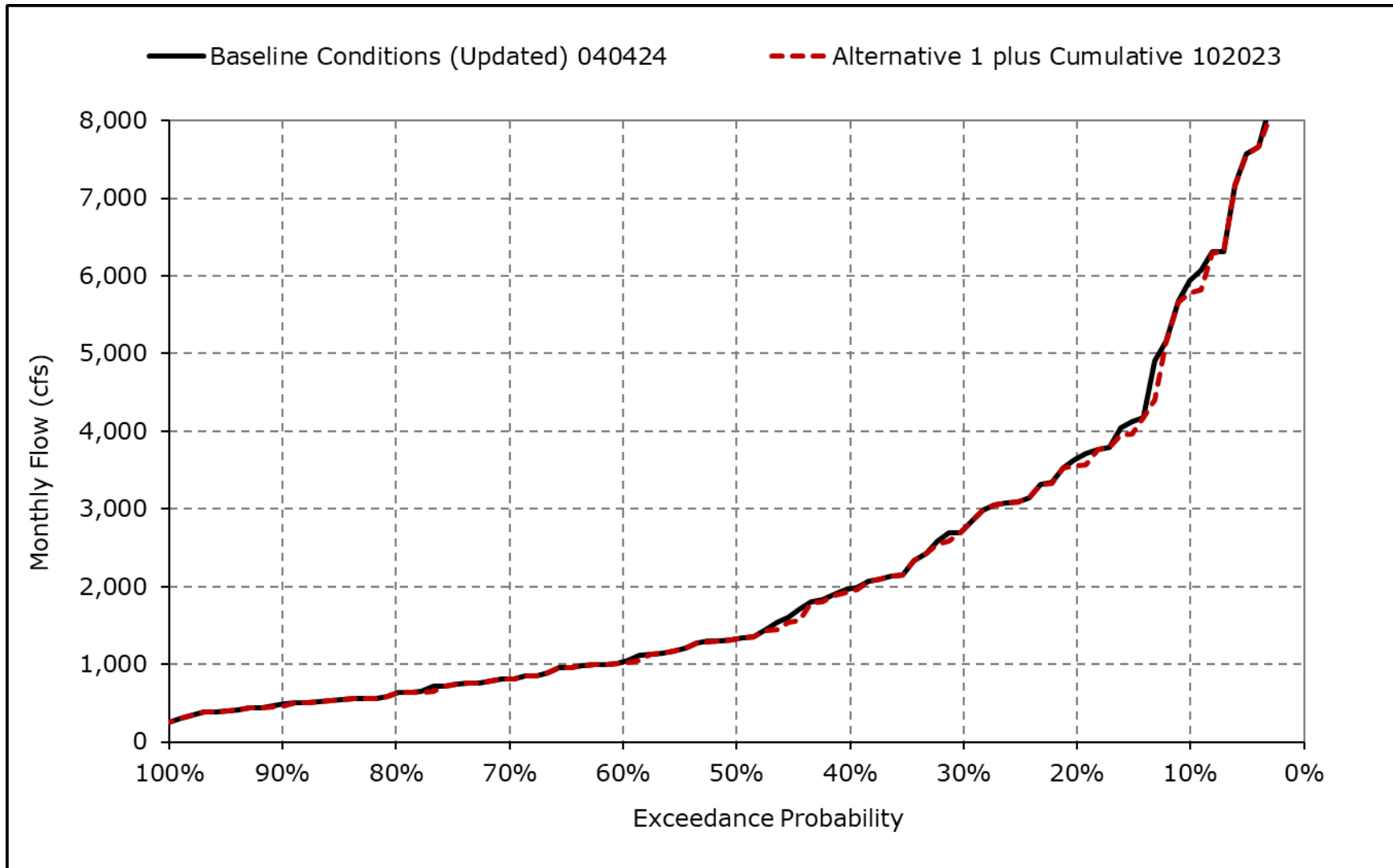
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5j. Mokelumne River below Cosumnes, January



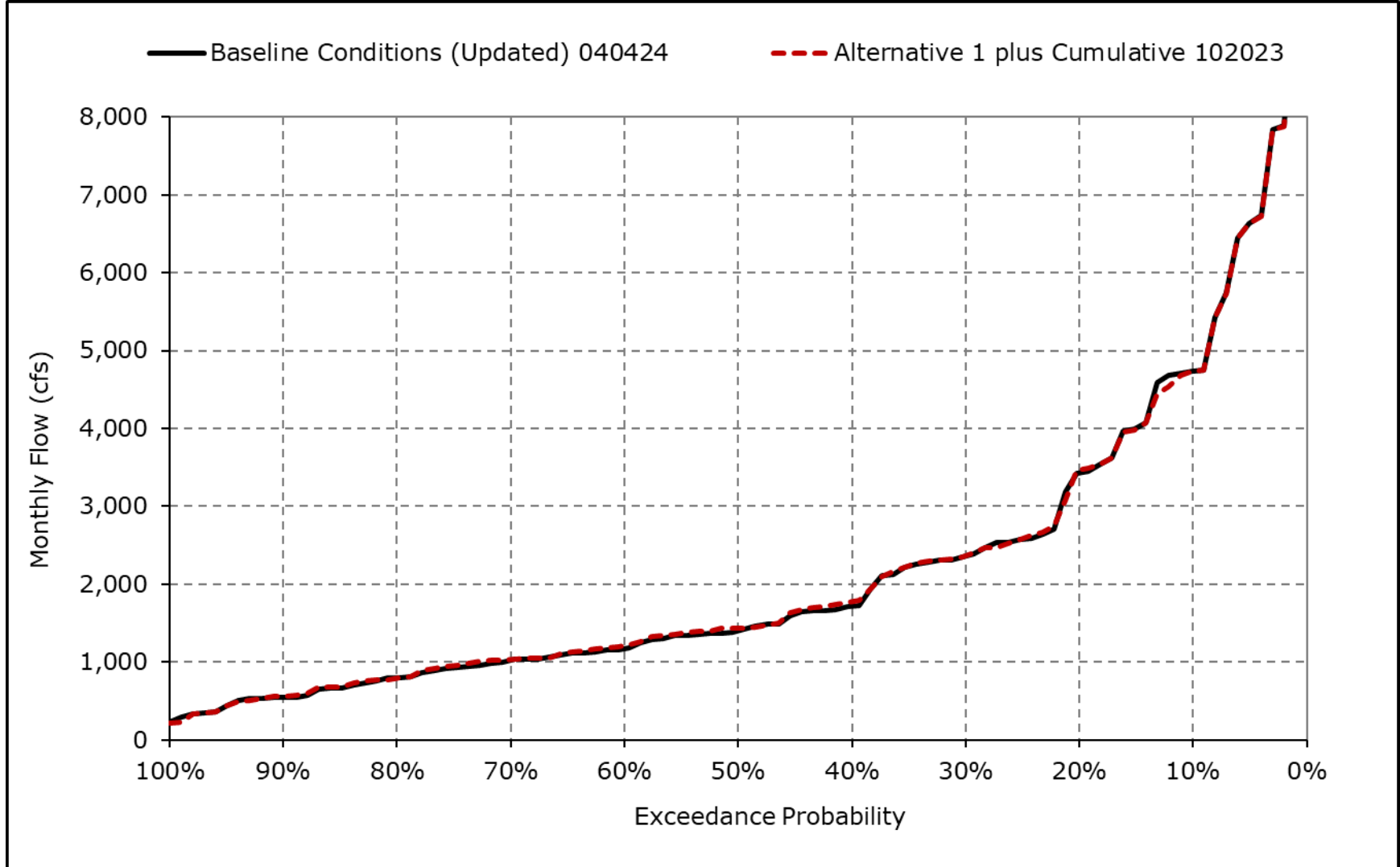
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5k. Mokelumne River below Cosumnes, February



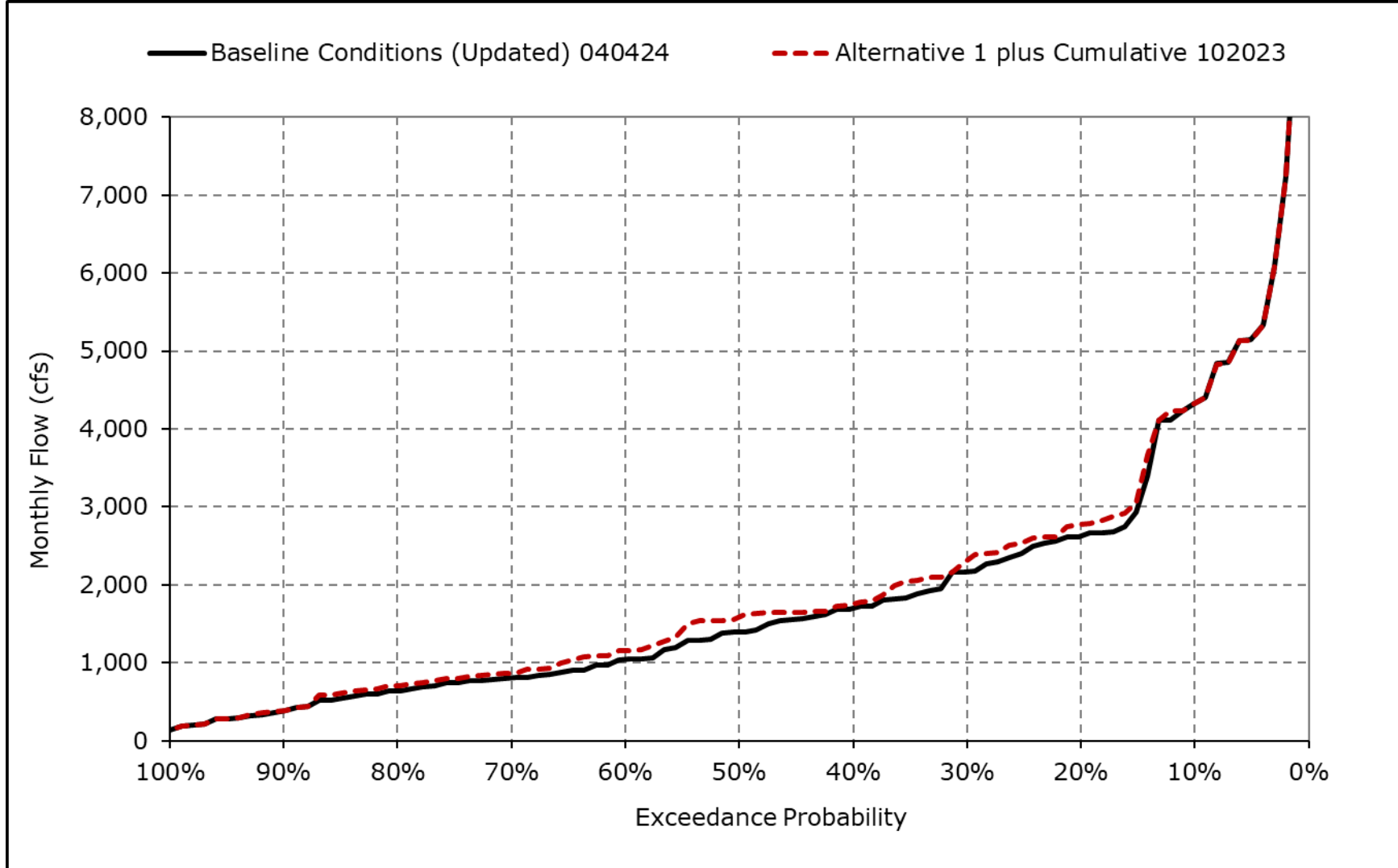
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5I. Mokelumne River below Cosumnes, March



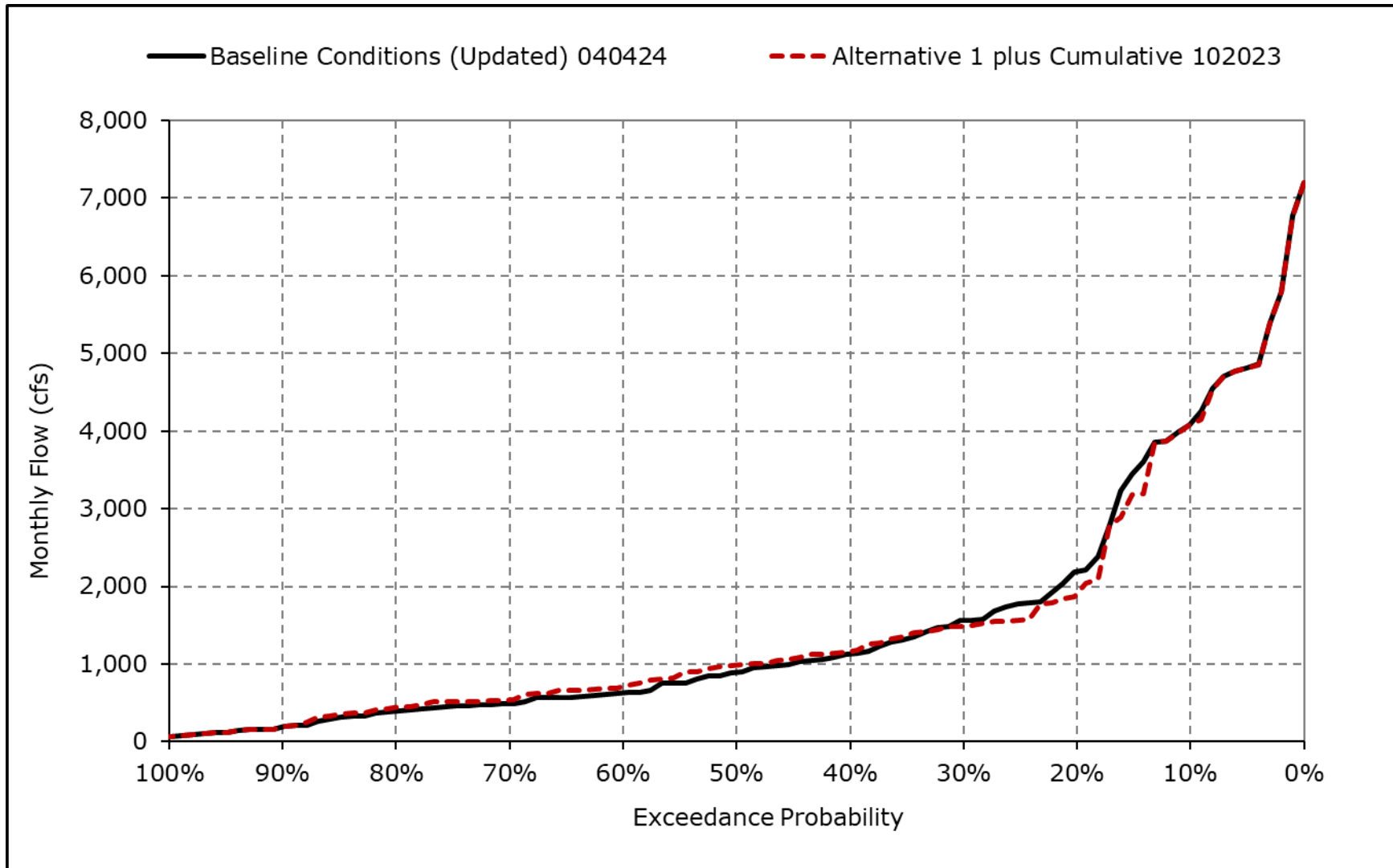
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5m. Mokelumne River below Cosumnes, April



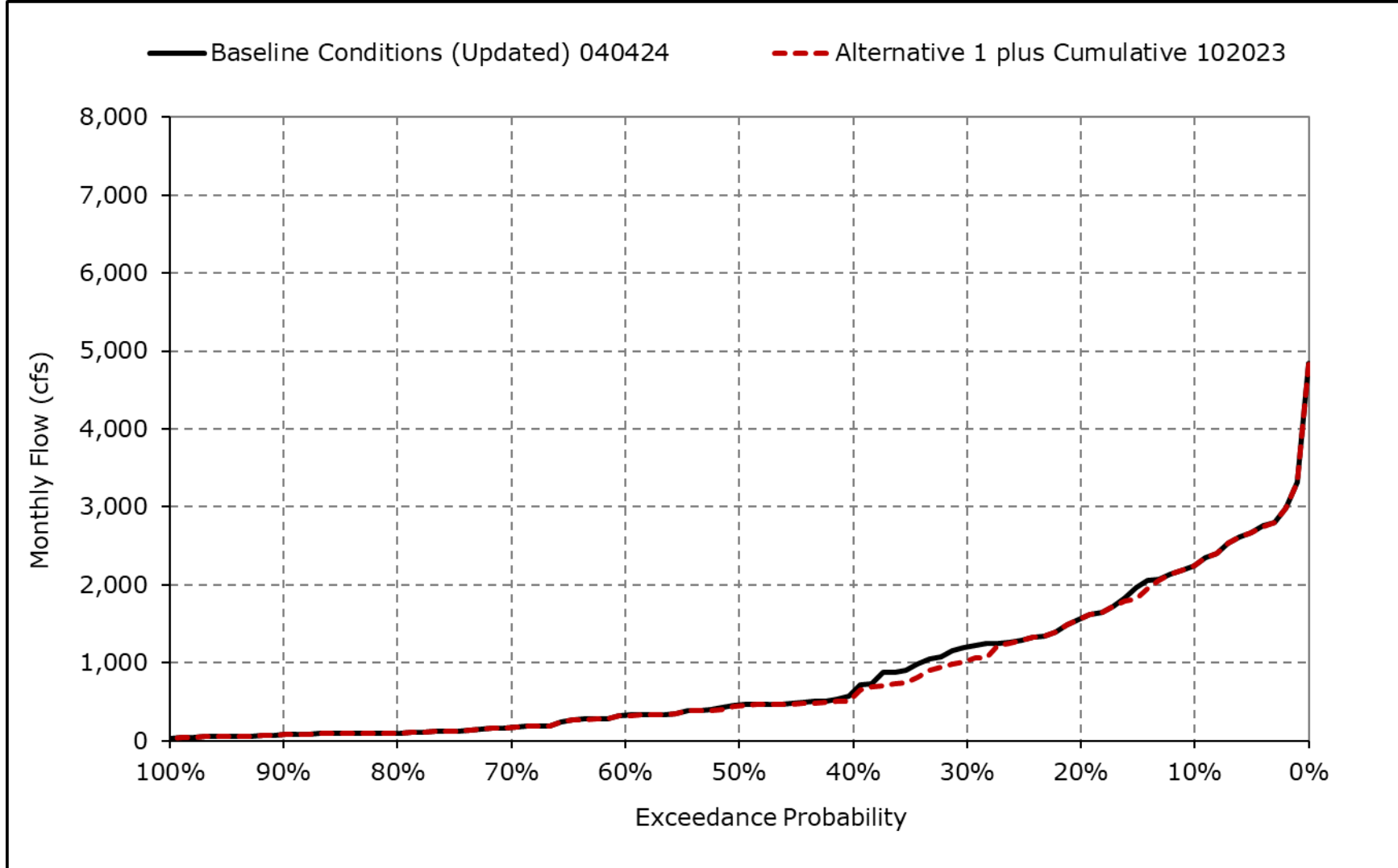
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5n. Mokelumne River below Cosumnes, May



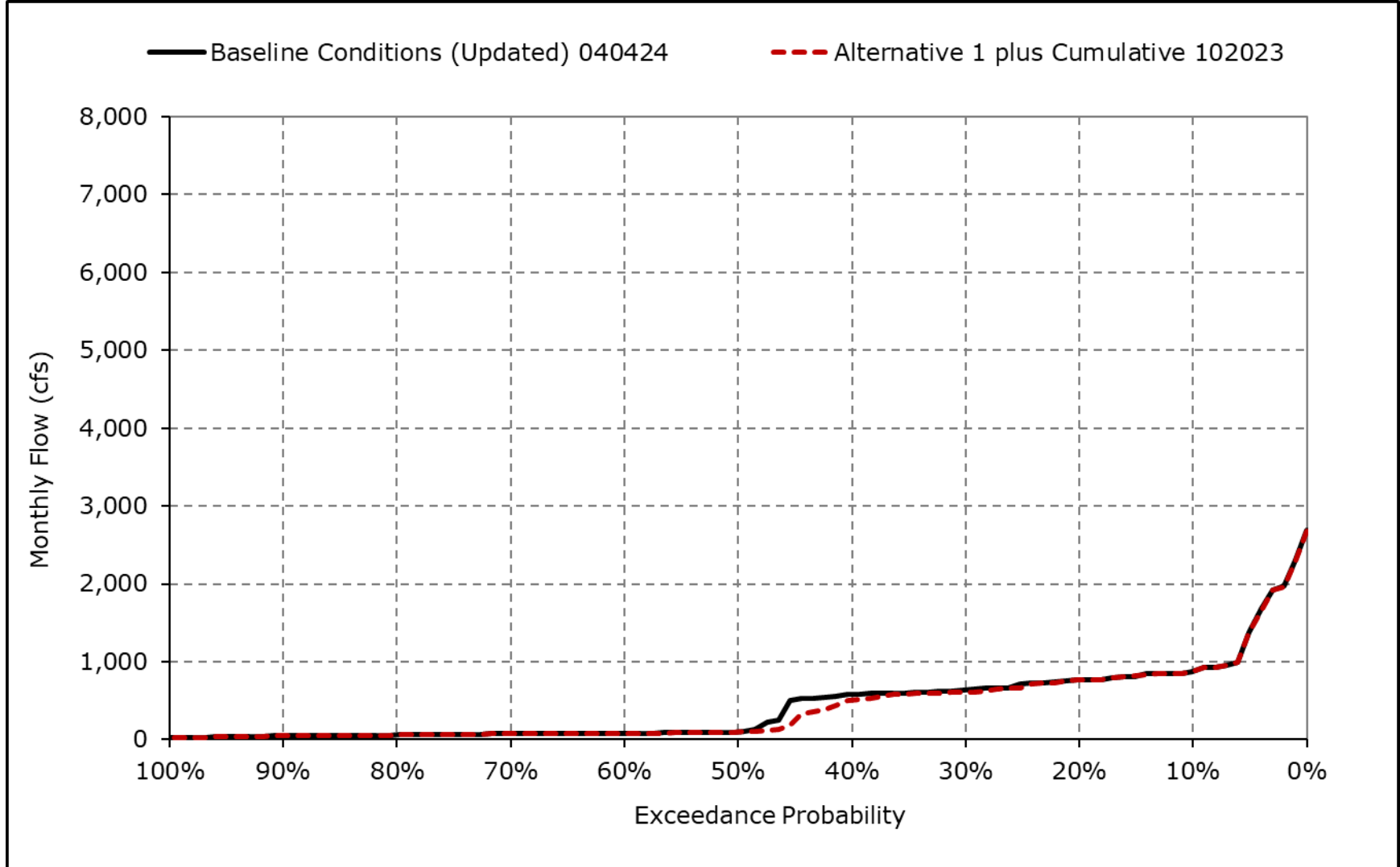
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5o. Mokelumne River below Cosumnes, June



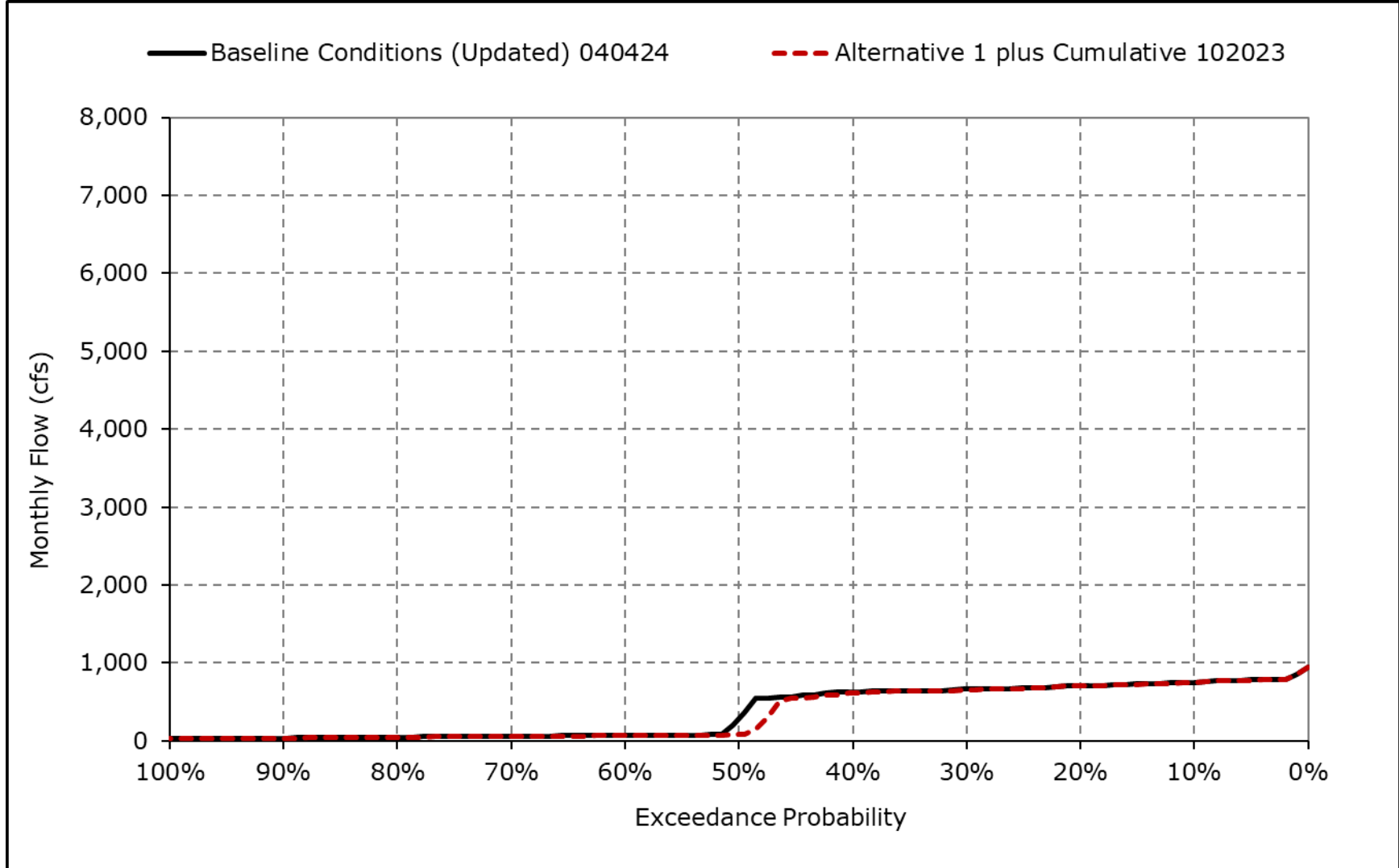
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5p. Mokelumne River below Cosumnes, July



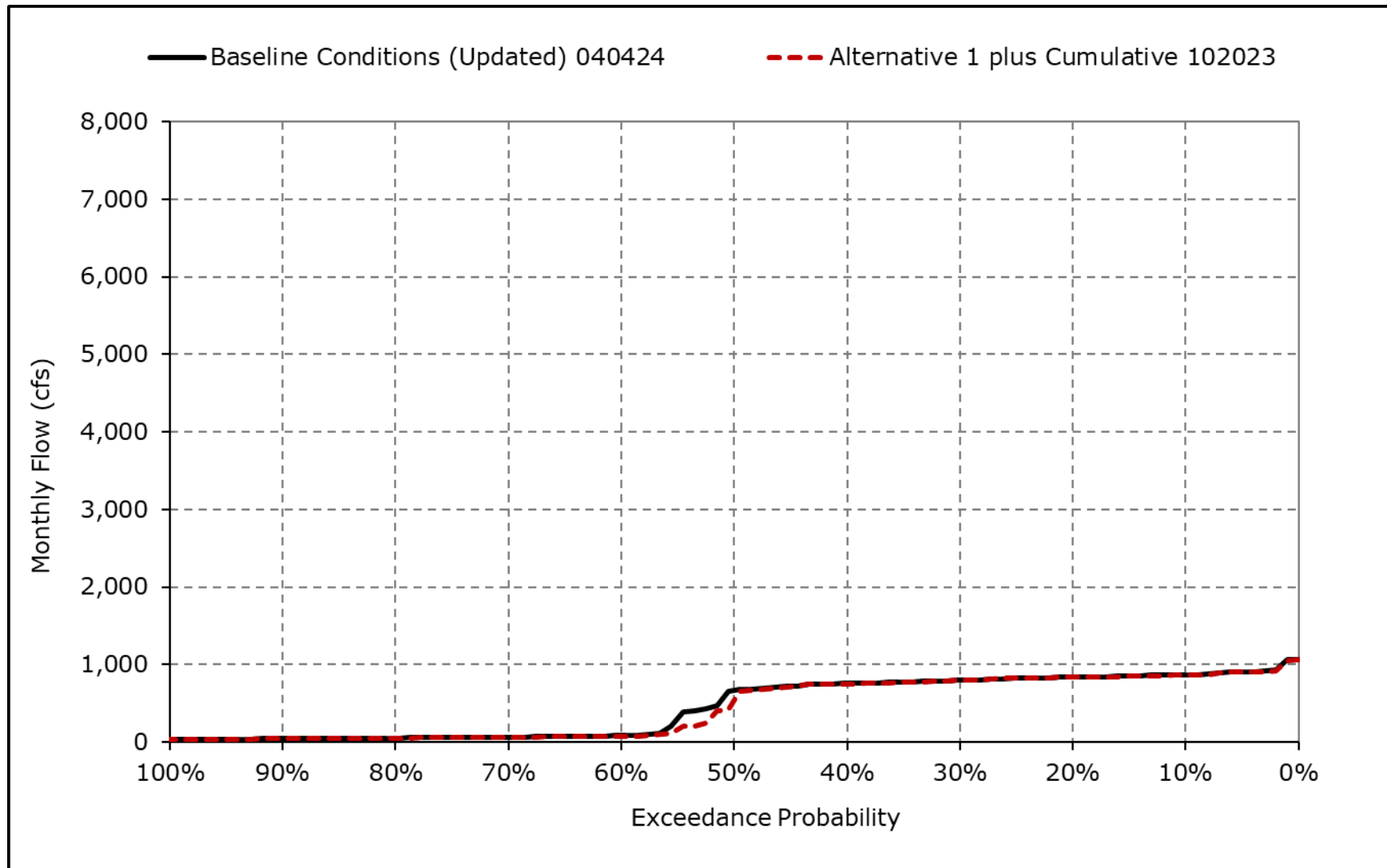
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5q. Mokelumne River below Cosumnes, August



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5r. Mokelumne River below Cosumnes, September



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Table 4G-3-6-1a. Old and Middle River Flow, Baseline Conditions (Updated) 040424, Monthly Flow (combined flows)(cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 10% Exceedance | -2,558 | -2,102 | -3,022 | -3,521 | -2,786 | -1,051 | 1,471 | 142 | -2,287 | -4,141 | -3,389 | -4,129 |
| 20% Exceedance | -3,293 | -3,082 | -4,338 | -3,645 | -4,021 | -3,138 | 319 | -398 | -4,091 | -7,536 | -5,671 | -5,134 |
| 30% Exceedance | -3,976 | -4,463 | -5,290 | -3,645 | -4,144 | -3,370 | -88 | -734 | -4,306 | -9,151 | -7,298 | -5,669 |
| 40% Exceedance | -4,891 | -5,636 | -5,290 | -4,280 | -4,144 | -3,414 | -395 | -1,071 | -4,504 | -9,700 | -9,244 | -6,811 |
| 50% Exceedance | -5,615 | -7,823 | -5,290 | -4,516 | -4,272 | -3,421 | -685 | -1,457 | -4,851 | -10,147 | -9,785 | -8,033 |
| 60% Exceedance | -6,120 | -8,465 | -5,290 | -4,516 | -4,316 | -3,425 | -934 | -1,636 | -4,995 | -10,773 | -10,508 | -8,808 |
| 70% Exceedance | -6,901 | -8,911 | -6,713 | -4,516 | -4,415 | -3,429 | -1,152 | -1,865 | -5,000 | -10,960 | -10,744 | -9,151 |
| 80% Exceedance | -7,486 | -9,295 | -8,457 | -5,000 | -4,464 | -3,908 | -1,265 | -2,039 | -5,000 | -11,239 | -10,972 | -9,643 |
| 90% Exceedance | -8,817 | -9,486 | -9,380 | -5,000 | -4,611 | -3,994 | -1,573 | -2,876 | -5,000 | -11,493 | -11,311 | -10,052 |
| Full Simulation Period Average^a | -5,589 | -6,488 | -5,790 | -3,834 | -3,717 | -2,758 | -389 | -1,287 | -4,203 | -9,211 | -8,601 | -7,507 |
| Wet Water Years (30%) | -6,738 | -7,548 | -5,693 | -3,224 | -2,830 | -1,355 | -569 | -1,795 | -3,974 | -9,633 | -9,906 | -8,807 |
| Above Normal Water Years (11%) | -4,852 | -6,729 | -6,461 | -4,085 | -3,682 | -3,066 | -672 | -2,257 | -4,755 | -10,010 | -10,848 | -7,898 |
| Below Normal Water Years (21%) | -5,847 | -7,077 | -6,206 | -4,194 | -4,170 | -3,600 | 563 | -462 | -4,862 | -11,195 | -10,939 | -9,580 |
| Dry Water Years (22%) | -5,568 | -6,451 | -6,284 | -4,265 | -4,178 | -3,683 | -605 | -977 | -4,849 | -10,128 | -7,240 | -6,057 |
| Critical Water Years (16%) | -3,631 | -3,610 | -4,287 | -3,743 | -4,176 | -2,799 | -810 | -1,178 | -2,504 | -4,008 | -3,412 | -4,075 |

