

**Attachment 2b: Flow Results (CalSim 3)**

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## Appendix 4H

### Attachment 2b: Flow Results (CalSim 3)

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

- Baseline Conditions – 2022 Hydrology and 15 centimeters (cm) Sea Level Rise (082824)
- Proposed Project plus CVP Proposed Action, Sacramento and Feather River VAs – 2022 Hydrology and 15 cm Sea Level Rise (091324)
- Proposed Project plus Cumulative Projects – 2022 Hydrology and 15 cm Sea Level Rise (091324)

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

Note:

<sup>1</sup> Parameter has been post-processed for the Proposed Project plus Cumulative Projects – 2022 Hydrology and 15 cm Sea Level Rise 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 4H-2-1-1a. Sacramento River Flow at Freeport, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 10% Exceedance                              | 15,265 | 18,949 | 54,791 | 66,766 | 73,964 | 68,390 | 47,138 | 29,847 | 15,264 | 23,541 | 18,451 | 19,509 |
| 20% Exceedance                              | 13,680 | 14,512 | 36,947 | 57,162 | 64,126 | 57,504 | 35,685 | 22,925 | 14,151 | 22,517 | 18,058 | 18,179 |
| 30% Exceedance                              | 13,188 | 13,490 | 25,728 | 37,482 | 51,187 | 44,355 | 26,133 | 17,105 | 13,491 | 21,571 | 17,280 | 16,250 |
| 40% Exceedance                              | 11,968 | 13,176 | 19,784 | 28,875 | 43,685 | 32,662 | 20,058 | 14,087 | 13,274 | 19,549 | 16,748 | 14,208 |
| 50% Exceedance                              | 10,910 | 12,239 | 16,017 | 23,676 | 31,173 | 25,072 | 16,185 | 12,367 | 13,054 | 18,181 | 15,820 | 11,249 |
| 60% Exceedance                              | 9,206  | 11,179 | 13,824 | 19,023 | 23,614 | 22,308 | 13,477 | 11,767 | 12,219 | 16,242 | 11,941 | 10,285 |
| 70% Exceedance                              | 8,373  | 9,519  | 11,803 | 14,766 | 19,547 | 19,622 | 11,841 | 11,036 | 11,637 | 14,463 | 10,778 | 9,832  |
| 80% Exceedance                              | 8,030  | 8,389  | 10,227 | 12,499 | 15,682 | 15,221 | 11,288 | 9,870  | 10,893 | 12,469 | 9,093  | 9,066  |
| 90% Exceedance                              | 6,479  | 7,291  | 8,850  | 10,862 | 13,250 | 12,073 | 9,680  | 8,711  | 9,611  | 10,358 | 7,651  | 8,385  |
| Full Simulation Period Average <sup>a</sup> | 11,121 | 13,381 | 23,961 | 31,576 | 38,245 | 33,941 | 23,263 | 16,492 | 13,212 | 17,556 | 13,931 | 13,221 |
| Wet Water Years (29%)                       | 13,448 | 18,934 | 42,755 | 54,971 | 62,763 | 54,092 | 40,486 | 24,659 | 15,588 | 19,628 | 17,400 | 18,412 |
| Above Normal Water Years (12%)              | 10,653 | 11,615 | 19,336 | 41,145 | 49,420 | 47,993 | 26,802 | 18,627 | 14,040 | 21,775 | 18,364 | 17,263 |
| Below Normal Water Years (18%)              | 11,234 | 11,443 | 17,482 | 24,632 | 30,699 | 28,373 | 19,025 | 16,534 | 12,595 | 21,609 | 15,535 | 11,148 |
| Dry Water Years (22%)                       | 10,527 | 12,513 | 16,871 | 17,081 | 24,706 | 20,911 | 13,265 | 11,528 | 13,060 | 15,646 | 10,886 | 10,081 |
| Critical Water Years (19%)                  | 8,446  | 8,864  | 12,546 | 13,188 | 16,591 | 14,670 | 10,329 | 8,388  | 9,822  | 10,104 | 7,845  | 8,342  |

**Table 4H-2-1-1b. Sacramento River Flow at Freeport, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 10% Exceedance                              | 15,236 | 18,991 | 55,998 | 67,896 | 73,900 | 69,206 | 47,165 | 29,829 | 15,344 | 22,788 | 18,635 | 20,742 |
| 20% Exceedance                              | 13,684 | 14,465 | 37,378 | 57,202 | 64,126 | 57,504 | 36,850 | 22,925 | 13,708 | 21,741 | 17,798 | 18,096 |
| 30% Exceedance                              | 13,138 | 13,589 | 26,004 | 37,937 | 51,281 | 44,337 | 27,060 | 17,196 | 13,086 | 21,178 | 17,132 | 17,140 |
| 40% Exceedance                              | 12,226 | 13,184 | 19,980 | 29,139 | 44,206 | 32,776 | 20,407 | 14,869 | 12,797 | 18,997 | 16,631 | 14,576 |
| 50% Exceedance                              | 10,923 | 12,442 | 15,943 | 23,819 | 31,200 | 25,027 | 16,495 | 13,218 | 12,570 | 17,934 | 15,450 | 11,374 |
| 60% Exceedance                              | 9,193  | 11,289 | 14,205 | 18,707 | 23,703 | 22,374 | 14,197 | 12,313 | 12,116 | 16,330 | 11,761 | 10,537 |
| 70% Exceedance                              | 8,406  | 9,923  | 11,904 | 13,768 | 19,675 | 19,593 | 12,794 | 11,751 | 11,593 | 14,384 | 9,844  | 9,971  |
| 80% Exceedance                              | 8,238  | 8,624  | 10,404 | 12,485 | 16,932 | 15,149 | 11,735 | 10,758 | 10,975 | 11,034 | 8,760  | 9,037  |
| 90% Exceedance                              | 6,579  | 7,621  | 9,103  | 10,859 | 13,490 | 12,106 | 10,236 | 9,202  | 9,451  | 9,687  | 7,586  | 8,172  |
| Full Simulation Period Average <sup>a</sup> | 11,184 | 13,647 | 24,263 | 31,744 | 38,521 | 33,941 | 23,863 | 17,050 | 12,953 | 17,023 | 13,650 | 13,552 |
| Wet Water Years (29%)                       | 13,523 | 19,266 | 43,368 | 55,179 | 62,864 | 54,070 | 40,570 | 24,774 | 15,558 | 19,502 | 17,464 | 18,971 |
| Above Normal Water Years (12%)              | 10,786 | 12,109 | 19,441 | 41,399 | 49,576 | 48,216 | 27,990 | 19,581 | 13,492 | 21,661 | 18,090 | 18,387 |
| Below Normal Water Years (18%)              | 11,126 | 11,711 | 17,662 | 24,965 | 31,047 | 28,429 | 20,117 | 17,188 | 12,681 | 20,630 | 14,984 | 11,316 |
| Dry Water Years (22%)                       | 10,532 | 12,568 | 17,160 | 16,969 | 24,985 | 20,880 | 14,062 | 12,542 | 12,544 | 14,742 | 10,286 | 10,144 |
| Critical Water Years (19%)                  | 8,677  | 9,126  | 12,626 | 13,404 | 17,138 | 14,546 | 10,655 | 8,752  | 9,368  | 9,535  | 7,658  | 8,292  |

**Table 4H-2-1-1c. Sacramento River Flow at Freeport, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct  | Nov | Dec   | Jan   | Feb   | Mar  | Apr   | May   | Jun  | Jul    | Aug  | Sep   |
|---------------------------------------------|------|-----|-------|-------|-------|------|-------|-------|------|--------|------|-------|
| 10% Exceedance                              | -30  | 43  | 1,207 | 1,130 | -65   | 816  | 27    | -17   | 80   | -753   | 184  | 1,233 |
| 20% Exceedance                              | 4    | -46 | 431   | 40    | 0     | -1   | 1,165 | 0     | -443 | -777   | -259 | -82   |
| 30% Exceedance                              | -50  | 99  | 276   | 455   | 93    | -17  | 927   | 91    | -405 | -392   | -148 | 890   |
| 40% Exceedance                              | 258  | 8   | 195   | 265   | 521   | 114  | 349   | 781   | -476 | -553   | -117 | 369   |
| 50% Exceedance                              | 13   | 204 | -74   | 143   | 27    | -45  | 310   | 851   | -484 | -246   | -370 | 124   |
| 60% Exceedance                              | -13  | 110 | 381   | -316  | 89    | 66   | 720   | 546   | -103 | 88     | -181 | 252   |
| 70% Exceedance                              | 33   | 404 | 101   | -998  | 128   | -29  | 953   | 716   | -45  | -79    | -935 | 139   |
| 80% Exceedance                              | 207  | 235 | 177   | -14   | 1,249 | -72  | 446   | 888   | 83   | -1,435 | -333 | -29   |
| 90% Exceedance                              | 100  | 330 | 253   | -4    | 241   | 33   | 557   | 490   | -160 | -671   | -65  | -213  |
| Full Simulation Period Average <sup>a</sup> | 63   | 266 | 302   | 167   | 276   | 0    | 601   | 558   | -259 | -533   | -281 | 331   |
| Wet Water Years (29%)                       | 75   | 332 | 613   | 209   | 101   | -22  | 84    | 115   | -29  | -125   | 64   | 558   |
| Above Normal Water Years (12%)              | 133  | 494 | 105   | 253   | 156   | 223  | 1,188 | 954   | -547 | -113   | -274 | 1,125 |
| Below Normal Water Years (18%)              | -109 | 268 | 180   | 333   | 348   | 56   | 1,092 | 654   | 86   | -979   | -551 | 168   |
| Dry Water Years (22%)                       | 5    | 56  | 290   | -111  | 280   | -32  | 797   | 1,014 | -517 | -904   | -599 | 62    |
| Critical Water Years (19%)                  | 231  | 262 | 80    | 216   | 547   | -124 | 326   | 364   | -454 | -569   | -187 | -50   |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-1-2a. Sacramento River Flow at Freeport, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 10% Exceedance                              | 15,265 | 18,949 | 54,791 | 66,766 | 73,964 | 68,390 | 47,138 | 29,847 | 15,264 | 23,541 | 18,451 | 19,509 |
| 20% Exceedance                              | 13,680 | 14,512 | 36,947 | 57,162 | 64,126 | 57,504 | 35,685 | 22,925 | 14,151 | 22,517 | 18,058 | 18,179 |
| 30% Exceedance                              | 13,188 | 13,490 | 25,728 | 37,482 | 51,187 | 44,355 | 26,133 | 17,105 | 13,491 | 21,571 | 17,280 | 16,250 |
| 40% Exceedance                              | 11,968 | 13,176 | 19,784 | 28,875 | 43,685 | 32,662 | 20,058 | 14,087 | 13,274 | 19,549 | 16,748 | 14,208 |
| 50% Exceedance                              | 10,910 | 12,239 | 16,017 | 23,676 | 31,173 | 25,072 | 16,185 | 12,367 | 13,054 | 18,181 | 15,820 | 11,249 |
| 60% Exceedance                              | 9,206  | 11,179 | 13,824 | 19,023 | 23,614 | 22,308 | 13,477 | 11,767 | 12,219 | 16,242 | 11,941 | 10,285 |
| 70% Exceedance                              | 8,373  | 9,519  | 11,803 | 14,766 | 19,547 | 19,622 | 11,841 | 11,036 | 11,637 | 14,463 | 10,778 | 9,832  |
| 80% Exceedance                              | 8,030  | 8,389  | 10,227 | 12,499 | 15,682 | 15,221 | 11,288 | 9,870  | 10,893 | 12,469 | 9,093  | 9,066  |
| 90% Exceedance                              | 6,479  | 7,291  | 8,850  | 10,862 | 13,250 | 12,073 | 9,680  | 8,711  | 9,611  | 10,358 | 7,651  | 8,385  |
| Full Simulation Period Average <sup>a</sup> | 11,121 | 13,381 | 23,961 | 31,576 | 38,245 | 33,941 | 23,263 | 16,492 | 13,212 | 17,556 | 13,931 | 13,221 |
| Wet Water Years (29%)                       | 13,448 | 18,934 | 42,755 | 54,971 | 62,763 | 54,092 | 40,486 | 24,659 | 15,588 | 19,628 | 17,400 | 18,412 |
| Above Normal Water Years (12%)              | 10,653 | 11,615 | 19,336 | 41,145 | 49,420 | 47,993 | 26,802 | 18,627 | 14,040 | 21,775 | 18,364 | 17,263 |
| Below Normal Water Years (18%)              | 11,234 | 11,443 | 17,482 | 24,632 | 30,699 | 28,373 | 19,025 | 16,534 | 12,595 | 21,609 | 15,535 | 11,148 |
| Dry Water Years (22%)                       | 10,527 | 12,513 | 16,871 | 17,081 | 24,706 | 20,911 | 13,265 | 11,528 | 13,060 | 15,646 | 10,886 | 10,081 |
| Critical Water Years (19%)                  | 8,446  | 8,864  | 12,546 | 13,188 | 16,591 | 14,670 | 10,329 | 8,388  | 9,822  | 10,104 | 7,845  | 8,342  |

**Table 4H-2-1-2b. Sacramento River Flow at Freeport, Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 10% Exceedance                              | 15,244 | 19,005 | 55,897 | 67,794 | 73,897 | 69,310 | 48,674 | 30,857 | 15,237 | 22,927 | 18,751 | 20,741 |
| 20% Exceedance                              | 13,614 | 14,453 | 37,274 | 57,201 | 64,127 | 57,515 | 37,770 | 24,202 | 13,667 | 21,794 | 17,931 | 18,305 |
| 30% Exceedance                              | 13,088 | 13,567 | 26,006 | 37,872 | 51,304 | 44,416 | 27,560 | 18,775 | 13,022 | 21,118 | 17,043 | 17,148 |
| 40% Exceedance                              | 12,102 | 13,190 | 19,894 | 29,020 | 44,357 | 32,881 | 22,000 | 16,048 | 12,772 | 19,298 | 16,519 | 14,559 |
| 50% Exceedance                              | 10,993 | 12,457 | 15,836 | 23,332 | 31,195 | 25,173 | 18,348 | 14,071 | 12,611 | 17,876 | 15,664 | 11,378 |
| 60% Exceedance                              | 9,196  | 11,181 | 14,178 | 18,729 | 23,671 | 22,597 | 15,447 | 13,411 | 12,192 | 16,162 | 11,838 | 10,445 |
| 70% Exceedance                              | 8,408  | 9,905  | 11,939 | 13,772 | 19,677 | 19,752 | 14,117 | 12,517 | 11,549 | 14,387 | 9,993  | 9,911  |
| 80% Exceedance                              | 8,213  | 8,554  | 10,403 | 12,458 | 16,825 | 15,261 | 12,631 | 11,879 | 10,962 | 11,164 | 8,719  | 8,961  |
| 90% Exceedance                              | 6,454  | 7,636  | 9,102  | 10,639 | 13,254 | 12,194 | 11,461 | 9,950  | 9,192  | 9,484  | 7,591  | 8,161  |
| Full Simulation Period Average <sup>a</sup> | 11,150 | 13,626 | 24,184 | 31,669 | 38,476 | 34,033 | 25,137 | 18,056 | 12,928 | 16,999 | 13,676 | 13,537 |
| Wet Water Years (29%)                       | 13,462 | 19,197 | 43,254 | 55,102 | 62,856 | 54,092 | 41,517 | 25,724 | 15,541 | 19,526 | 17,486 | 18,984 |
| Above Normal Water Years (12%)              | 10,724 | 12,109 | 19,288 | 41,339 | 49,548 | 48,400 | 29,470 | 20,715 | 13,508 | 21,617 | 18,002 | 18,414 |
| Below Normal Water Years (18%)              | 11,126 | 11,729 | 17,574 | 24,887 | 30,977 | 28,463 | 21,662 | 18,216 | 12,620 | 20,527 | 14,982 | 11,270 |
| Dry Water Years (22%)                       | 10,514 | 12,510 | 17,098 | 16,892 | 24,896 | 21,031 | 15,879 | 13,697 | 12,532 | 14,777 | 10,417 | 10,097 |
| Critical Water Years (19%)                  | 8,646  | 9,171  | 12,635 | 13,331 | 17,102 | 14,673 | 11,410 | 9,568  | 9,326  | 9,457  | 7,664  | 8,275  |

**Table 4H-2-1-2c. Sacramento River Flow at Freeport, Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct  | Nov | Dec   | Jan   | Feb   | Mar | Apr   | May   | Jun  | Jul    | Aug  | Sep   |
|---------------------------------------------|------|-----|-------|-------|-------|-----|-------|-------|------|--------|------|-------|
| 10% Exceedance                              | -21  | 56  | 1,106 | 1,028 | -67   | 920 | 1,536 | 1,011 | -27  | -614   | 301  | 1,231 |
| 20% Exceedance                              | -66  | -58 | 327   | 39    | 0     | 11  | 2,086 | 1,278 | -484 | -723   | -126 | 126   |
| 30% Exceedance                              | -100 | 77  | 278   | 390   | 117   | 61  | 1,427 | 1,671 | -469 | -453   | -236 | 898   |
| 40% Exceedance                              | 135  | 14  | 110   | 145   | 671   | 219 | 1,942 | 1,961 | -502 | -251   | -229 | 352   |
| 50% Exceedance                              | 83   | 219 | -181  | -344  | 22    | 101 | 2,163 | 1,704 | -443 | -305   | -156 | 128   |
| 60% Exceedance                              | -10  | 2   | 354   | -294  | 57    | 289 | 1,970 | 1,644 | -27  | -80    | -103 | 160   |
| 70% Exceedance                              | 35   | 386 | 136   | -994  | 129   | 130 | 2,276 | 1,481 | -88  | -77    | -785 | 79    |
| 80% Exceedance                              | 183  | 165 | 176   | -41   | 1,143 | 40  | 1,343 | 2,009 | 70   | -1,304 | -373 | -104  |
| 90% Exceedance                              | -25  | 345 | 252   | -223  | 4     | 120 | 1,782 | 1,239 | -419 | -874   | -60  | -223  |
| Full Simulation Period Average <sup>a</sup> | 29   | 245 | 222   | 93    | 231   | 92  | 1,874 | 1,564 | -283 | -557   | -255 | 316   |
| Wet Water Years (29%)                       | 14   | 263 | 498   | 131   | 92    | 0   | 1,031 | 1,066 | -46  | -102   | 86   | 571   |
| Above Normal Water Years (12%)              | 72   | 494 | -48   | 193   | 128   | 406 | 2,668 | 2,088 | -532 | -158   | -363 | 1,151 |
| Below Normal Water Years (18%)              | -108 | 285 | 92    | 255   | 278   | 89  | 2,637 | 1,682 | 25   | -1,082 | -553 | 122   |
| Dry Water Years (22%)                       | -13  | -2  | 228   | -189  | 190   | 120 | 2,614 | 2,169 | -528 | -869   | -468 | 16    |
| Critical Water Years (19%)                  | 200  | 306 | 89    | 143   | 511   | 3   | 1,081 | 1,180 | -496 | -647   | -181 | -67   |

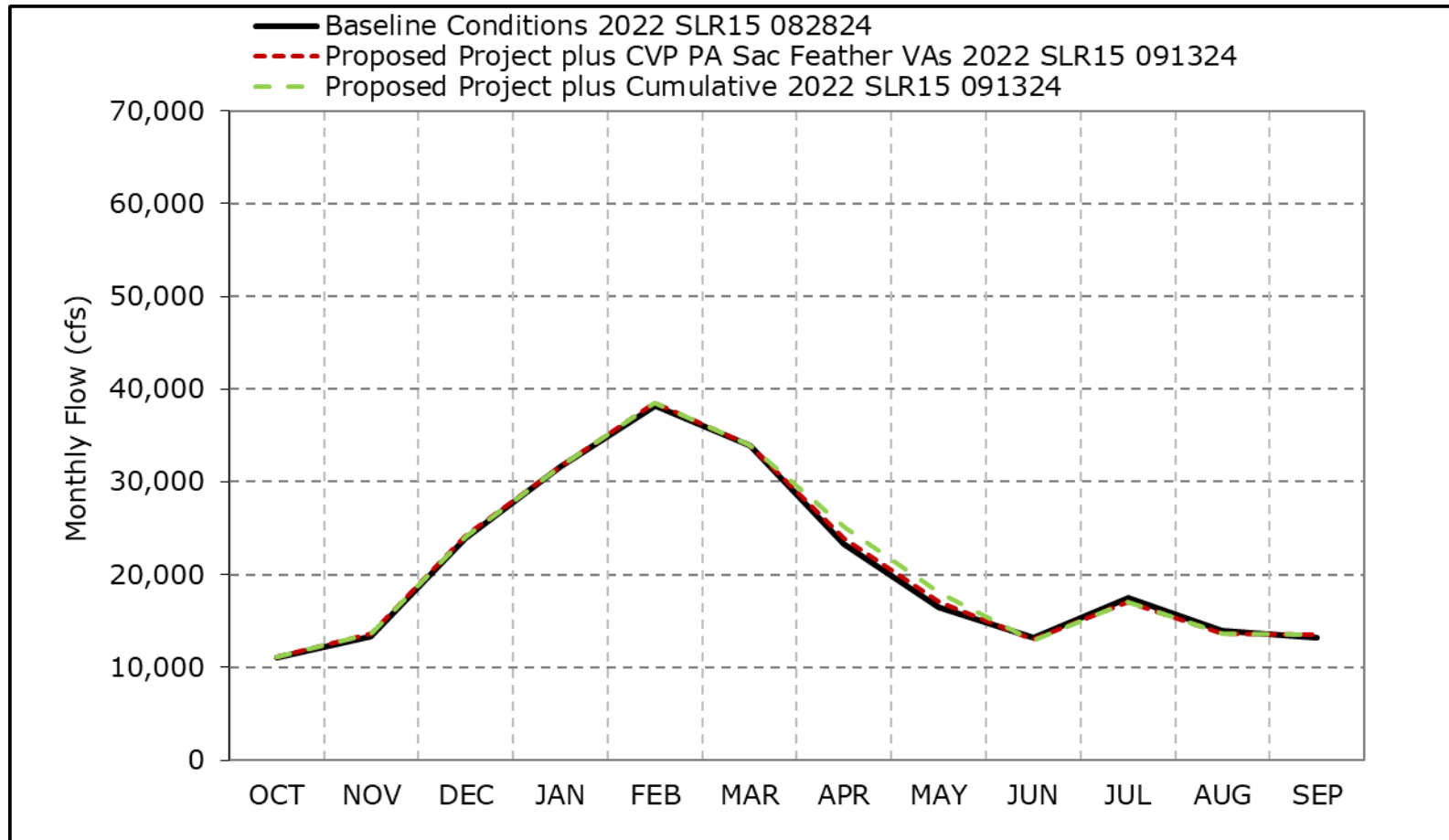
<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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 4H-2-1a. Sacramento River Flow at Freeport, Long-Term Average Flow**