Table 4G-3-6-1b. Old and Middle River Flow, Alternative 1 plus Cumulative 102023, Monthly Flow (combined flows)(cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 10% Exceedance | -2,665 | -2,435 | -3,238 | -3,127 | -2,980 | -934 | 1,495 | -1,399 | -1,587 | -3,678 | -3,199 | -4,035 |
| 20% Exceedance | -3,366 | -3,765 | -4,328 | -3,518 | -3,621 | -1,260 | 254 | -1,783 | -3,636 | -6,976 | -4,814 | -5,446 |
| 30% Exceedance | -4,495 | -4,750 | -5,290 | -3,645 | -3,741 | -1,402 | -271 | -2,150 | -4,301 | -8,456 | -7,946 | -6,042 |
| 40% Exceedance | -5,043 | -5,962 | -5,290 | -3,876 | -3,982 | -1,566 | -557 | -2,380 | -4,394 | -9,514 | -9,310 | -6,872 |
| 50% Exceedance | -5,804 | -8,080 | -5,290 | -4,093 | -4,033 | -2,341 | -1,107 | -2,610 | -4,400 | -9,918 | -9,913 | -8,340 |
| 60% Exceedance | -6,335 | -8,656 | -5,290 | -4,364 | -4,194 | -3,445 | -1,292 | -2,846 | -4,400 | -10,409 | -10,452 | -9,404 |
| 70% Exceedance | -6,844 | -8,985 | -6,471 | -4,516 | -4,242 | -3,608 | -1,489 | -3,105 | -4,475 | -10,818 | -10,803 | -10,005 |
| 80% Exceedance | -7,658 | -9,293 | -8,472 | -4,625 | -4,464 | -3,724 | -1,584 | -3,417 | -4,475 | -11,175 | -10,989 | -10,597 |
| 90% Exceedance | -8,535 | -9,487 | -9,375 | -4,775 | -4,485 | -3,950 | -1,821 | -3,615 | -4,490 | -11,341 | -11,178 | -10,961 |
| Full Simulation Period Average^a | -5,636 | -6,640 | -5,774 | -3,681 | -3,521 | -2,025 | -531 | -2,449 | -3,818 | -8,968 | -8,518 | -7,897 |
| Wet Water Years (30%) | -6,765 | -7,798 | -5,605 | -3,070 | -2,876 | -884 | 186 | -2,778 | -3,722 | -9,664 | -10,218 | -9,799 |
| Above Normal Water Years (11%) | -4,561 | -6,791 | -6,917 | -3,944 | -3,520 | -1,819 | 8 | -2,636 | -4,370 | -10,292 | -10,893 | -8,345 |
| Below Normal Water Years (21%) | -5,857 | -7,184 | -6,303 | -4,014 | -3,930 | -2,105 | -841 | -2,537 | -4,457 | -10,937 | -10,690 | -9,507 |
| Dry Water Years (22%) | -5,716 | -6,684 | -6,132 | -4,062 | -3,802 | -3,019 | -960 | -2,205 | -4,394 | -9,375 | -6,913 | -6,361 |
| Critical Water Years (16%) | -3,856 | -3,593 | -4,121 | -3,684 | -3,807 | -2,833 | -1,251 | -1,927 | -1,990 | -3,610 | -3,055 | -4,019 |

Table 4G-3-6-1c. Old and Middle River Flow, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (combined flows)(cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------|------|------|-----|------|-------|--------|--------|-----|------|------|------|
| 10% Exceedance | -107 | -333 | -216 | 394 | -194 | 117 | 25 | -1,542 | 701 | 464 | 190 | 94 |
| 20% Exceedance | -73 | -682 | 10 | 127 | 400 | 1,878 | -64 | -1,384 | 455 | 560 | 857 | -313 |
| 30% Exceedance | -520 | -287 | 0 | 0 | 403 | 1,968 | -182 | -1,416 | 5 | 694 | -648 | -373 |
| 40% Exceedance | -153 | -326 | 0 | 404 | 162 | 1,848 | -162 | -1,309 | 110 | 186 | -67 | -61 |
| 50% Exceedance | -190 | -257 | 0 | 423 | 239 | 1,081 | -422 | -1,154 | 451 | 229 | -128 | -307 |
| 60% Exceedance | -215 | -191 | 0 | 152 | 123 | -20 | -358 | -1,210 | 595 | 363 | 57 | -597 |
| 70% Exceedance | 57 | -74 | 242 | 0 | 173 | -179 | -337 | -1,240 | 525 | 142 | -58 | -854 |
| 80% Exceedance | -172 | 2 | -15 | 375 | 0 | 184 | -319 | -1,378 | 525 | 64 | -17 | -954 |
| 90% Exceedance | 282 | -1 | 5 | 225 | 126 | 45 | -247 | -739 | 510 | 152 | 132 | -909 |
| Full Simulation Period Average^a | -47 | -153 | 16 | 154 | 196 | 733 | -143 | -1,162 | 385 | 243 | 83 | -389 |
| Wet Water Years (30%) | -27 | -251 | 88 | 154 | -45 | 470 | 755 | -983 | 252 | -31 | -312 | -992 |
| Above Normal Water Years (11%) | 291 | -63 | -456 | 141 | 162 | 1,246 | 680 | -379 | 385 | -282 | -44 | -447 |
| Below Normal Water Years (21%) | -10 | -107 | -97 | 180 | 240 | 1,495 | -1,405 | -2,074 | 405 | 258 | 249 | 73 |
| Dry Water Years (22%) | -148 | -232 | 152 | 203 | 376 | 664 | -355 | -1,228 | 455 | 753 | 326 | -304 |
| Critical Water Years (16%) | -226 | 17 | 166 | 59 | 369 | -34 | -441 | -749 | 514 | 398 | 357 | 56 |

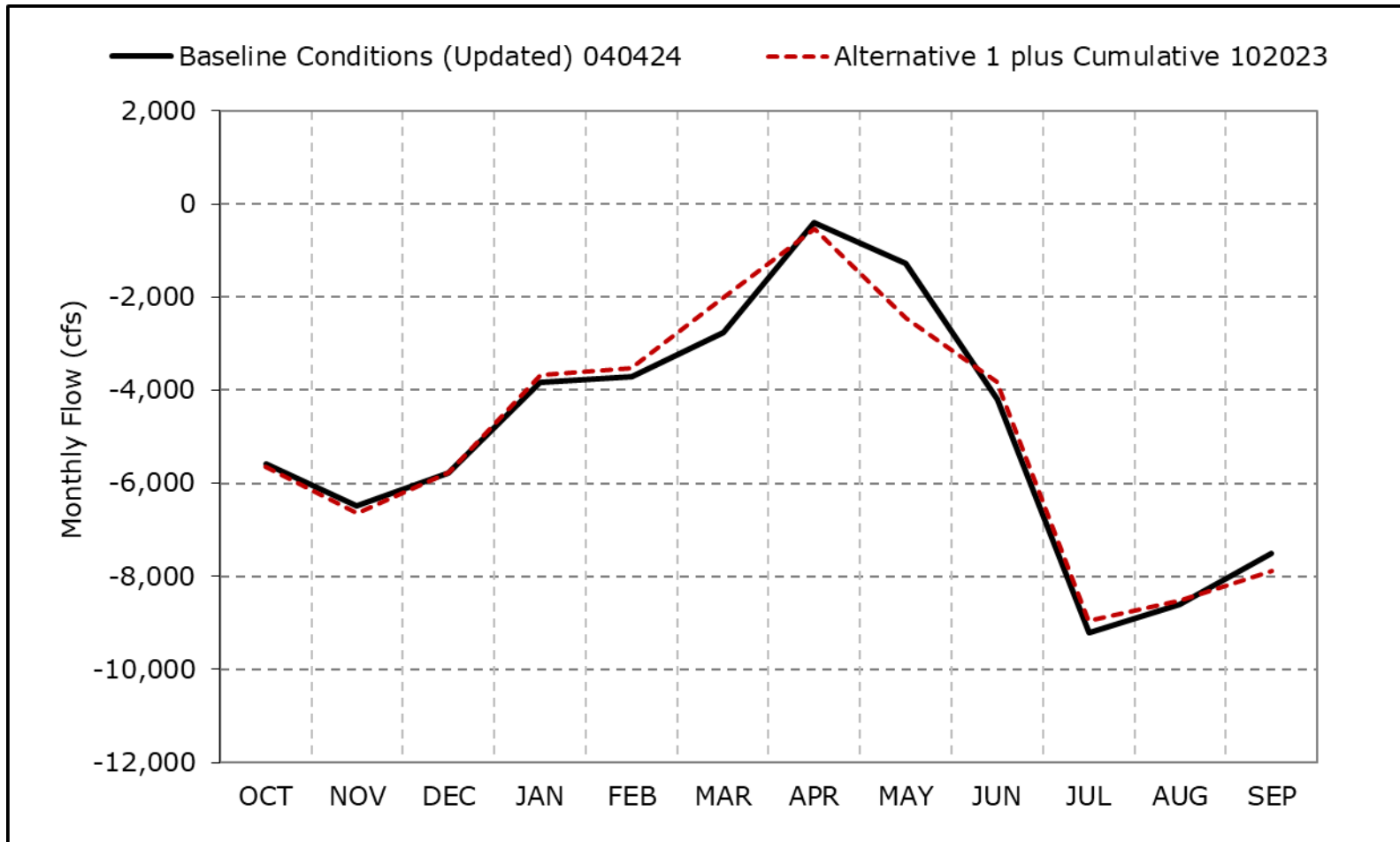
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-6a. Old and Middle River Flow, Long-Term Average Flow

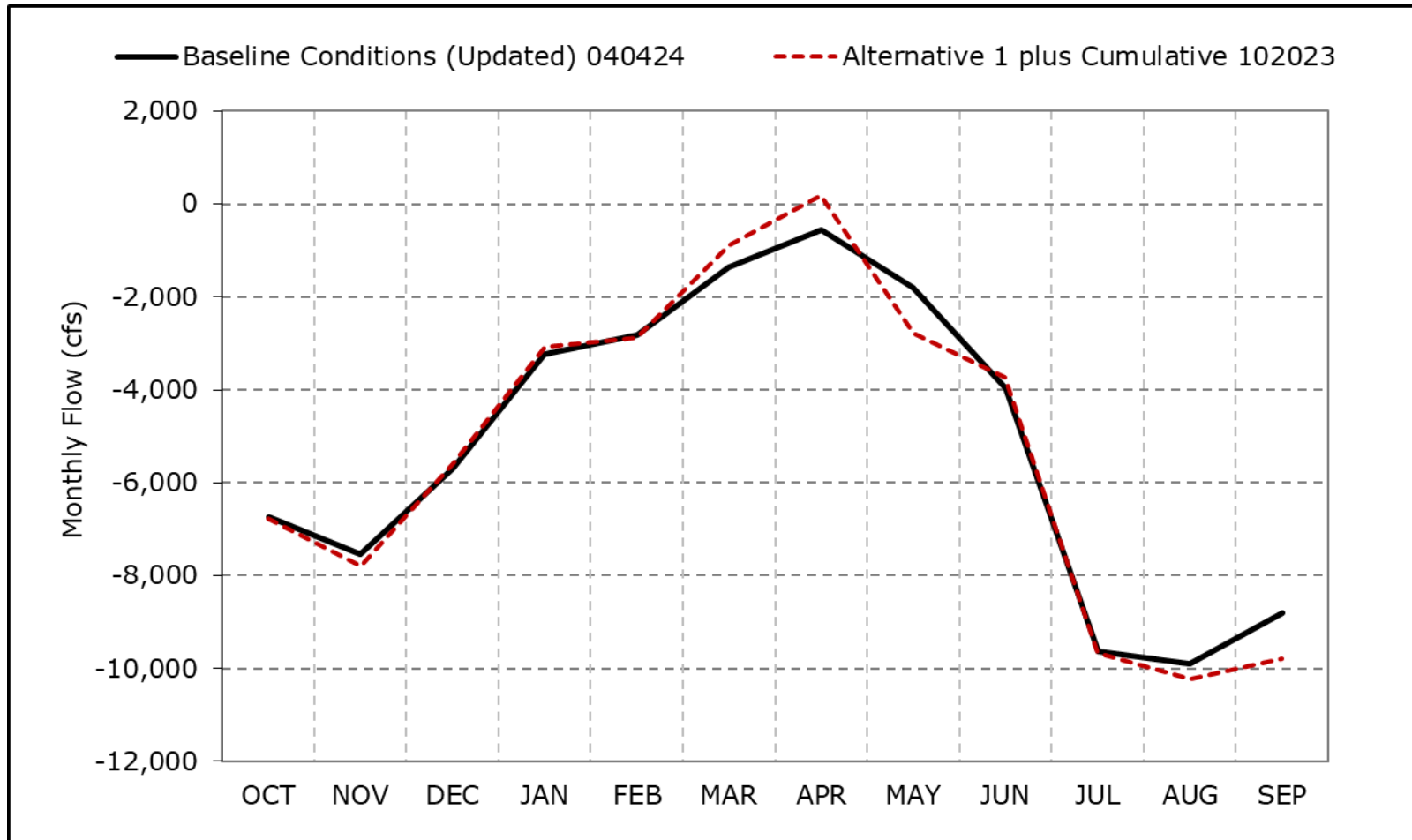


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6b. Old and Middle River Flow, Wet Year Average Flow

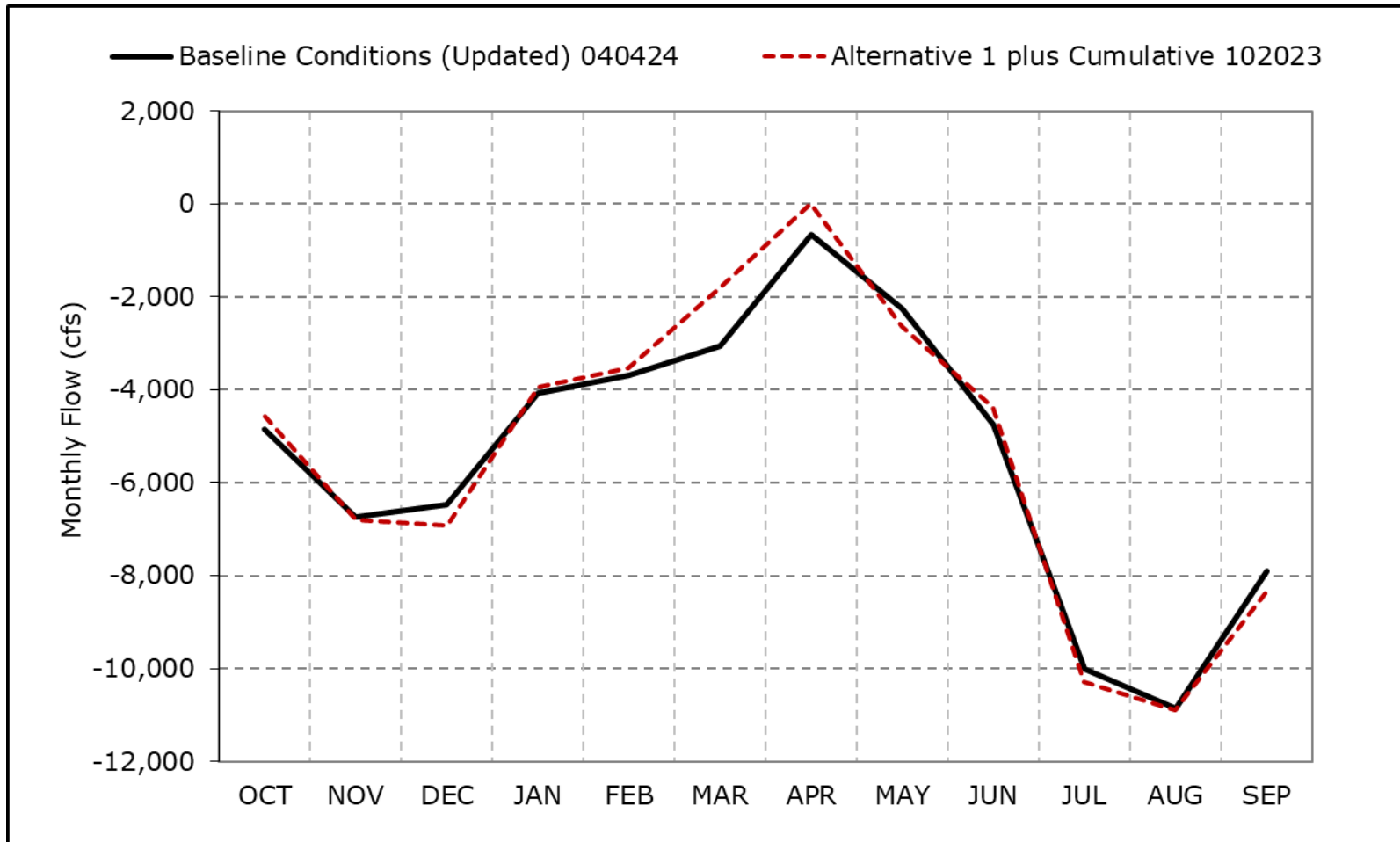


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6c. Old and Middle River Flow, Above Normal Year Average Flow

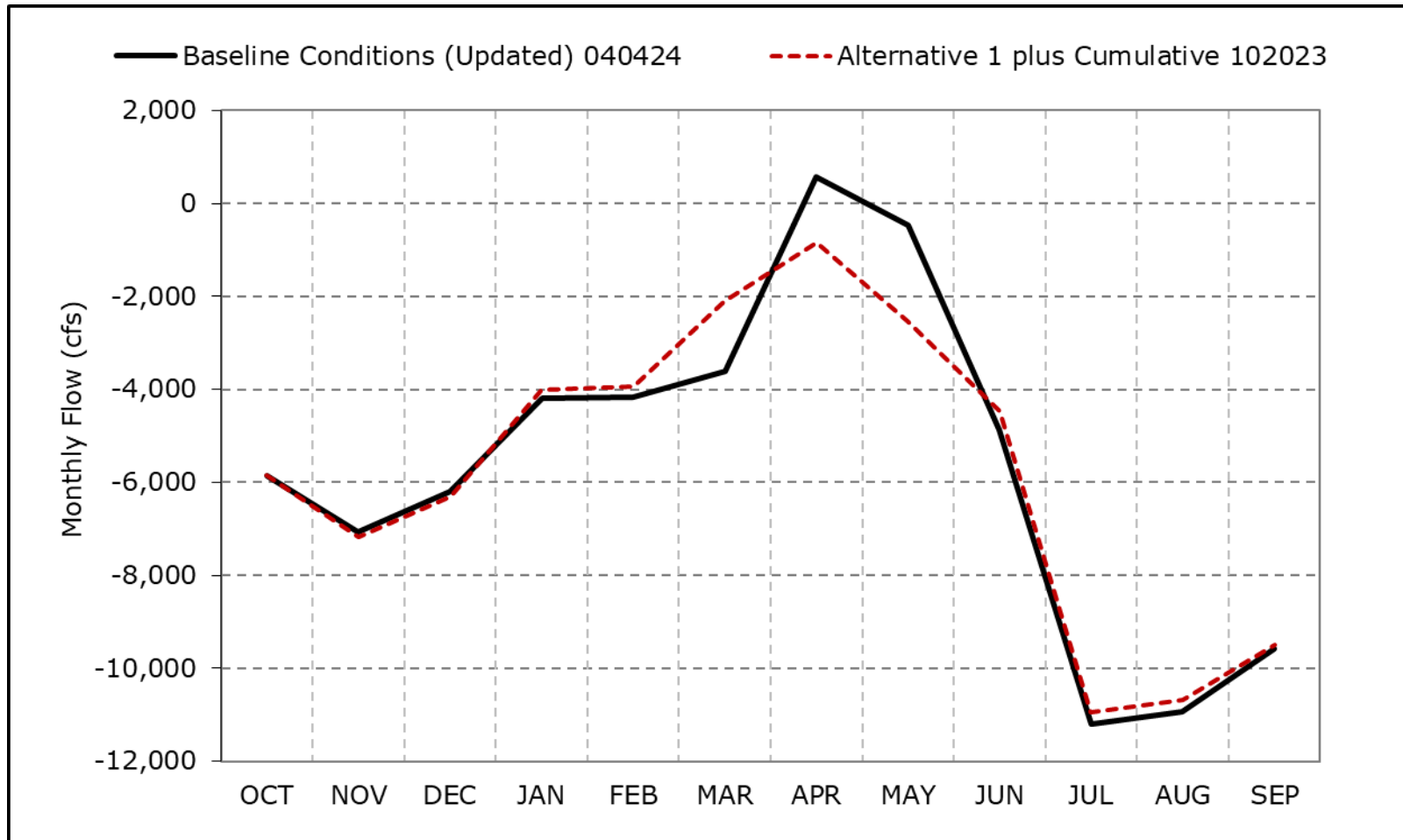


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6d. Old and Middle River Flow, Below Normal Year Average Flow

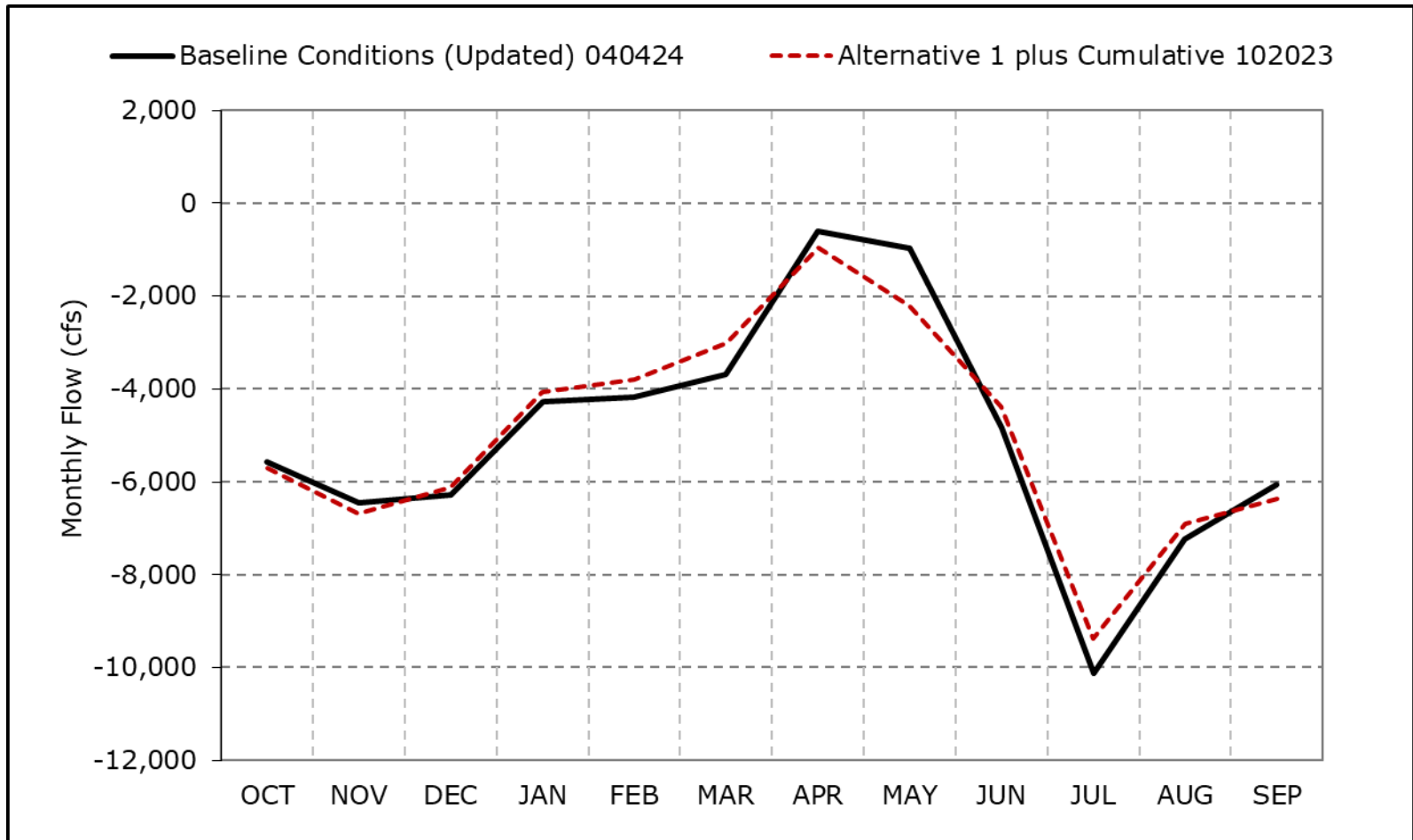


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6e. Old and Middle River Flow, Dry Year Average Flow

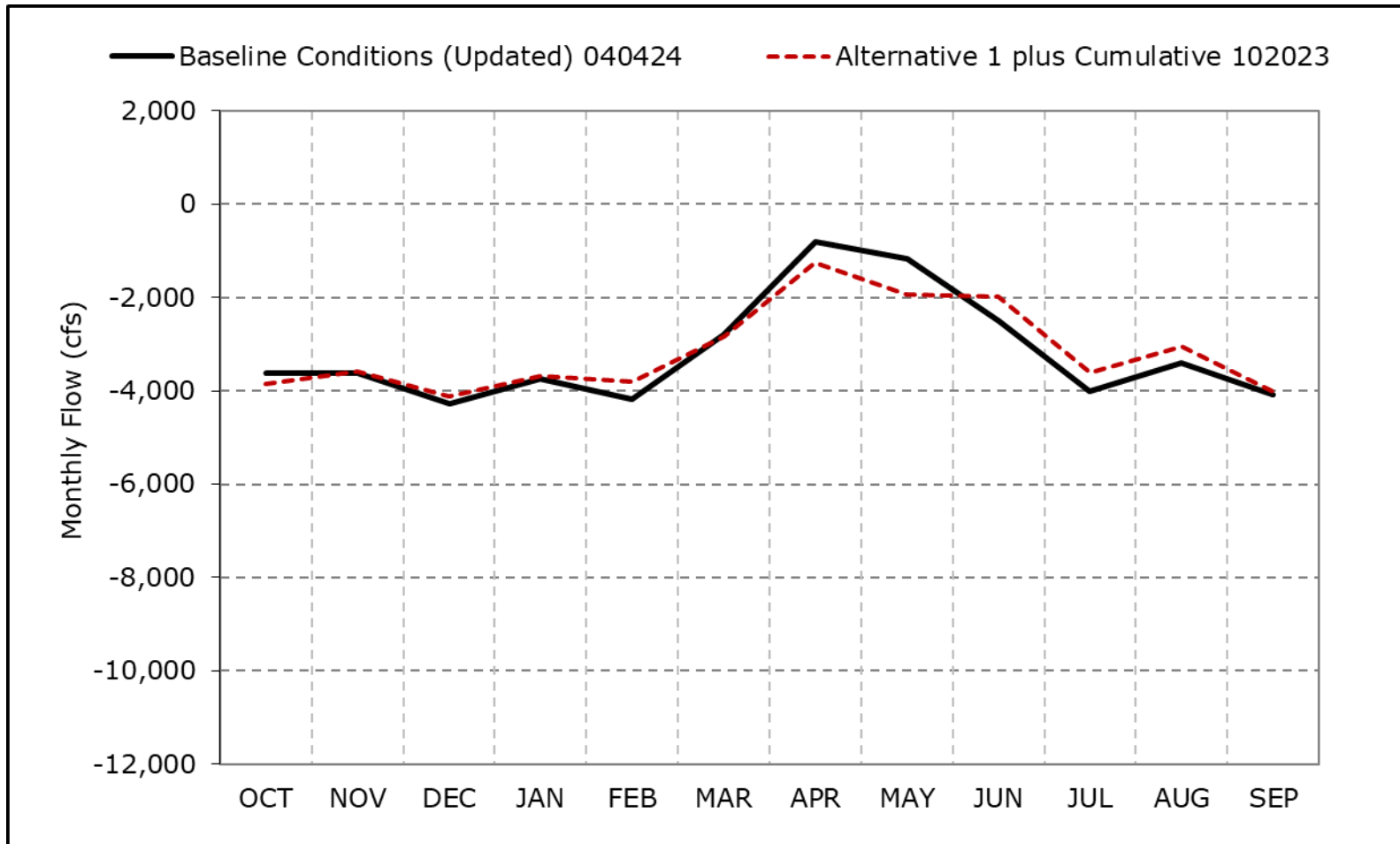


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6f. Old and Middle River Flow, Critical Year Average Flow

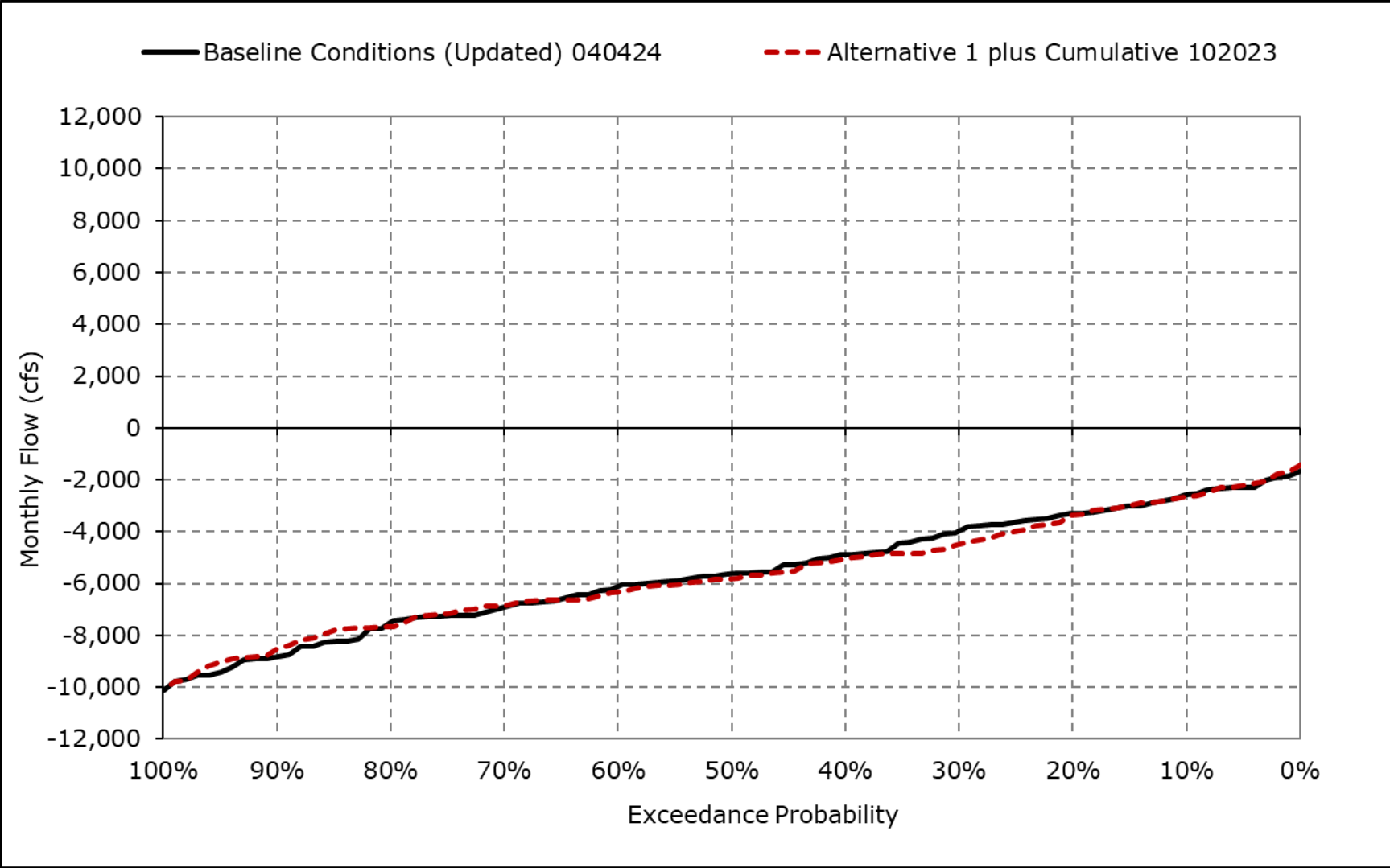


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

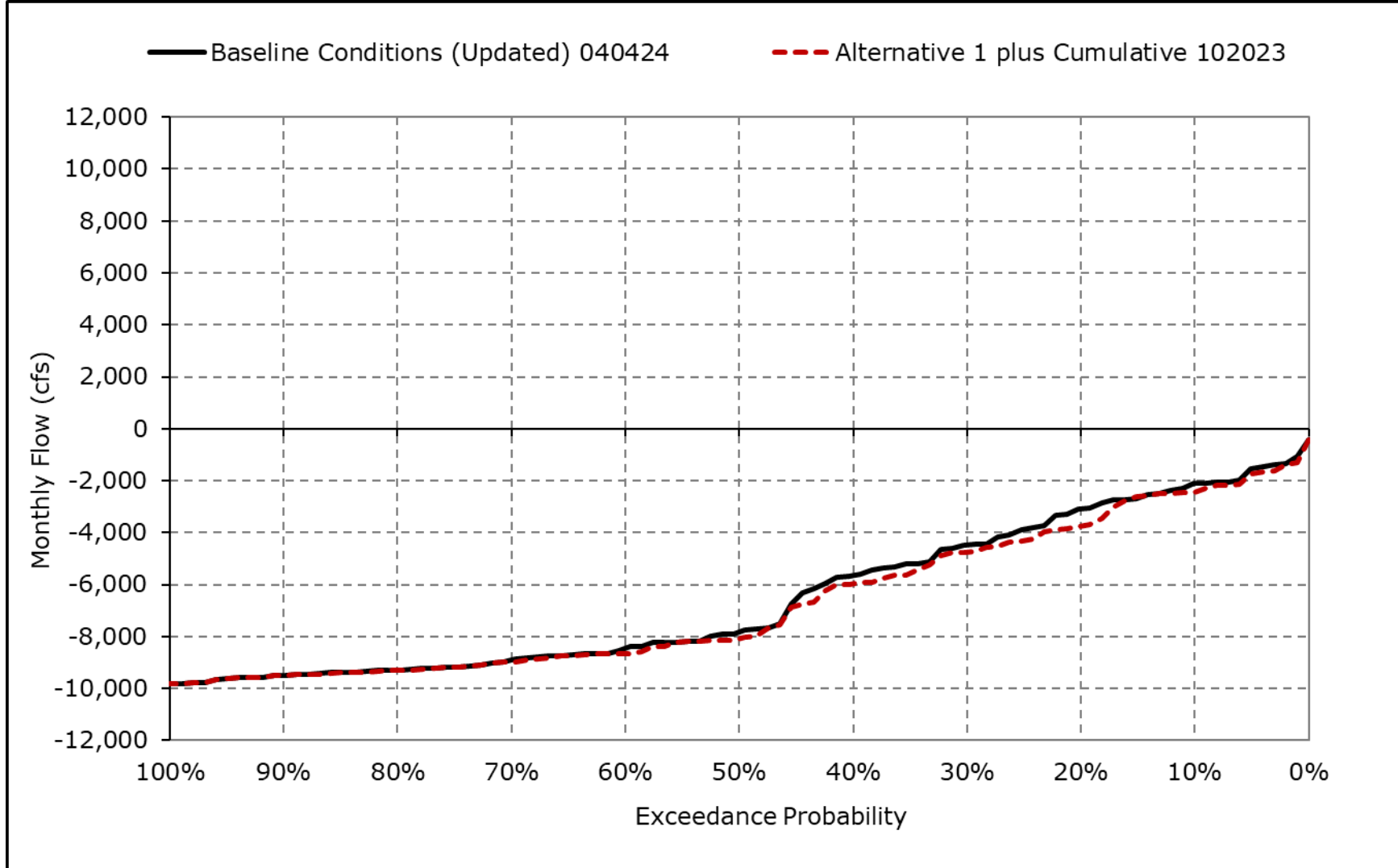
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6g. Old and Middle River Flow, October



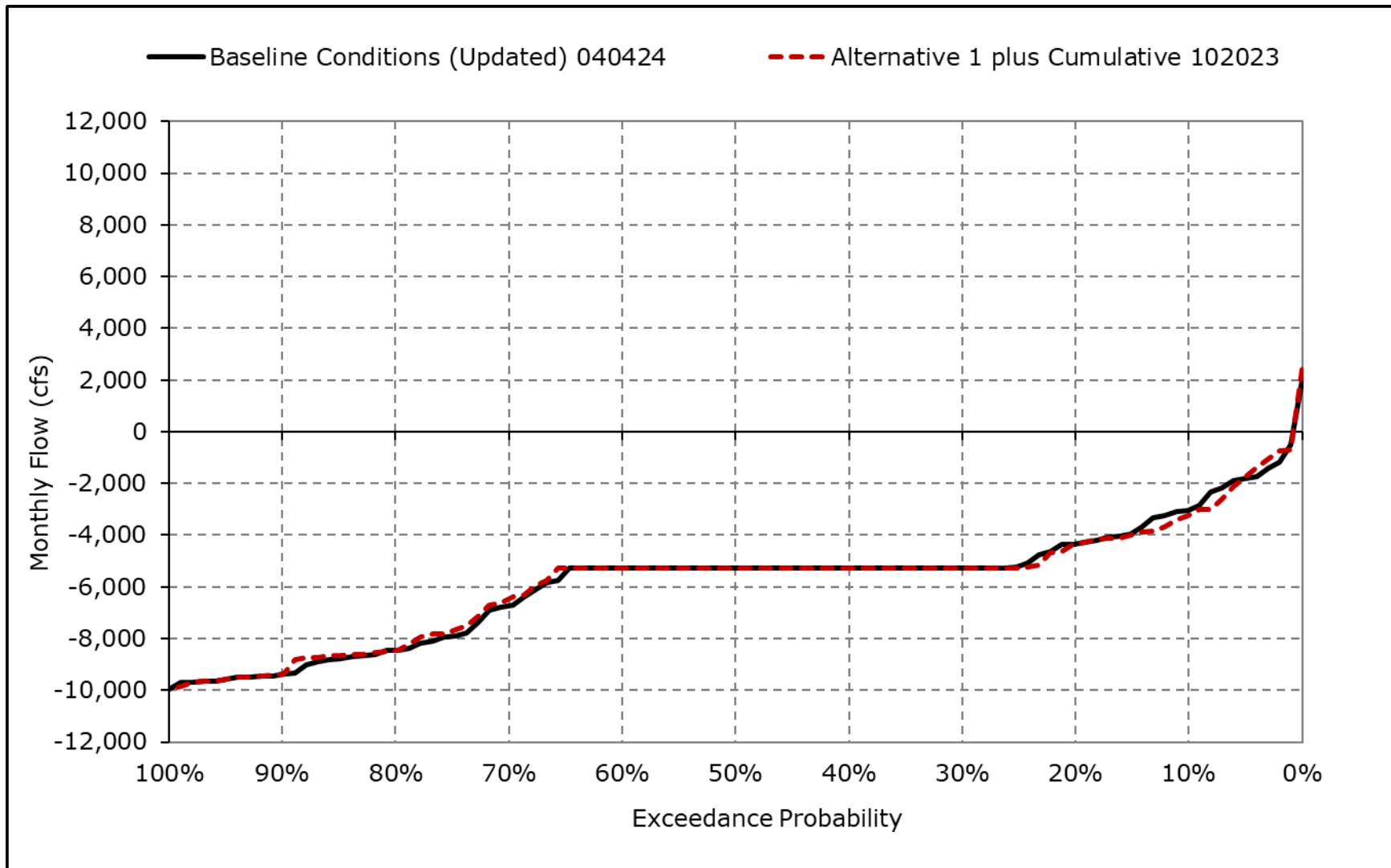
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6h. Old and Middle River Flow, November



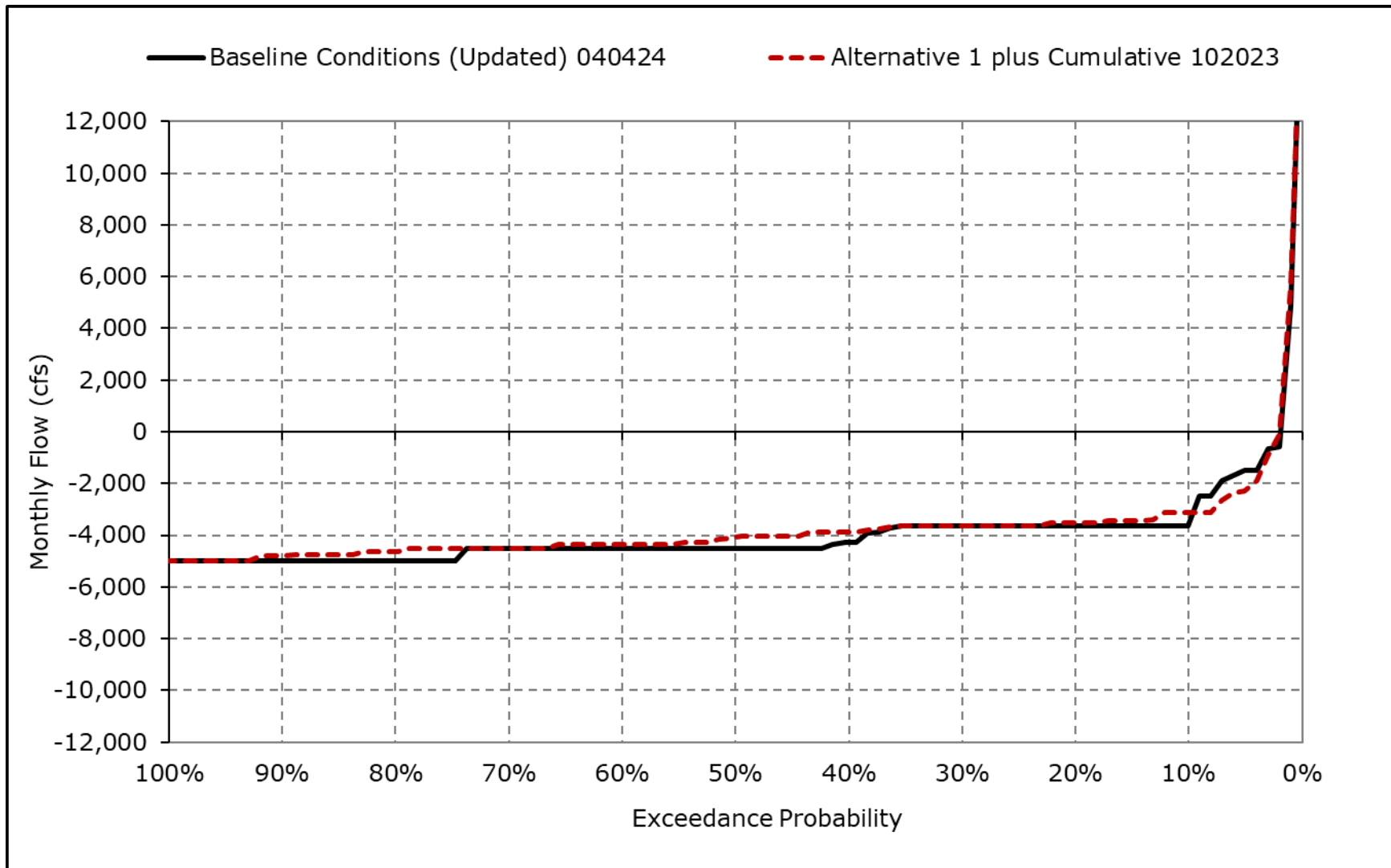
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6i. Old and Middle River Flow, December



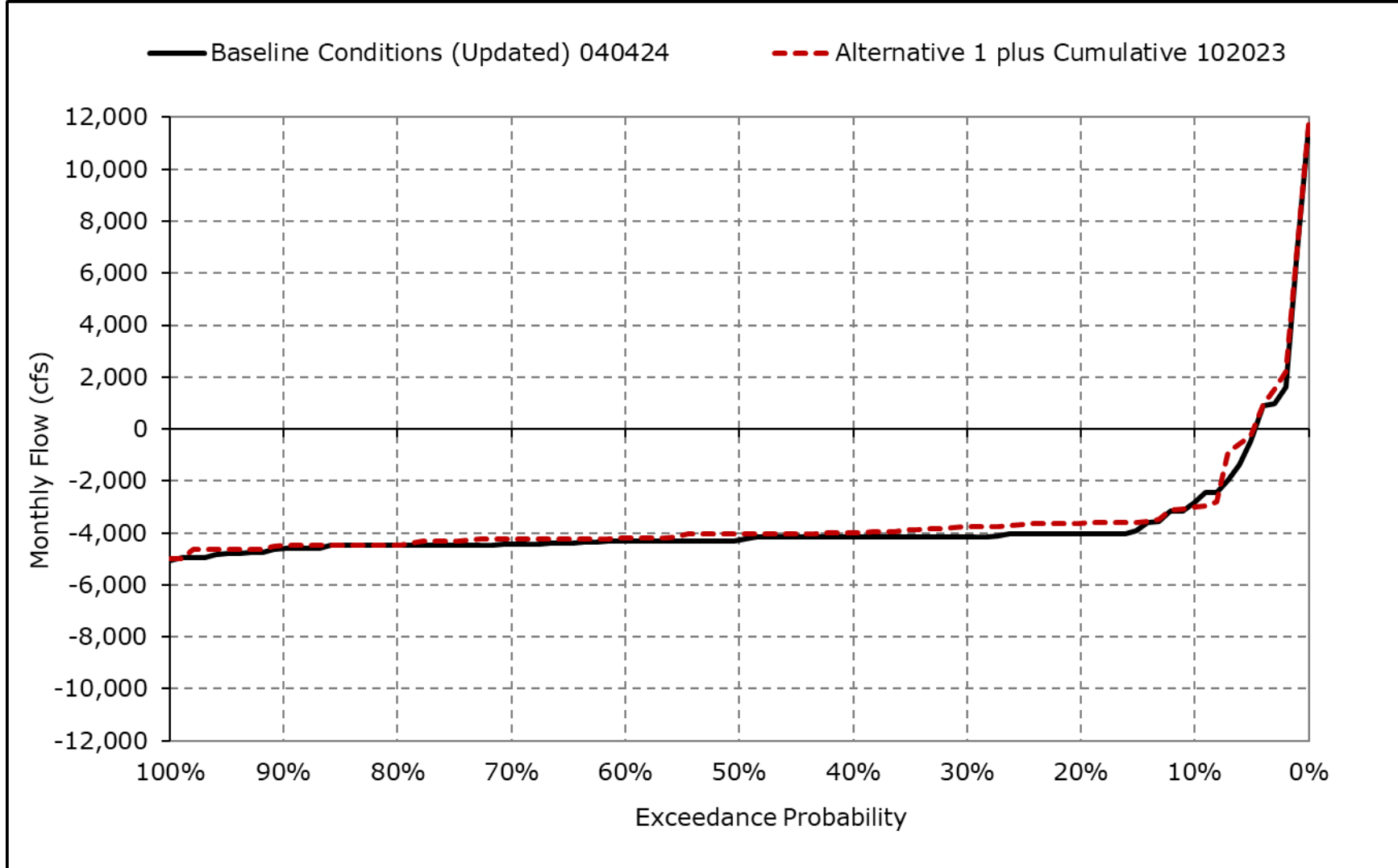
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6j. Old and Middle River Flow, January



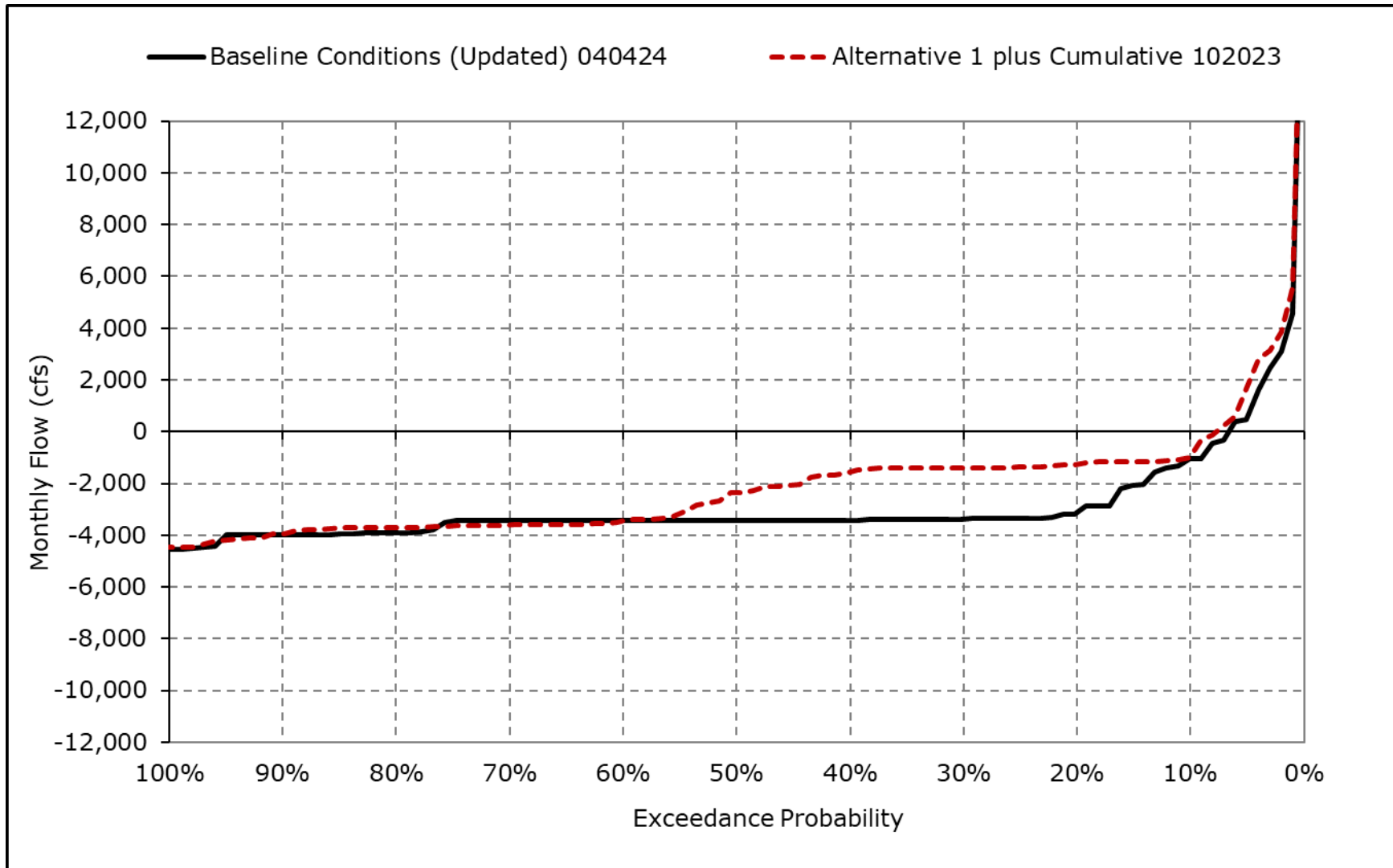
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6k. Old and Middle River Flow, February



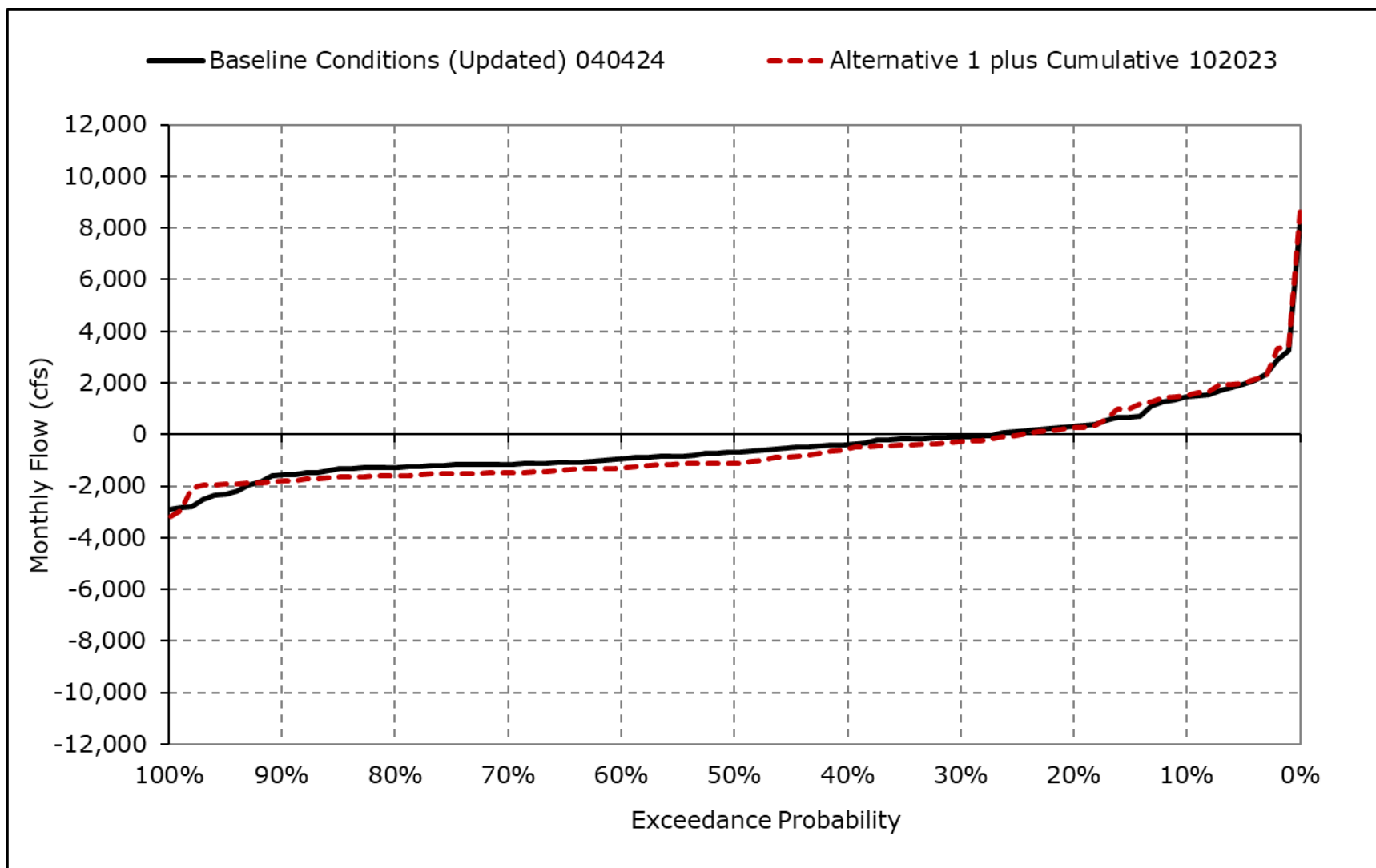
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6I. Old and Middle River Flow, March



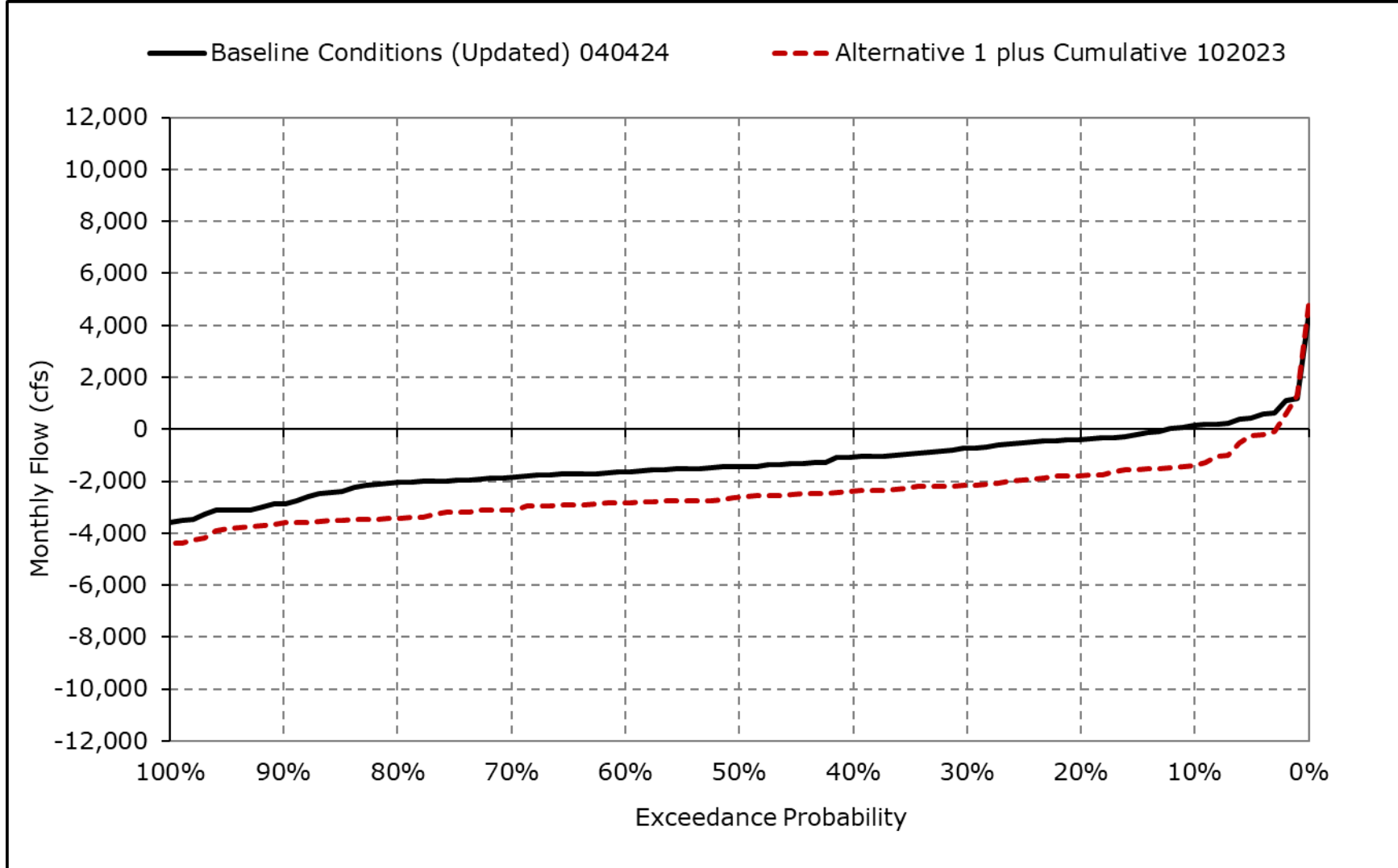
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6m. Old and Middle River Flow, April



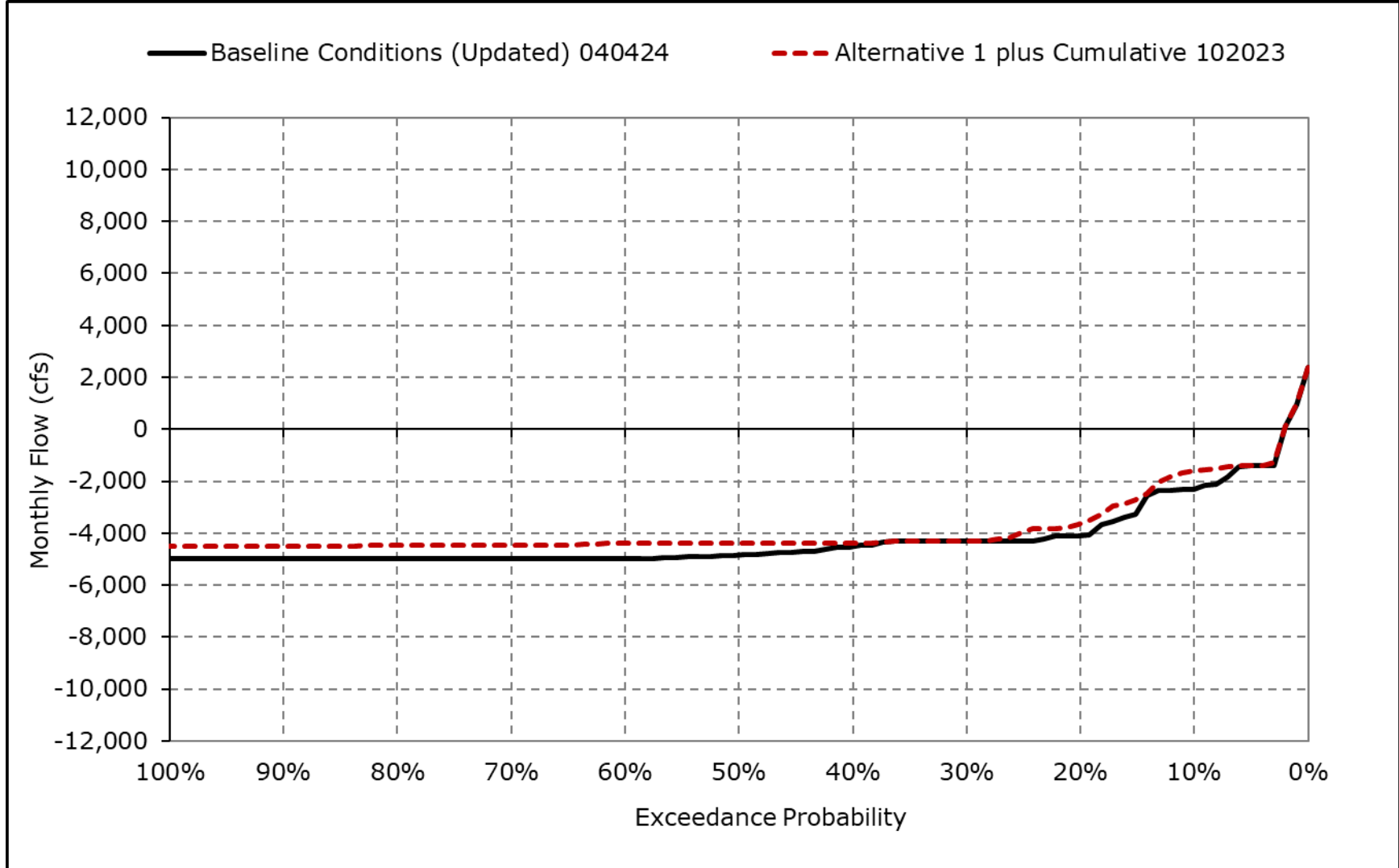
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6n. Old and Middle River Flow, May