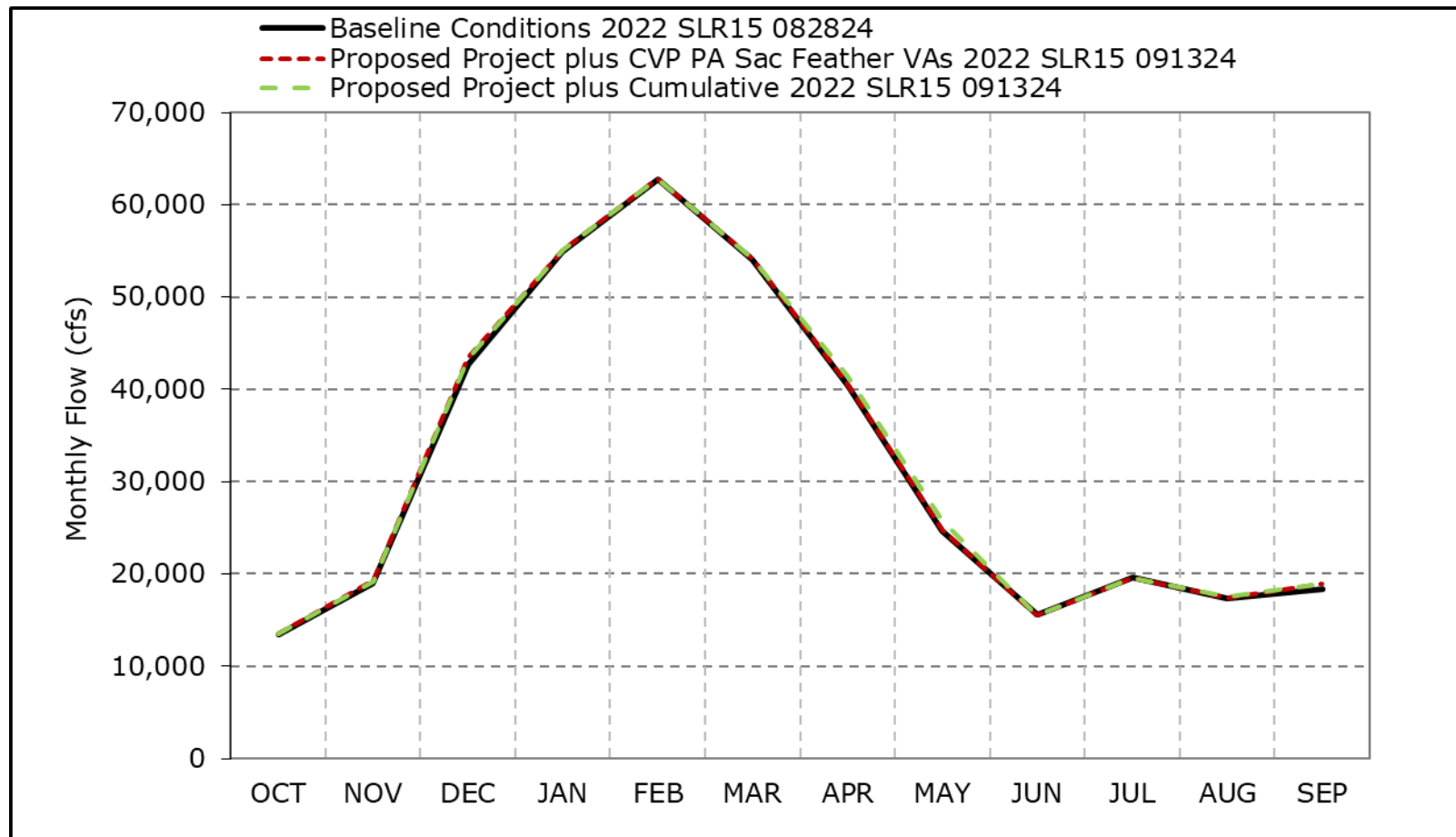


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1b. Sacramento River Flow at Freeport, Wet Year Average Flow**

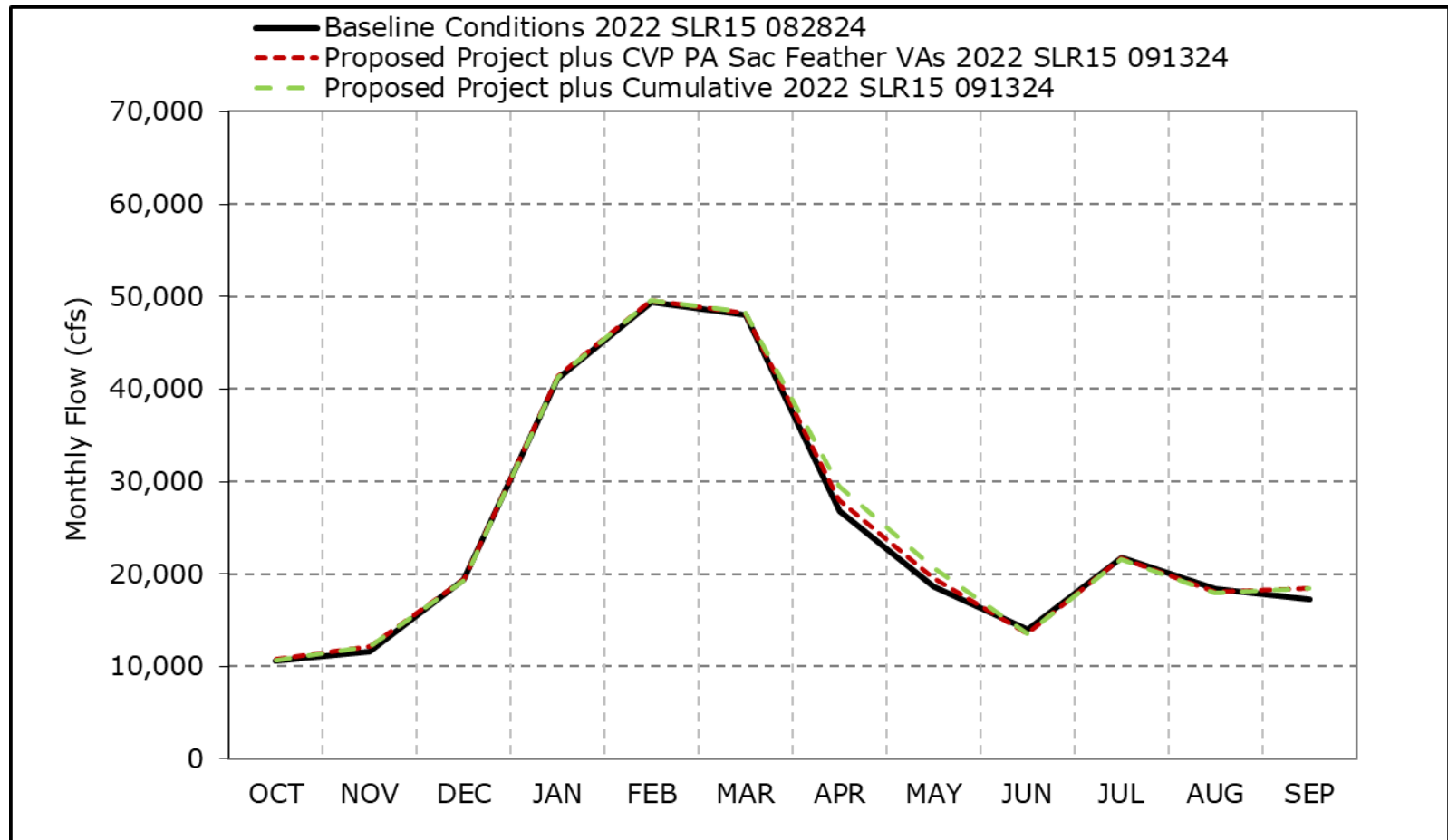


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1c. Sacramento River Flow at Freeport, Above Normal Year Average Flow**

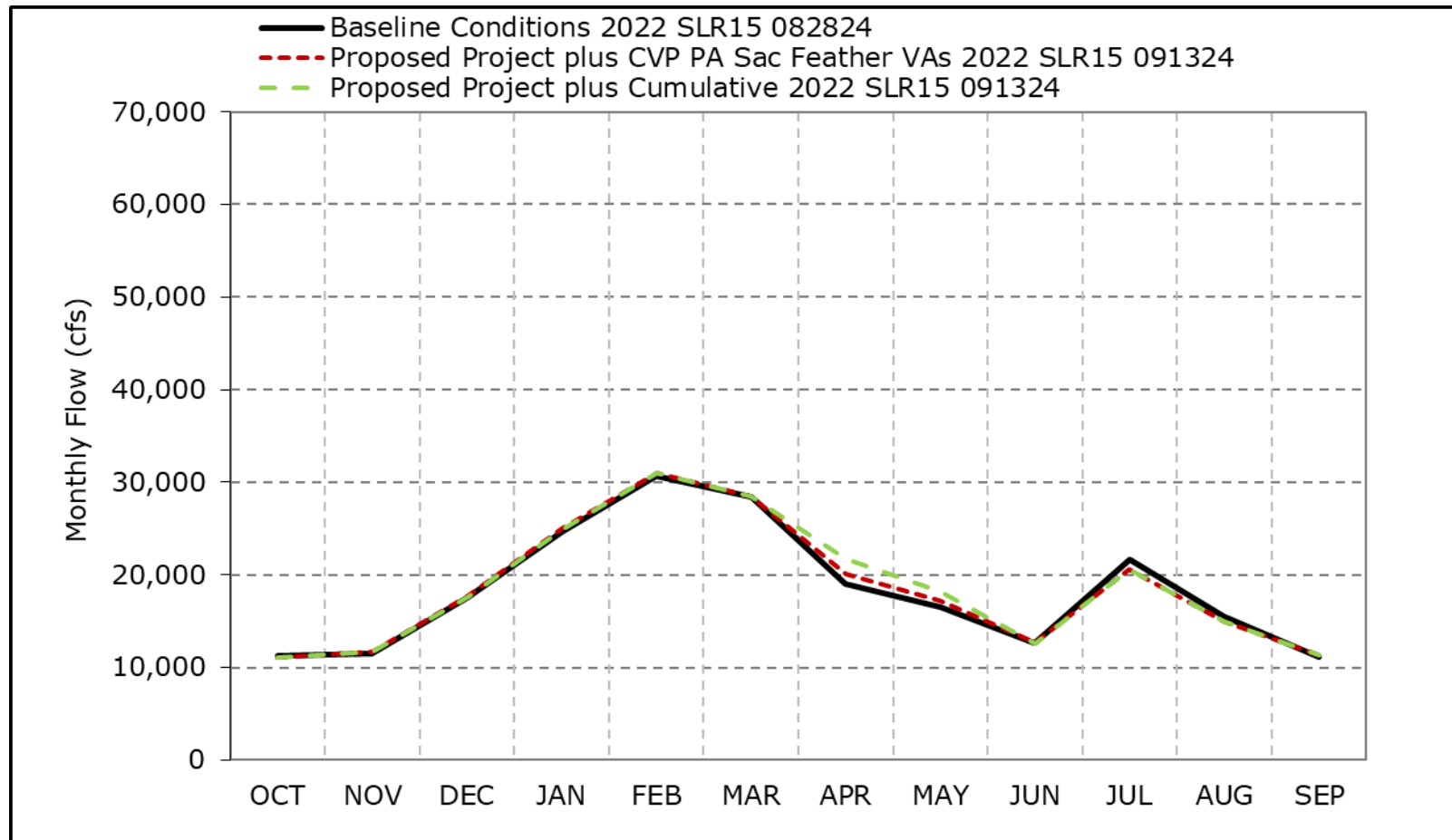


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1d. Sacramento River Flow at Freeport, Below Normal Year Average Flow**



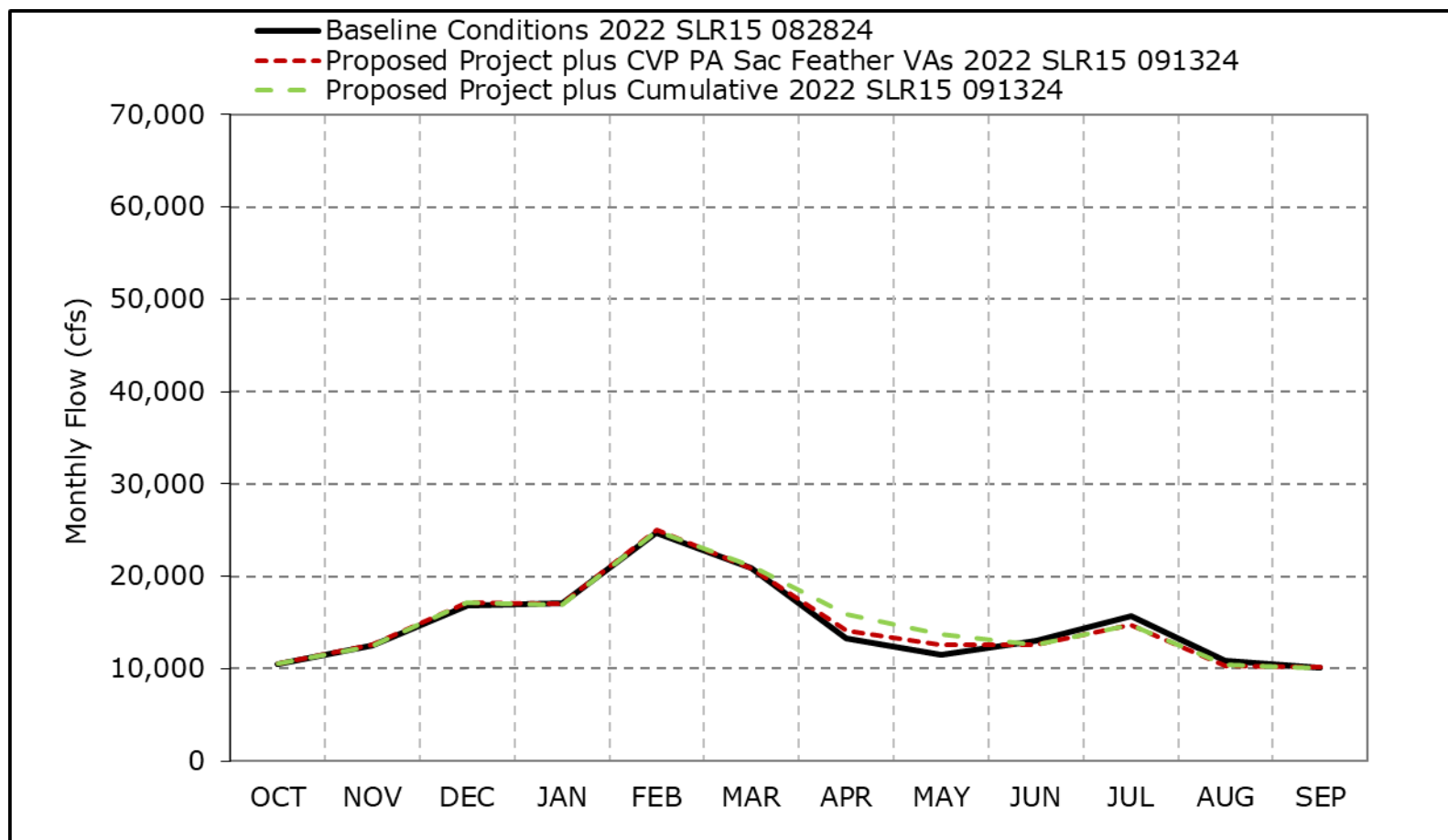
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.



**Figure 4H-2-1e. Sacramento River Flow at Freeport, Dry Year Average Flow**

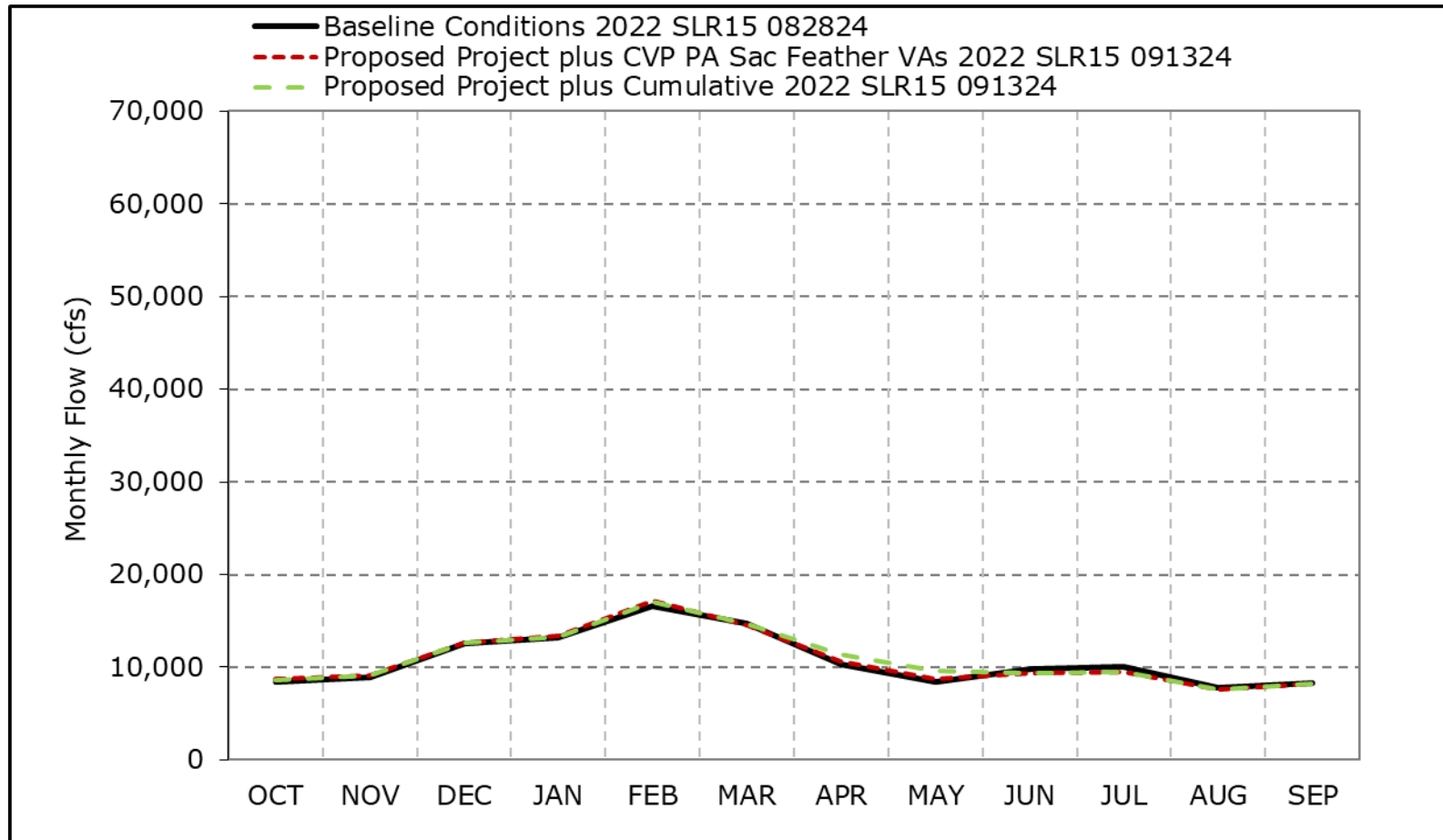


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1f. Sacramento River Flow at Freeport, Critical Year Average Flow**

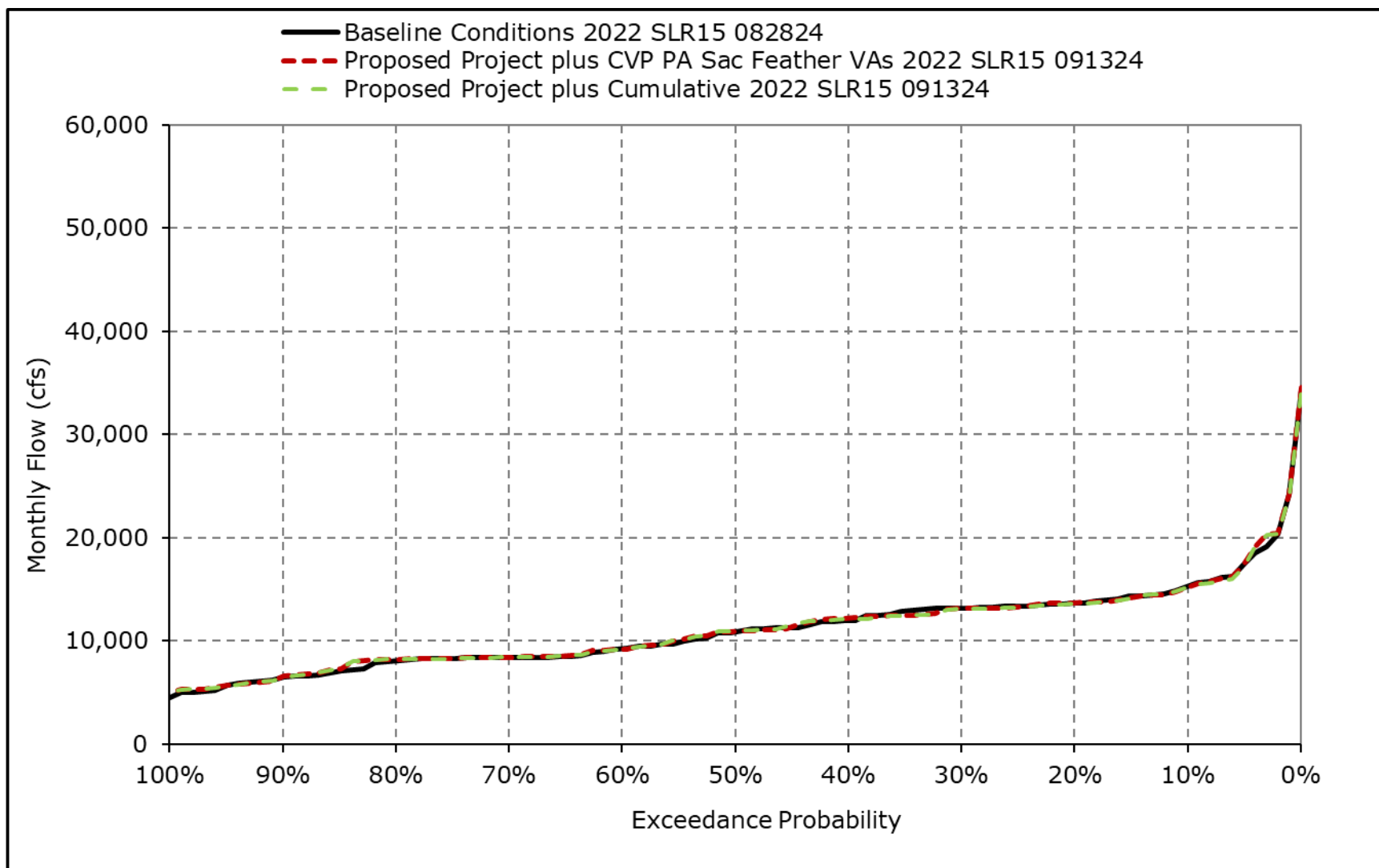


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

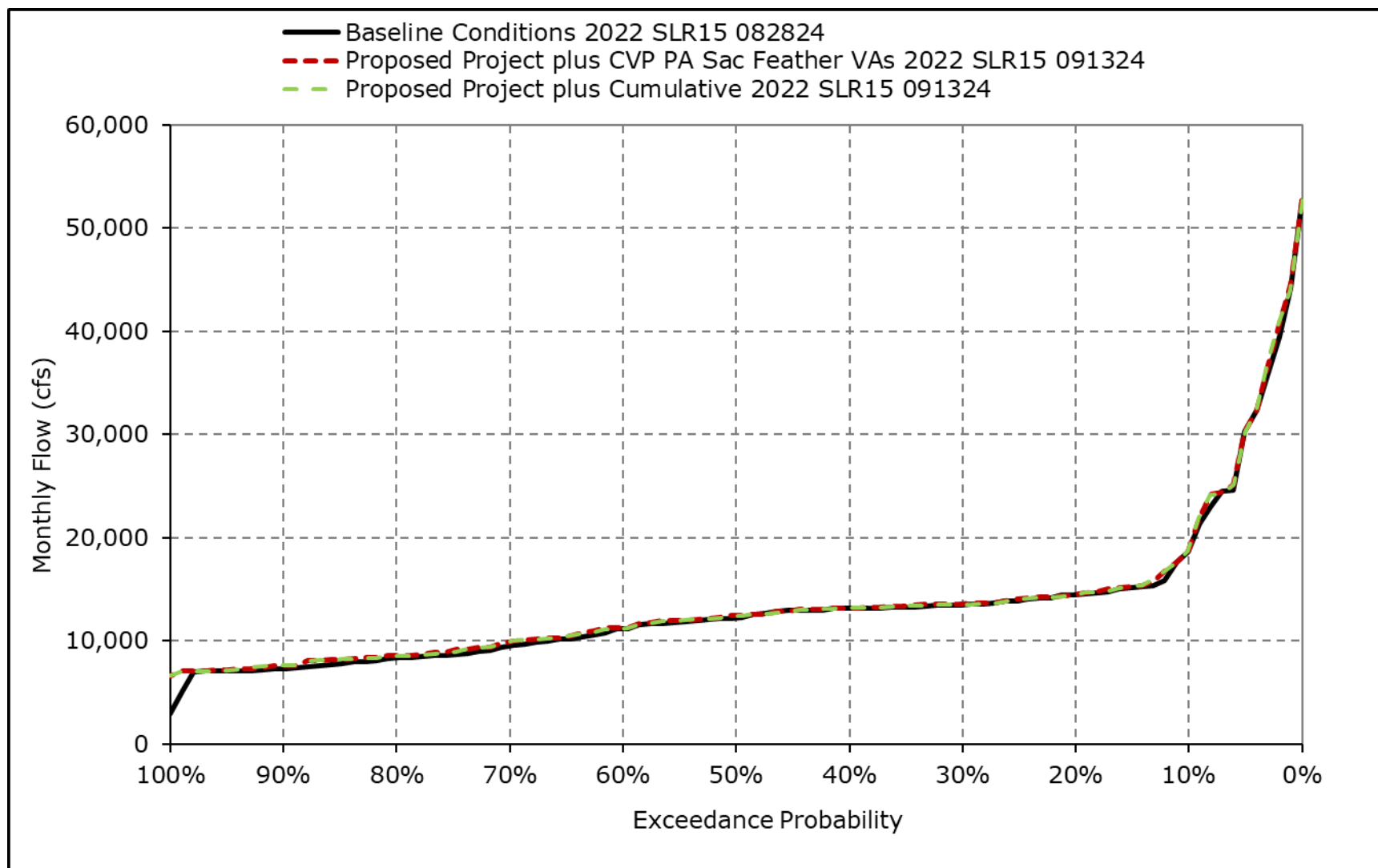
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1g. Sacramento River Flow at Freeport, October**



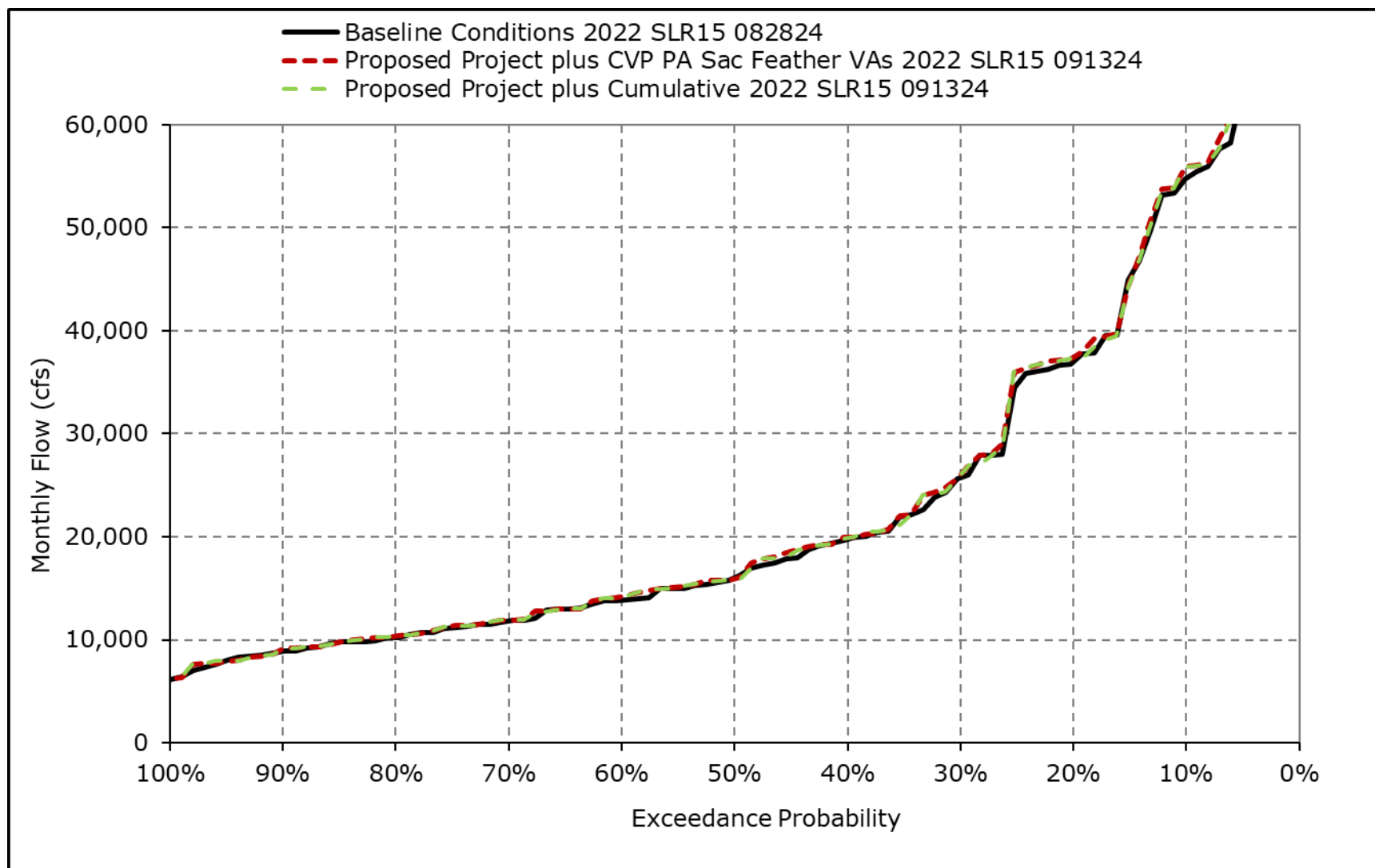
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1h. Sacramento River Flow at Freeport, November**



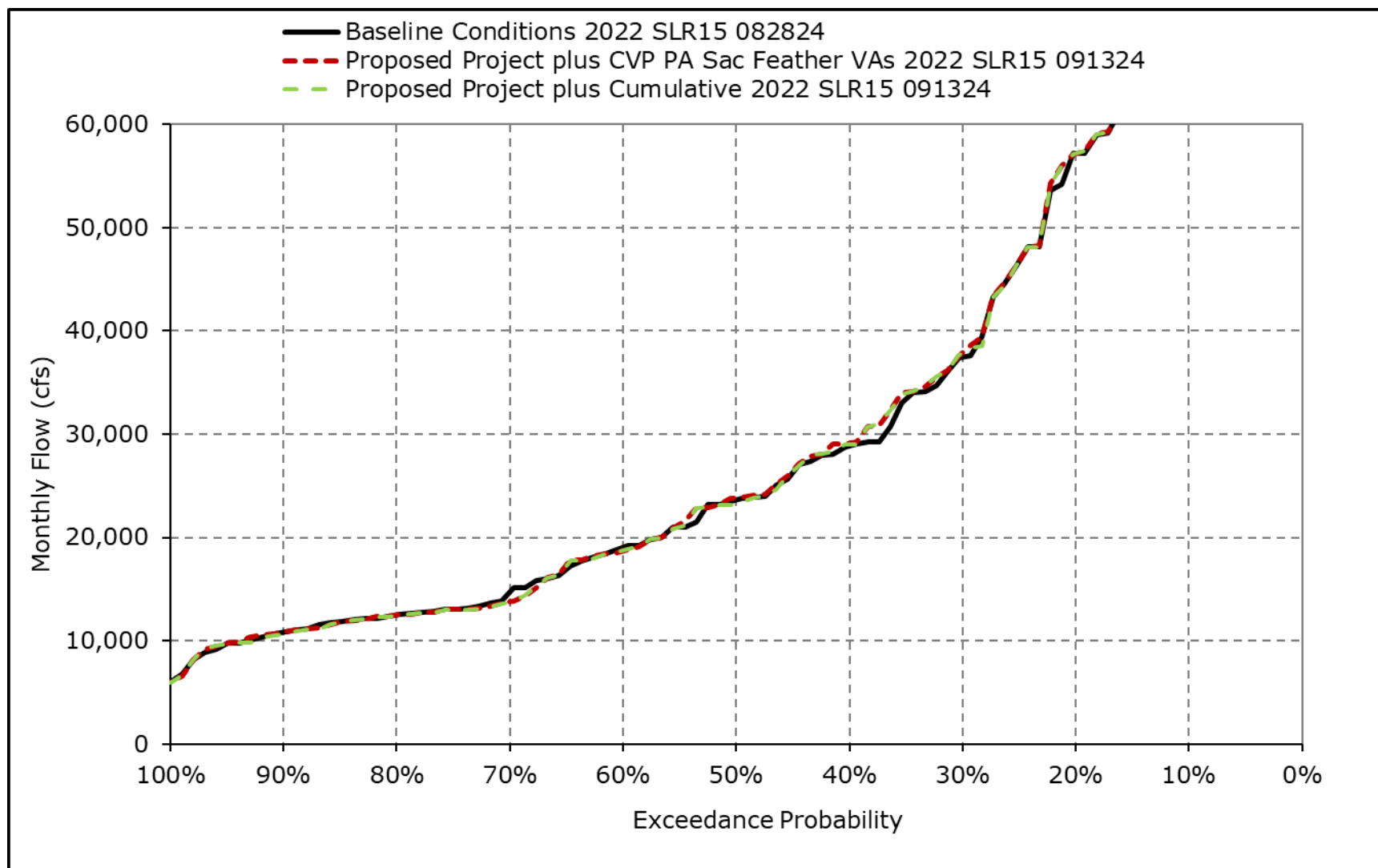
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1i. Sacramento River Flow at Freeport, December**



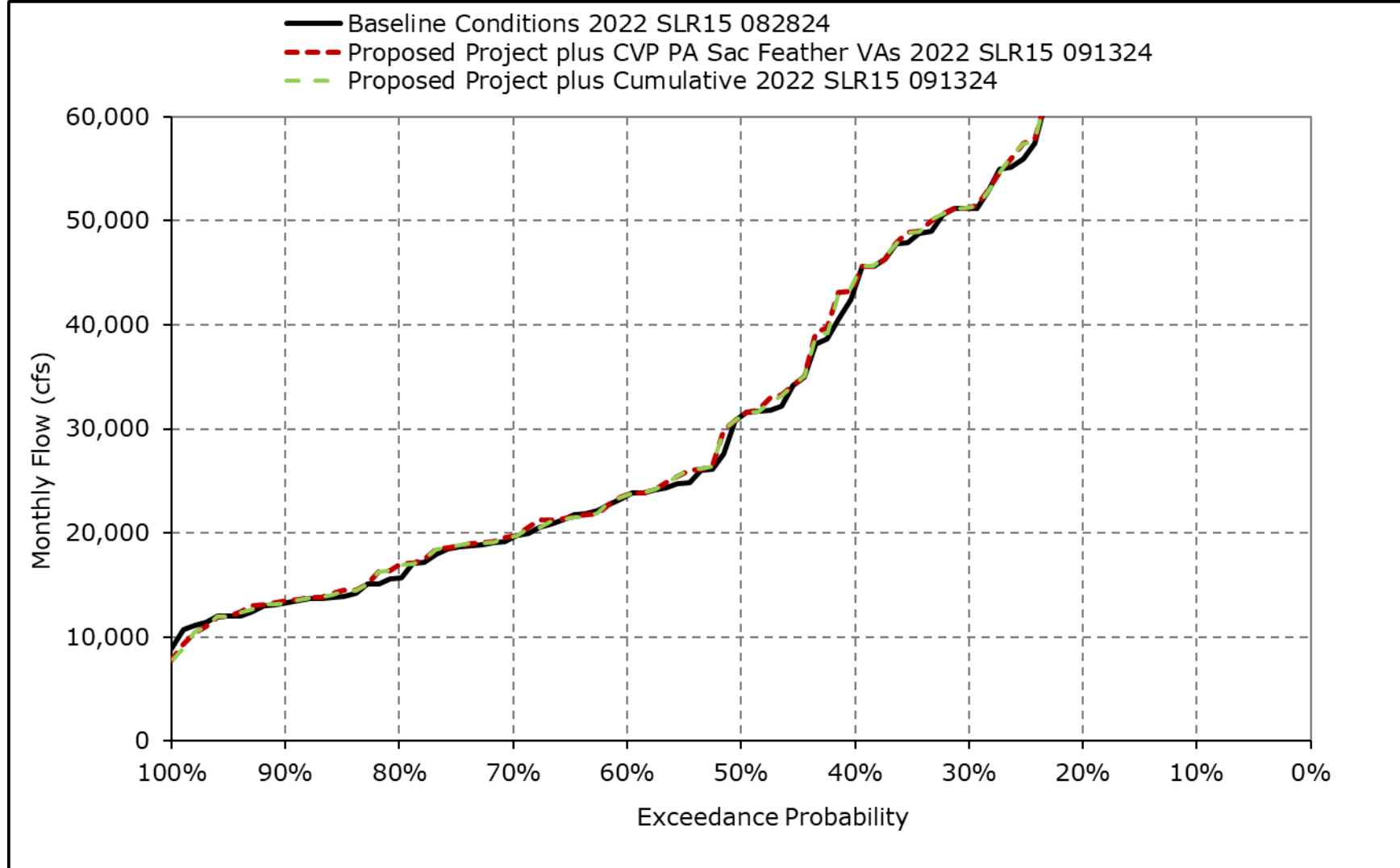
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1j. Sacramento River Flow at Freeport, January**



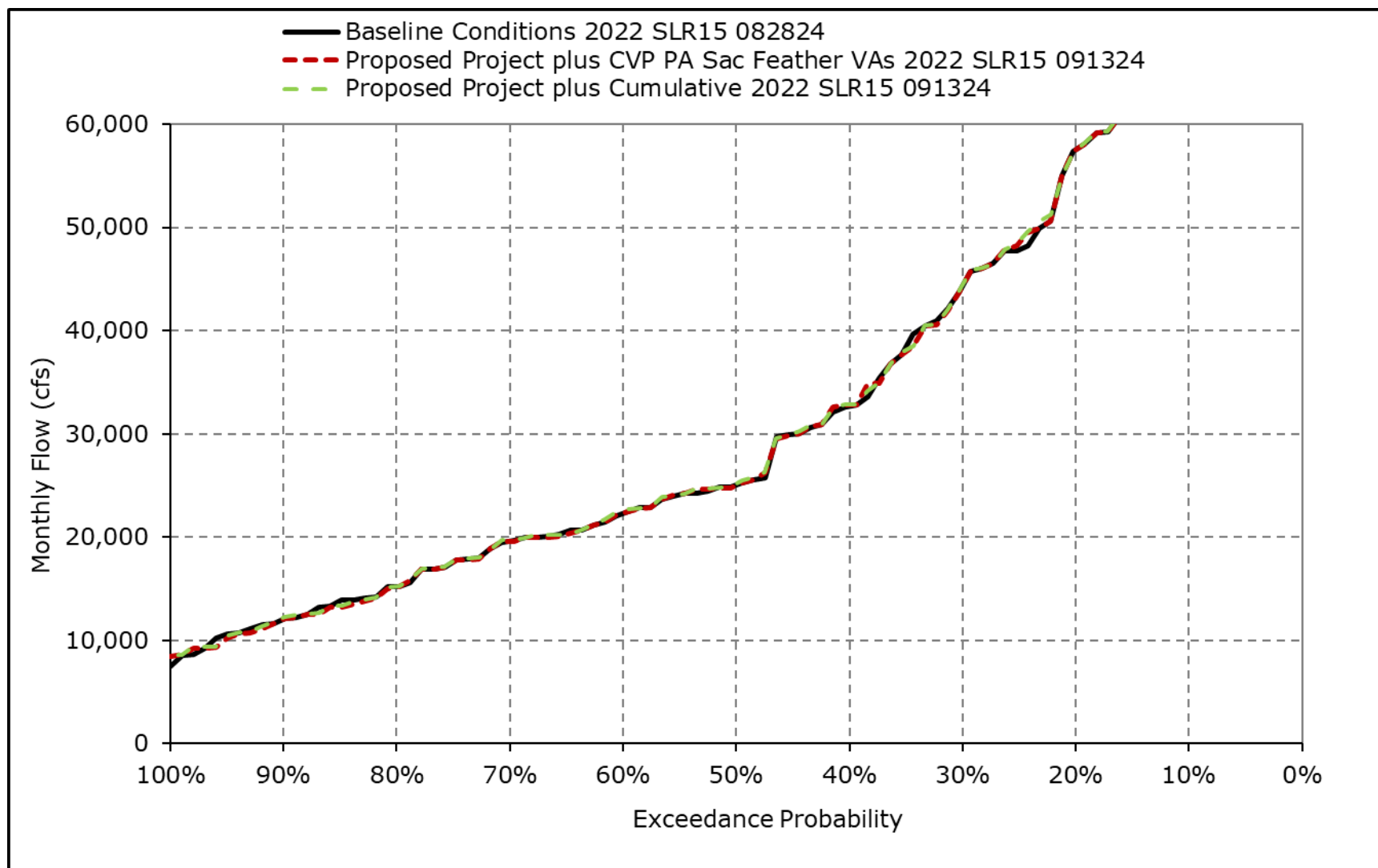
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1k. Sacramento River Flow at Freeport, February**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