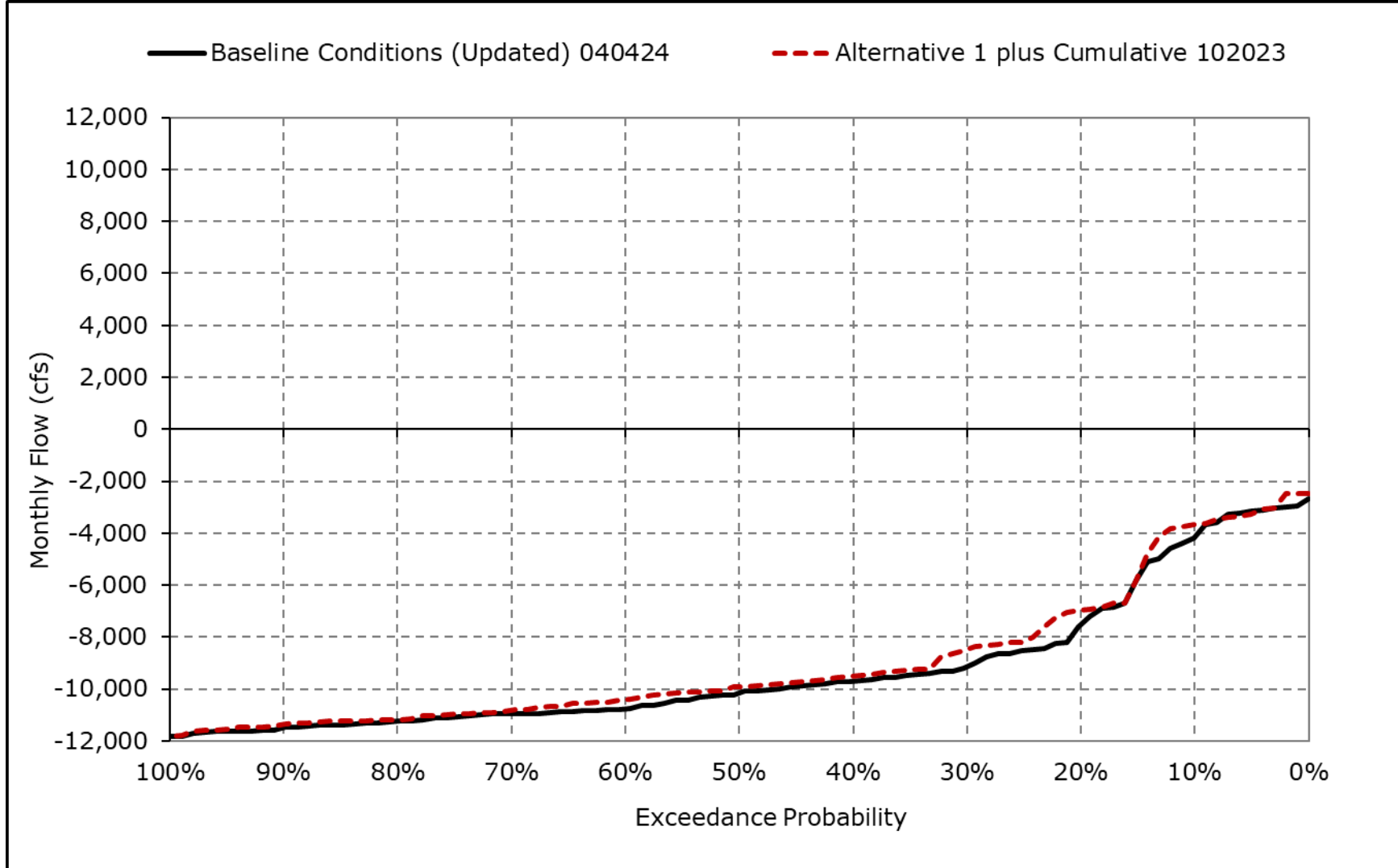
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6o. Old and Middle River Flow, June



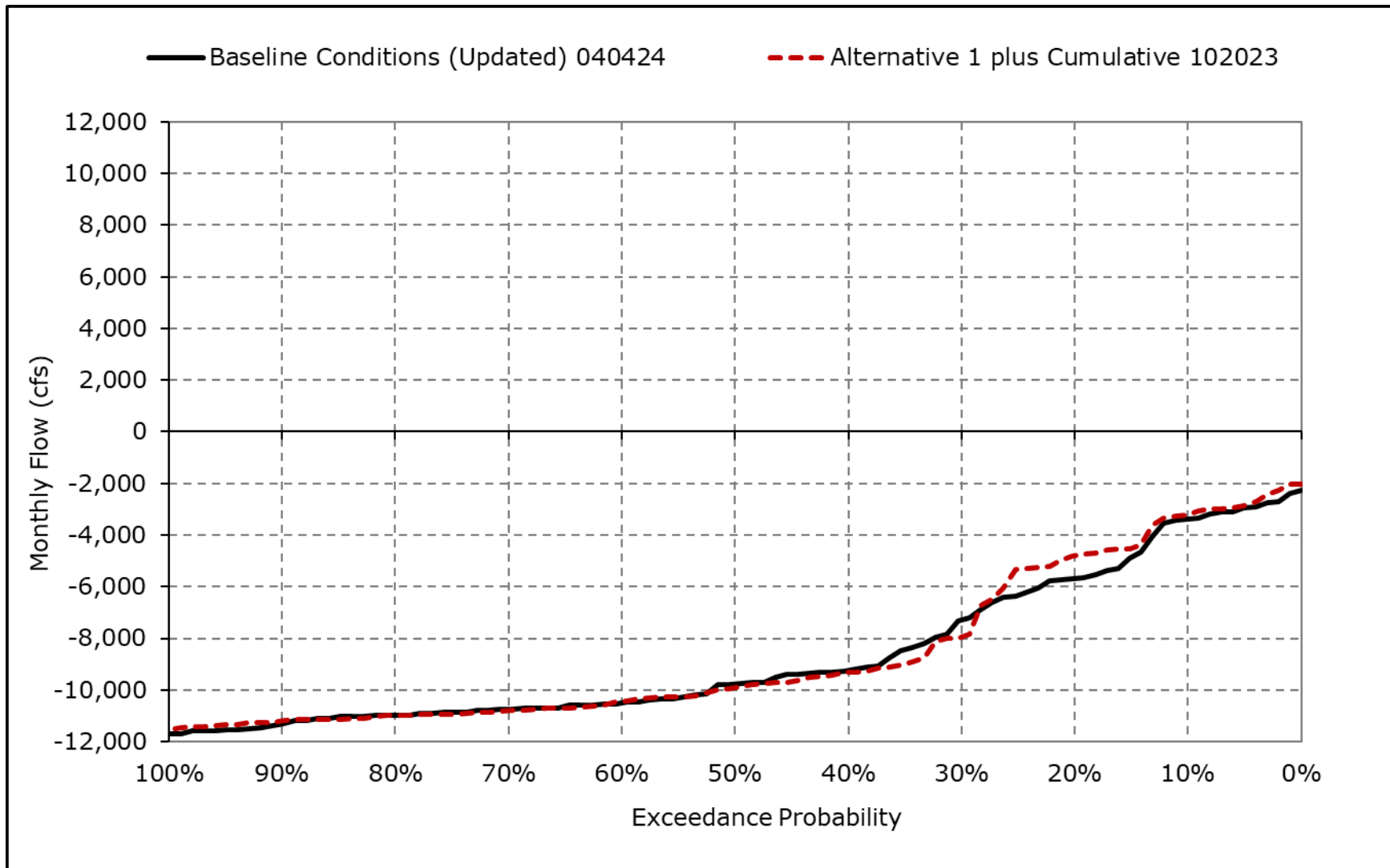
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6p. Old and Middle River Flow, July



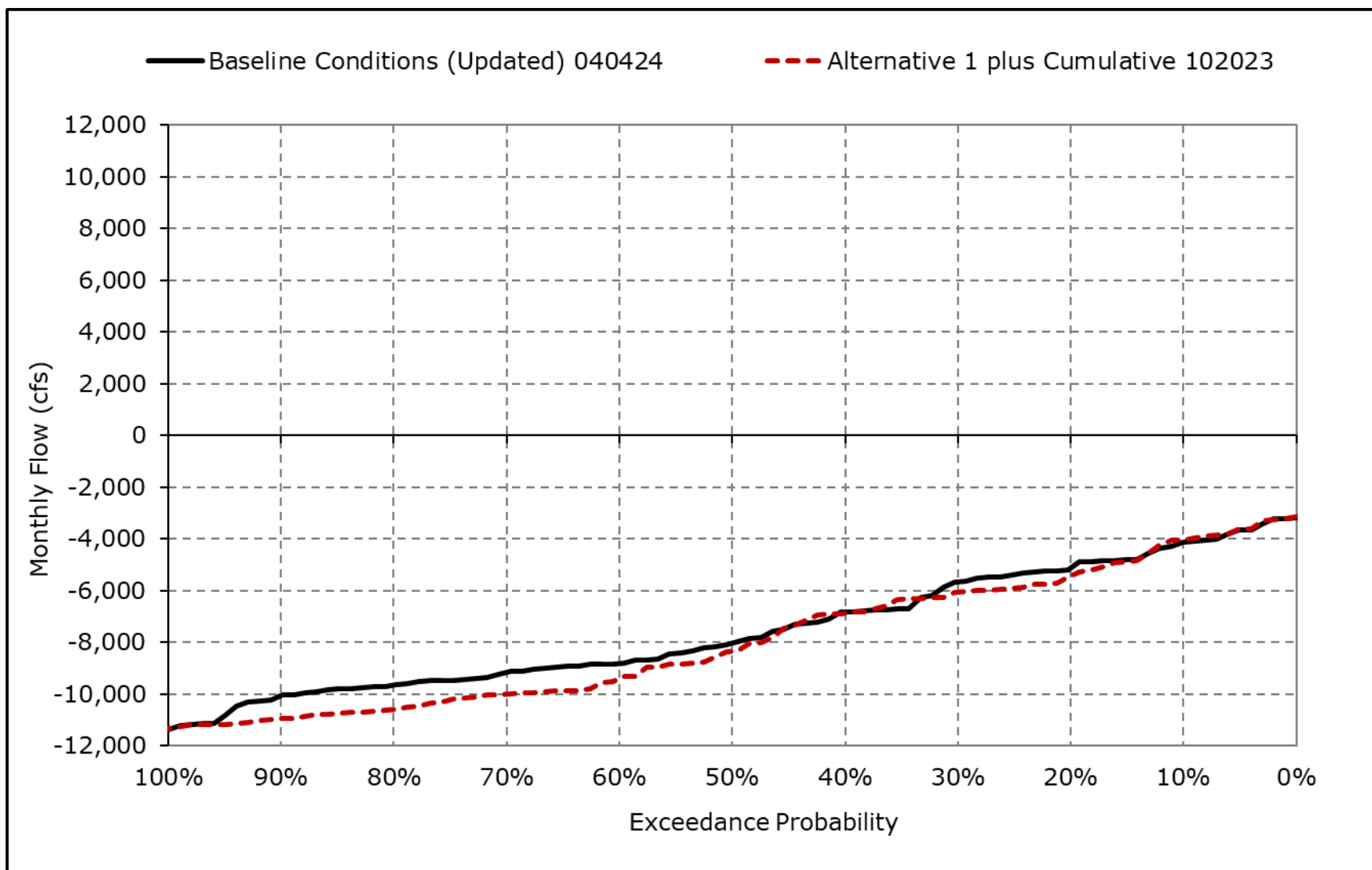
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6q. Old and Middle River Flow, August



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6r. Old and Middle River Flow, September



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Table 4G-3-7-1a. Qwest, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|
| 10% Exceedance | 1,041 | 359 | 8,369 | 15,346 | 20,961 | 20,523 | 16,713 | 13,257 | 9,911 | 1,244 | 862 | 1,086 |
| 20% Exceedance | 708 | -182 | 3,810 | 9,899 | 12,856 | 12,923 | 12,291 | 7,924 | 4,392 | 311 | 297 | 600 |
| 30% Exceedance | 383 | -670 | 1,041 | 4,871 | 9,991 | 8,500 | 10,274 | 6,172 | 2,841 | -467 | -621 | 144 |
| 40% Exceedance | 117 | -1,019 | -73 | 3,125 | 6,612 | 5,830 | 8,103 | 5,197 | 2,127 | -1,135 | -1,301 | -202 |
| 50% Exceedance | -165 | -1,538 | -874 | 2,214 | 4,299 | 4,212 | 6,220 | 4,219 | 1,499 | -1,978 | -2,454 | -393 |
| 60% Exceedance | -290 | -2,592 | -1,793 | 640 | 2,192 | 2,849 | 5,273 | 3,479 | 1,099 | -2,730 | -2,975 | -716 |
| 70% Exceedance | -591 | -3,245 | -3,712 | -479 | 1,471 | 2,268 | 3,995 | 2,732 | 738 | -3,123 | -3,152 | -988 |
| 80% Exceedance | -1,202 | -3,638 | -5,073 | -1,471 | 556 | 1,693 | 3,058 | 2,058 | 427 | -3,360 | -3,442 | -1,949 |
| 90% Exceedance | -2,177 | -4,349 | -5,695 | -2,068 | -359 | 582 | 2,234 | 1,721 | 262 | -4,141 | -4,049 | -2,918 |
| Full Simulation Period Average^a | -257 | -1,524 | 506 | 5,049 | 8,144 | 7,893 | 8,546 | 6,066 | 3,286 | -1,427 | -1,794 | -612 |
| Wet Water Years (30%) | -758 | -822 | 5,869 | 13,436 | 17,795 | 17,086 | 15,391 | 11,230 | 7,624 | 254 | -1,316 | 367 |
| Above Normal Water Years (11%) | 322 | -2,690 | -1,688 | 7,259 | 10,551 | 9,386 | 8,678 | 5,228 | 2,549 | -1,372 | -3,012 | 608 |
| Below Normal Water Years (21%) | -127 | -2,052 | -1,822 | 1,680 | 5,202 | 4,933 | 7,920 | 5,584 | 1,476 | -3,246 | -3,922 | -2,914 |
| Dry Water Years (22%) | -388 | -2,021 | -2,425 | -338 | 2,019 | 2,103 | 4,034 | 2,994 | 533 | -3,440 | -1,598 | -965 |
| Critical Water Years (16%) | 292 | -660 | -956 | -365 | 678 | 1,474 | 2,644 | 1,819 | 1,822 | 538 | 673 | 219 |

Table 4G-3-7-1b. Qwest, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|
| 10% Exceedance | 1,166 | 262 | 8,371 | 15,297 | 20,891 | 20,654 | 18,524 | 12,127 | 9,930 | 1,281 | 1,182 | 978 |
| 20% Exceedance | 695 | -478 | 3,958 | 10,156 | 13,019 | 13,772 | 13,414 | 7,561 | 4,695 | 820 | 217 | 357 |
| 30% Exceedance | 444 | -821 | 1,249 | 5,155 | 10,102 | 9,324 | 9,857 | 5,285 | 3,272 | -559 | -314 | -205 |
| 40% Exceedance | 343 | -1,027 | -198 | 3,395 | 6,974 | 6,926 | 8,060 | 4,413 | 2,603 | -1,224 | -1,302 | -559 |
| 50% Exceedance | 47 | -1,765 | -1,038 | 2,360 | 4,708 | 5,143 | 6,918 | 3,527 | 1,993 | -1,711 | -2,539 | -926 |
| 60% Exceedance | -224 | -2,712 | -1,924 | 822 | 2,781 | 4,383 | 5,351 | 2,706 | 1,657 | -2,268 | -3,028 | -1,179 |
| 70% Exceedance | -523 | -3,384 | -3,311 | -447 | 1,880 | 2,960 | 4,538 | 2,197 | 1,329 | -2,701 | -3,308 | -1,453 |
| 80% Exceedance | -1,045 | -3,633 | -4,821 | -1,104 | 879 | 1,826 | 3,149 | 1,655 | 1,021 | -3,076 | -3,567 | -1,808 |
| 90% Exceedance | -1,845 | -4,376 | -5,554 | -1,798 | -105 | 715 | 2,175 | 1,225 | 849 | -3,393 | -3,986 | -3,168 |
| Full Simulation Period Average^a | -125 | -1,679 | 531 | 5,229 | 8,382 | 8,718 | 9,080 | 5,411 | 3,725 | -1,175 | -1,755 | -864 |
| Wet Water Years (30%) | -520 | -1,084 | 5,974 | 13,622 | 17,724 | 17,603 | 16,776 | 10,525 | 7,909 | 264 | -1,629 | -393 |
| Above Normal Water Years (11%) | 586 | -2,681 | -2,167 | 7,393 | 10,799 | 10,723 | 10,365 | 5,516 | 2,981 | -1,622 | -3,205 | 570 |
| Below Normal Water Years (21%) | -5 | -2,186 | -1,905 | 1,912 | 5,479 | 6,610 | 7,301 | 4,158 | 2,038 | -2,981 | -3,714 | -2,891 |
| Dry Water Years (22%) | -367 | -2,240 | -2,250 | -104 | 2,405 | 2,899 | 4,374 | 2,462 | 1,067 | -2,731 | -1,366 | -1,157 |
| Critical Water Years (16%) | 300 | -667 | -801 | -308 | 1,232 | 1,449 | 2,569 | 1,447 | 2,260 | 943 | 1,042 | 332 |

Table 4G-3-7-1c. Qwest, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|-------------|-------------|------------|------------|--------------|--------------|---------------|------------|-------------|-------------|-------------|
| 10% Exceedance | 124 | -98 | 3 | -49 | -70 | 132 | 1,811 | -1,130 | 19 | 37 | 320 | -108 |
| 20% Exceedance | -13 | -296 | 148 | 257 | 163 | 849 | 1,122 | -363 | 303 | 510 | -80 | -243 |
| 30% Exceedance | 60 | -152 | 208 | 283 | 111 | 824 | -416 | -887 | 431 | -92 | 307 | -349 |
| 40% Exceedance | 225 | -8 | -125 | 270 | 362 | 1,096 | -44 | -785 | 476 | -89 | -2 | -356 |
| 50% Exceedance | 211 | -227 | -164 | 147 | 409 | 931 | 698 | -692 | 495 | 268 | -85 | -533 |
| 60% Exceedance | 66 | -120 | -131 | 182 | 590 | 1,534 | 77 | -773 | 558 | 462 | -53 | -463 |
| 70% Exceedance | 68 | -140 | 402 | 32 | 409 | 691 | 544 | -535 | 591 | 421 | -156 | -465 |
| 80% Exceedance | 157 | 4 | 251 | 367 | 323 | 134 | 91 | -403 | 594 | 284 | -125 | 141 |
| 90% Exceedance | 332 | -27 | 141 | 270 | 254 | 133 | -59 | -496 | 587 | 748 | 64 | -250 |
| Full Simulation Period Average^a | 132 | -155 | 24 | 180 | 238 | 825 | 534 | -656 | 439 | 252 | 38 | -252 |
| Wet Water Years (30%) | 237 | -262 | 104 | 187 | -70 | 517 | 1,384 | -704 | 285 | 9 | -313 | -760 |
| Above Normal Water Years (11%) | 264 | 9 | -478 | 135 | 248 | 1,337 | 1,687 | 287 | 432 | -251 | -193 | -38 |
| Below Normal Water Years (21%) | 122 | -134 | -83 | 232 | 276 | 1,677 | -618 | -1,427 | 562 | 265 | 208 | 23 |
| Dry Water Years (22%) | 22 | -218 | 175 | 234 | 386 | 796 | 340 | -532 | 534 | 709 | 232 | -193 |
| Critical Water Years (16%) | 8 | -7 | 154 | 57 | 554 | -25 | -75 | -372 | 438 | 404 | 368 | 113 |

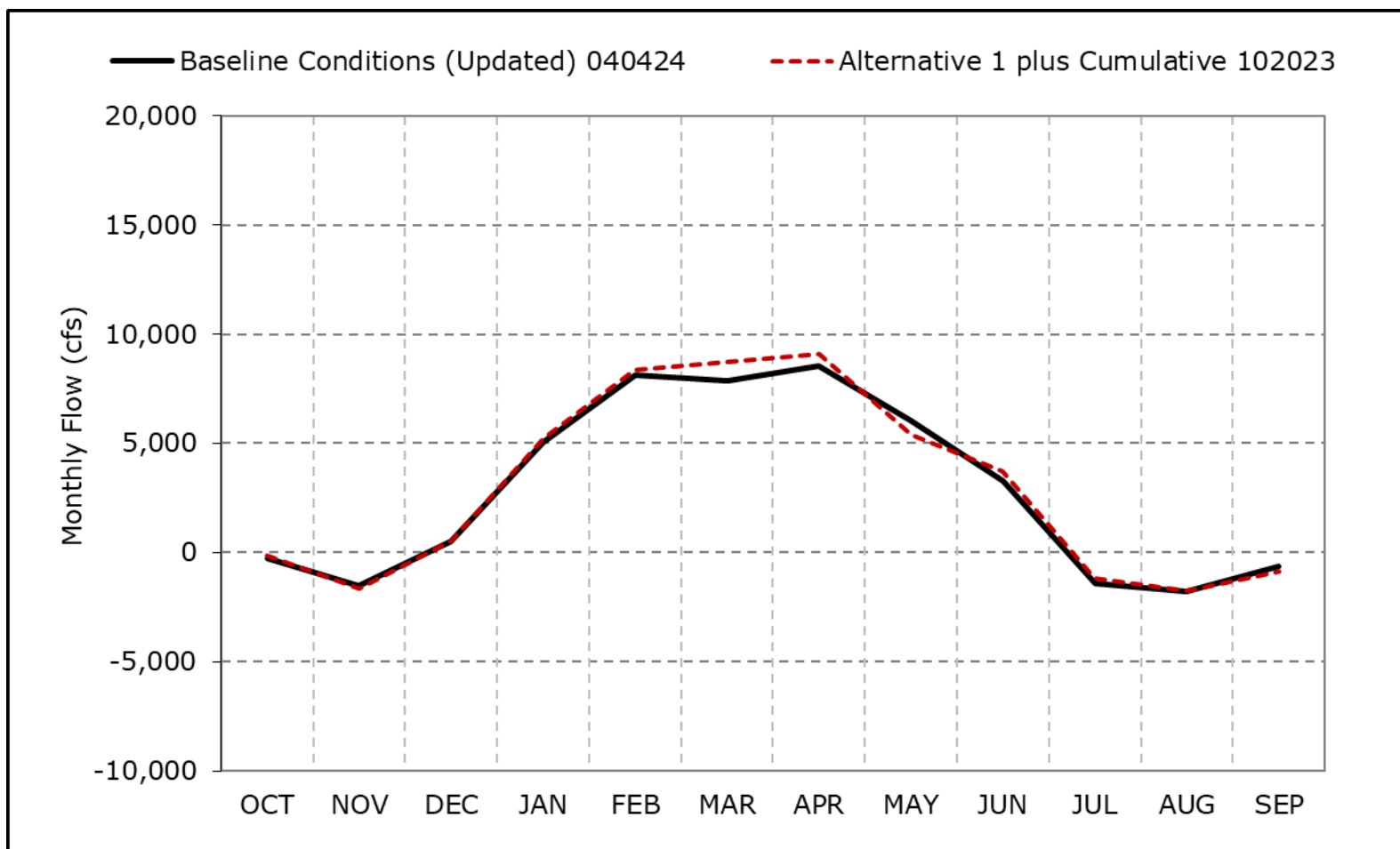
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-7a. Qwest, Long-Term Average Flow

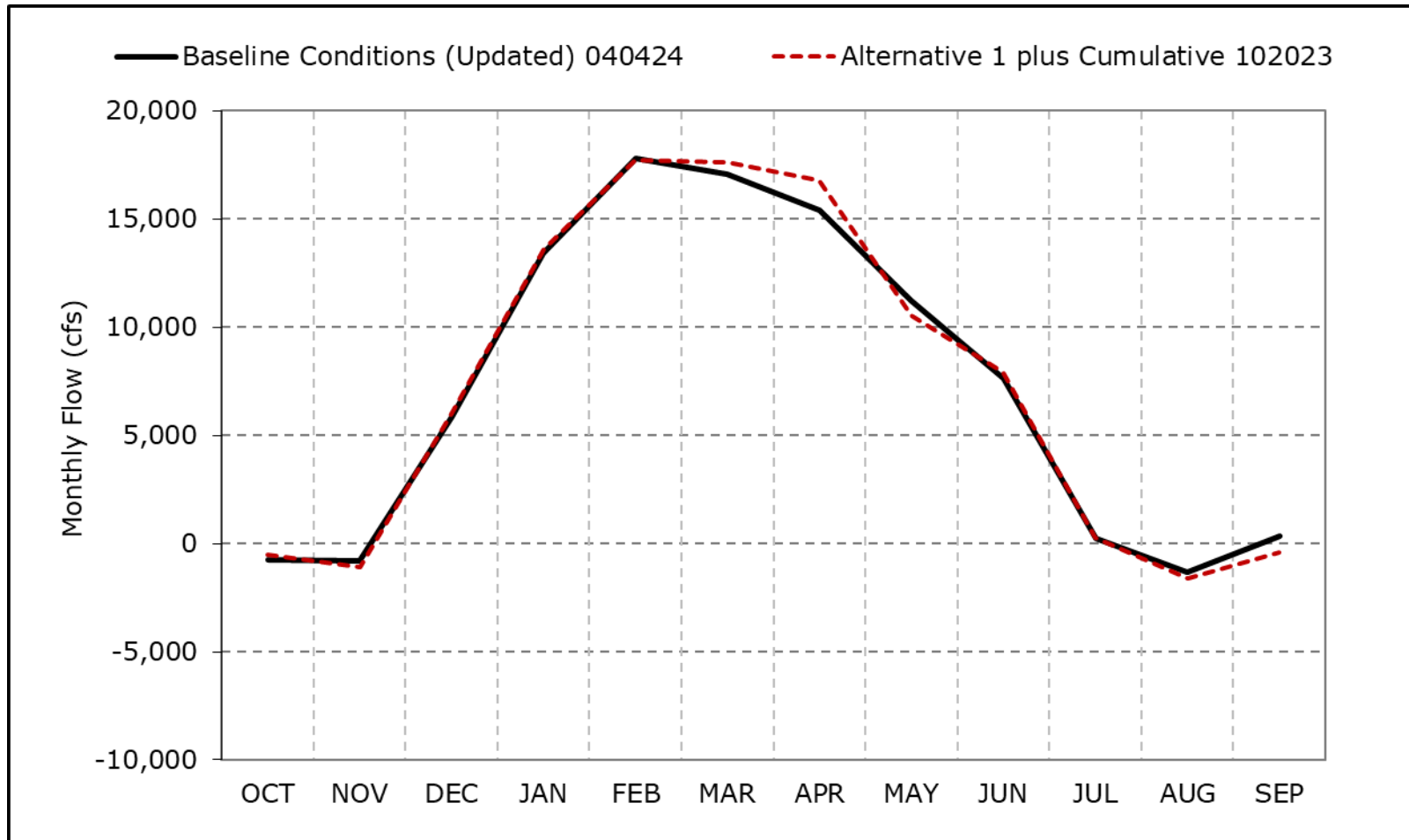


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7b. Qwest, Wet Year Average Flow

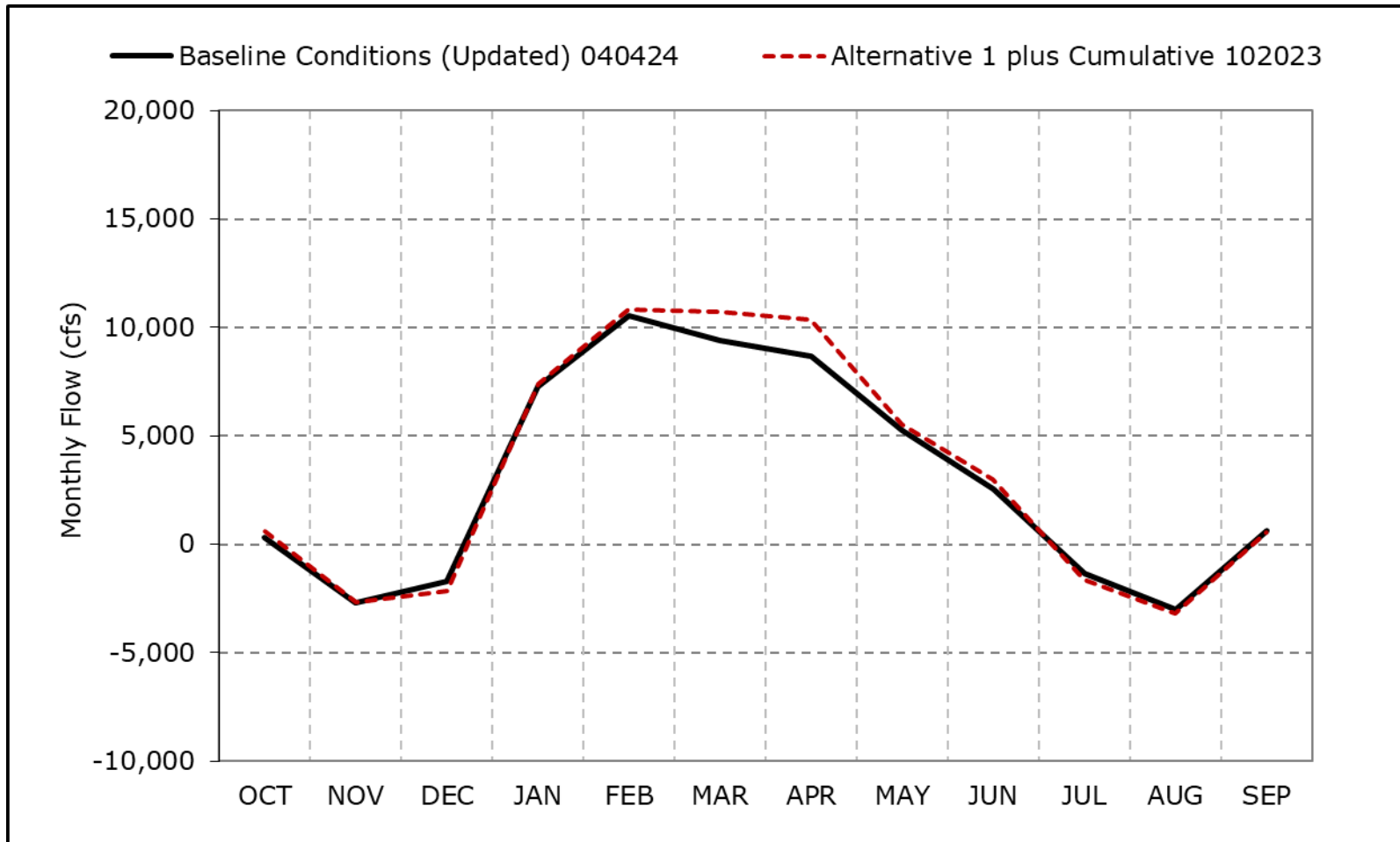


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7c. Qwest, Above Normal Year Average Flow

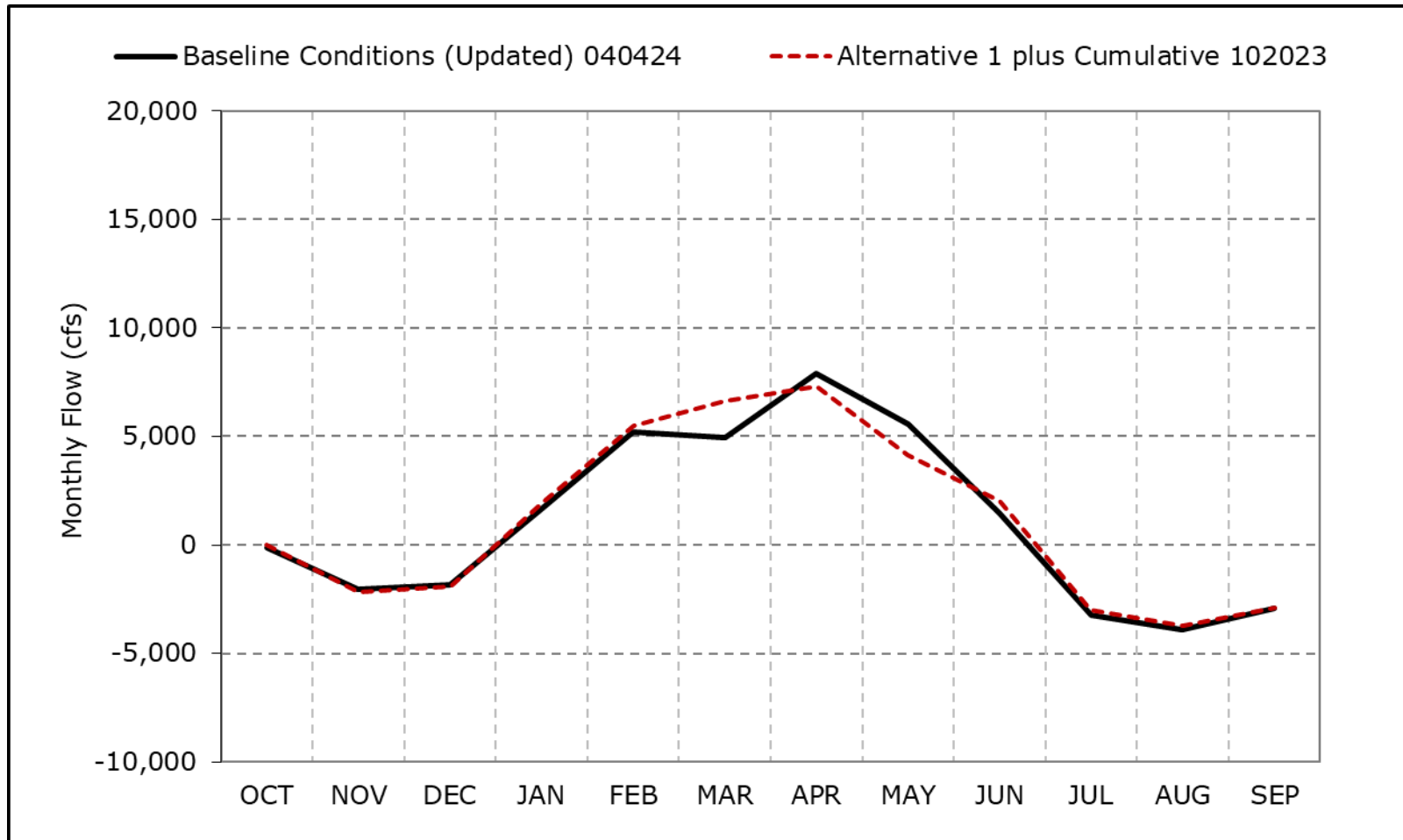


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7d. Qwest, Below Normal Year Average Flow