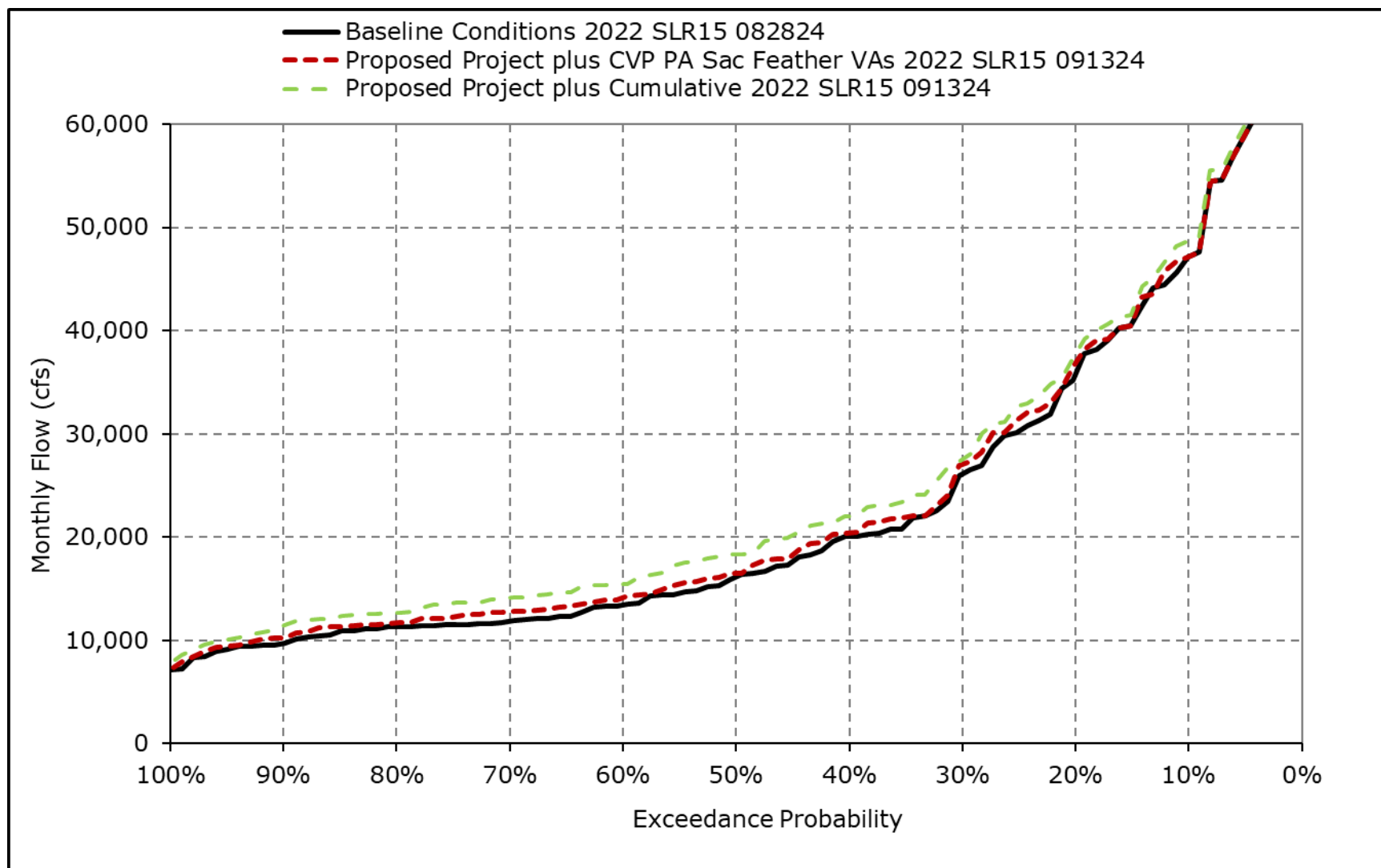
**Figure 4H-2-1I. Sacramento River Flow at Freeport, March**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

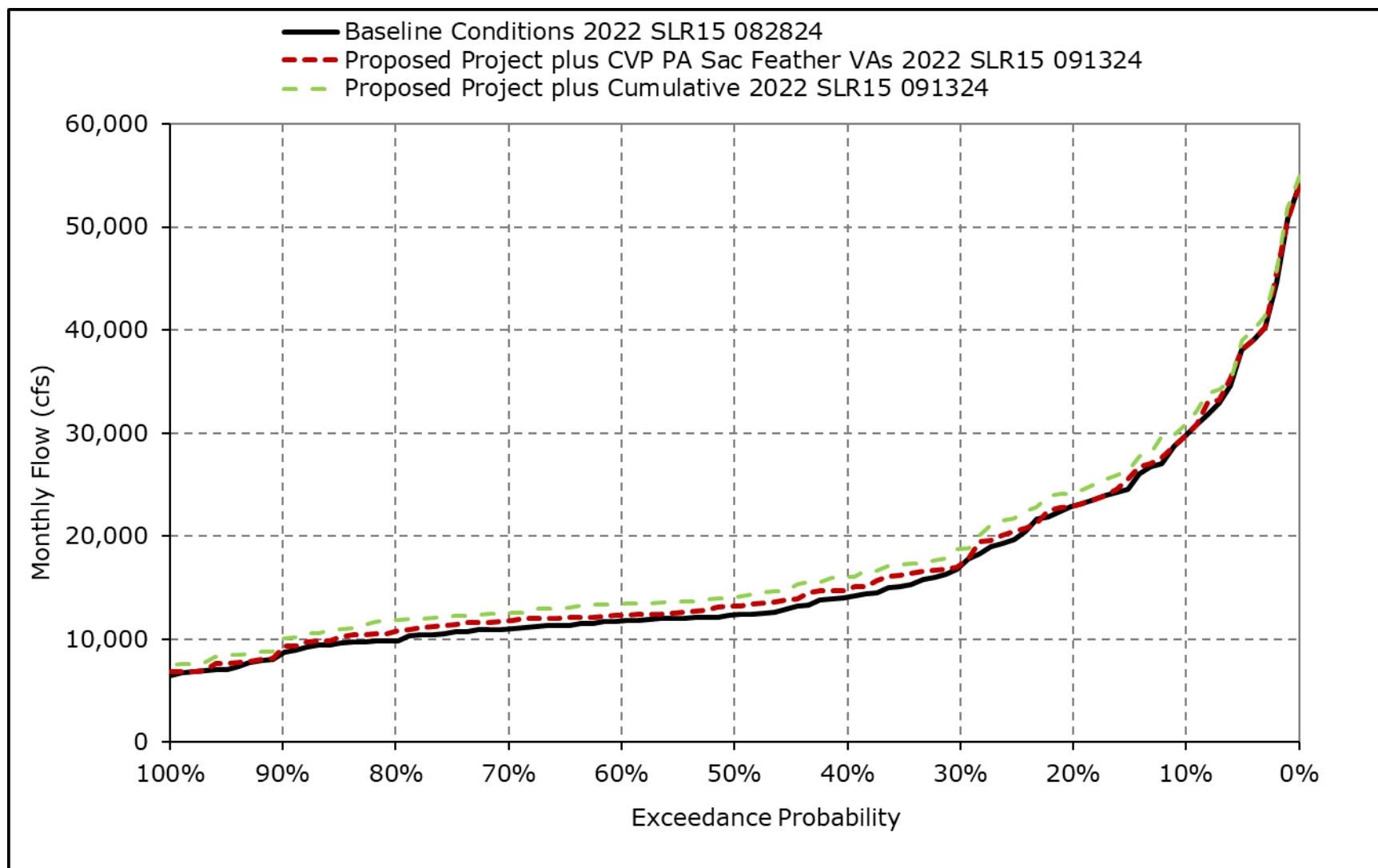


**Figure 4H-2-1m. Sacramento River Flow at Freeport, April**



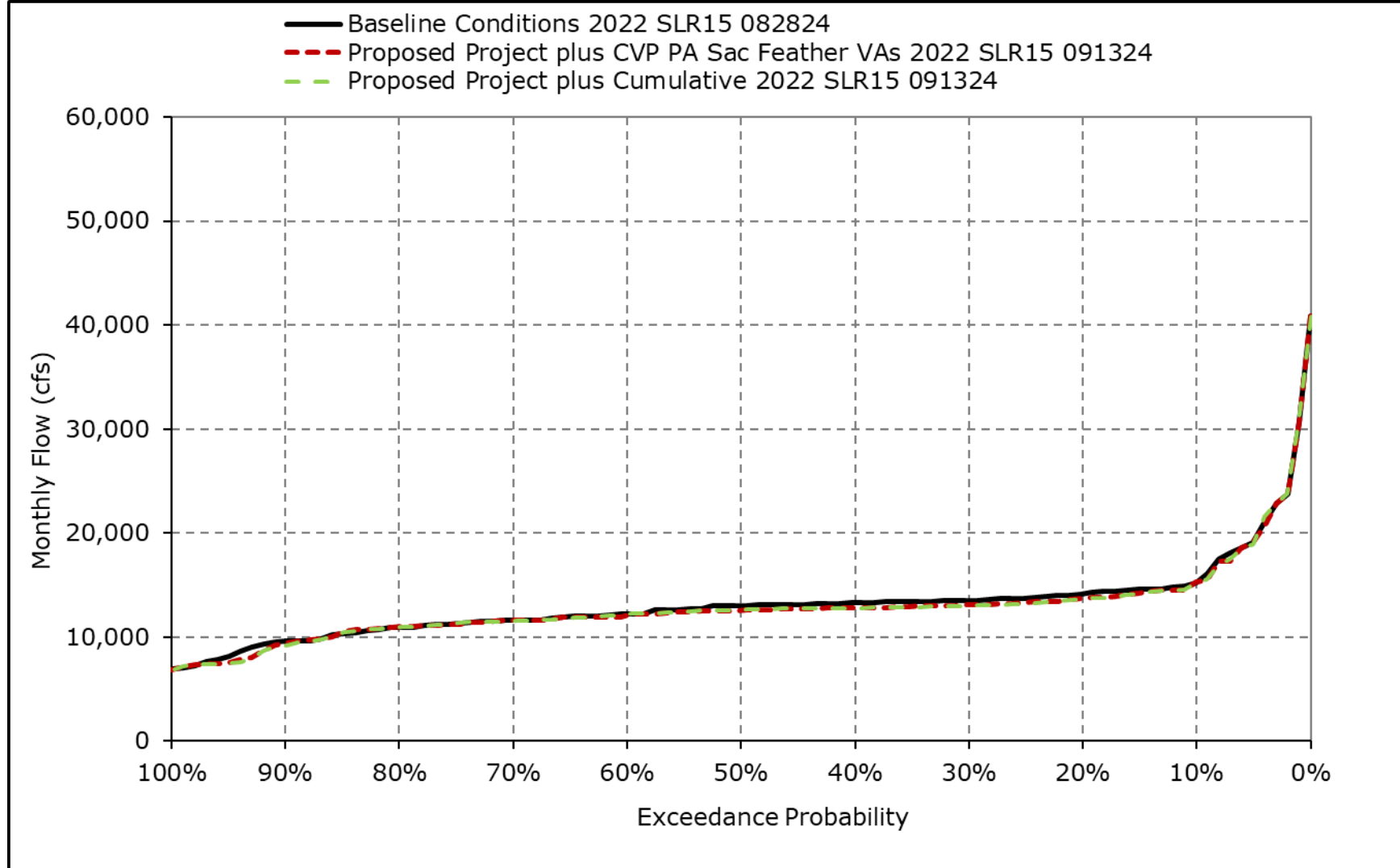
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1n. Sacramento River Flow at Freeport, May**



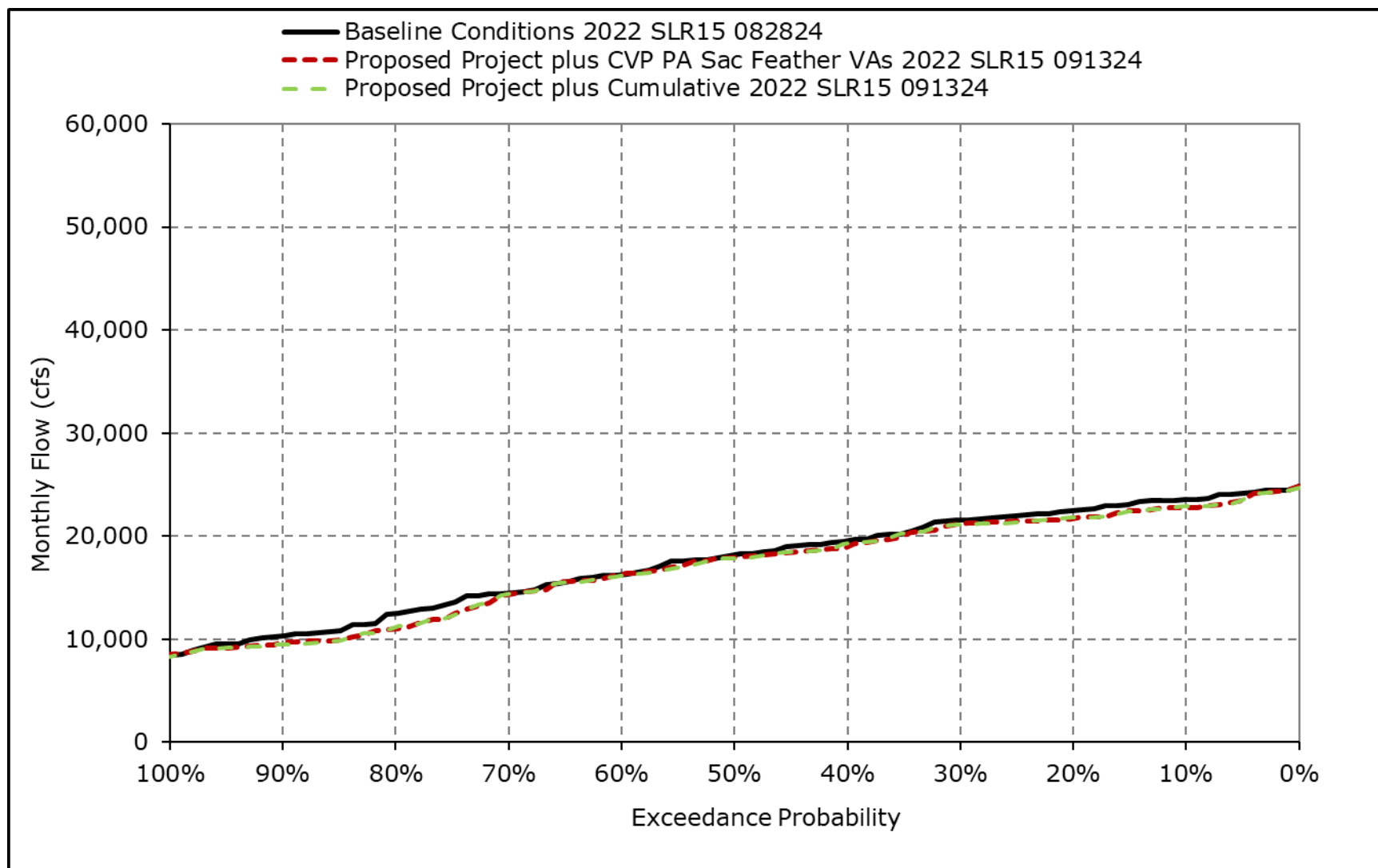
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1o. Sacramento River Flow at Freeport, June**



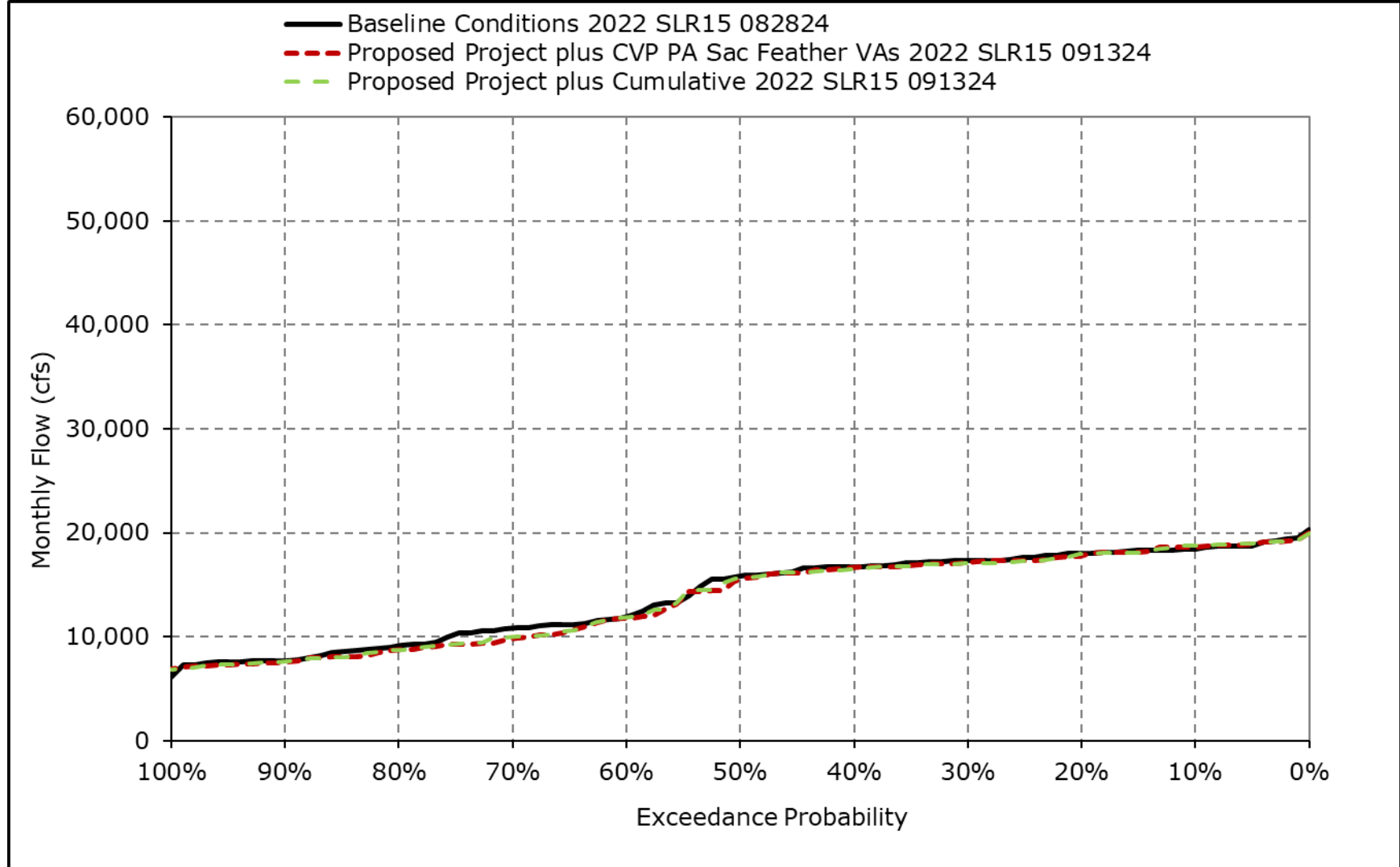
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1p. Sacramento River Flow at Freeport, July**