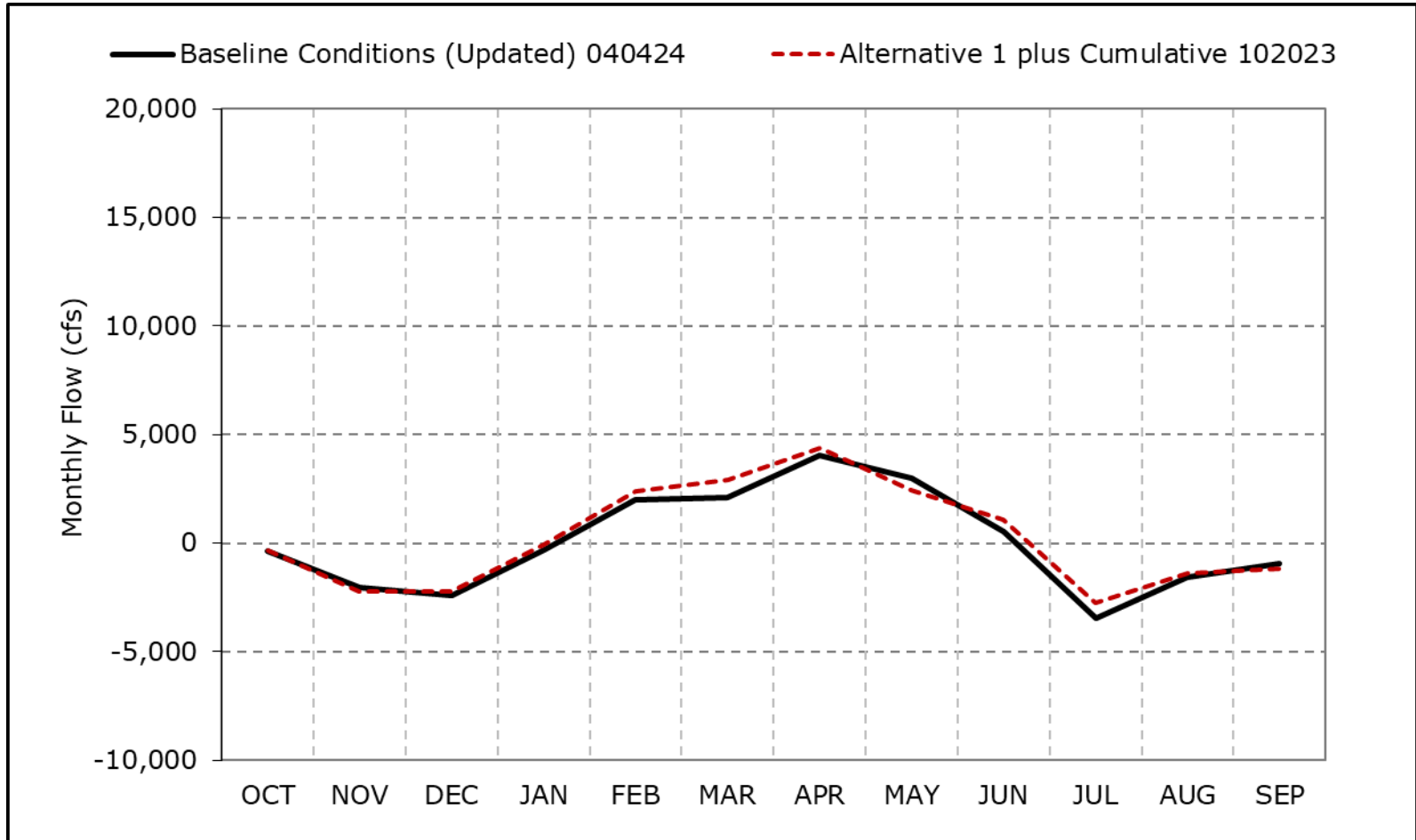


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7e. Qwest, Dry Year Average Flow

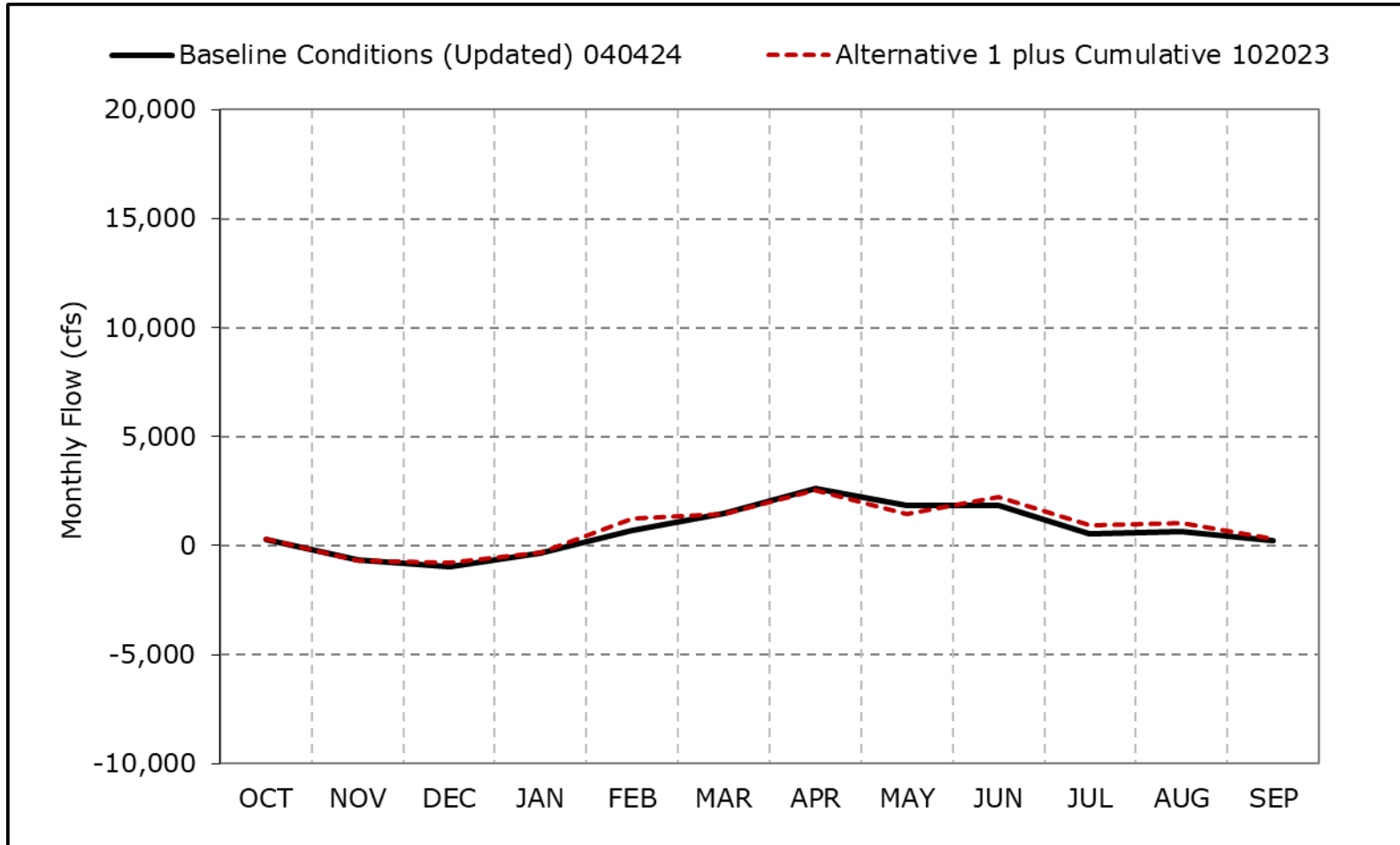


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7f. Qwest, Critical Year Average Flow

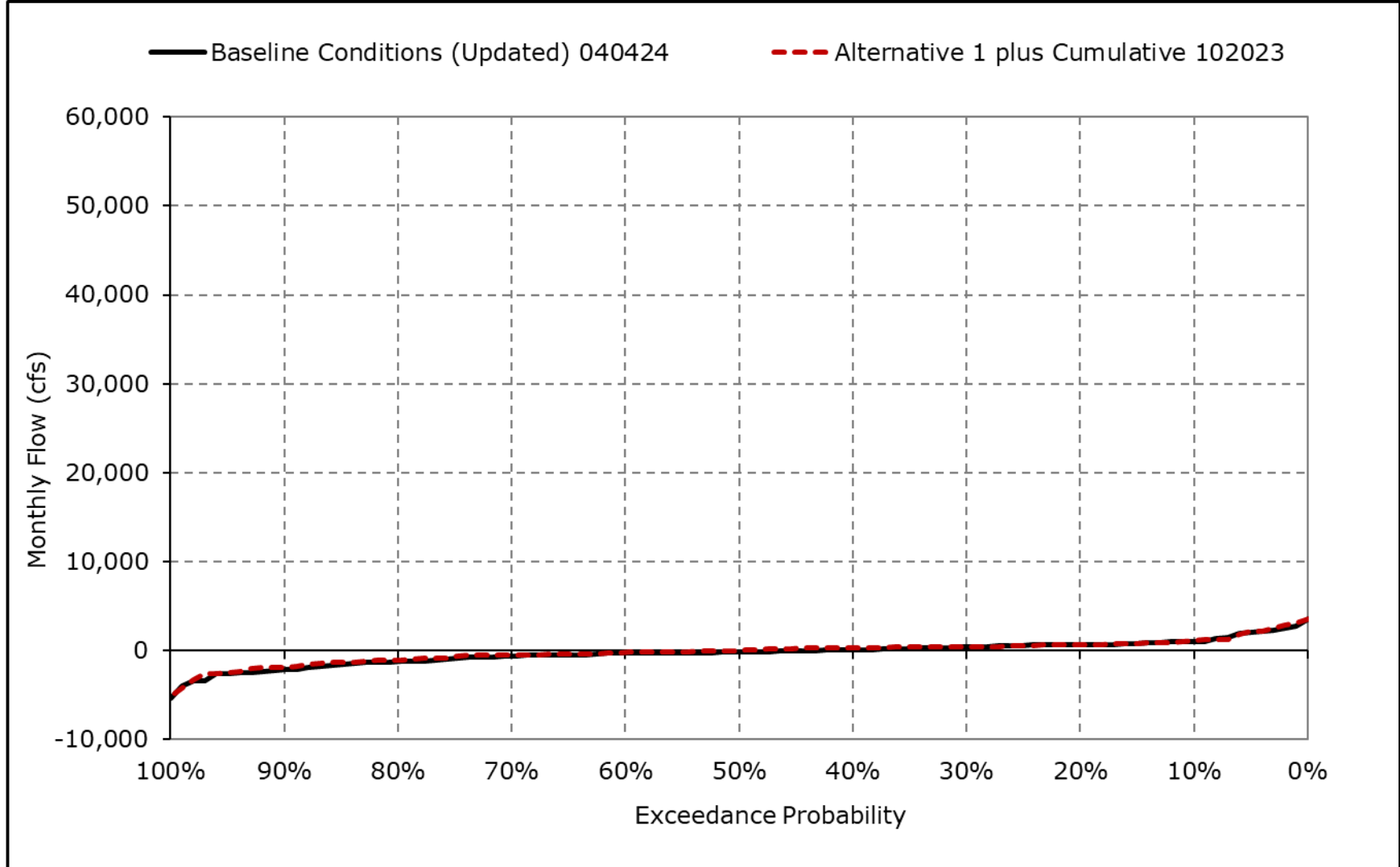


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

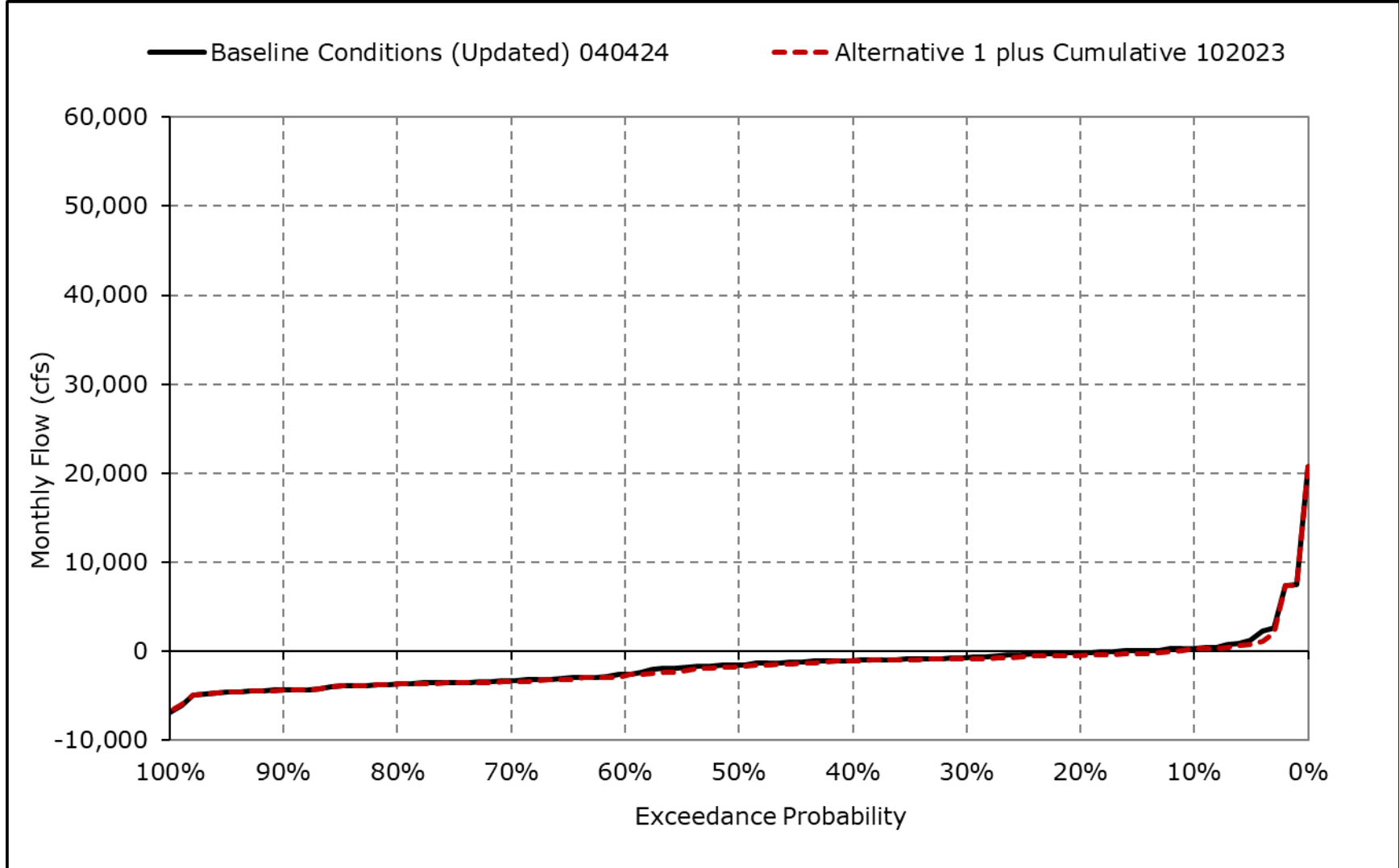
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7g. Qwest, October



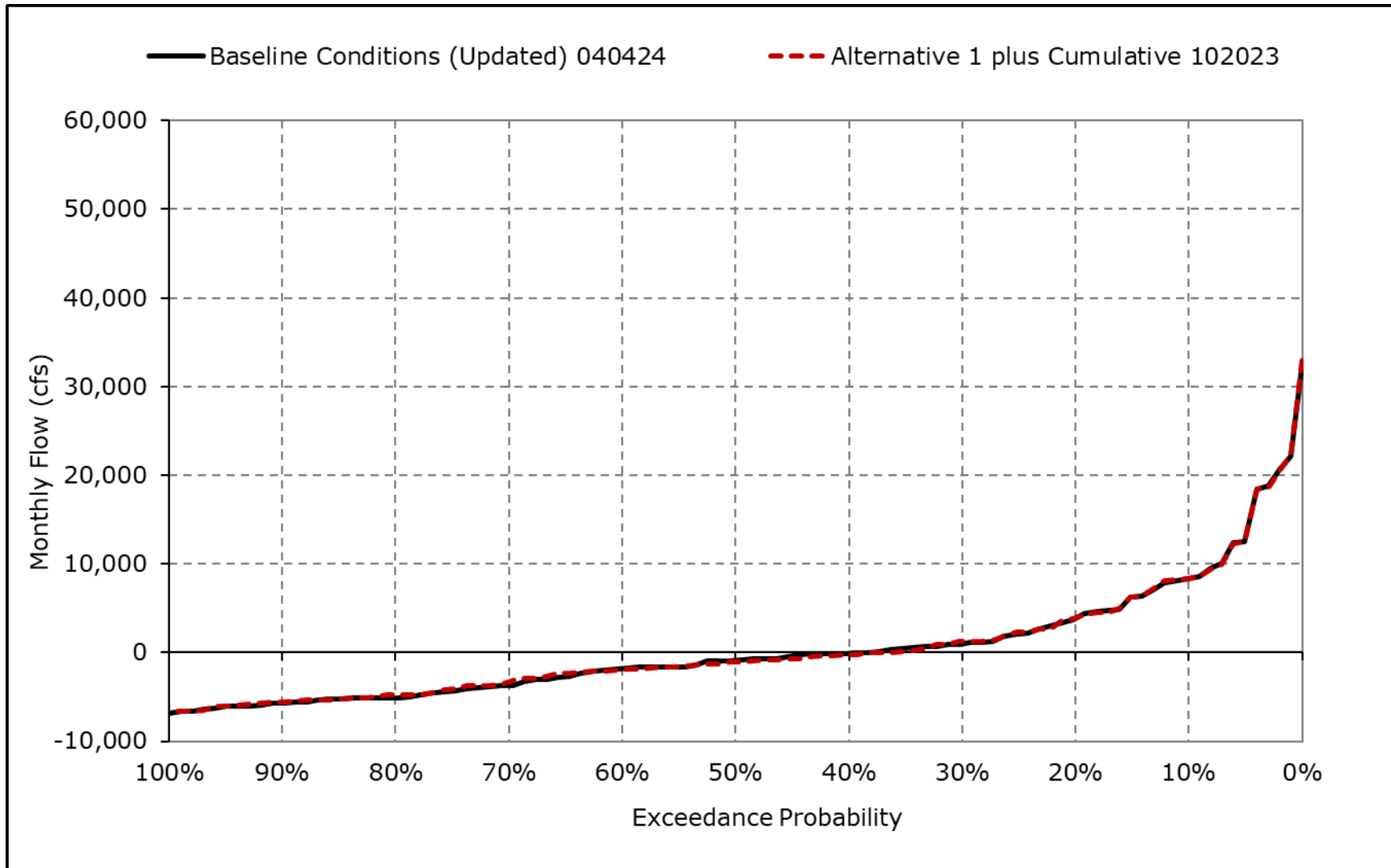
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7h. Qwest, November



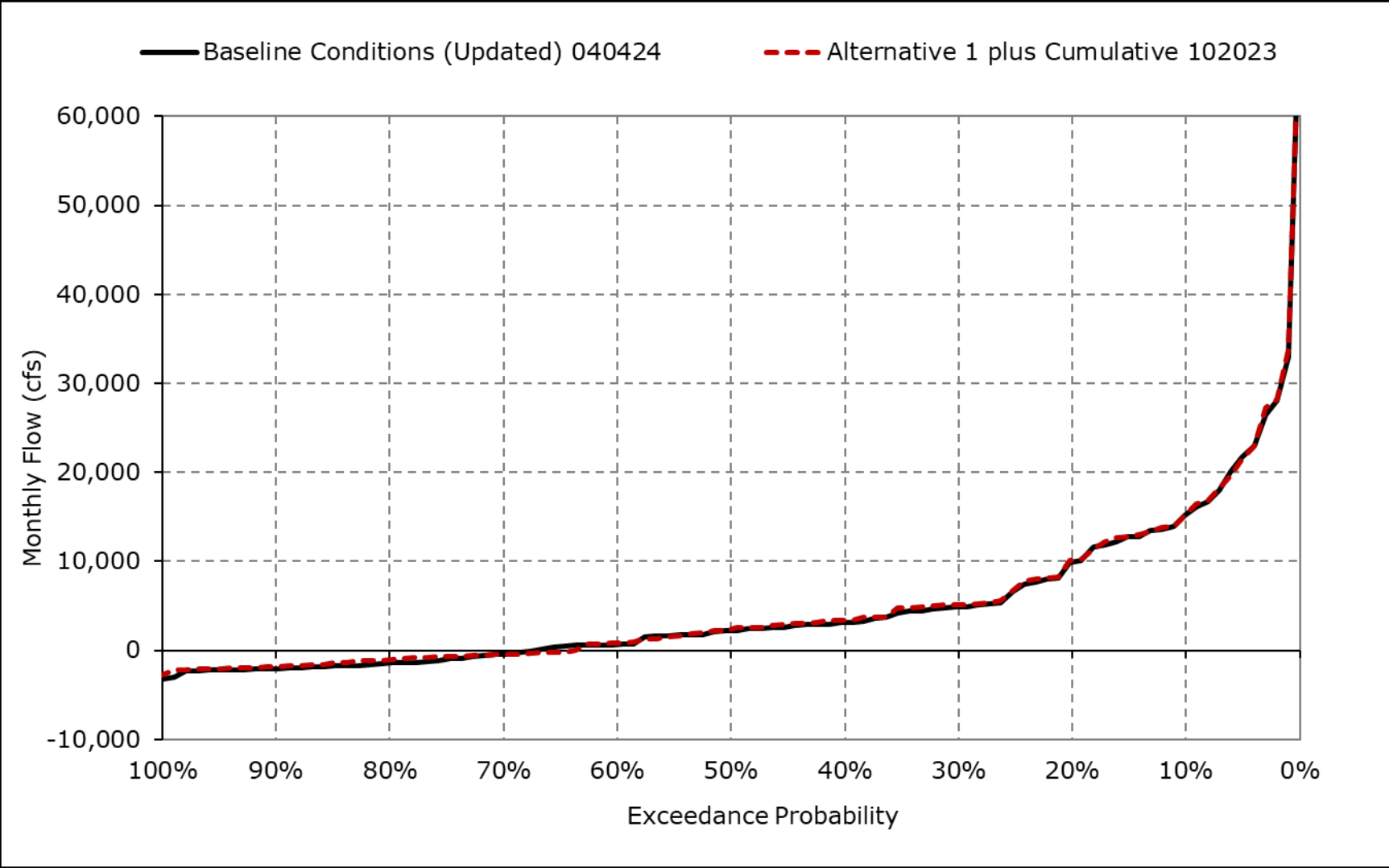
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7i. Qwest, December



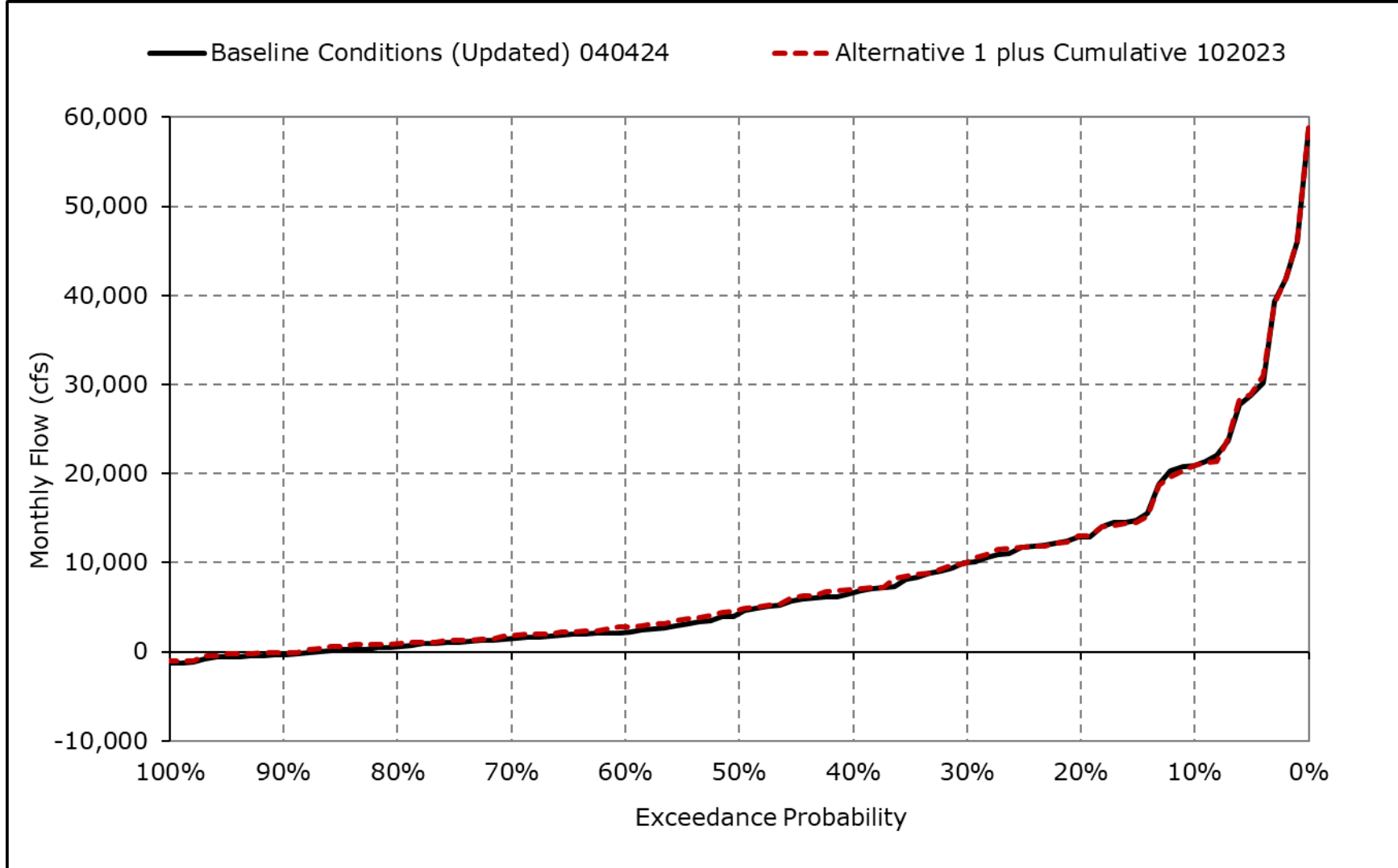
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7j. Qwest, January



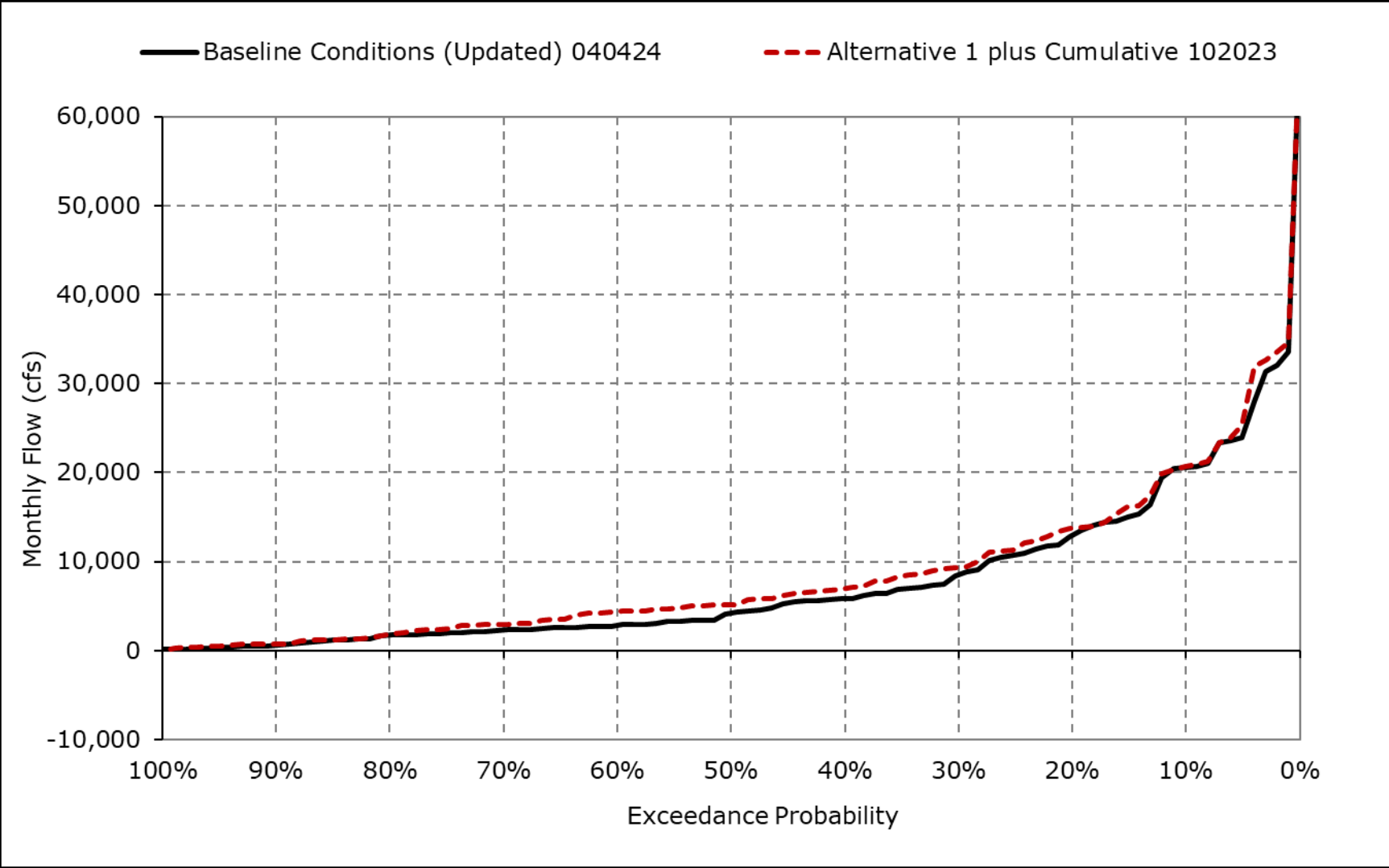
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7k. Qwest, February



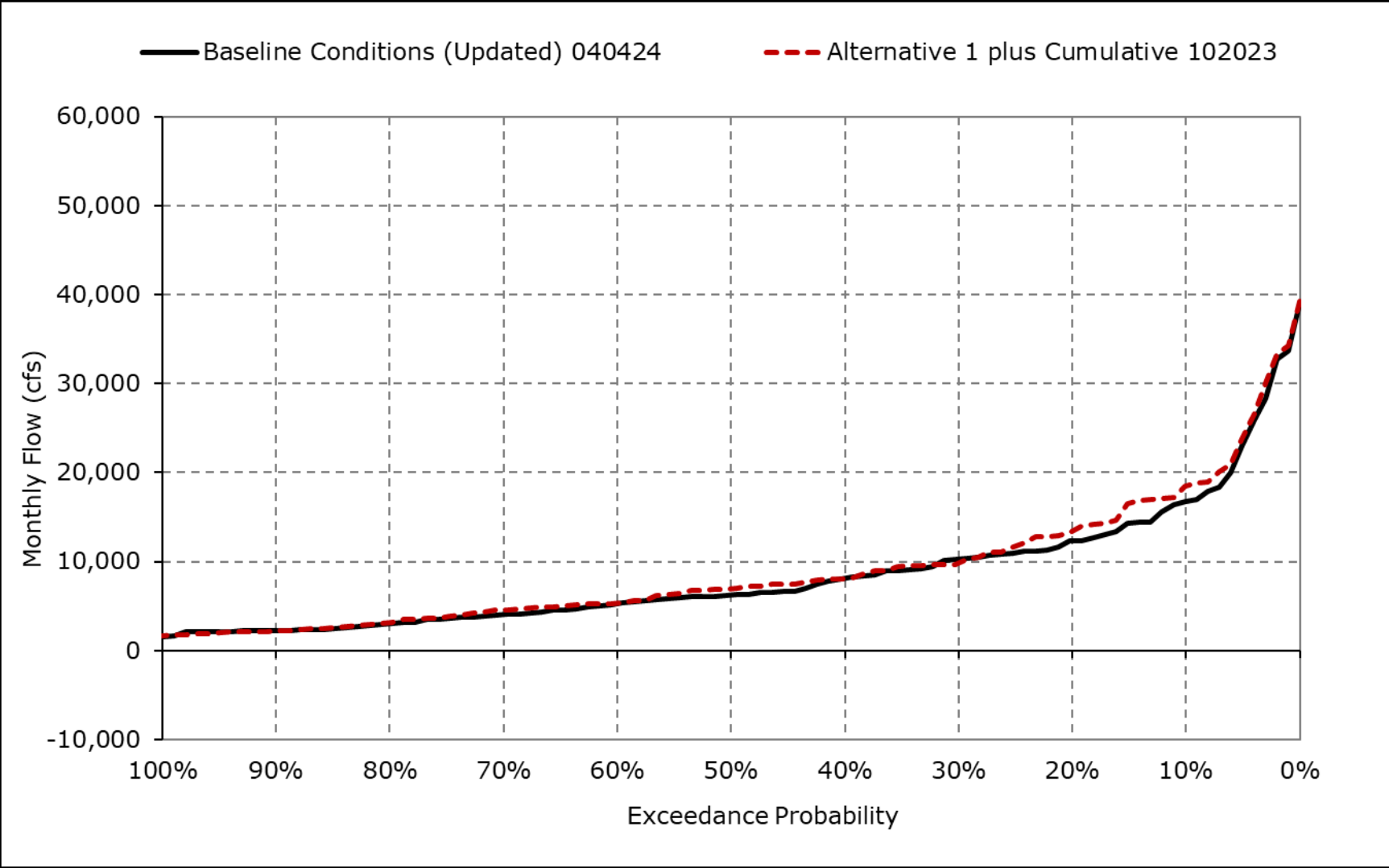
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7I. Qwest, March