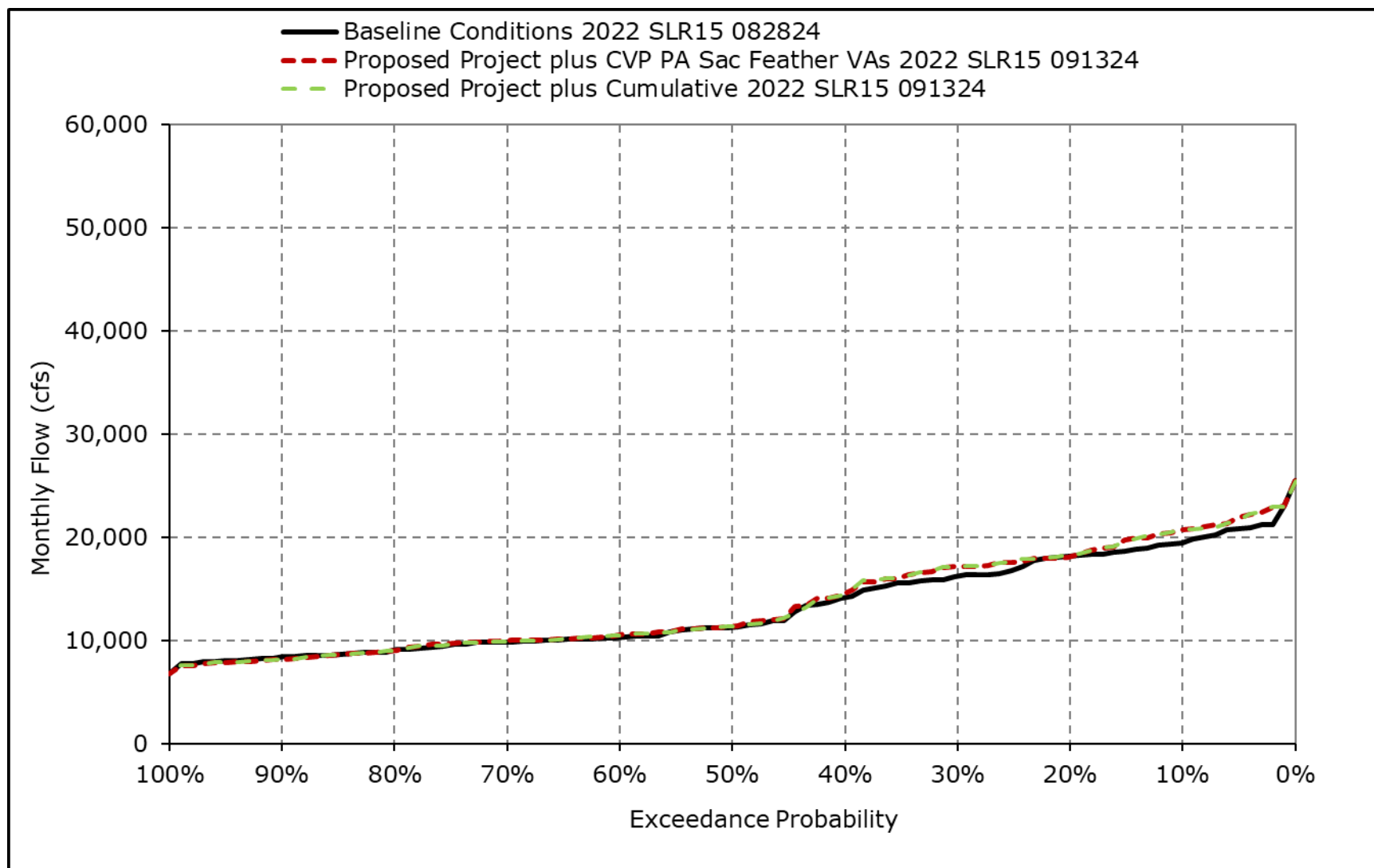
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1q. Sacramento River Flow at Freeport, August**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-1r. Sacramento River Flow at Freeport, September**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Table 4H-2-2-1a. Yolo Bypass Flow, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec    | Jan    | Feb    | Mar    | Apr   | May   | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|--------|--------|--------|--------|-------|-------|-----|-----|-----|-----|
| 10% Exceedance                              | 197 | 1,407 | 15,194 | 33,597 | 63,568 | 27,143 | 2,766 | 1,063 | 444 | 277 | 219 | 271 |
| 20% Exceedance                              | 134 | 372   | 8,598  | 16,243 | 23,161 | 9,319  | 1,521 | 623   | 341 | 267 | 210 | 256 |
| 30% Exceedance                              | 106 | 242   | 2,134  | 5,685  | 10,781 | 4,783  | 904   | 480   | 278 | 264 | 202 | 246 |
| 40% Exceedance                              | 93  | 162   | 1,064  | 3,224  | 7,167  | 2,748  | 620   | 410   | 259 | 257 | 197 | 238 |
| 50% Exceedance                              | 78  | 127   | 548    | 1,636  | 3,441  | 1,305  | 380   | 314   | 254 | 252 | 192 | 230 |
| 60% Exceedance                              | 71  | 104   | 318    | 986    | 1,733  | 795    | 268   | 271   | 246 | 248 | 189 | 217 |
| 70% Exceedance                              | 62  | 93    | 190    | 426    | 754    | 474    | 246   | 255   | 239 | 240 | 183 | 201 |
| 80% Exceedance                              | 52  | 80    | 112    | 237    | 420    | 276    | 230   | 223   | 231 | 228 | 176 | 180 |
| 90% Exceedance                              | 42  | 69    | 94     | 131    | 179    | 126    | 214   | 212   | 220 | 210 | 146 | 162 |
| Full Simulation Period Average <sup>a</sup> | 169 | 655   | 5,780  | 12,489 | 18,683 | 9,599  | 2,078 | 562   | 310 | 250 | 218 | 227 |
| Wet Water Years (29%)                       | 321 | 1,576 | 16,087 | 35,371 | 49,896 | 26,266 | 5,982 | 977   | 440 | 280 | 219 | 258 |
| Above Normal Water Years (12%)              | 138 | 460   | 2,520  | 12,070 | 18,183 | 11,273 | 957   | 604   | 276 | 239 | 190 | 217 |
| Below Normal Water Years (18%)              | 146 | 334   | 2,119  | 2,475  | 6,507  | 2,018  | 605   | 560   | 239 | 198 | 194 | 234 |
| Dry Water Years (22%)                       | 87  | 260   | 1,239  | 926    | 2,944  | 837    | 343   | 295   | 272 | 253 | 184 | 222 |
| Critical Water Years (19%)                  | 74  | 133   | 832    | 707    | 1,115  | 428    | 230   | 214   | 242 | 254 | 294 | 187 |

**Table 4H-2-2-1b. Yolo Bypass Flow, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec    | Jan    | Feb    | Mar    | Apr   | May   | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|--------|--------|--------|--------|-------|-------|-----|-----|-----|-----|
| 10% Exceedance                              | 180 | 1,266 | 16,414 | 33,793 | 63,639 | 27,089 | 2,761 | 1,091 | 464 | 282 | 219 | 270 |
| 20% Exceedance                              | 123 | 328   | 8,450  | 16,365 | 23,580 | 9,739  | 1,497 | 595   | 339 | 270 | 208 | 255 |
| 30% Exceedance                              | 104 | 233   | 1,996  | 5,606  | 10,438 | 4,751  | 903   | 475   | 285 | 265 | 198 | 246 |
| 40% Exceedance                              | 87  | 148   | 1,064  | 3,045  | 6,720  | 2,469  | 619   | 397   | 259 | 259 | 195 | 236 |
| 50% Exceedance                              | 77  | 122   | 521    | 1,587  | 2,891  | 1,225  | 361   | 309   | 254 | 252 | 190 | 224 |
| 60% Exceedance                              | 70  | 102   | 317    | 986    | 1,733  | 801    | 267   | 271   | 246 | 249 | 186 | 216 |
| 70% Exceedance                              | 60  | 91    | 170    | 425    | 766    | 479    | 244   | 254   | 236 | 243 | 178 | 200 |
| 80% Exceedance                              | 51  | 80    | 110    | 234    | 437    | 276    | 230   | 226   | 231 | 230 | 160 | 178 |
| 90% Exceedance                              | 43  | 67    | 90     | 134    | 185    | 121    | 212   | 205   | 222 | 212 | 129 | 156 |
| Full Simulation Period Average <sup>a</sup> | 160 | 632   | 5,907  | 12,584 | 18,698 | 9,666  | 2,100 | 560   | 311 | 252 | 186 | 226 |
| Wet Water Years (29%)                       | 329 | 1,698 | 16,488 | 35,702 | 50,171 | 26,351 | 6,067 | 985   | 444 | 283 | 219 | 258 |
| Above Normal Water Years (12%)              | 88  | 232   | 2,480  | 12,278 | 18,240 | 11,673 | 949   | 596   | 275 | 241 | 191 | 217 |
| Below Normal Water Years (18%)              | 114 | 168   | 2,074  | 2,360  | 6,437  | 1,989  | 602   | 546   | 241 | 208 | 192 | 235 |
| Dry Water Years (22%)                       | 86  | 257   | 1,348  | 925    | 2,822  | 835    | 343   | 295   | 277 | 254 | 173 | 218 |
| Critical Water Years (19%)                  | 74  | 132   | 833    | 677    | 946    | 428    | 228   | 209   | 239 | 254 | 141 | 185 |

**Table 4H-2-2-1c. Yolo Bypass Flow, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov  | Dec   | Jan  | Feb  | Mar  | Apr | May | Jun | Jul | Aug  | Sep |
|---------------------------------------------|-----|------|-------|------|------|------|-----|-----|-----|-----|------|-----|
| 10% Exceedance                              | -16 | -141 | 1,220 | 196  | 71   | -54  | -5  | 27  | 19  | 5   | 0    | 0   |
| 20% Exceedance                              | -12 | -45  | -148  | 122  | 419  | 420  | -24 | -29 | -2  | 2   | -2   | -1  |
| 30% Exceedance                              | -2  | -9   | -137  | -79  | -343 | -32  | 0   | -5  | 7   | 1   | -4   | 0   |
| 40% Exceedance                              | -6  | -13  | 1     | -179 | -447 | -279 | -1  | -12 | 0   | 1   | -2   | -2  |
| 50% Exceedance                              | -1  | -4   | -27   | -49  | -550 | -80  | -19 | -5  | 0   | 1   | -2   | -6  |
| 60% Exceedance                              | -1  | -1   | 0     | 0    | 0    | 6    | -1  | -1  | -1  | 1   | -3   | -1  |
| 70% Exceedance                              | -2  | -2   | -20   | -1   | 12   | 5    | -2  | -1  | -2  | 4   | -5   | -1  |
| 80% Exceedance                              | -1  | 1    | -2    | -2   | 17   | 0    | 0   | 3   | 0   | 2   | -16  | -2  |
| 90% Exceedance                              | 1   | -2   | -4    | 3    | 7    | -5   | -2  | -7  | 2   | 2   | -17  | -6  |
| Full Simulation Period Average <sup>a</sup> | -10 | -22  | 127   | 94   | 15   | 67   | 23  | -2  | 2   | 3   | -32  | -1  |
| Wet Water Years (29%)                       | 8   | 123  | 401   | 331  | 275  | 84   | 85  | 8   | 4   | 3   | 1    | 0   |
| Above Normal Water Years (12%)              | -50 | -228 | -40   | 208  | 57   | 399  | -8  | -8  | -1  | 2   | 1    | 0   |
| Below Normal Water Years (18%)              | -32 | -166 | -45   | -115 | -69  | -29  | -3  | -13 | 1   | 10  | -2   | 0   |
| Dry Water Years (22%)                       | -1  | -3   | 109   | -1   | -121 | -2   | 0   | 0   | 4   | 1   | -12  | -4  |
| Critical Water Years (19%)                  | 0   | -1   | 1     | -30  | -169 | 1    | -1  | -5  | -2  | 0   | -153 | -2  |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-2-2a. Yolo Bypass Flow, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec    | Jan    | Feb    | Mar    | Apr   | May   | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|--------|--------|--------|--------|-------|-------|-----|-----|-----|-----|
| 10% Exceedance                              | 197 | 1,407 | 15,194 | 33,597 | 63,568 | 27,143 | 2,766 | 1,063 | 444 | 277 | 219 | 271 |
| 20% Exceedance                              | 134 | 372   | 8,598  | 16,243 | 23,161 | 9,319  | 1,521 | 623   | 341 | 267 | 210 | 256 |
| 30% Exceedance                              | 106 | 242   | 2,134  | 5,685  | 10,781 | 4,783  | 904   | 480   | 278 | 264 | 202 | 246 |
| 40% Exceedance                              | 93  | 162   | 1,064  | 3,224  | 7,167  | 2,748  | 620   | 410   | 259 | 257 | 197 | 238 |
| 50% Exceedance                              | 78  | 127   | 548    | 1,636  | 3,441  | 1,305  | 380   | 314   | 254 | 252 | 192 | 230 |
| 60% Exceedance                              | 71  | 104   | 318    | 986    | 1,733  | 795    | 268   | 271   | 246 | 248 | 189 | 217 |
| 70% Exceedance                              | 62  | 93    | 190    | 426    | 754    | 474    | 246   | 255   | 239 | 240 | 183 | 201 |
| 80% Exceedance                              | 52  | 80    | 112    | 237    | 420    | 276    | 230   | 223   | 231 | 228 | 176 | 180 |
| 90% Exceedance                              | 42  | 69    | 94     | 131    | 179    | 126    | 214   | 212   | 220 | 210 | 146 | 162 |
| Full Simulation Period Average <sup>a</sup> | 169 | 655   | 5,780  | 12,489 | 18,683 | 9,599  | 2,078 | 562   | 310 | 250 | 218 | 227 |
| Wet Water Years (29%)                       | 321 | 1,576 | 16,087 | 35,371 | 49,896 | 26,266 | 5,982 | 977   | 440 | 280 | 219 | 258 |
| Above Normal Water Years (12%)              | 138 | 460   | 2,520  | 12,070 | 18,183 | 11,273 | 957   | 604   | 276 | 239 | 190 | 217 |
| Below Normal Water Years (18%)              | 146 | 334   | 2,119  | 2,475  | 6,507  | 2,018  | 605   | 560   | 239 | 198 | 194 | 234 |
| Dry Water Years (22%)                       | 87  | 260   | 1,239  | 926    | 2,944  | 837    | 343   | 295   | 272 | 253 | 184 | 222 |
| Critical Water Years (19%)                  | 74  | 133   | 832    | 707    | 1,115  | 428    | 230   | 214   | 242 | 254 | 294 | 187 |

**Table 4H-2-2-2b. Yolo Bypass Flow, Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec    | Jan    | Feb    | Mar    | Apr   | May   | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|--------|--------|--------|--------|-------|-------|-----|-----|-----|-----|
| 10% Exceedance                              | 181 | 1,296 | 16,444 | 33,804 | 63,679 | 27,173 | 2,764 | 1,096 | 465 | 282 | 219 | 270 |
| 20% Exceedance                              | 122 | 351   | 8,472  | 16,395 | 22,646 | 9,944  | 1,502 | 615   | 342 | 270 | 208 | 257 |
| 30% Exceedance                              | 104 | 254   | 1,981  | 5,637  | 10,447 | 4,802  | 910   | 476   | 288 | 265 | 198 | 246 |
| 40% Exceedance                              | 88  | 176   | 1,060  | 2,981  | 6,752  | 2,481  | 620   | 399   | 259 | 260 | 194 | 236 |
| 50% Exceedance                              | 77  | 136   | 538    | 1,599  | 2,912  | 1,237  | 383   | 312   | 254 | 252 | 189 | 226 |
| 60% Exceedance                              | 70  | 118   | 318    | 998    | 1,744  | 824    | 271   | 276   | 246 | 248 | 184 | 217 |
| 70% Exceedance                              | 63  | 108   | 190    | 438    | 768    | 479    | 246   | 261   | 238 | 239 | 178 | 201 |
| 80% Exceedance                              | 53  | 96    | 118    | 241    | 440    | 288    | 230   | 233   | 232 | 226 | 167 | 177 |
| 90% Exceedance                              | 43  | 85    | 104    | 141    | 191    | 129    | 209   | 204   | 222 | 212 | 127 | 158 |
| Full Simulation Period Average <sup>a</sup> | 155 | 649   | 5,889  | 12,587 | 18,678 | 9,675  | 2,123 | 562   | 313 | 253 | 186 | 226 |
| Wet Water Years (29%)                       | 312 | 1,711 | 16,426 | 35,707 | 50,146 | 26,285 | 6,134 | 984   | 445 | 283 | 220 | 259 |
| Above Normal Water Years (12%)              | 88  | 247   | 2,439  | 12,279 | 18,253 | 11,881 | 955   | 601   | 277 | 243 | 191 | 217 |
| Below Normal Water Years (18%)              | 114 | 183   | 2,072  | 2,351  | 6,416  | 1,990  | 613   | 542   | 242 | 211 | 194 | 235 |
| Dry Water Years (22%)                       | 87  | 274   | 1,351  | 929    | 2,768  | 841    | 344   | 302   | 277 | 254 | 172 | 217 |
| Critical Water Years (19%)                  | 75  | 157   | 853    | 691    | 956    | 439    | 230   | 211   | 241 | 251 | 141 | 185 |

**Table 4H-2-2-2c. Yolo Bypass Flow, Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov  | Dec   | Jan  | Feb  | Mar  | Apr | May | Jun | Jul | Aug  | Sep |
|---------------------------------------------|-----|------|-------|------|------|------|-----|-----|-----|-----|------|-----|
| 10% Exceedance                              | -15 | -111 | 1,250 | 208  | 110  | 30   | -2  | 33  | 21  | 5   | 0    | -1  |
| 20% Exceedance                              | -12 | -21  | -126  | 152  | -515 | 626  | -18 | -8  | 0   | 3   | -2   | 1   |
| 30% Exceedance                              | -2  | 12   | -152  | -48  | -334 | 19   | 7   | -4  | 10  | 2   | -4   | 0   |
| 40% Exceedance                              | -5  | 14   | -4    | -243 | -415 | -267 | 0   | -11 | 0   | 3   | -3   | -2  |
| 50% Exceedance                              | -1  | 9    | -10   | -38  | -529 | -68  | 3   | -2  | 0   | 0   | -3   | -4  |
| 60% Exceedance                              | -1  | 14   | 0     | 11   | 11   | 29   | 3   | 5   | 0   | 0   | -5   | 0   |
| 70% Exceedance                              | 0   | 15   | 0     | 12   | 14   | 5    | 0   | 6   | -1  | 0   | -5   | 0   |
| 80% Exceedance                              | 1   | 17   | 6     | 5    | 20   | 12   | 0   | 10  | 1   | -1  | -9   | -3  |
| 90% Exceedance                              | 1   | 16   | 10    | 9    | 12   | 3    | -5  | -8  | 2   | 2   | -20  | -4  |
| Full Simulation Period Average <sup>a</sup> | -14 | -6   | 109   | 98   | -4   | 76   | 46  | 0   | 3   | 3   | -31  | -1  |
| Wet Water Years (29%)                       | -9  | 135  | 339   | 336  | 250  | 18   | 152 | 8   | 5   | 3   | 1    | 1   |
| Above Normal Water Years (12%)              | -49 | -213 | -80   | 210  | 70   | 608  | -2  | -3  | 1   | 3   | 1    | 0   |
| Below Normal Water Years (18%)              | -32 | -151 | -47   | -124 | -91  | -28  | 8   | -18 | 3   | 13  | 0    | 0   |
| Dry Water Years (22%)                       | 0   | 14   | 112   | 3    | -176 | 4    | 1   | 7   | 5   | 1   | -12  | -5  |
| Critical Water Years (19%)                  | 1   | 24   | 21    | -17  | -159 | 11   | 0   | -3  | 0   | -3  | -153 | -2  |

<sup>a</sup> Based on the 100-year simulation period.

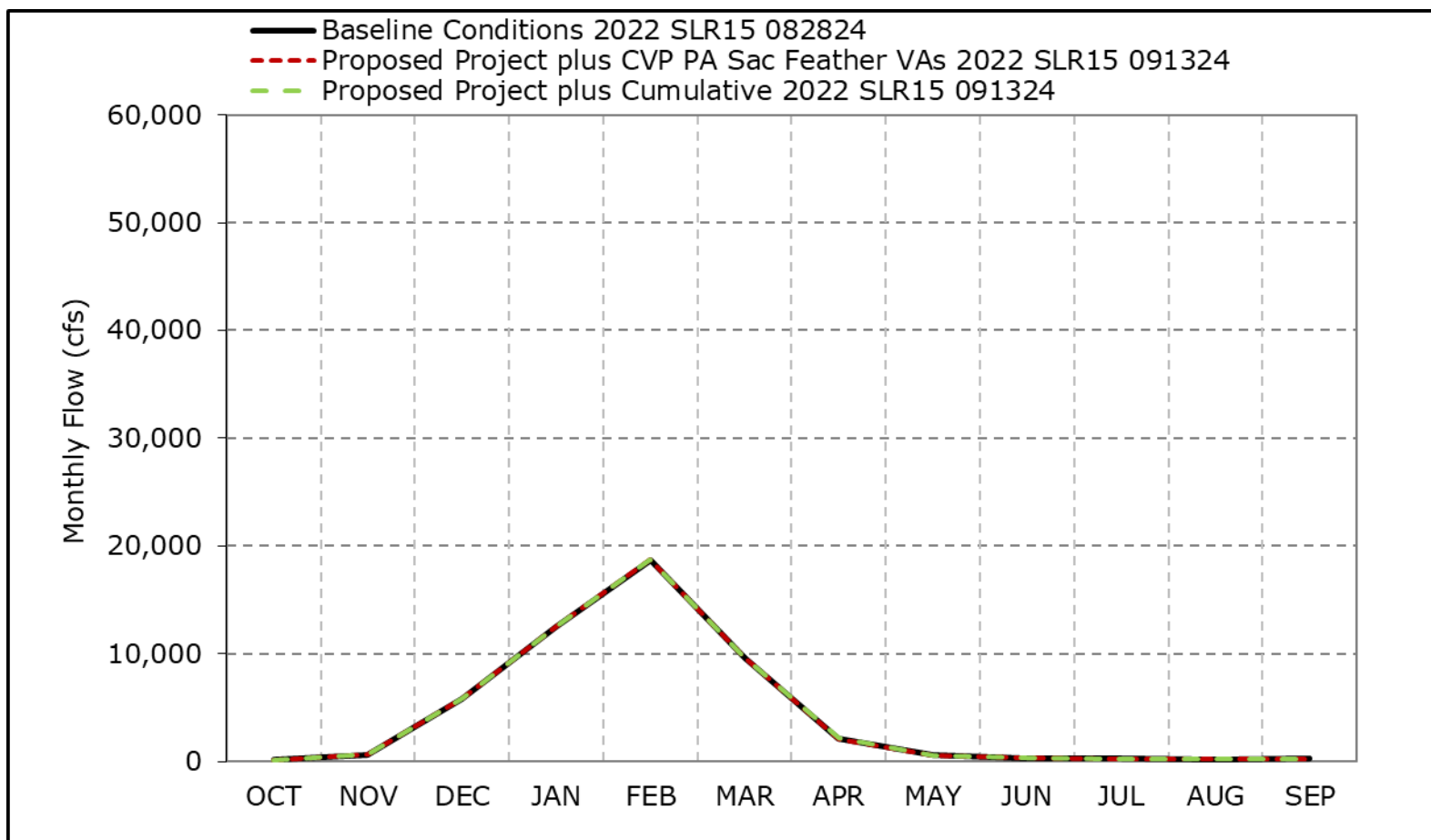
\* All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

\* 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 4H-2-2a. Yolo Bypass Flow, Long-Term Average Flow**

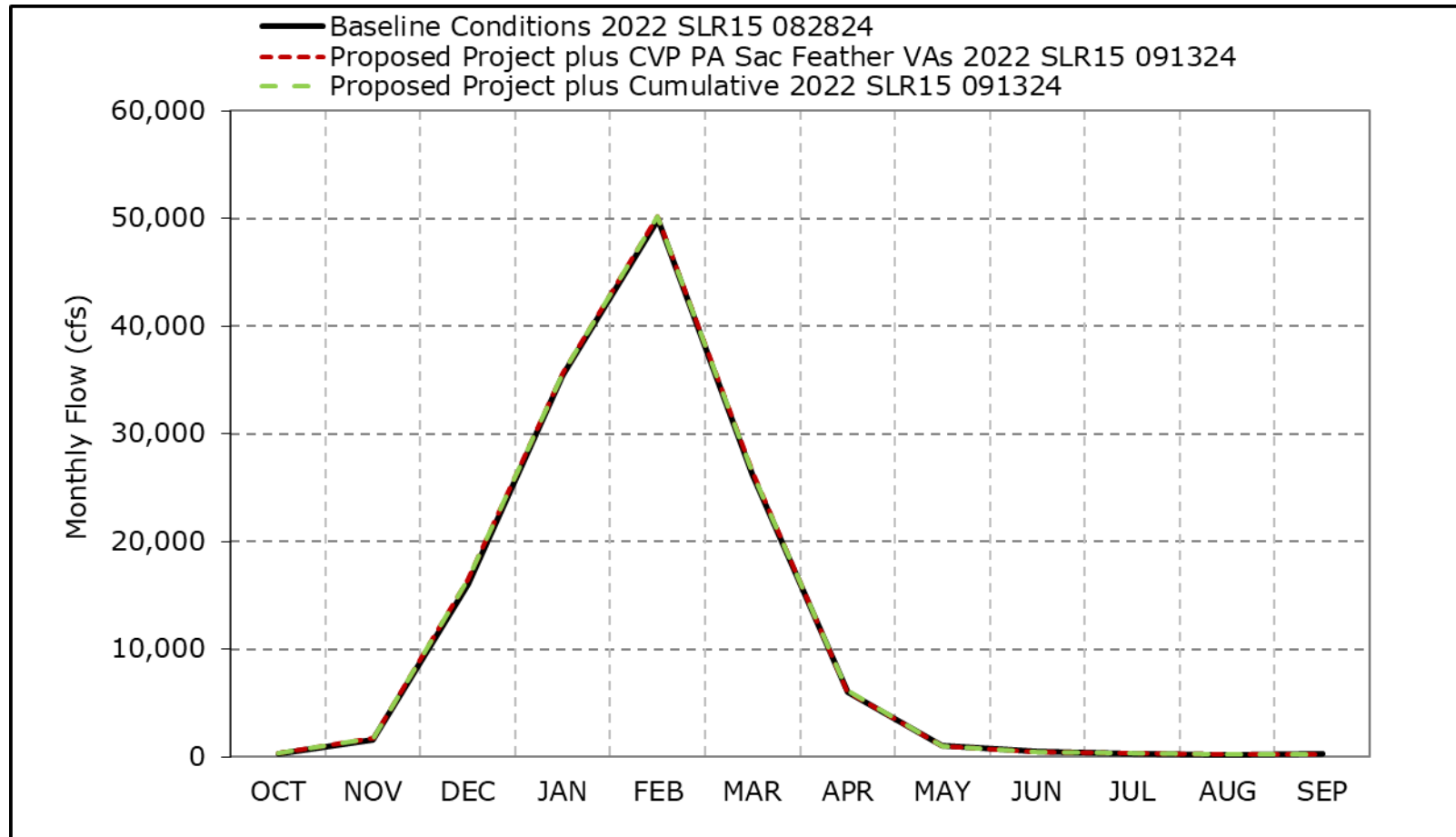


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2b. Yolo Bypass Flow, Wet Year Average Flow**

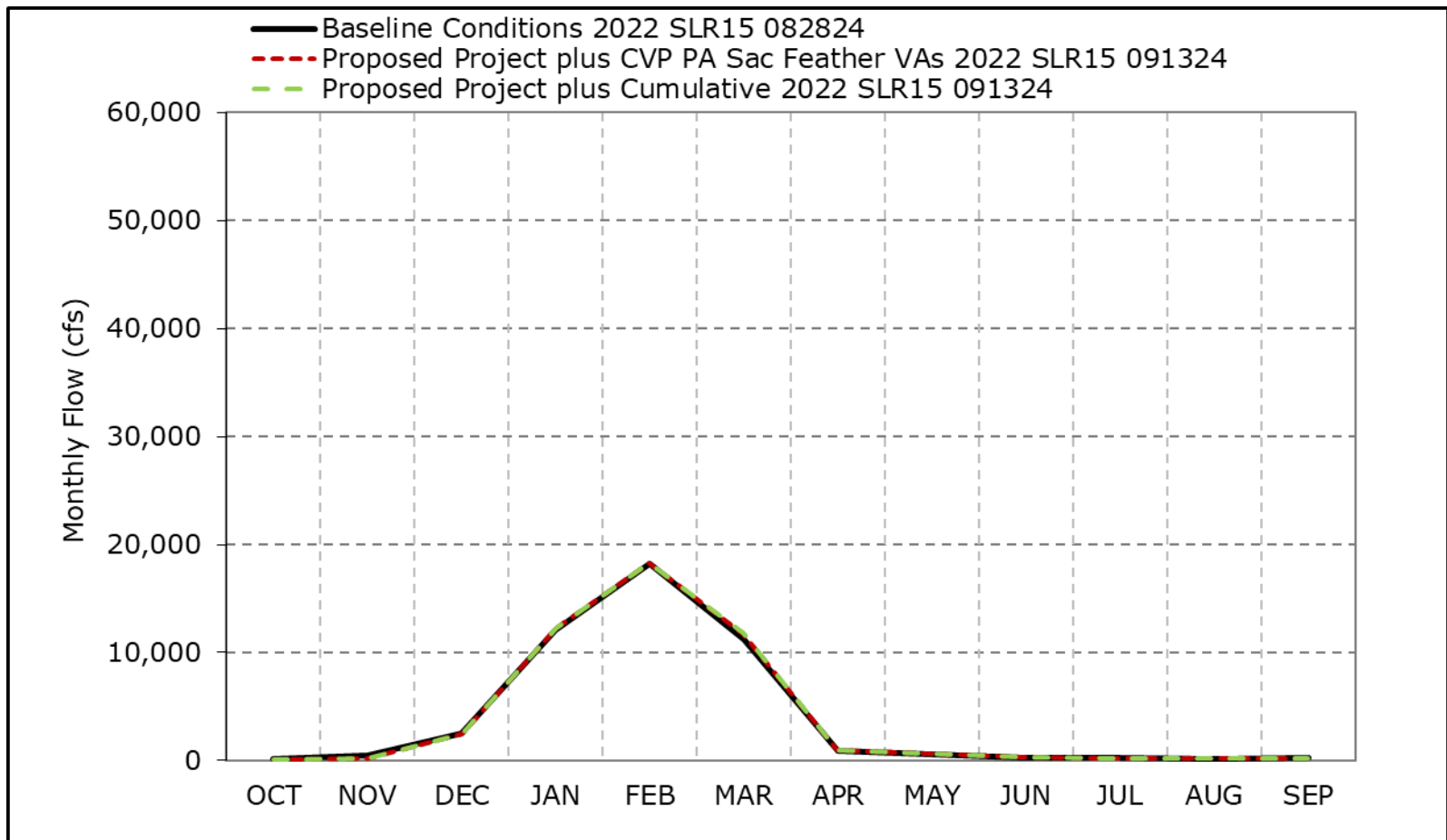


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2c. Yolo Bypass Flow, Above Normal Year Average Flow**

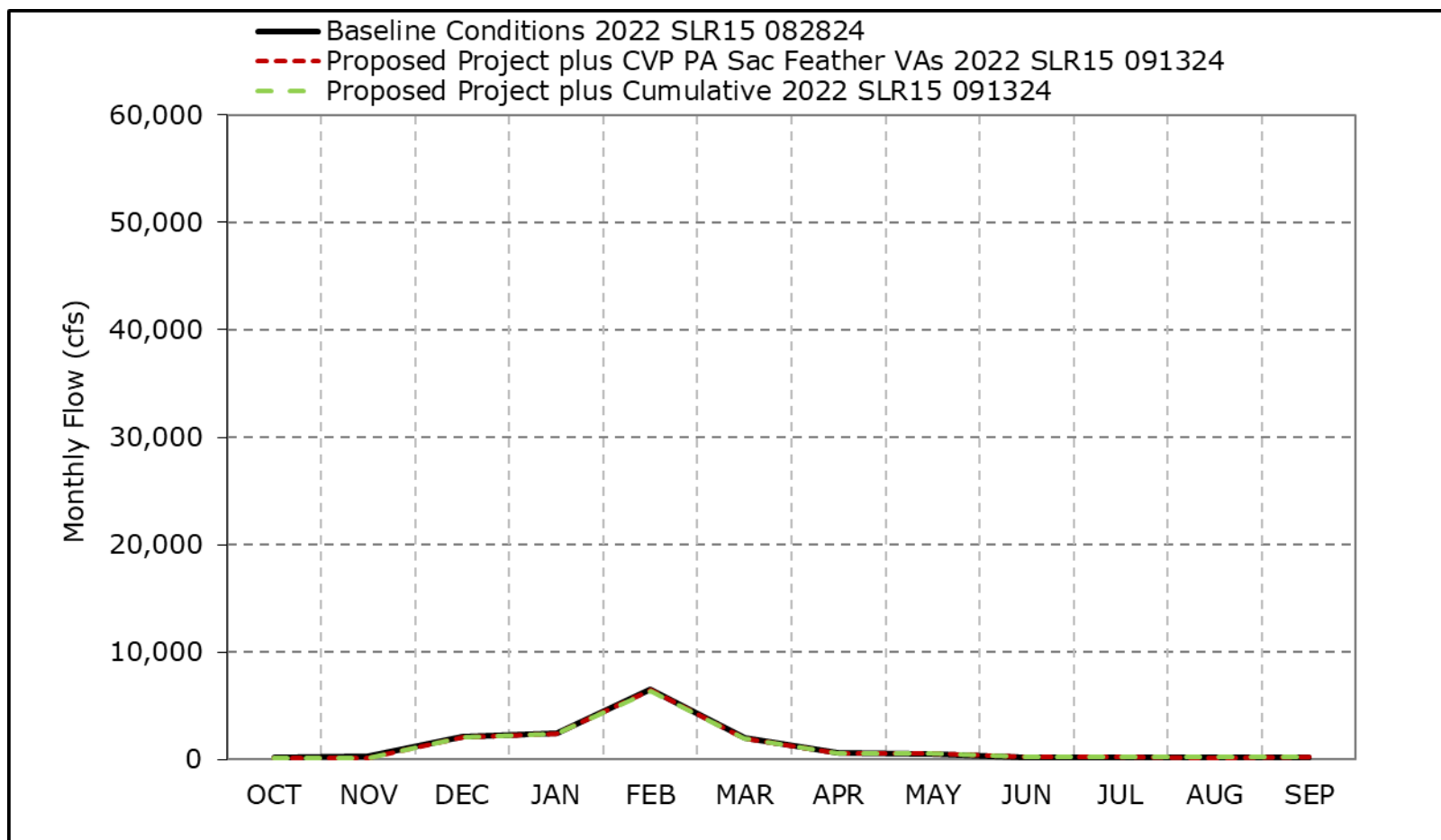


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2d. Yolo Bypass Flow, Below Normal Year Average Flow**

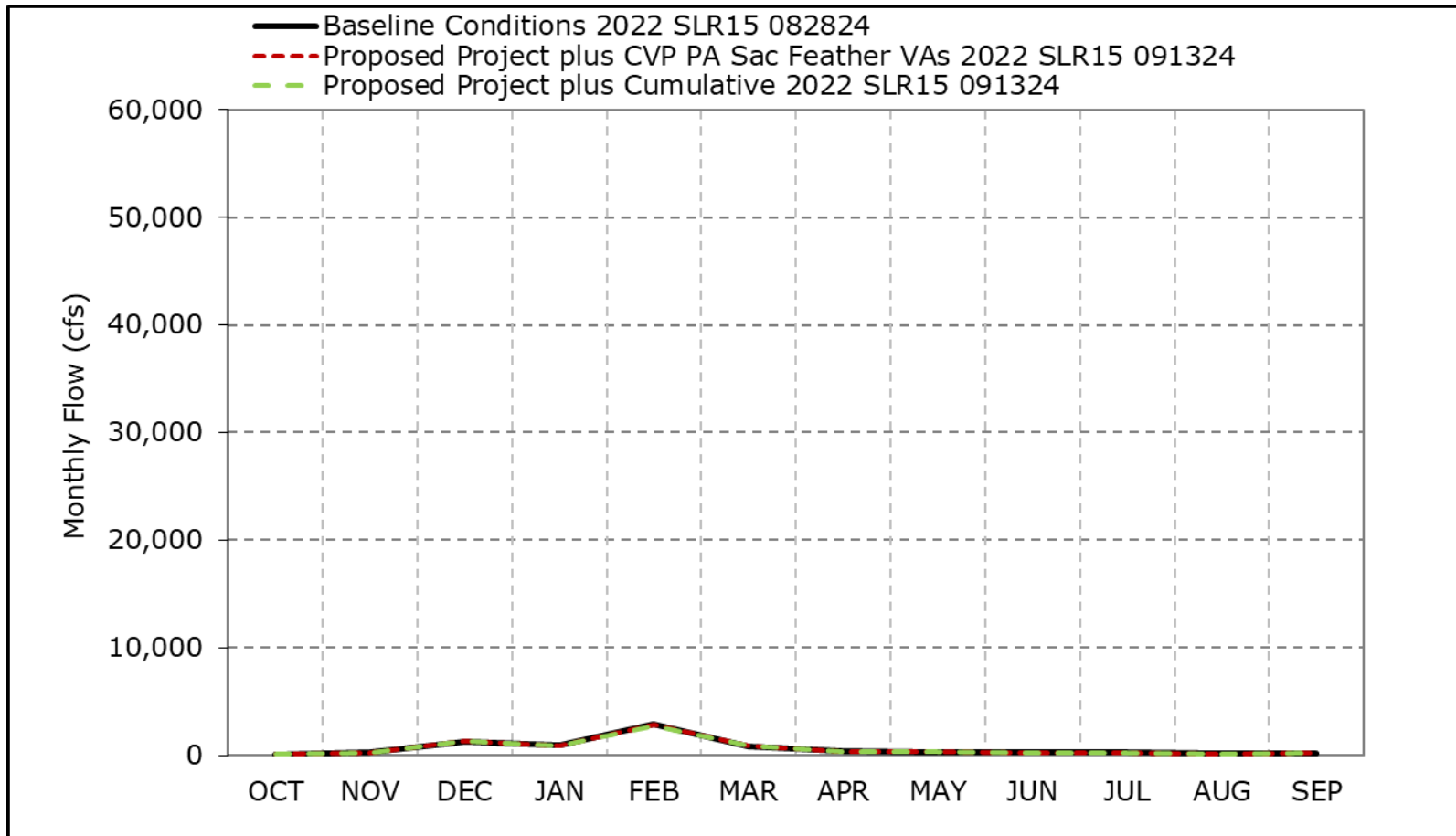


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2e. Yolo Bypass Flow, Dry Year Average Flow**

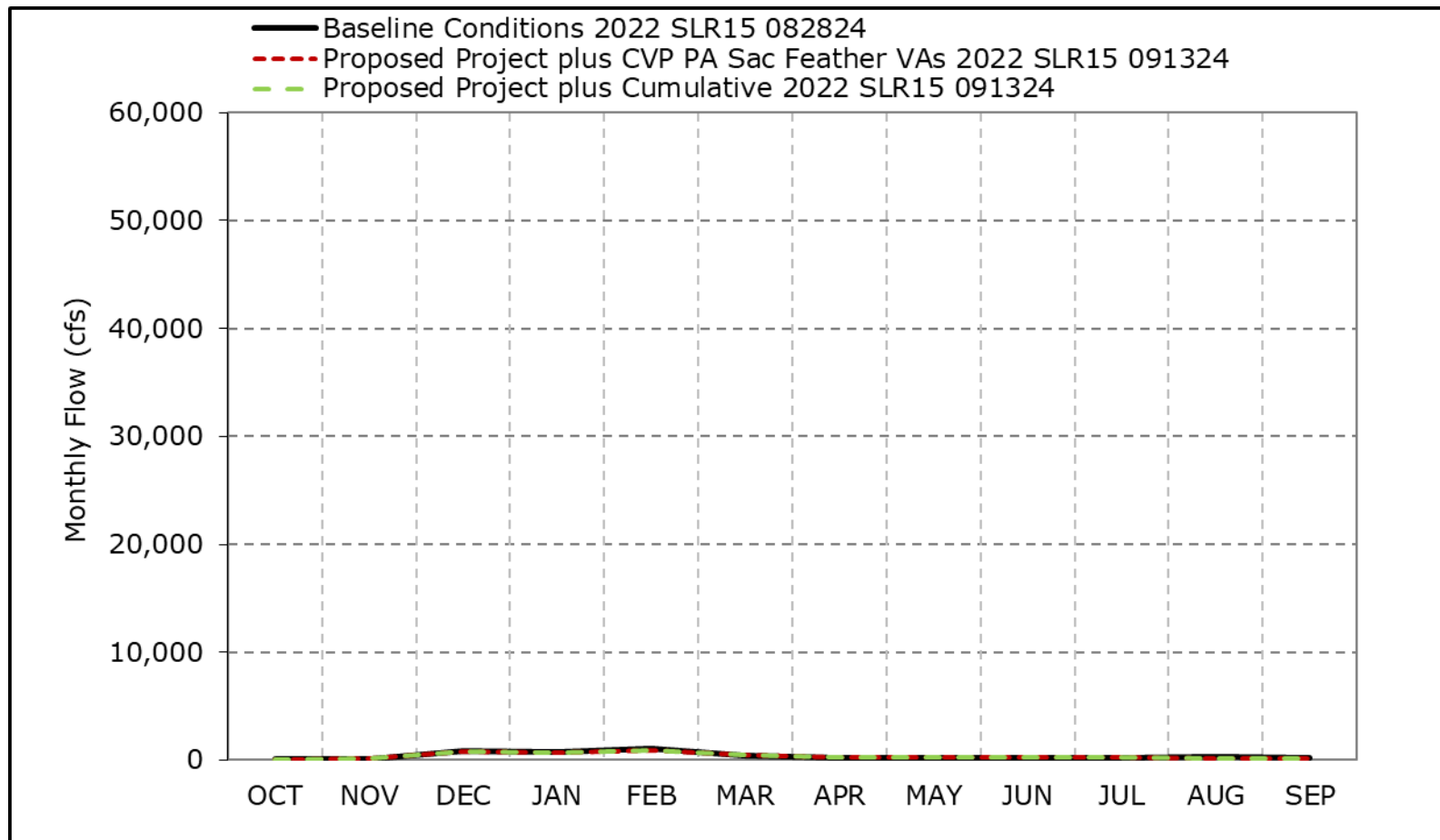


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2f. Yolo Bypass Flow, Critical Year Average Flow**