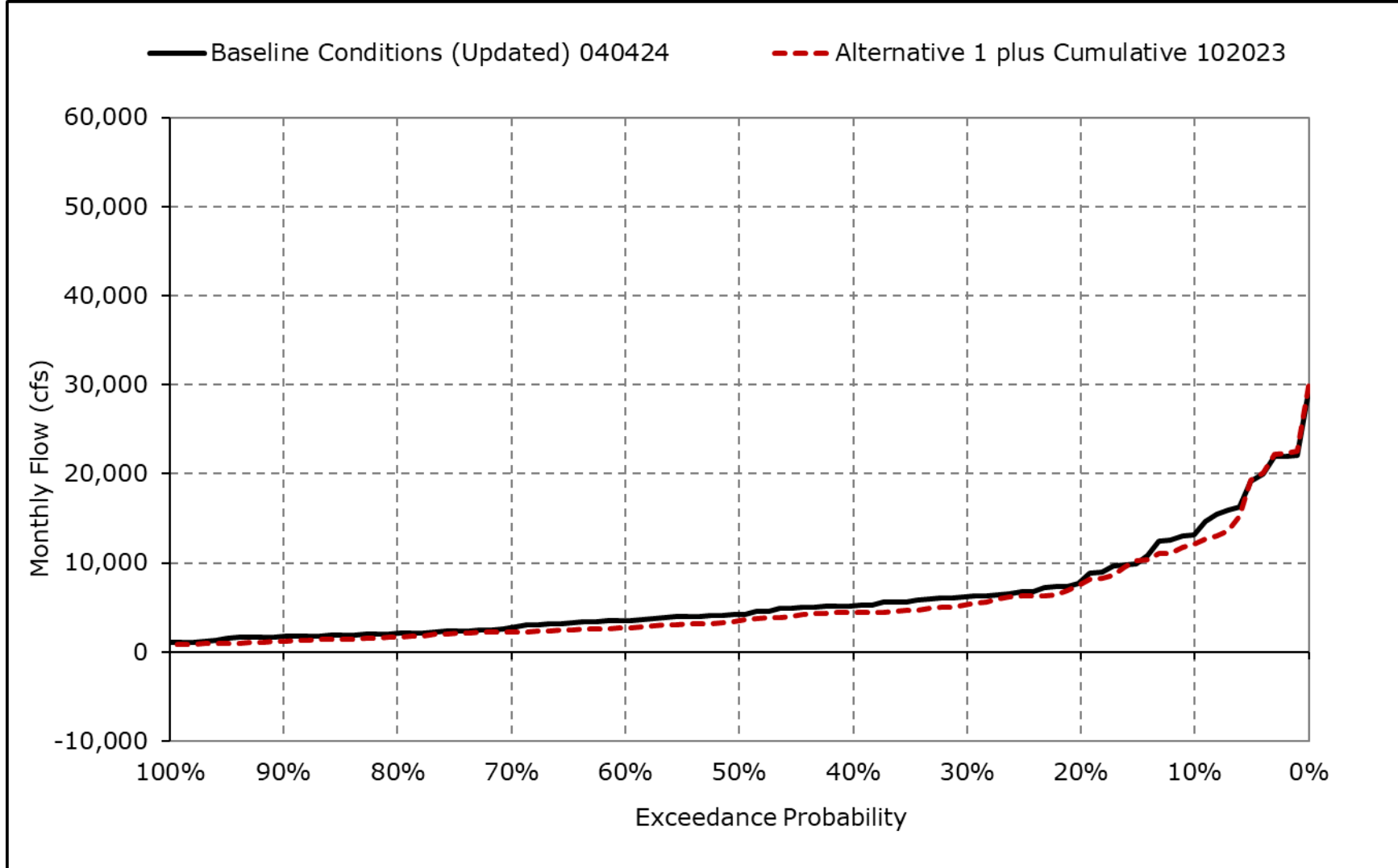
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7m. Qwest, April



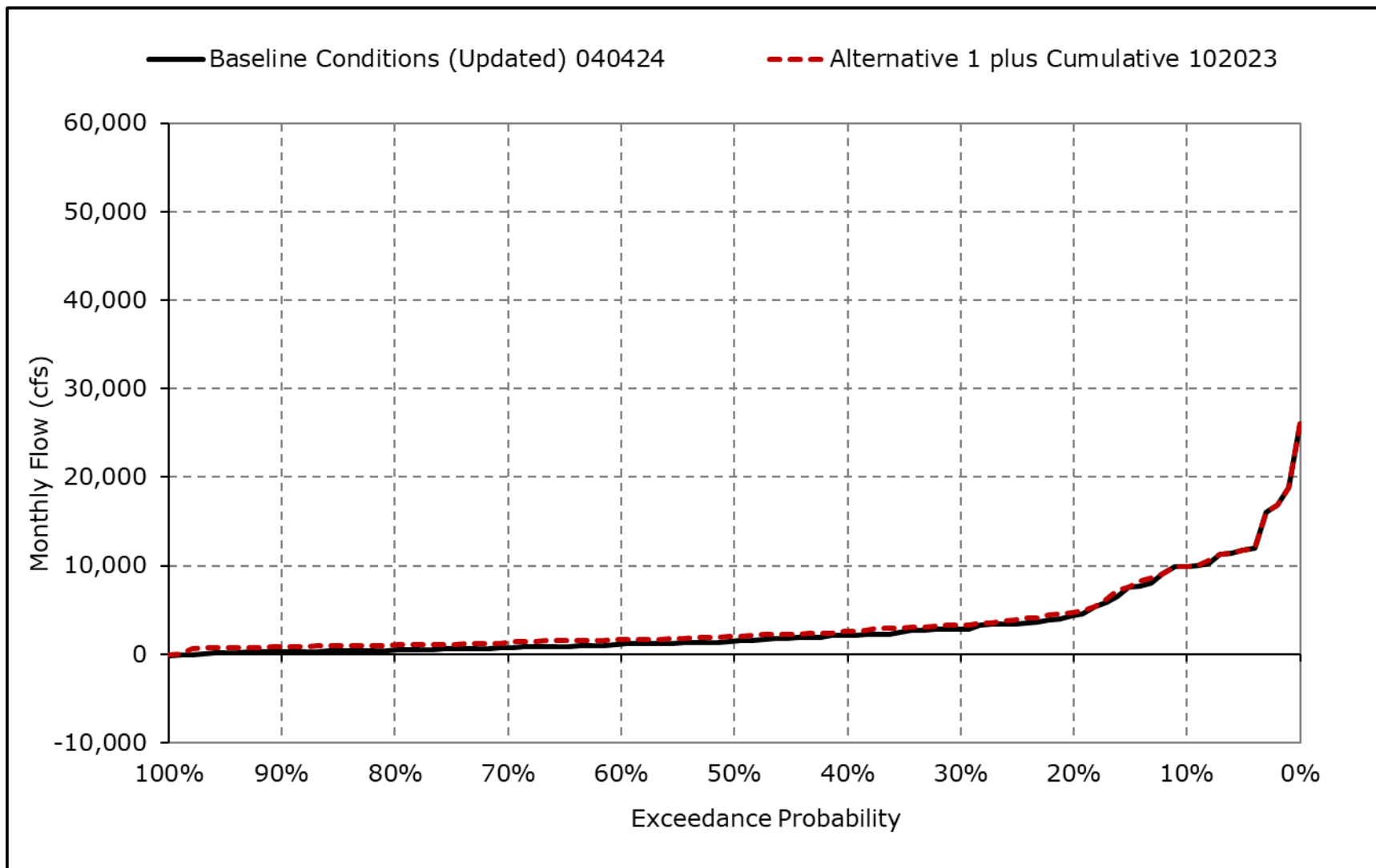
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7n. Qwest, May



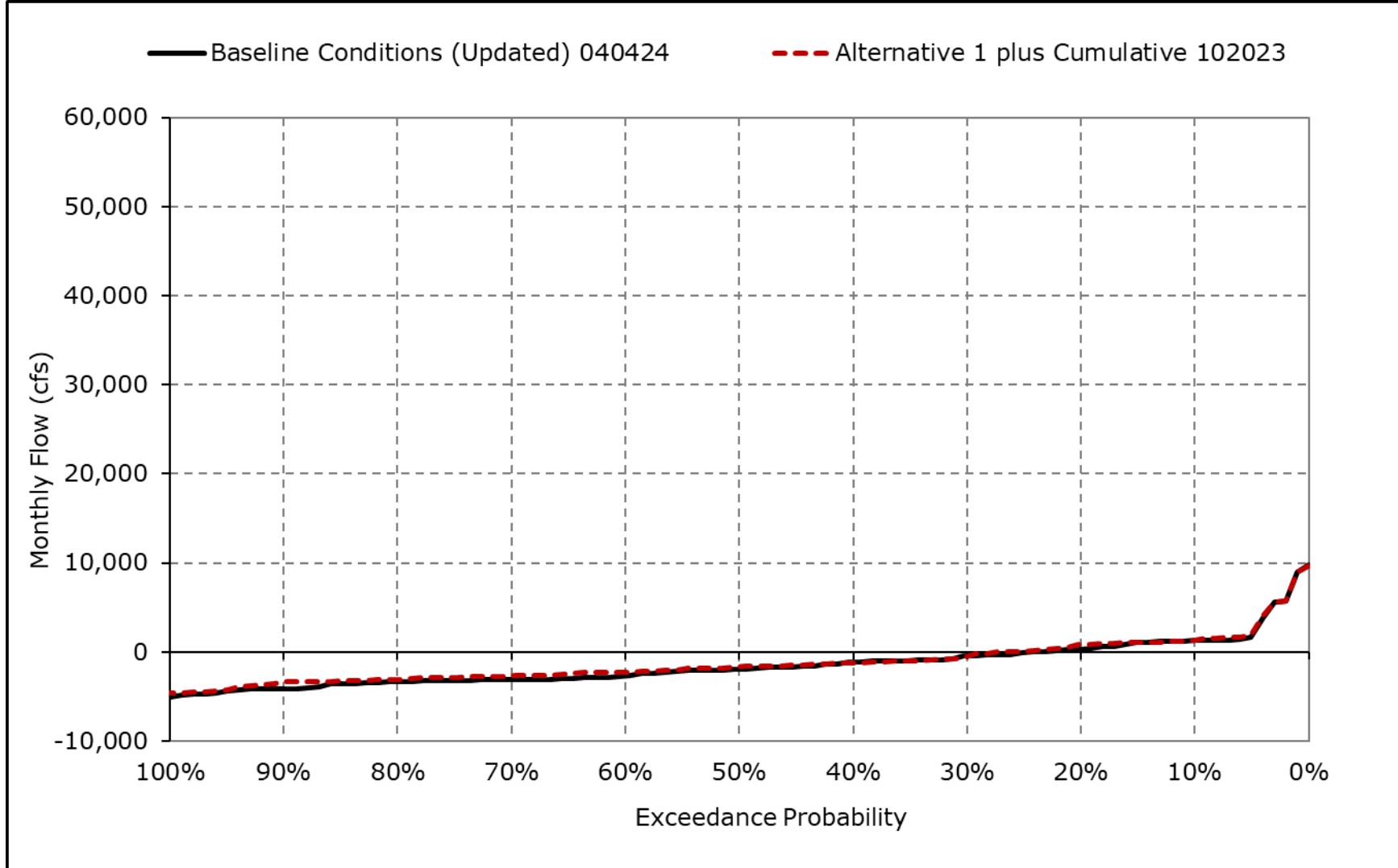
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7o. Qwest, June



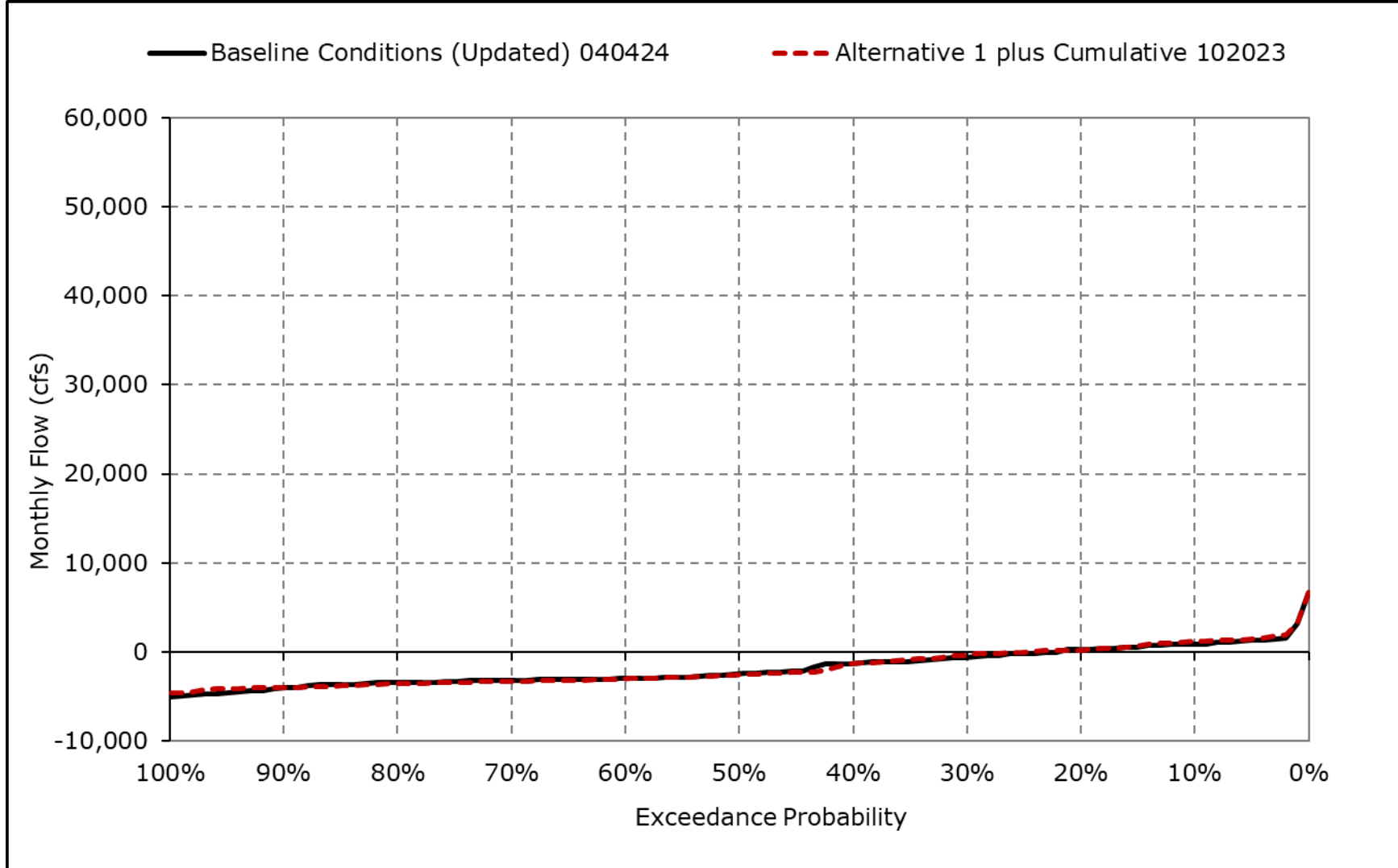
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7p. Qwest, July



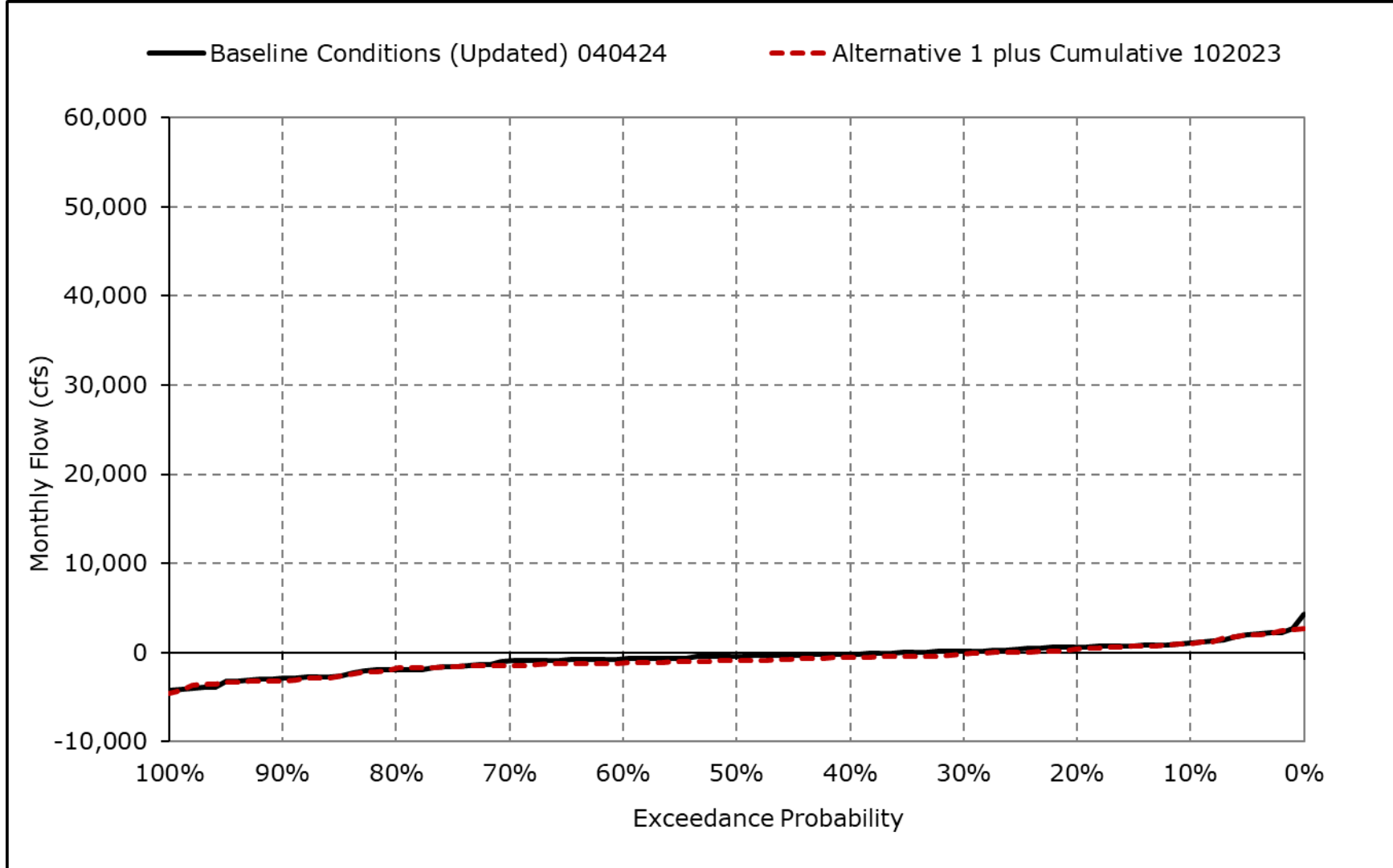
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7q. Qwest, August



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7r. Qwest, September



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Table 4G-3-8-1a. Delta Outflow, Baseline Conditions (Updated) 040424, Monthly Outflow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|
| 10% Exceedance | 8,750 | 15,802 | 61,124 | 93,124 | 124,948 | 95,161 | 63,477 | 47,600 | 31,869 | 10,942 | 7,085 | 10,504 |
| 20% Exceedance | 8,125 | 8,426 | 34,906 | 61,502 | 79,484 | 62,006 | 45,213 | 33,061 | 20,571 | 8,749 | 6,112 | 10,181 |
| 30% Exceedance | 7,969 | 6,909 | 19,731 | 36,740 | 56,477 | 45,515 | 31,001 | 23,220 | 11,753 | 8,249 | 5,812 | 10,024 |
| 40% Exceedance | 7,656 | 6,060 | 12,296 | 27,765 | 40,735 | 35,702 | 25,965 | 18,728 | 8,622 | 8,244 | 5,520 | 8,872 |
| 50% Exceedance | 4,797 | 5,776 | 9,230 | 21,973 | 30,173 | 24,222 | 19,196 | 16,441 | 7,366 | 8,005 | 4,649 | 4,413 |
| 60% Exceedance | 4,000 | 5,357 | 6,590 | 16,890 | 21,333 | 20,649 | 15,234 | 13,056 | 7,102 | 6,500 | 4,050 | 3,857 |
| 70% Exceedance | 4,000 | 4,948 | 6,040 | 11,328 | 16,721 | 17,417 | 12,721 | 11,224 | 6,930 | 5,278 | 4,000 | 3,115 |
| 80% Exceedance | 4,000 | 4,631 | 5,410 | 9,385 | 14,104 | 13,293 | 11,173 | 9,731 | 6,554 | 5,000 | 3,500 | 3,000 |
| 90% Exceedance | 3,000 | 4,500 | 4,959 | 7,391 | 9,825 | 9,639 | 10,064 | 7,777 | 4,017 | 4,000 | 3,000 | 3,000 |
| Full Simulation Period Average^a | 6,410 | 9,149 | 22,224 | 39,022 | 50,907 | 42,658 | 29,366 | 22,233 | 13,246 | 7,653 | 5,155 | 6,559 |
| Wet Water Years (30%) | 8,198 | 15,115 | 47,417 | 80,674 | 101,611 | 81,776 | 55,355 | 39,927 | 25,280 | 10,680 | 7,197 | 10,966 |
| Above Normal Water Years (11%) | 6,010 | 6,855 | 14,467 | 50,398 | 59,250 | 55,211 | 30,859 | 23,540 | 14,025 | 9,696 | 6,390 | 10,430 |
| Below Normal Water Years (21%) | 6,428 | 7,857 | 12,401 | 21,387 | 32,858 | 28,315 | 22,461 | 18,719 | 8,612 | 7,599 | 4,322 | 4,195 |
| Dry Water Years (22%) | 5,769 | 6,233 | 10,915 | 13,504 | 21,708 | 19,078 | 14,063 | 11,689 | 6,746 | 5,212 | 4,107 | 3,459 |
| Critical Water Years (16%) | 4,188 | 5,246 | 8,760 | 11,339 | 13,942 | 11,927 | 9,717 | 7,269 | 5,168 | 4,000 | 3,011 | 3,000 |

Table 4G-3-8-1b. Delta Outflow, Alternative 1 plus Cumulative 102023, Monthly Outflow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|--------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|
| 10% Exceedance | 8,600 | 16,334 | 61,852 | 93,734 | 125,515 | 97,900 | 66,257 | 49,532 | 31,863 | 10,314 | 6,417 | 11,251 |
| 20% Exceedance | 8,363 | 8,090 | 35,076 | 63,635 | 78,458 | 63,202 | 47,000 | 35,057 | 20,907 | 8,722 | 5,961 | 10,519 |
| 30% Exceedance | 7,956 | 6,614 | 20,239 | 37,636 | 56,236 | 46,613 | 33,053 | 24,872 | 12,285 | 8,493 | 5,620 | 10,203 |
| 40% Exceedance | 7,817 | 5,936 | 12,759 | 28,487 | 42,437 | 35,735 | 27,065 | 18,341 | 9,506 | 8,111 | 5,134 | 8,999 |
| 50% Exceedance | 5,190 | 5,728 | 9,291 | 22,406 | 31,770 | 26,322 | 21,939 | 17,013 | 8,398 | 7,248 | 4,583 | 4,440 |
| 60% Exceedance | 4,392 | 5,358 | 6,723 | 16,984 | 21,497 | 22,374 | 17,228 | 13,703 | 7,569 | 6,593 | 4,248 | 3,666 |
| 70% Exceedance | 4,226 | 4,982 | 6,156 | 11,805 | 16,810 | 18,444 | 14,465 | 12,162 | 7,268 | 5,688 | 4,056 | 3,341 |
| 80% Exceedance | 4,118 | 4,660 | 5,584 | 9,212 | 14,643 | 14,704 | 12,726 | 11,499 | 7,038 | 5,375 | 3,771 | 3,280 |
| 90% Exceedance | 3,118 | 4,500 | 5,153 | 6,966 | 10,645 | 9,967 | 10,818 | 8,506 | 4,625 | 4,327 | 3,330 | 3,009 |
| Full Simulation Period Average^a | 6,651 | 9,103 | 22,473 | 39,485 | 51,472 | 43,545 | 31,187 | 23,064 | 13,770 | 7,744 | 5,072 | 6,653 |
| Wet Water Years (30%) | 8,542 | 15,111 | 47,981 | 81,335 | 101,679 | 82,084 | 57,642 | 40,257 | 25,635 | 10,738 | 6,976 | 10,845 |
| Above Normal Water Years (11%) | 6,317 | 6,972 | 14,205 | 51,016 | 60,556 | 56,624 | 34,039 | 25,664 | 14,582 | 9,376 | 5,883 | 11,323 |
| Below Normal Water Years (21%) | 6,605 | 7,825 | 12,564 | 21,889 | 33,352 | 30,053 | 23,625 | 18,978 | 9,490 | 7,535 | 4,377 | 4,114 |
| Dry Water Years (22%) | 5,937 | 6,135 | 11,239 | 13,814 | 21,966 | 20,287 | 16,050 | 13,339 | 7,425 | 5,566 | 4,052 | 3,542 |
| Critical Water Years (16%) | 4,381 | 5,062 | 8,782 | 11,480 | 15,442 | 11,980 | 10,363 | 7,774 | 5,310 | 4,279 | 3,255 | 3,194 |

Table 4G-3-8-1c. Delta Outflow, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Outflow (cfs)

| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------------|------------|-------------|-------------|------------|--------------|--------------|--------------|--------------|------------|-------------|-------------|-------------|
| 10% Exceedance | -150 | 532 | 729 | 609 | 567 | 2,739 | 2,780 | 1,932 | -5 | -628 | -669 | 748 |
| 20% Exceedance | 238 | -337 | 170 | 2,134 | -1,026 | 1,196 | 1,788 | 1,996 | 335 | -27 | -151 | 337 |
| 30% Exceedance | -13 | -295 | 508 | 895 | -242 | 1,097 | 2,051 | 1,652 | 532 | 244 | -193 | 179 |
| 40% Exceedance | 161 | -124 | 462 | 722 | 1,702 | 33 | 1,100 | -386 | 884 | -134 | -386 | 127 |
| 50% Exceedance | 393 | -48 | 61 | 433 | 1,598 | 2,099 | 2,742 | 572 | 1,032 | -757 | -66 | 27 |
| 60% Exceedance | 392 | 1 | 133 | 93 | 165 | 1,725 | 1,995 | 647 | 467 | 93 | 199 | -191 |
| 70% Exceedance | 226 | 34 | 117 | 477 | 89 | 1,027 | 1,743 | 938 | 337 | 409 | 56 | 226 |
| 80% Exceedance | 118 | 28 | 175 | -172 | 539 | 1,411 | 1,553 | 1,768 | 484 | 375 | 271 | 280 |
| 90% Exceedance | 118 | 0 | 194 | -425 | 820 | 329 | 754 | 728 | 608 | 327 | 330 | 9 |
| Full Simulation Period Average^a | 242 | -46 | 249 | 462 | 564 | 887 | 1,821 | 831 | 524 | 92 | -83 | 94 |
| Wet Water Years (30%) | 344 | -4 | 563 | 661 | 68 | 307 | 2,287 | 331 | 355 | 59 | -220 | -121 |
| Above Normal Water Years (11%) | 307 | 117 | -263 | 618 | 1,306 | 1,413 | 3,180 | 2,124 | 557 | -320 | -507 | 892 |
| Below Normal Water Years (21%) | 176 | -32 | 163 | 502 | 494 | 1,737 | 1,164 | 260 | 879 | -63 | 55 | -82 |
| Dry Water Years (22%) | 168 | -98 | 324 | 310 | 258 | 1,209 | 1,987 | 1,650 | 679 | 354 | -55 | 83 |
| Critical Water Years (16%) | 194 | -184 | 21 | 140 | 1,500 | 53 | 646 | 505 | 141 | 278 | 244 | 194 |

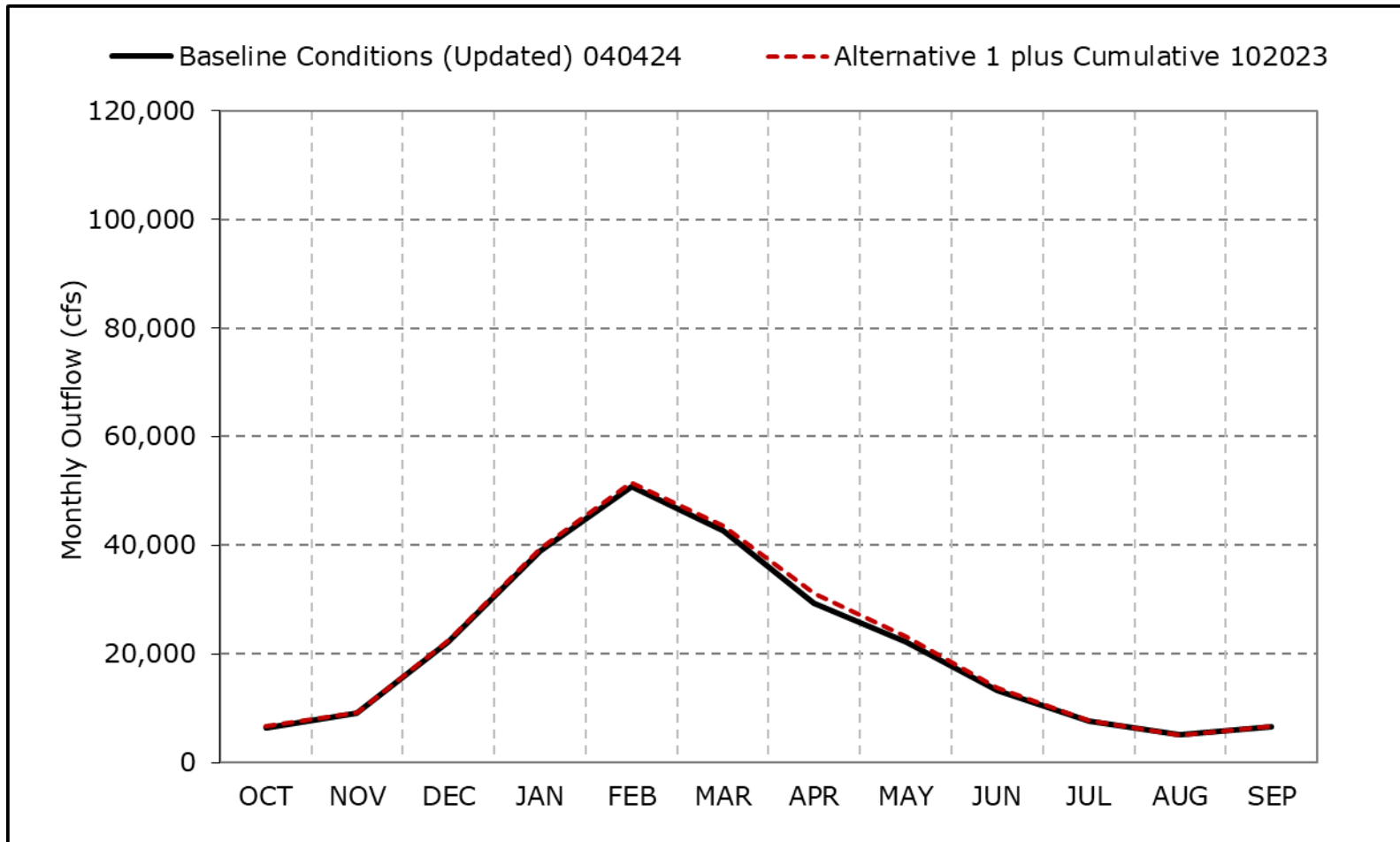
^a Based on the 100-year simulation period.