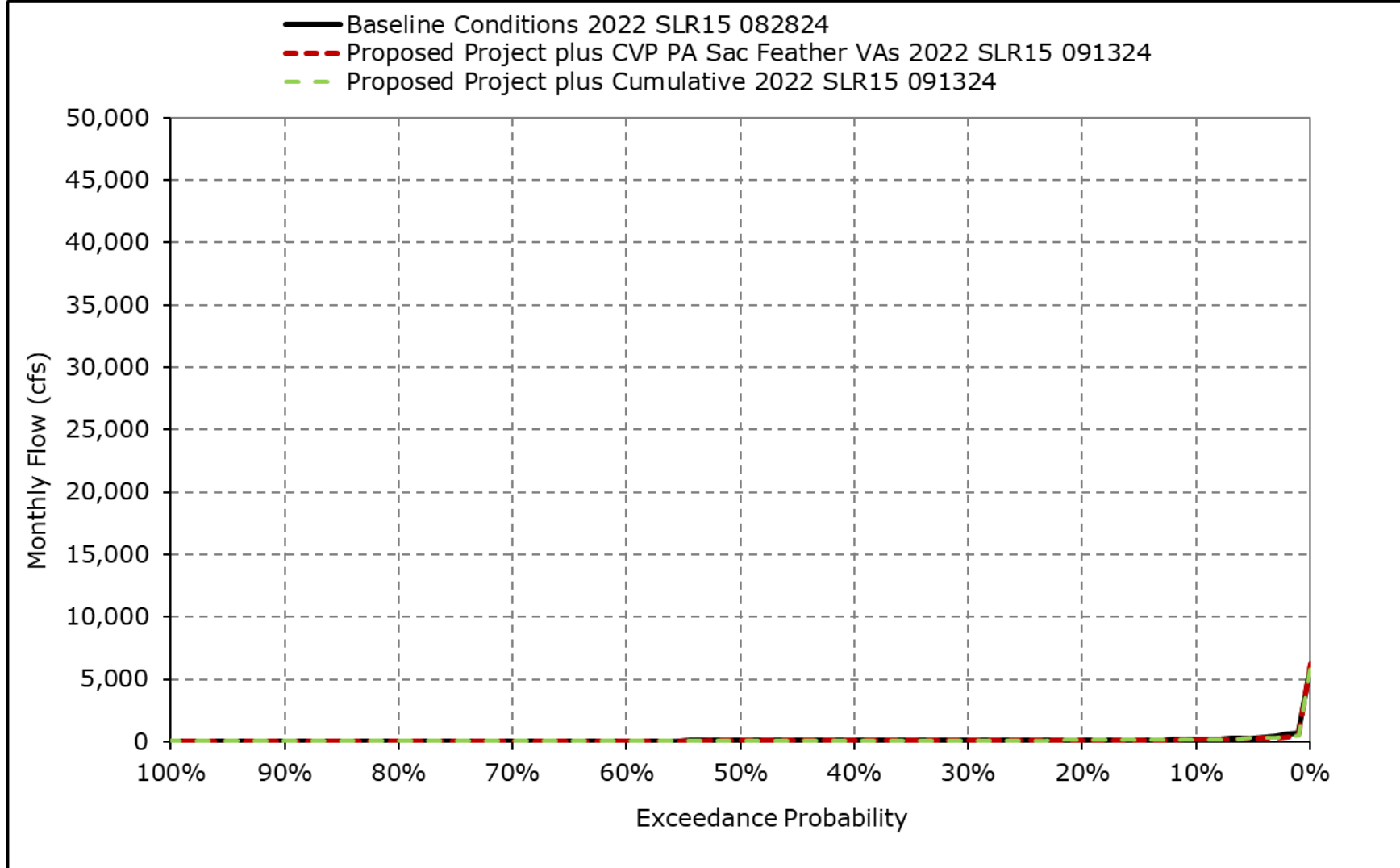


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

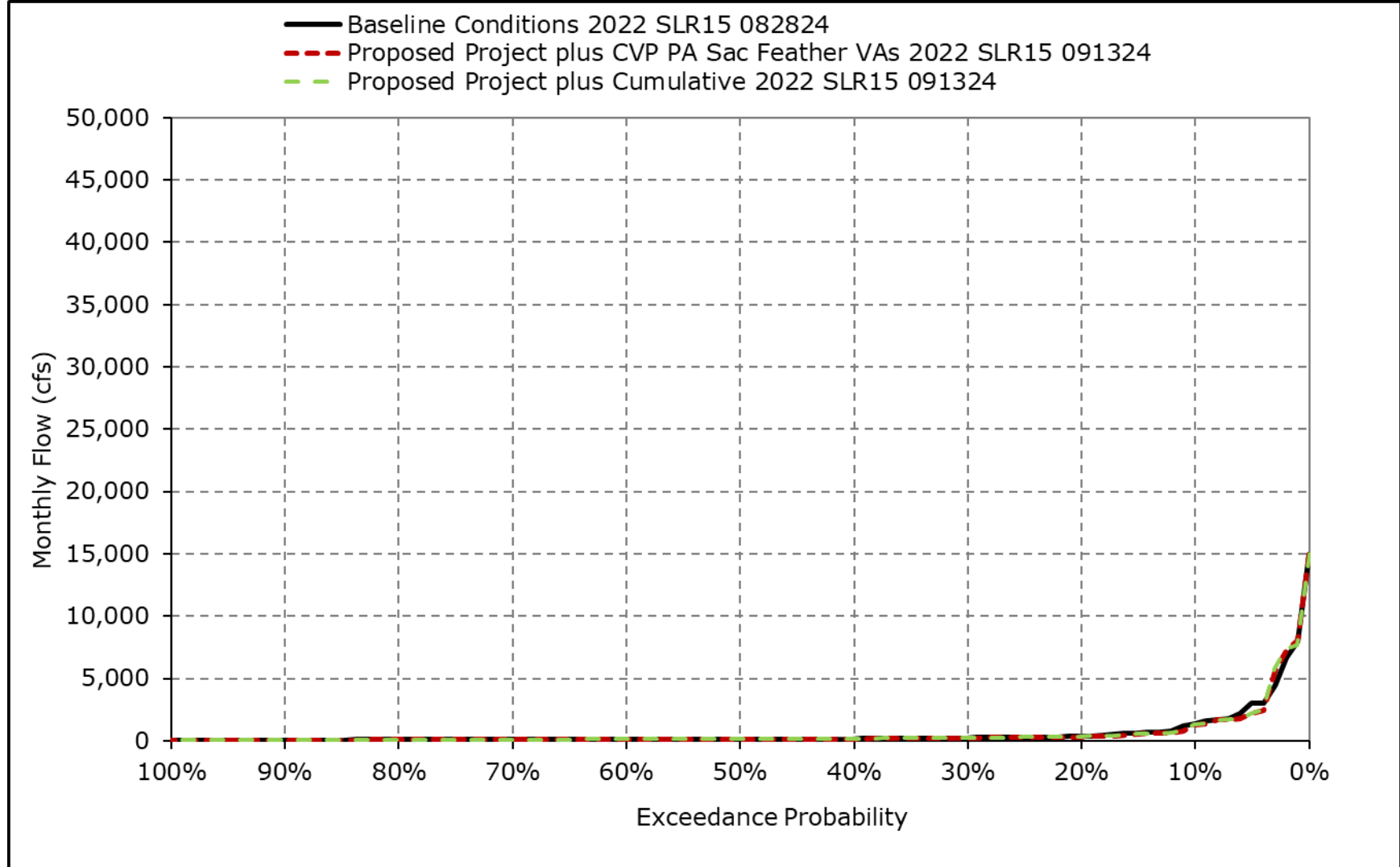
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2g. Yolo Bypass Flow, October**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

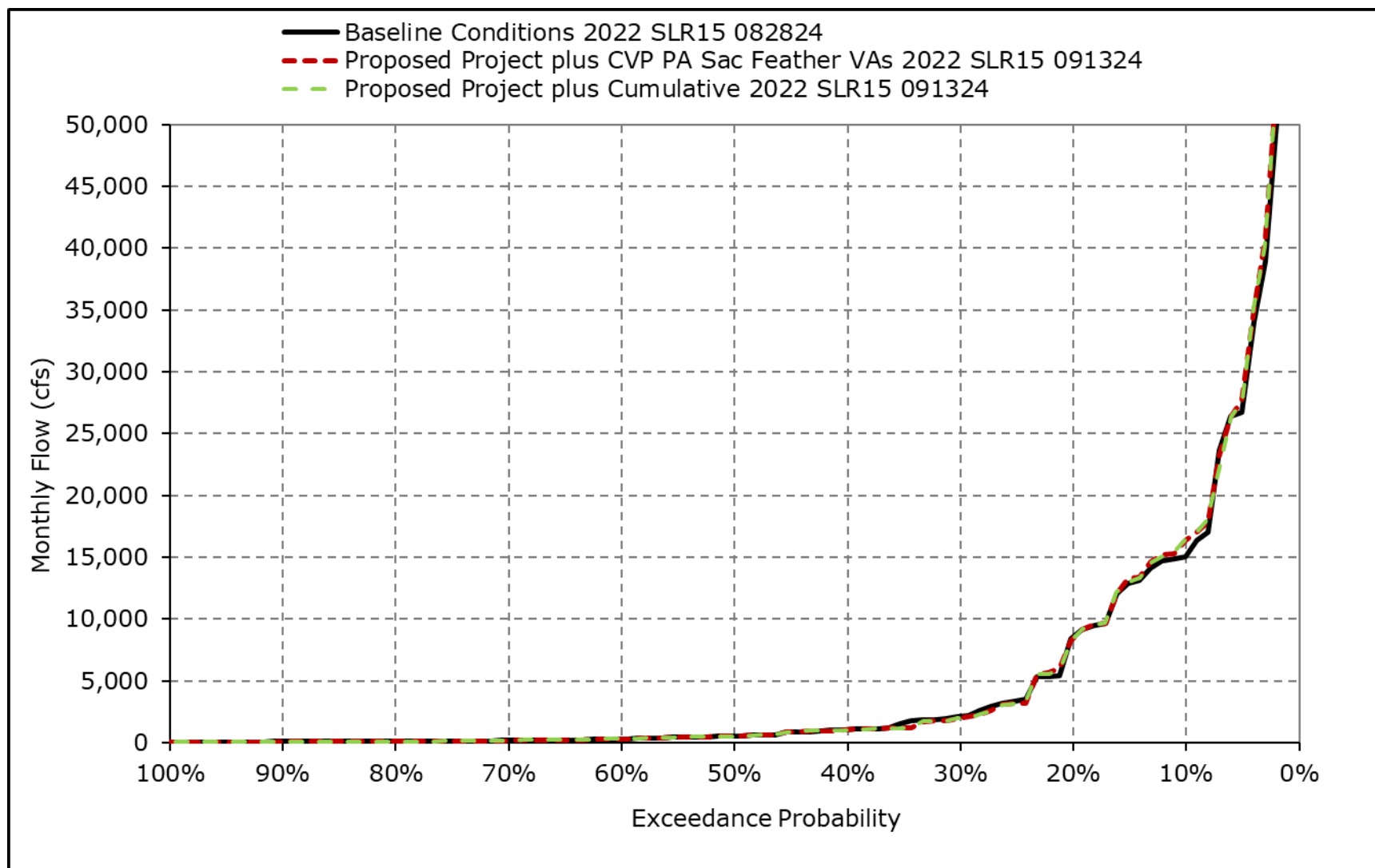
**Figure 4H-2-2h. Yolo Bypass Flow, November**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

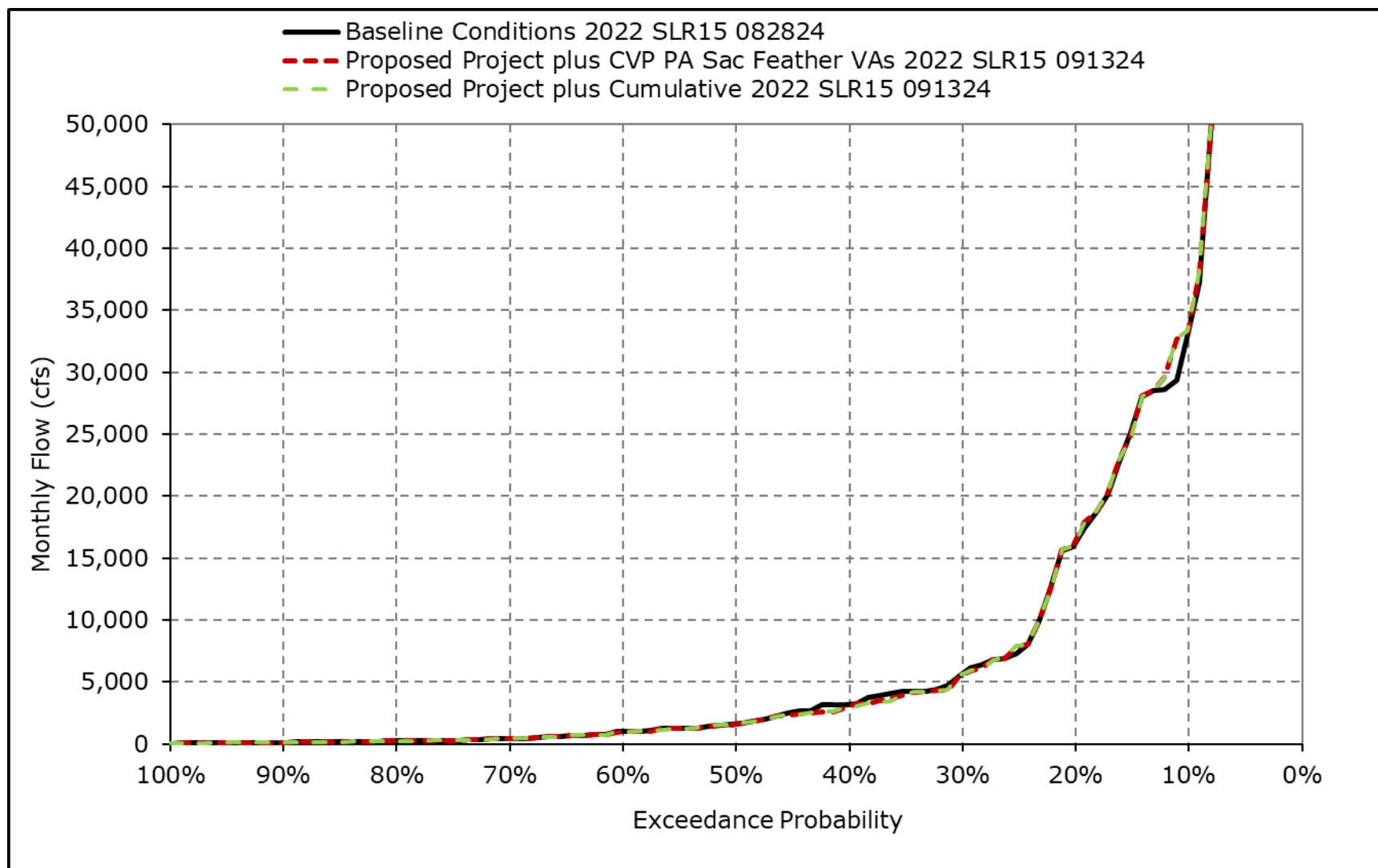


**Figure 4H-2-2i. Yolo Bypass Flow, December**



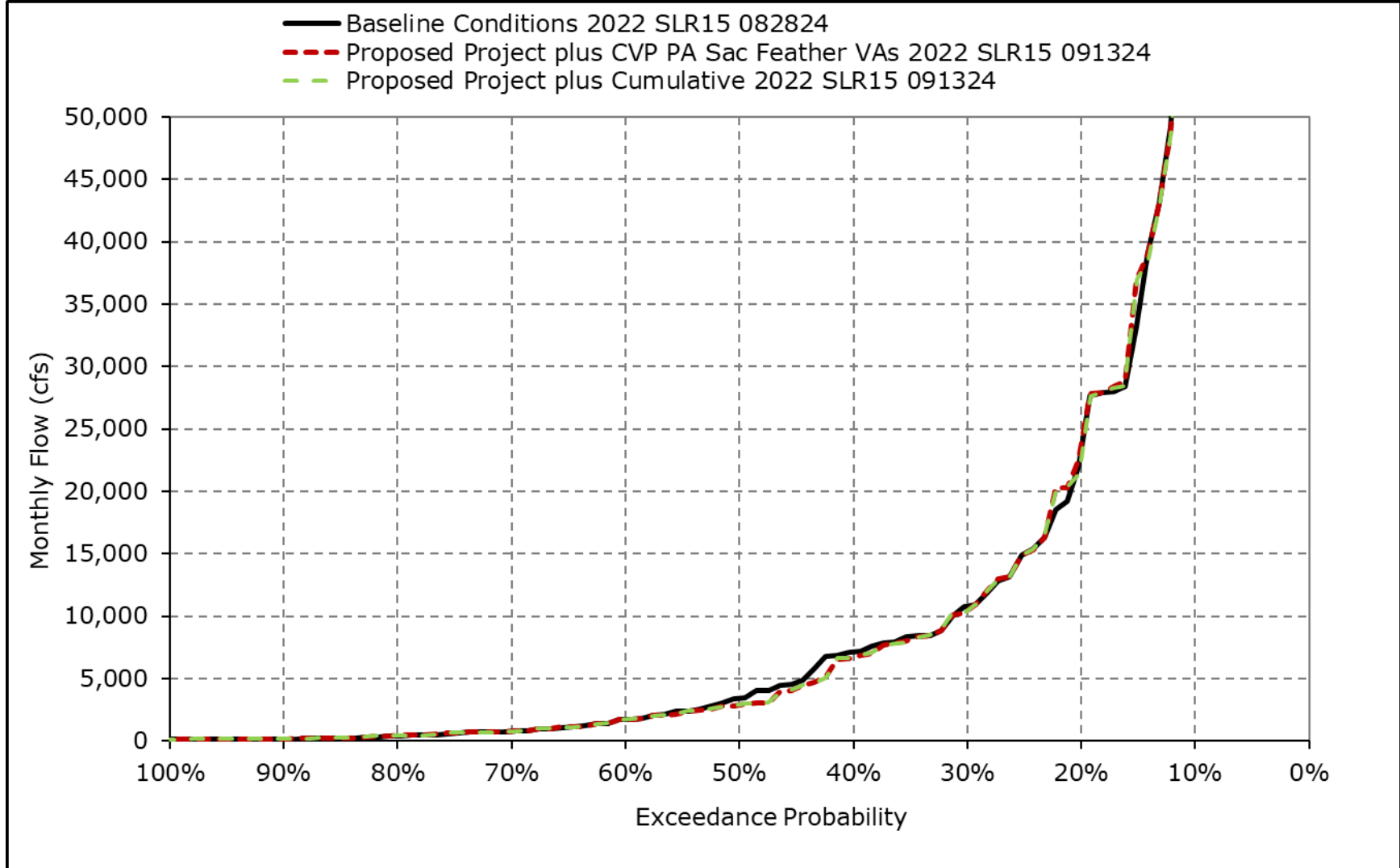
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2j. Yolo Bypass Flow, January**



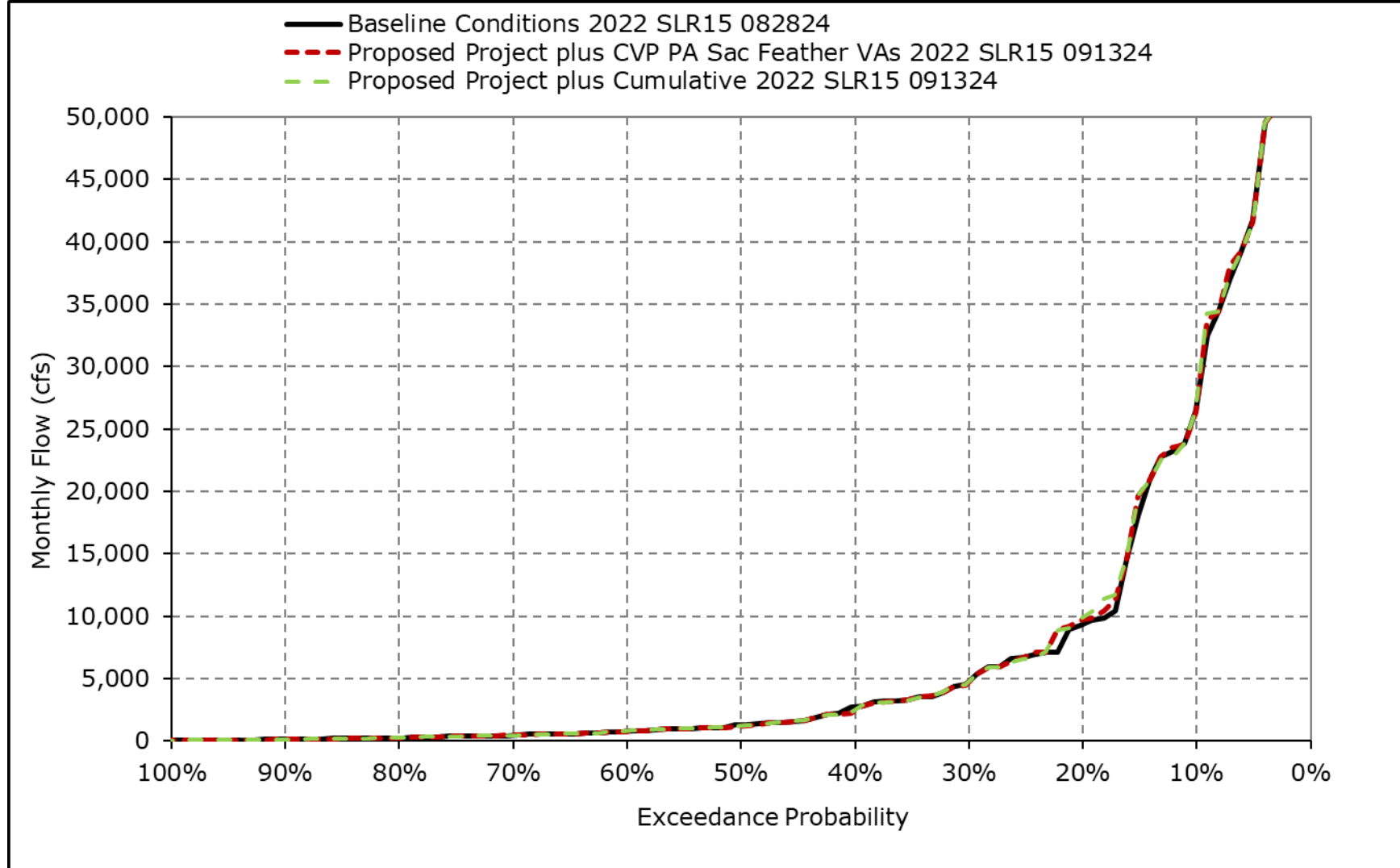
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2k. Yolo Bypass Flow, February**



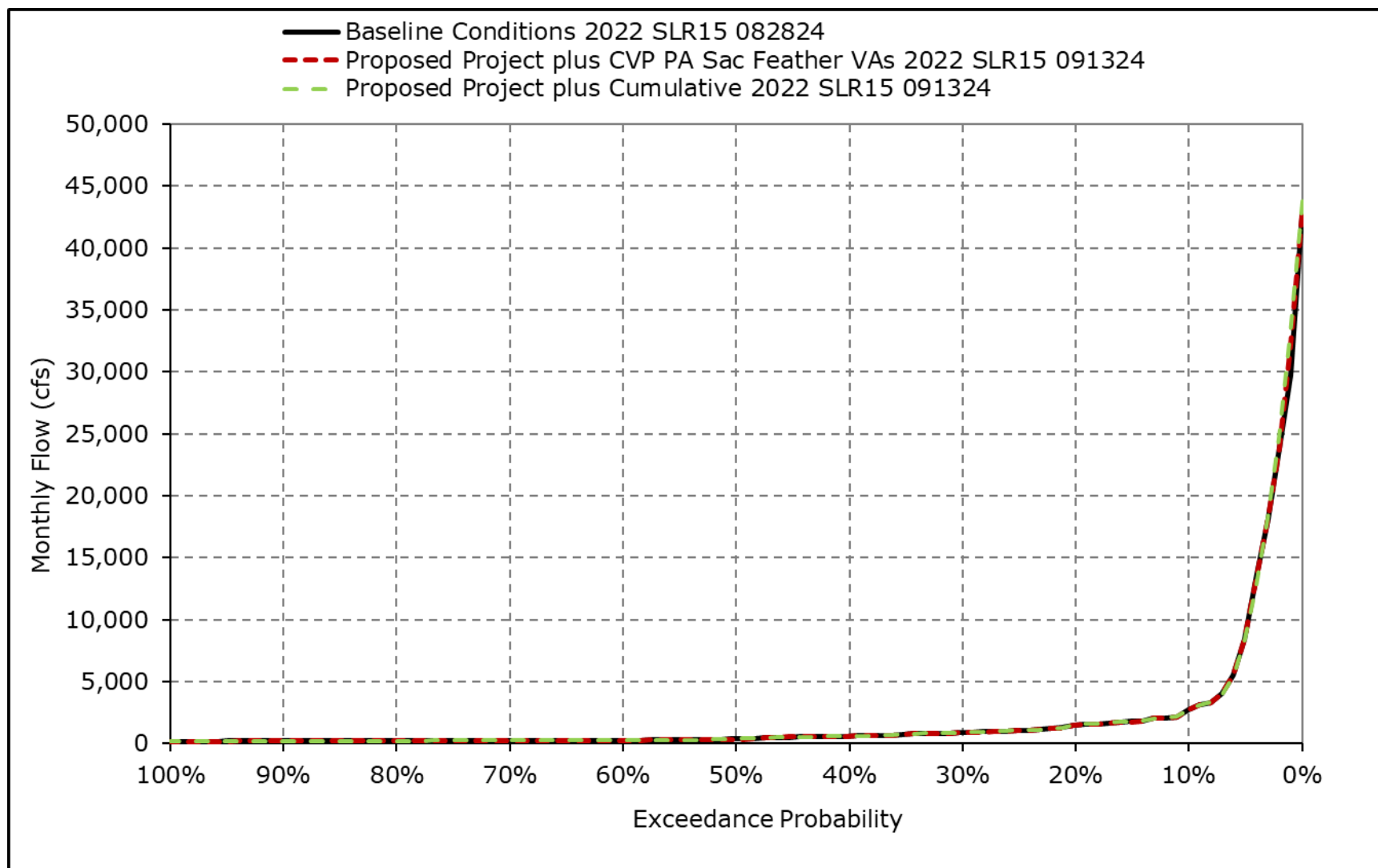
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2I. Yolo Bypass Flow, March**