* All scenarios are simulated at current climate condition and 0 cm sea level rise.

* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

* Water Year Types results are displayed with water year - year type sorting.

Figure 4G-3-8a. Delta Outflow, Long-Term Average Outflow

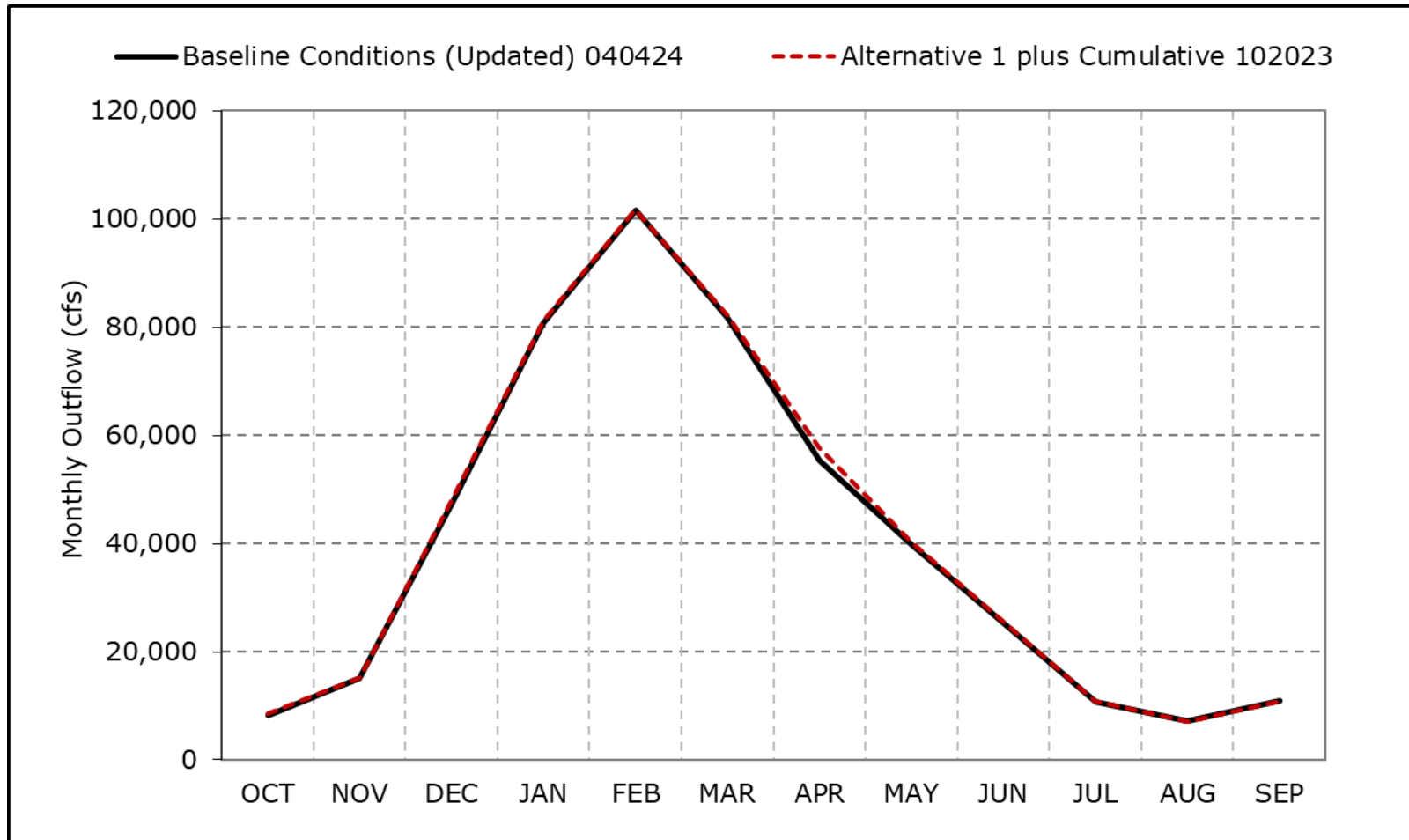


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8b. Delta Outflow, Wet Year Average Outflow

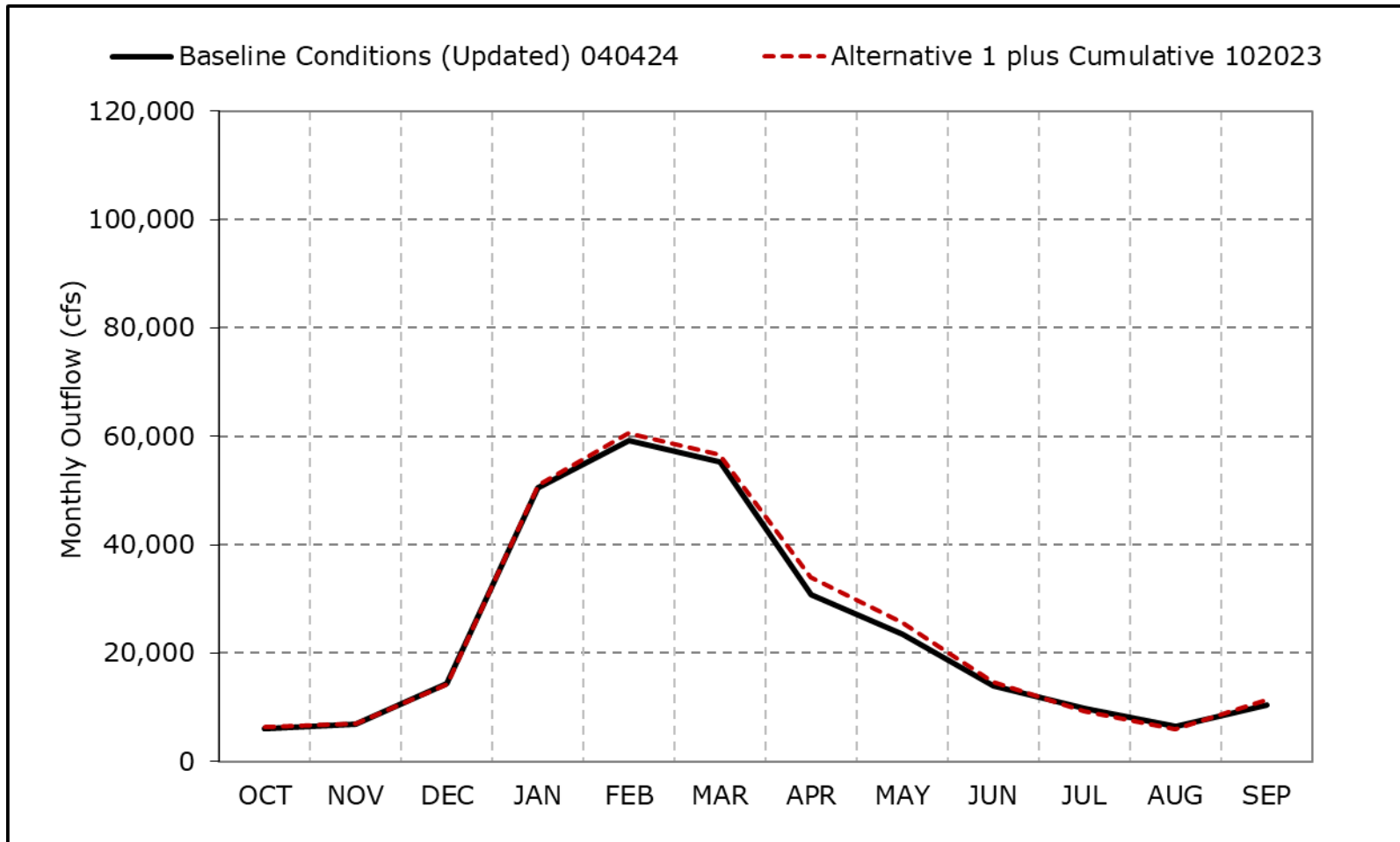


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8c. Delta Outflow, Above Normal Year Average Outflow

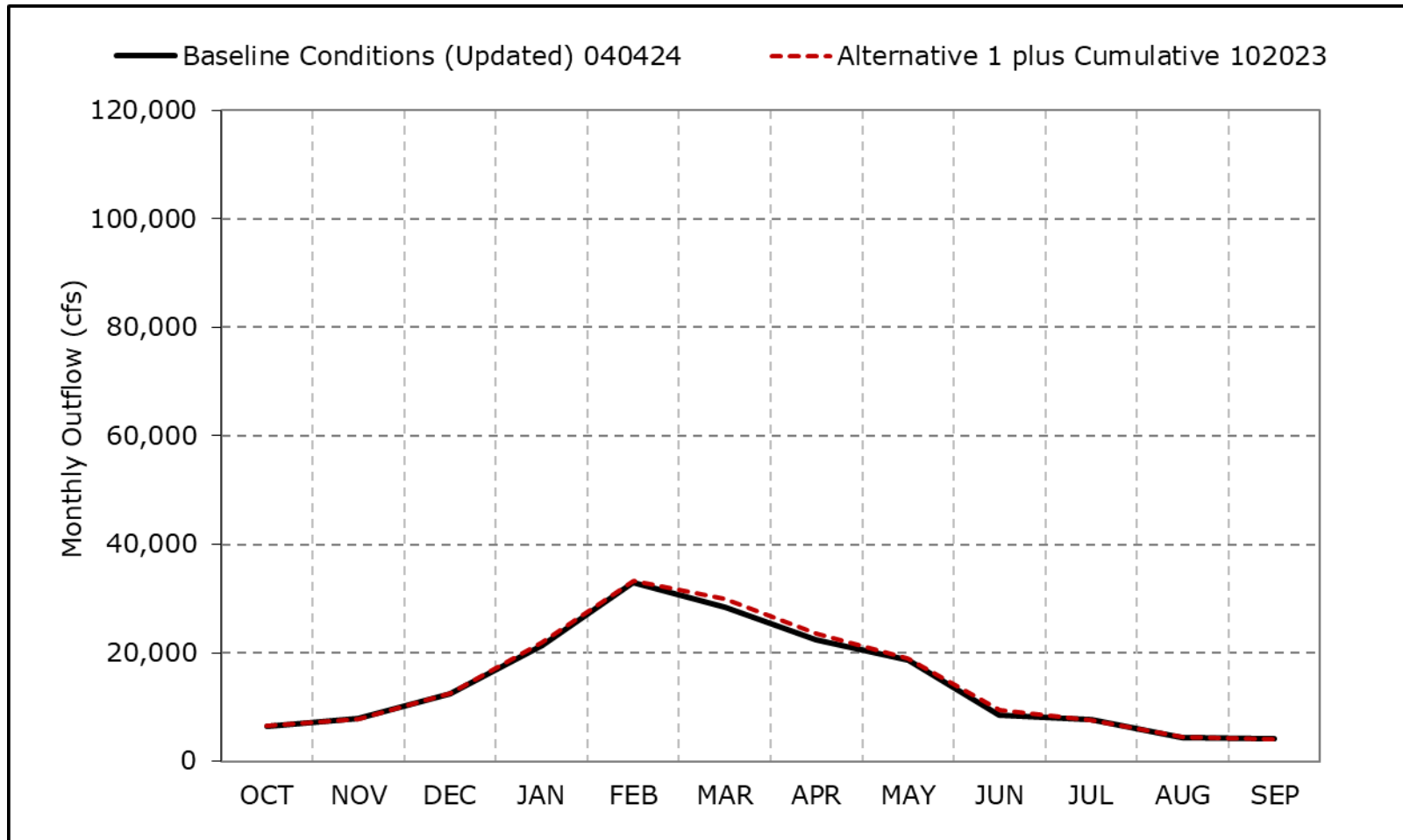


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8d. Delta Outflow, Below Normal Year Average Outflow

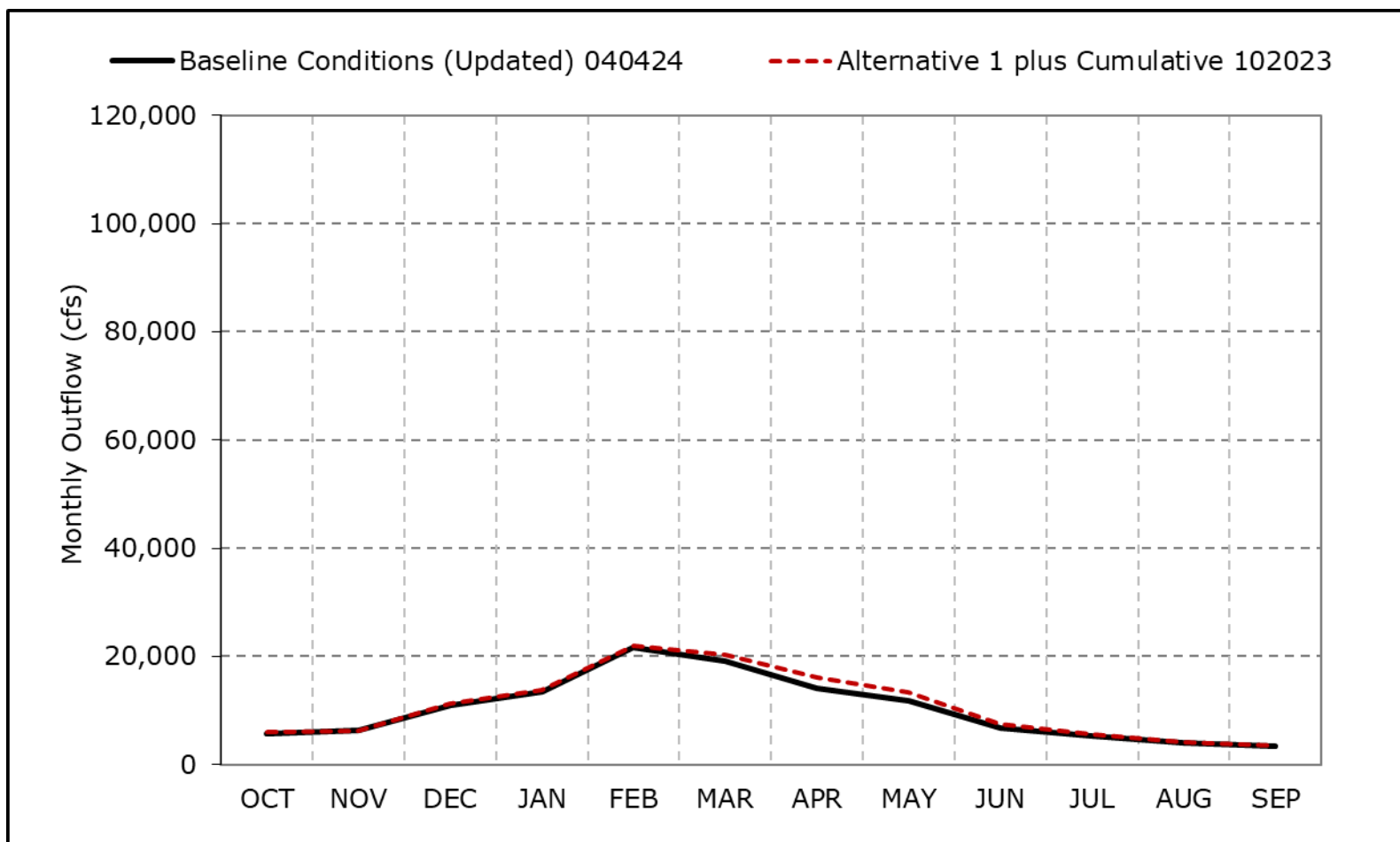


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8e. Delta Outflow, Dry Year Average Outflow

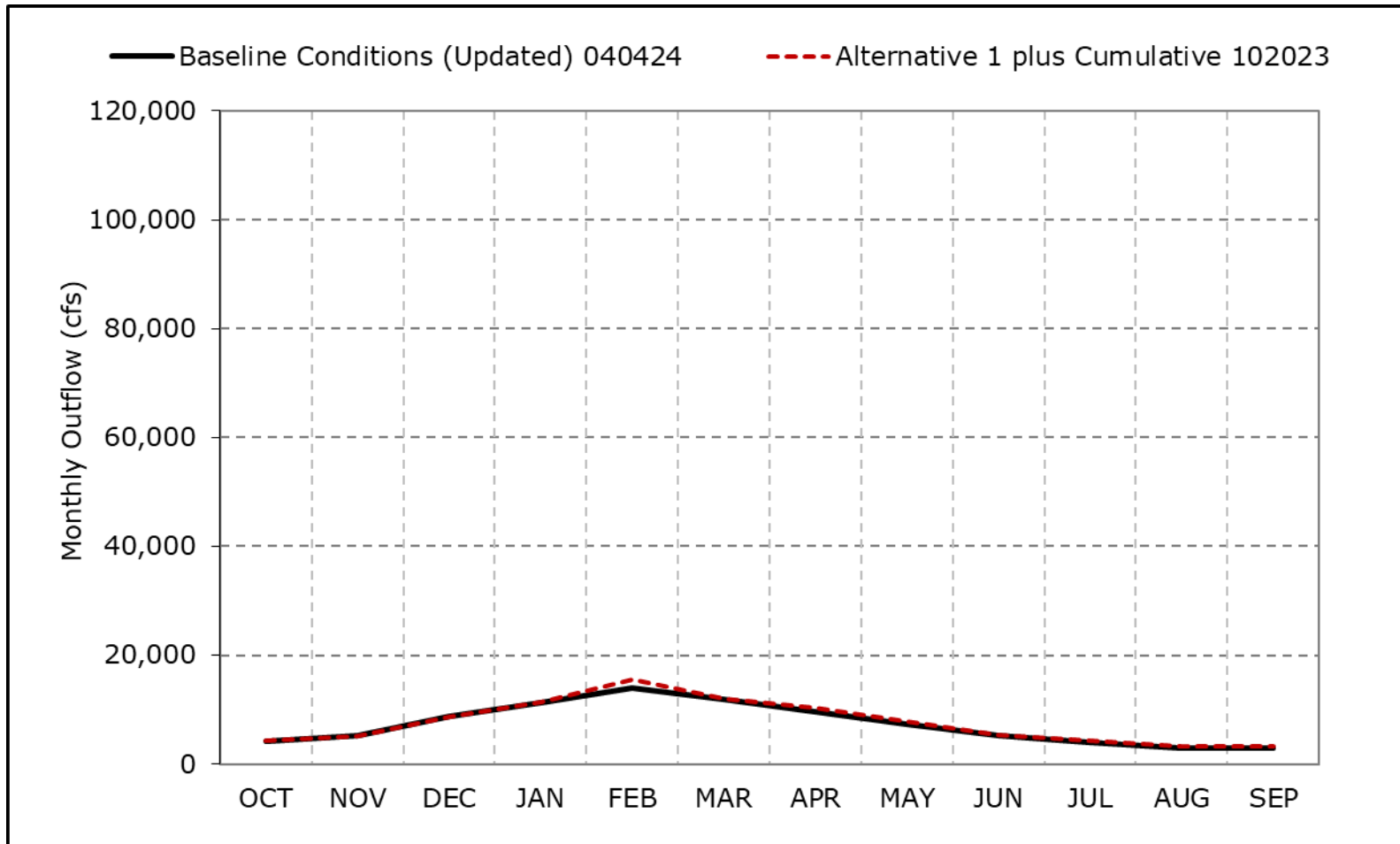


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8f. Delta Outflow, Critical Year Average Outflow

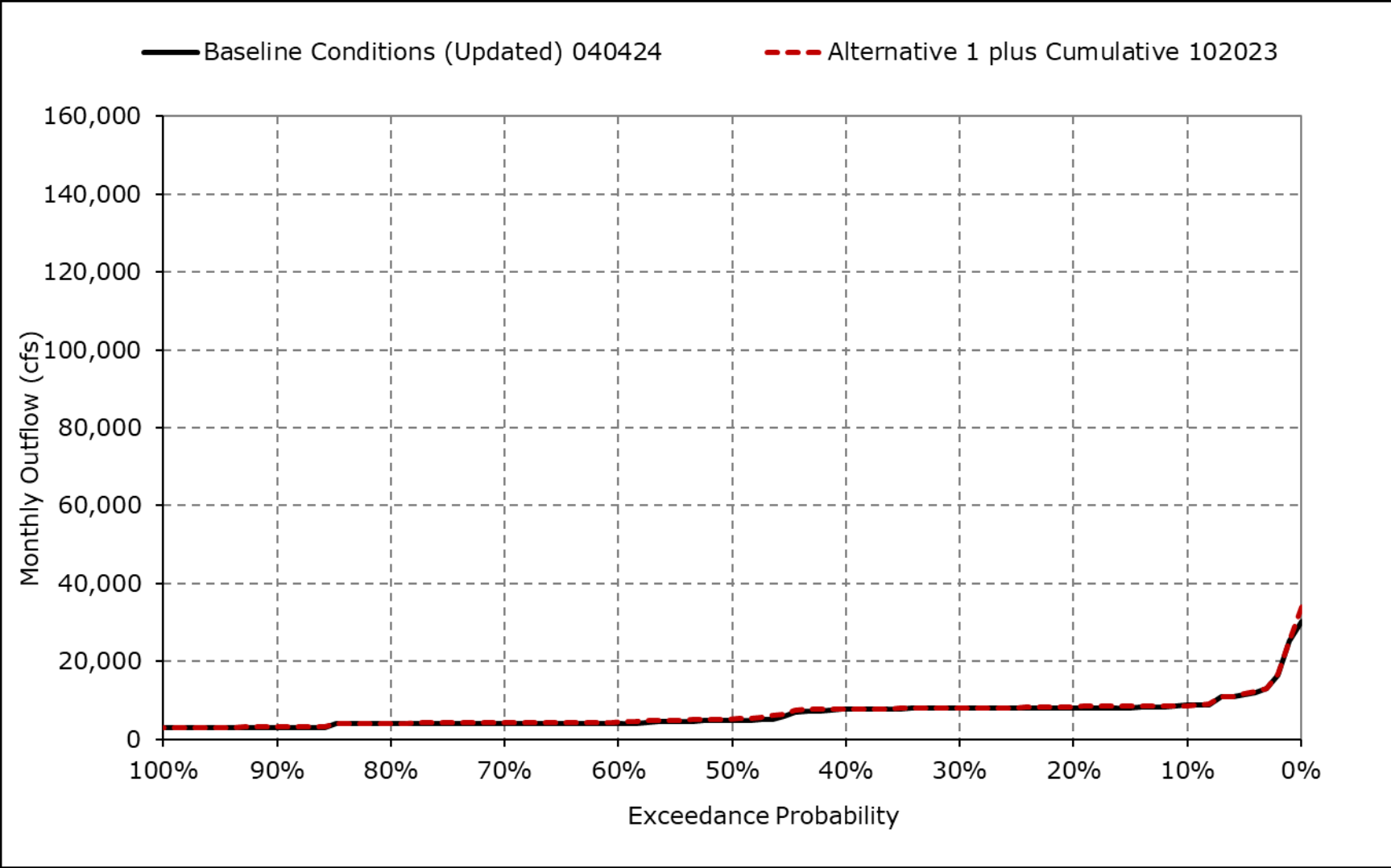


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

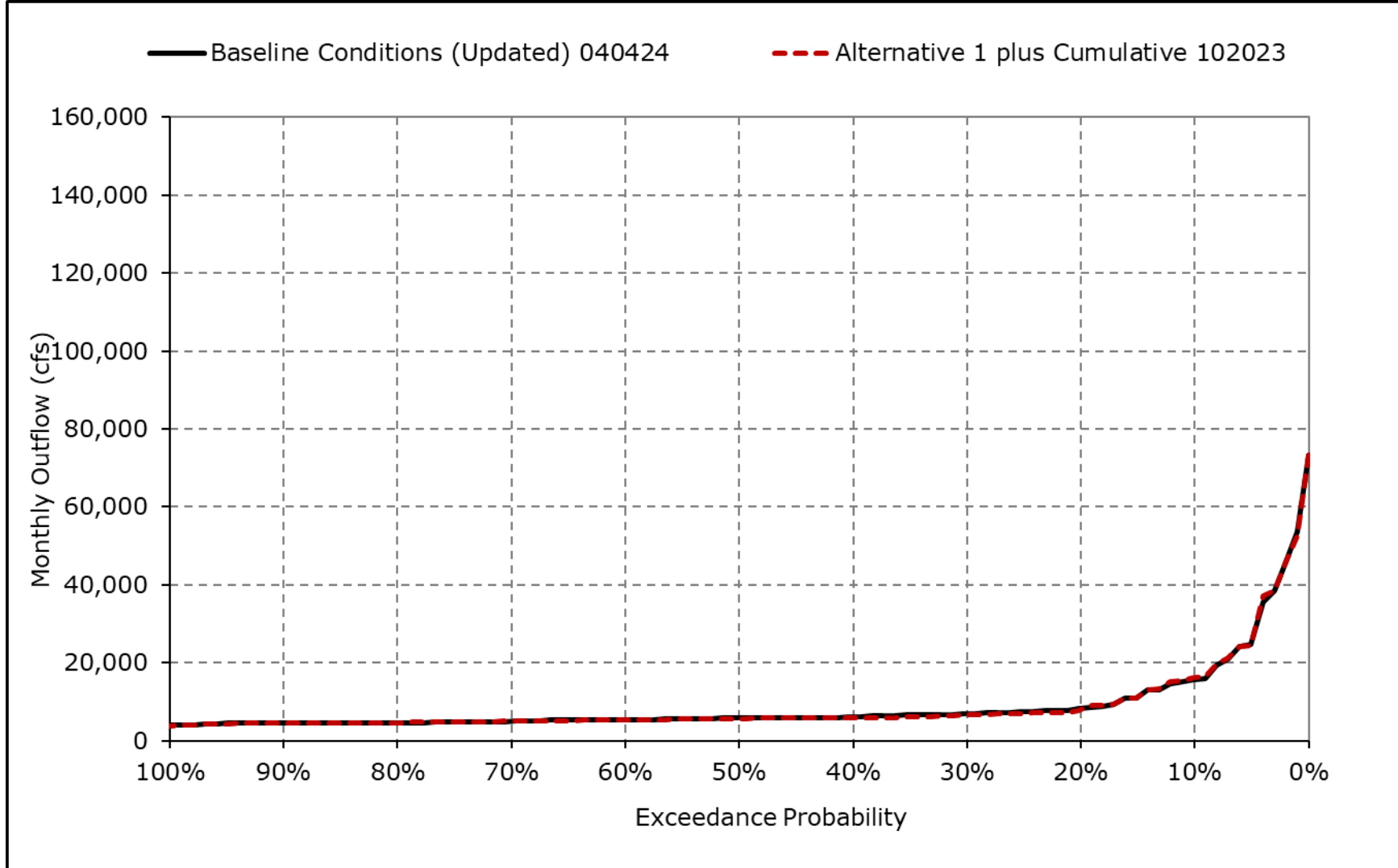
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8g. Delta Outflow, October



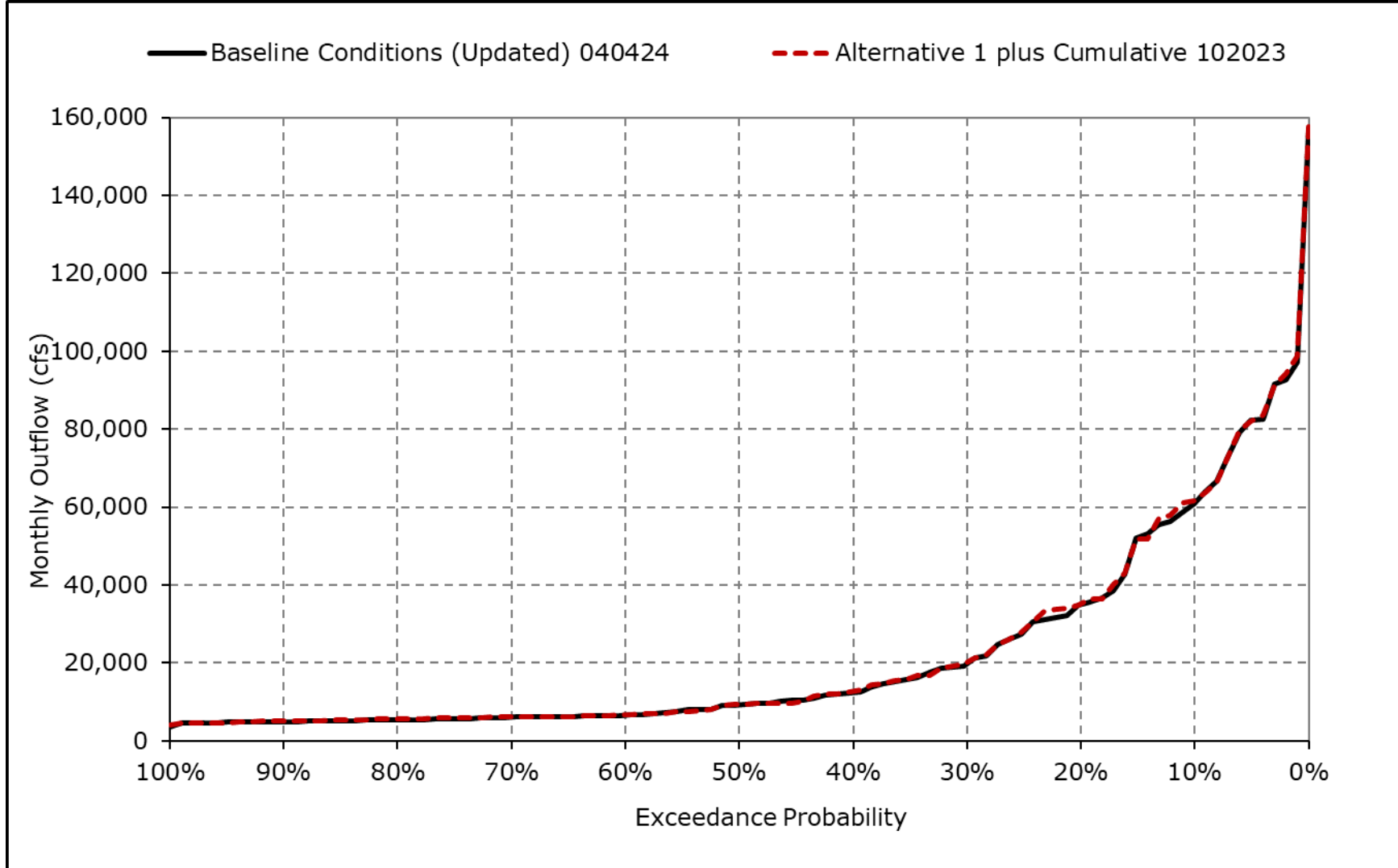
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8h. Delta Outflow, November



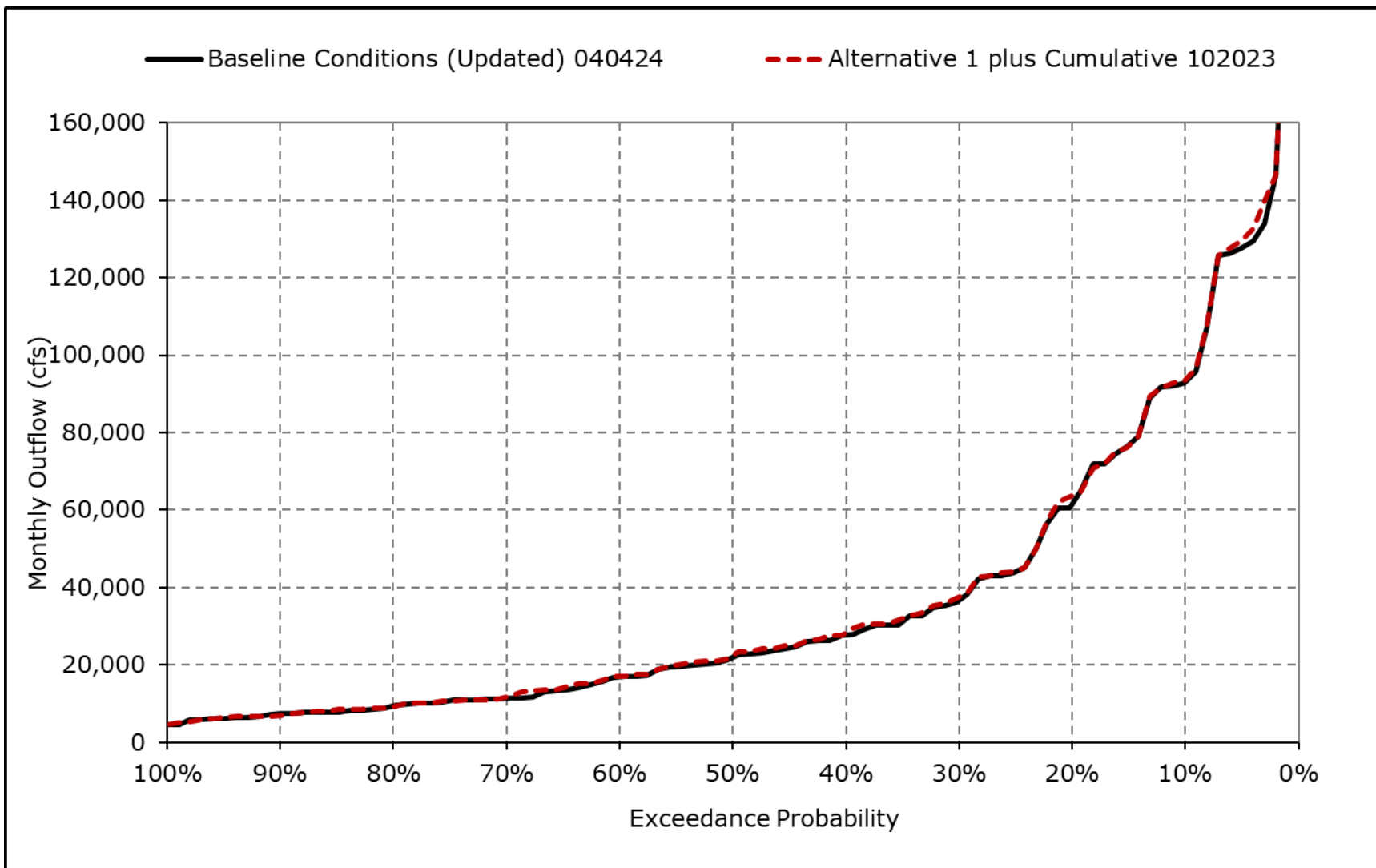
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8i. Delta Outflow, December



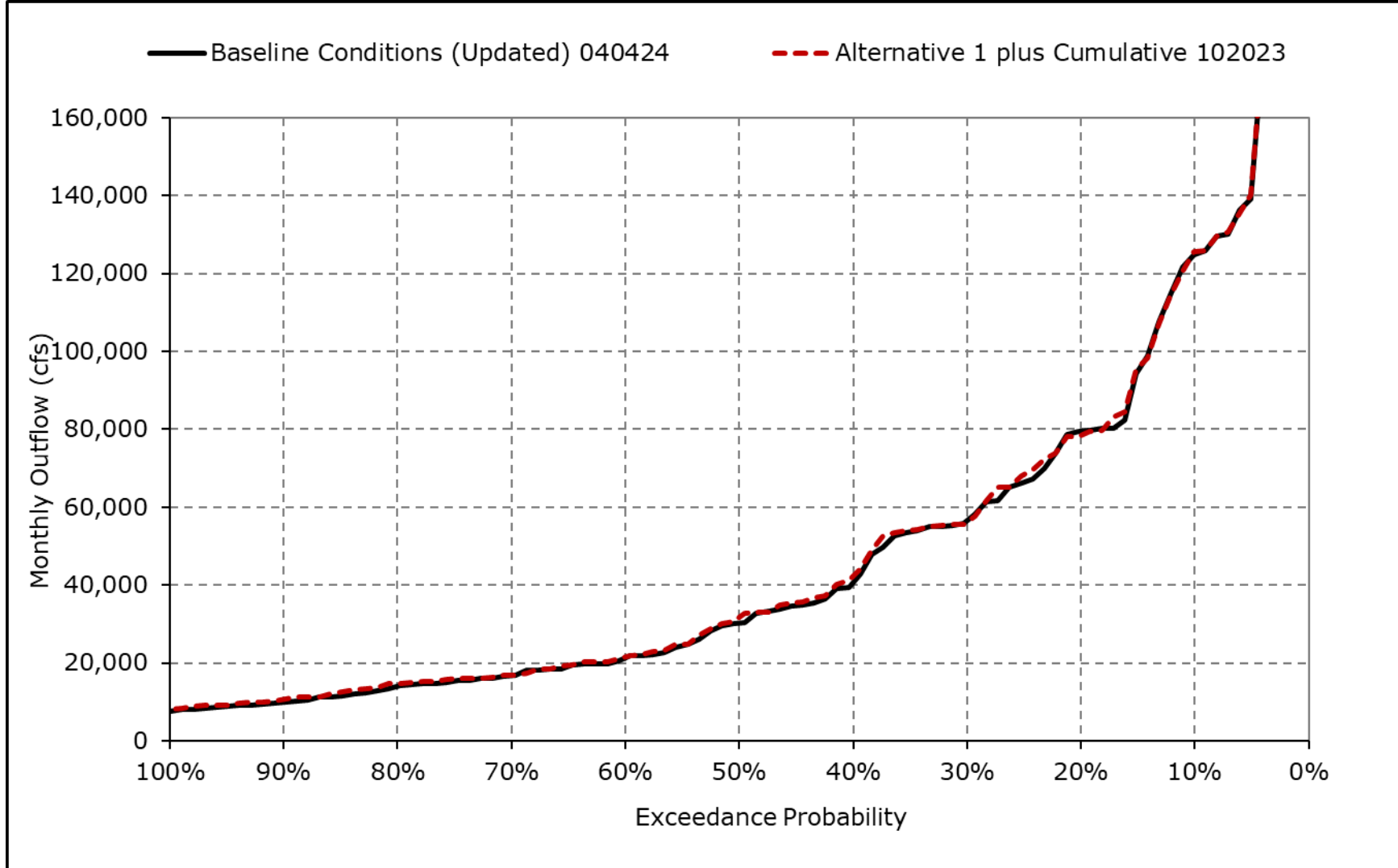
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8j. Delta Outflow, January



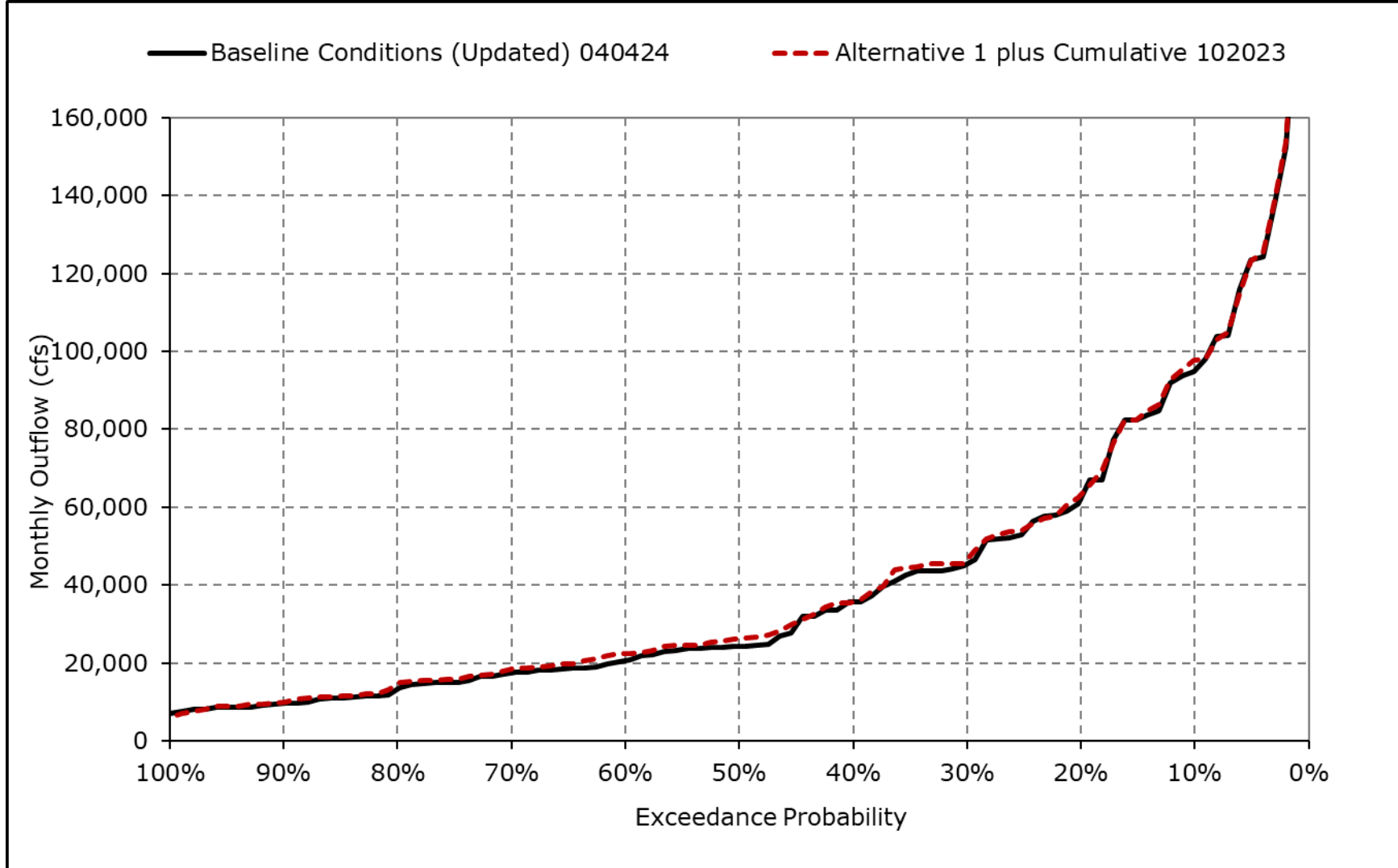
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8k. Delta Outflow, February



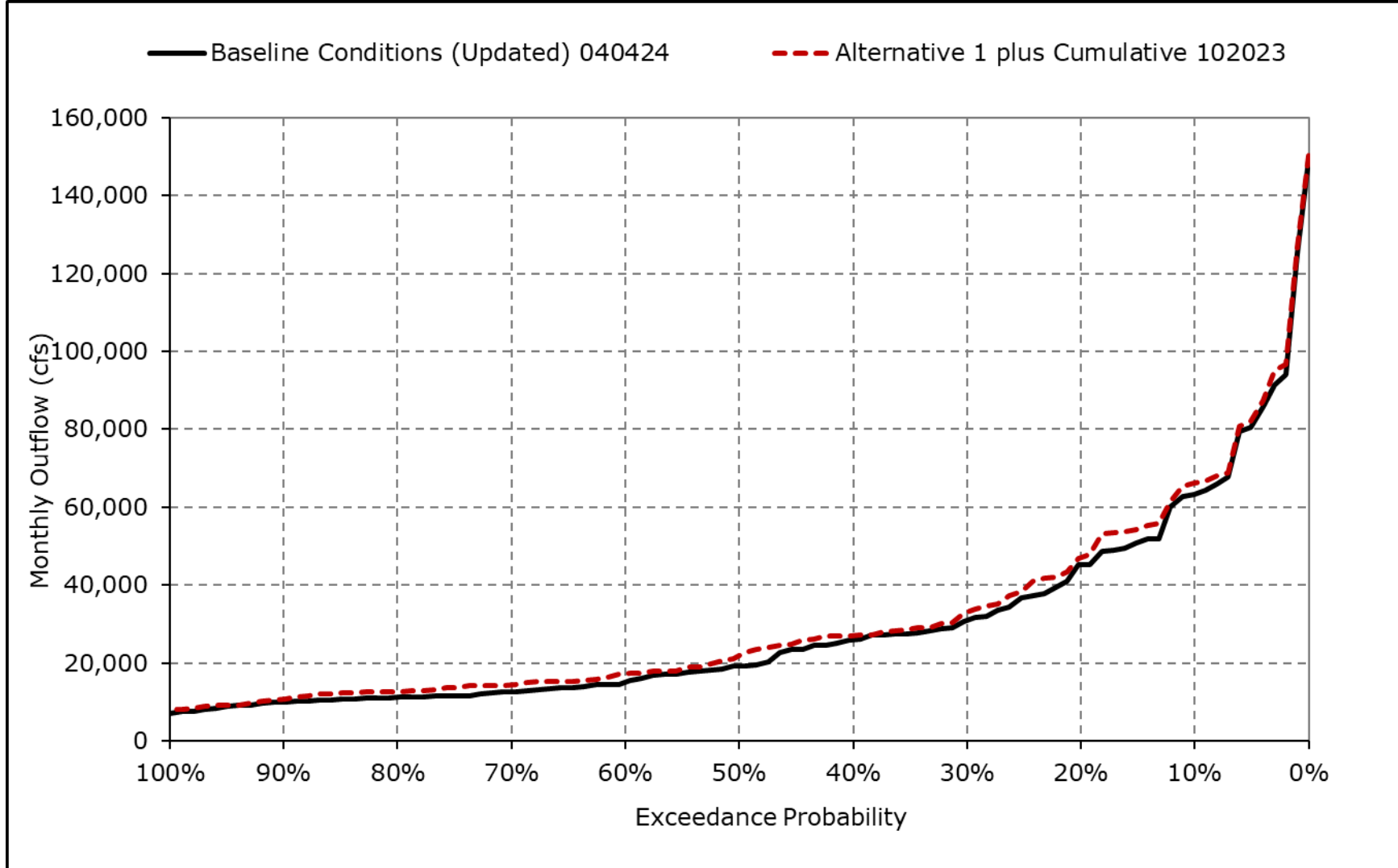
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8I. Delta Outflow, March



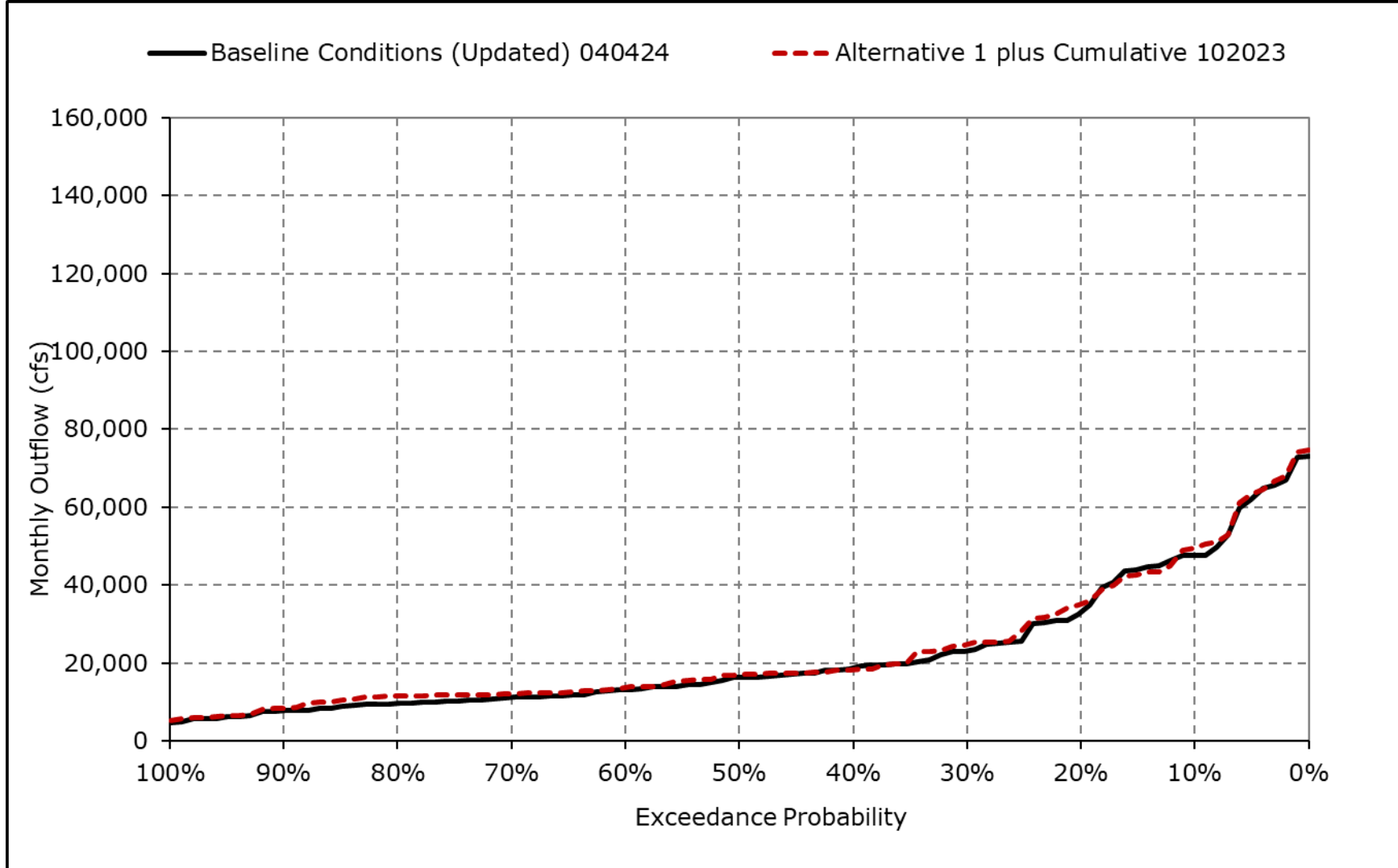
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8m. Delta Outflow, April



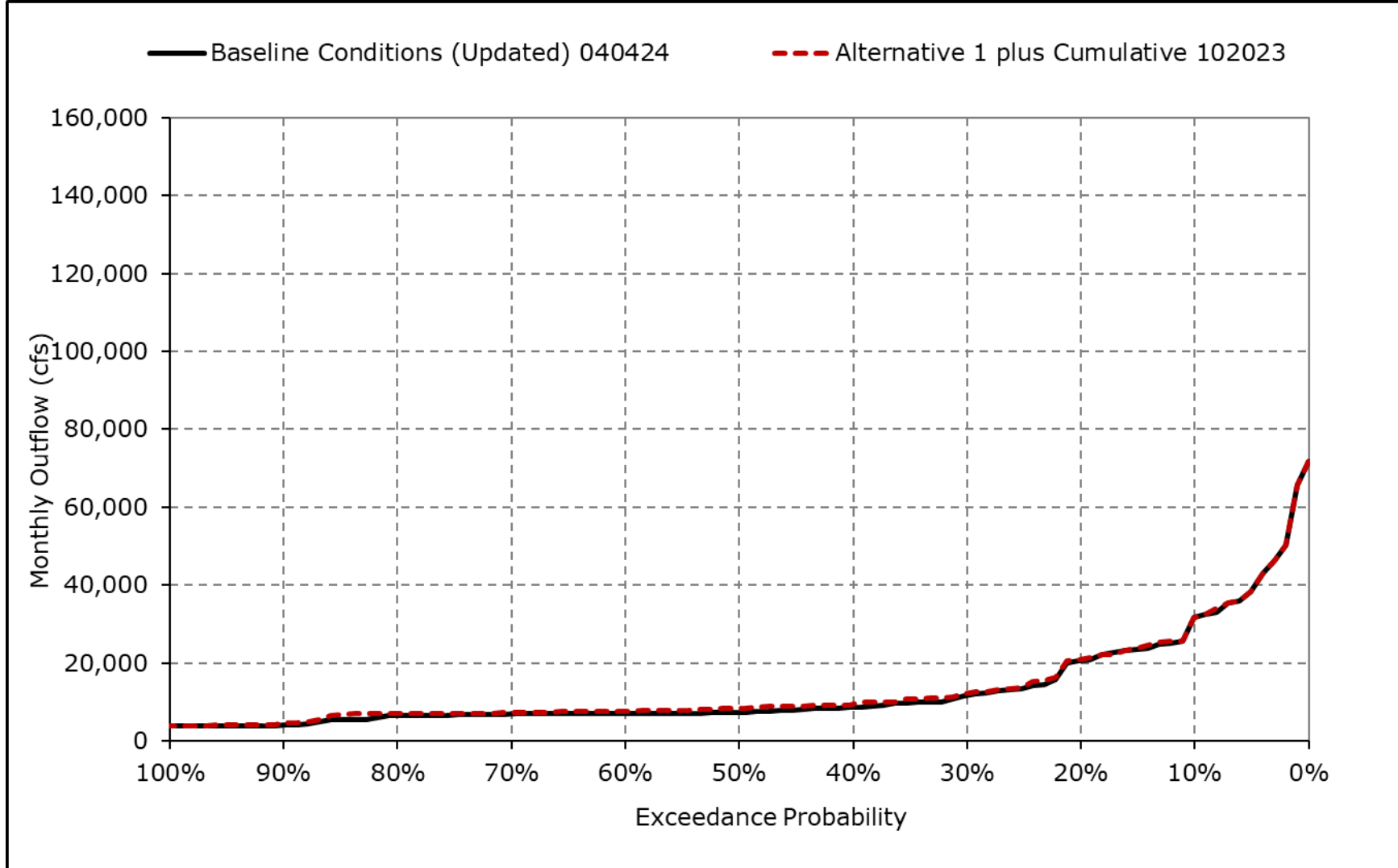
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8n. Delta Outflow, May



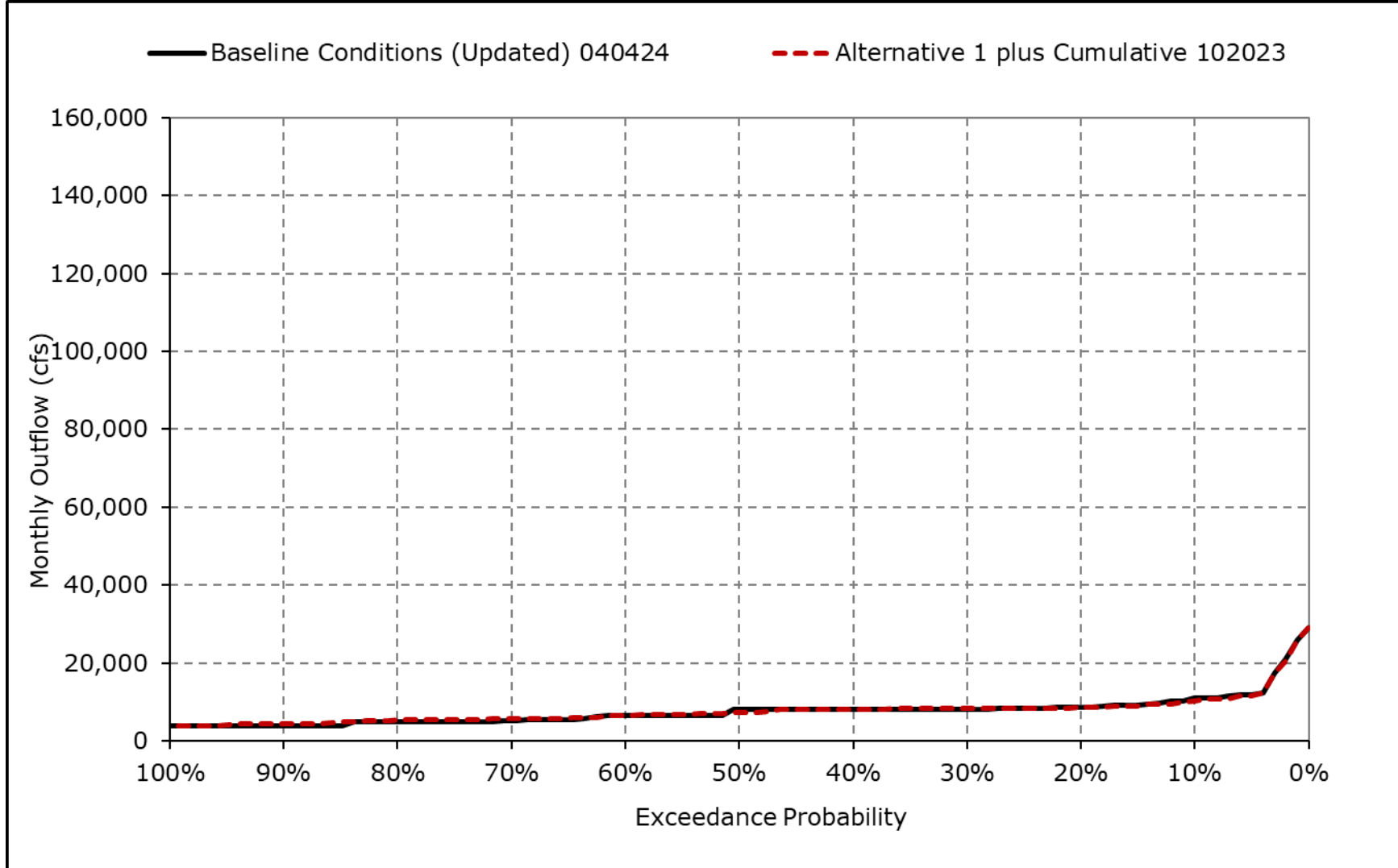
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8o. Delta Outflow, June



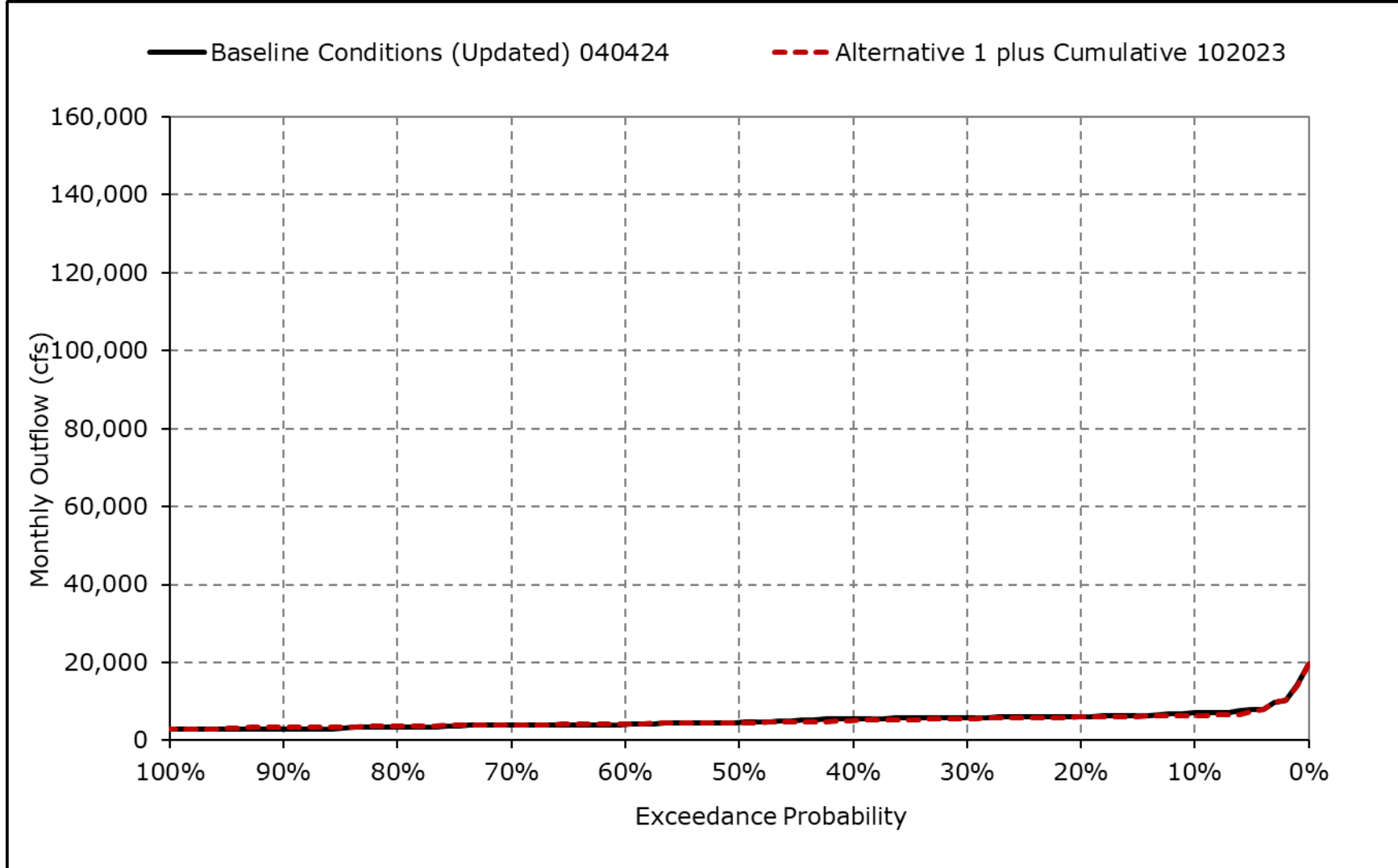
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8p. Delta Outflow, July



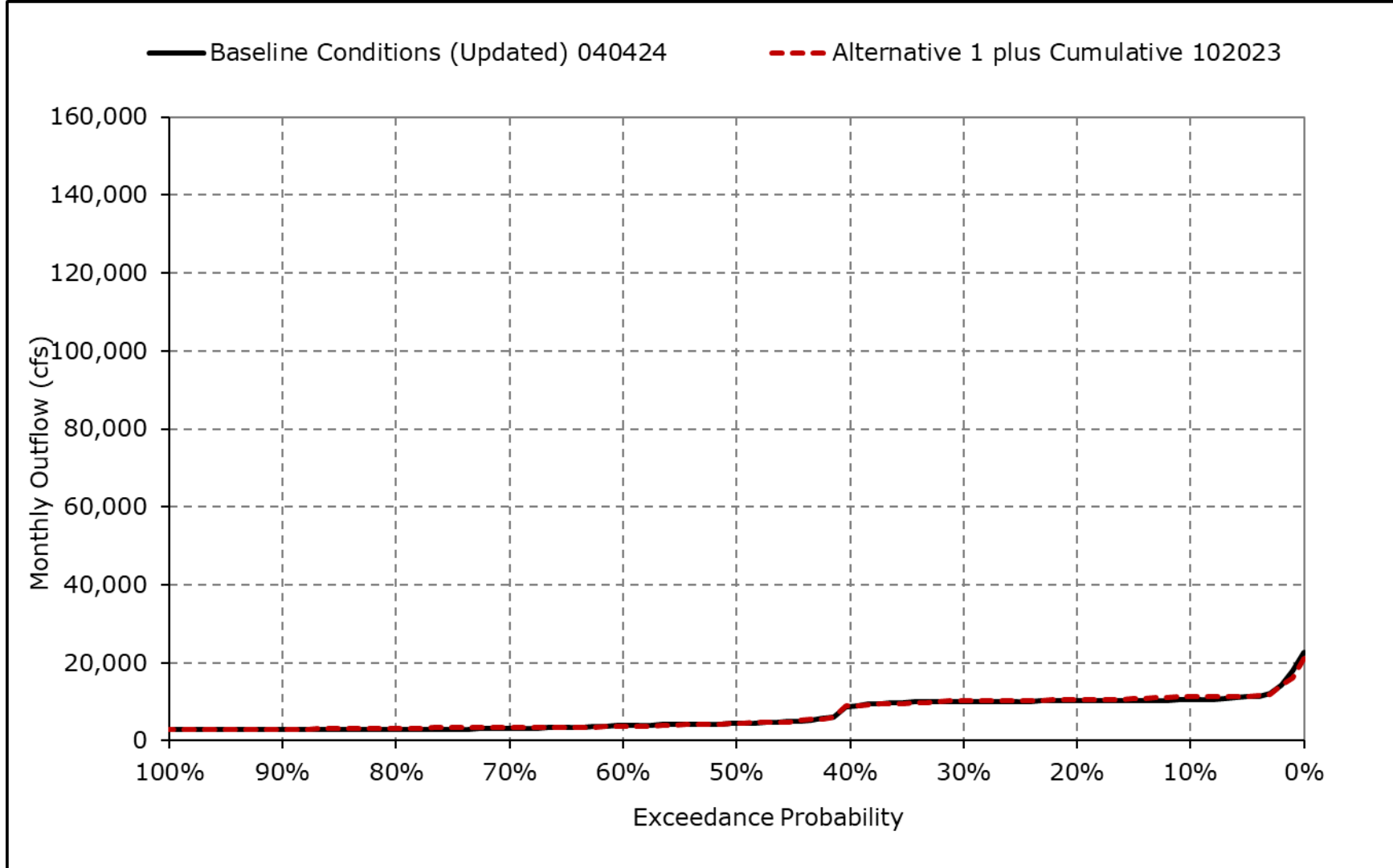
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8q. Delta Outflow, August



*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8r. Delta Outflow, September



*All scenarios are simulated at current climate condition and 0 cm sea level rise.