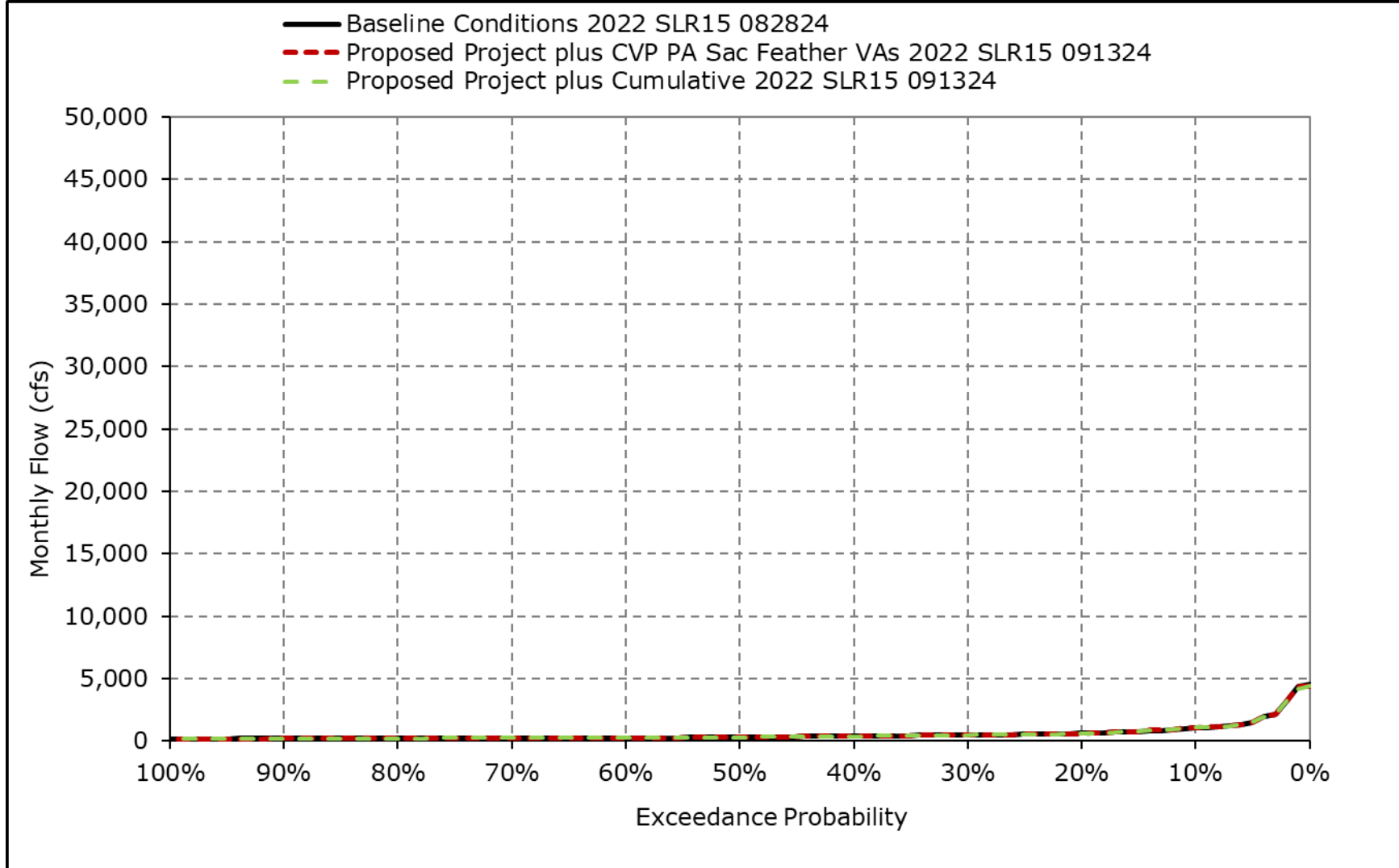
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2m. Yolo Bypass Flow, April**



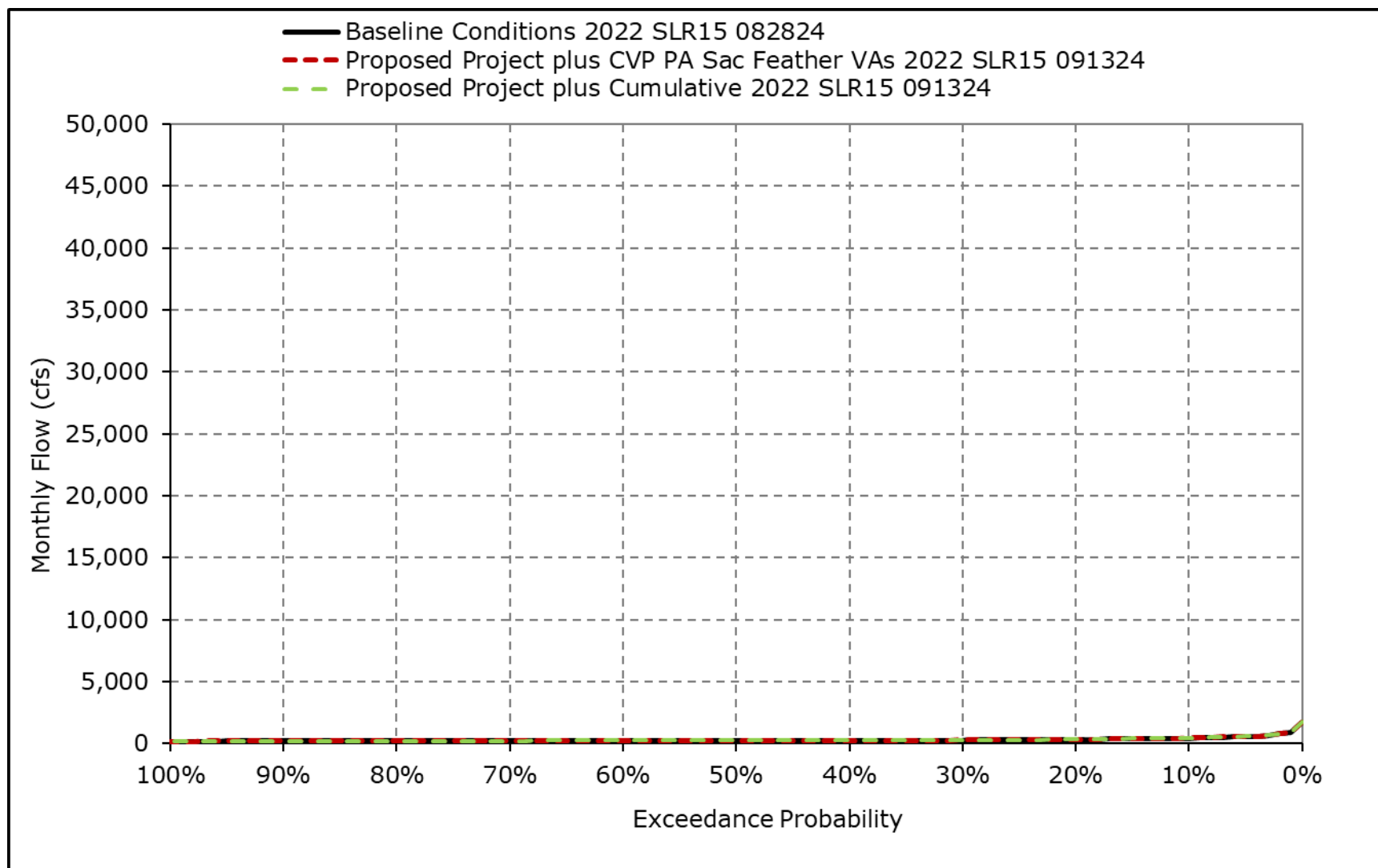
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2n. Yolo Bypass Flow, May**



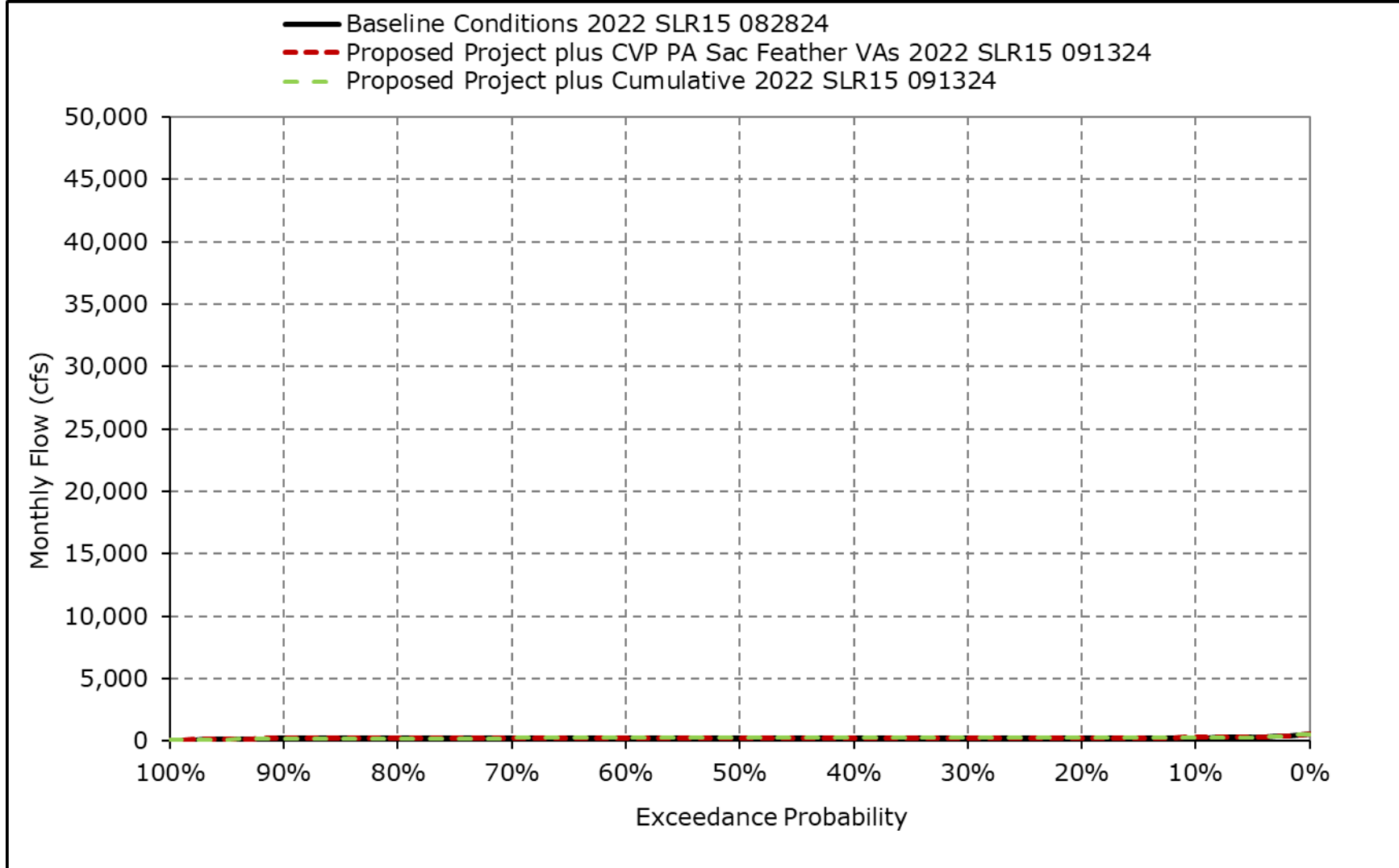
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2o. Yolo Bypass Flow, June**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

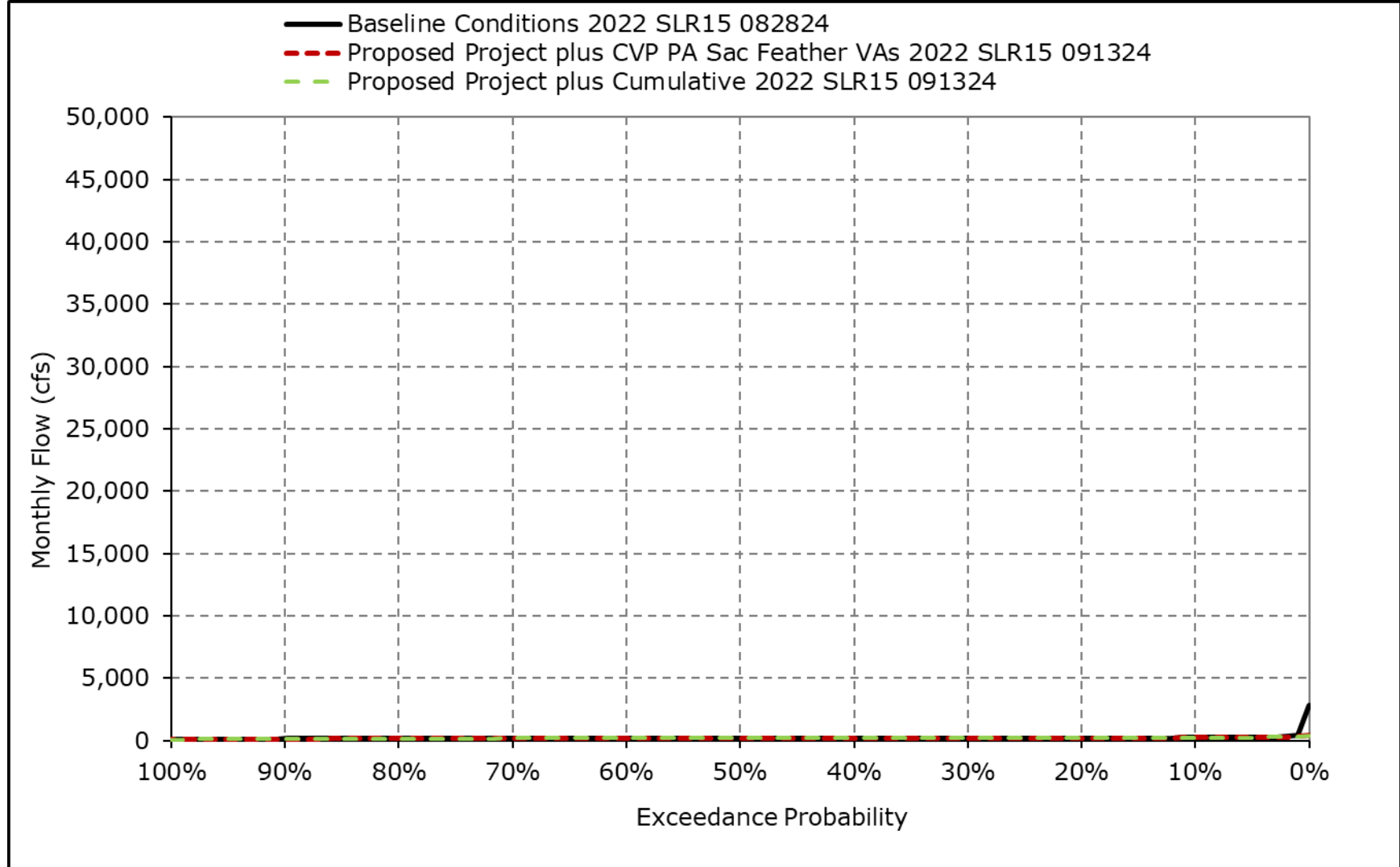
**Figure 4H-2-2p. Yolo Bypass Flow, July**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

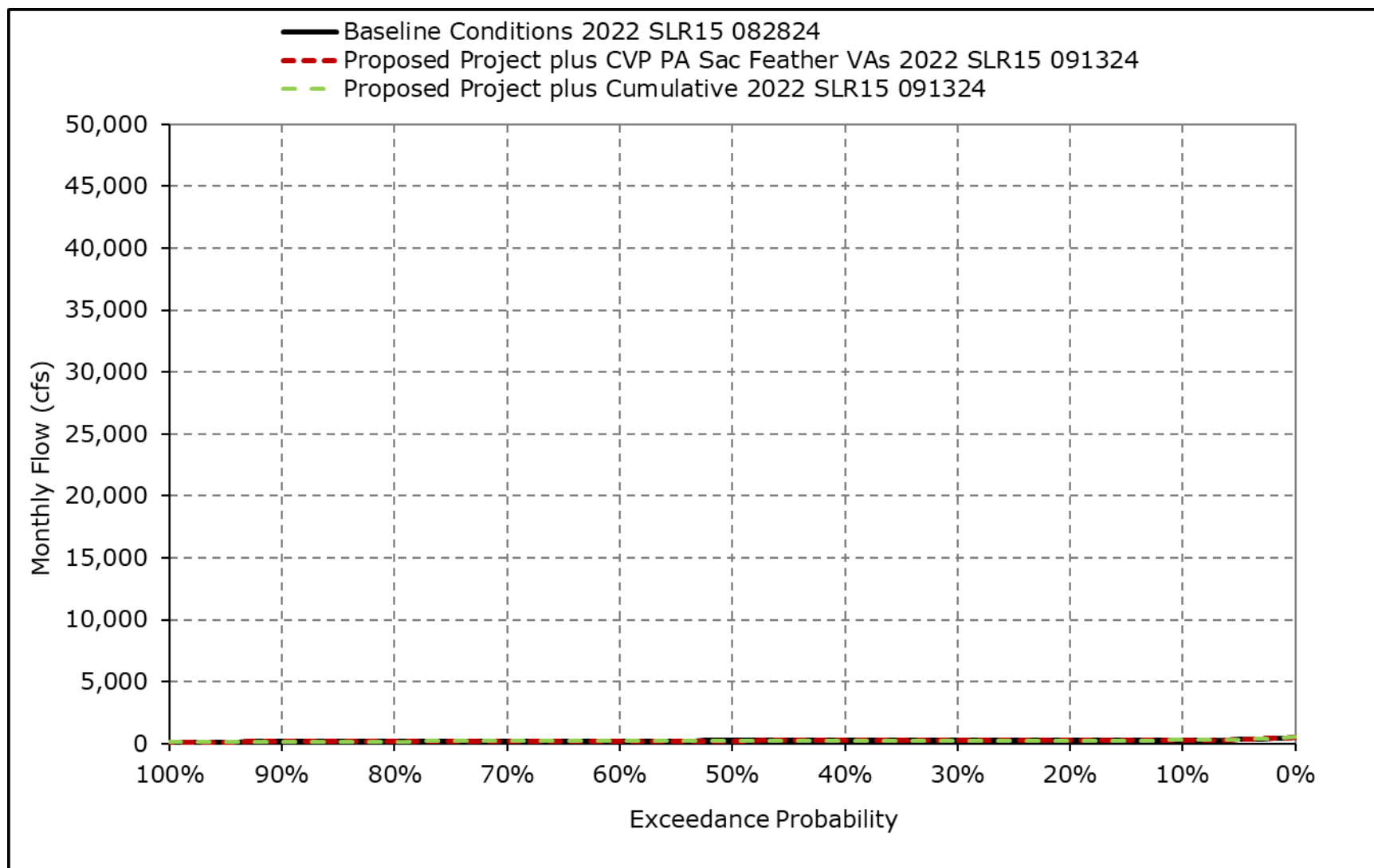


**Figure 4H-2-2q. Yolo Bypass Flow, August**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-2r. Yolo Bypass Flow, September**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Table 4H-2-3-1a. San Joaquin River at Vernalis, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan   | Feb    | Mar    | Apr    | May    | Jun   | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|
| 10% Exceedance                              | 3,389 | 2,763 | 5,050 | 9,682 | 14,334 | 13,392 | 13,622 | 12,934 | 9,141 | 4,057 | 2,521 | 2,765 |
| 20% Exceedance                              | 2,669 | 2,303 | 2,821 | 4,809 | 9,278  | 9,063  | 9,509  | 7,836  | 4,433 | 2,698 | 1,715 | 1,737 |
| 30% Exceedance                              | 2,102 | 2,025 | 2,127 | 3,598 | 5,737  | 7,067  | 7,490  | 4,977  | 2,956 | 1,719 | 1,402 | 1,397 |
| 40% Exceedance                              | 1,903 | 1,842 | 1,816 | 2,787 | 4,247  | 4,542  | 6,408  | 4,348  | 2,460 | 1,623 | 1,285 | 1,333 |
| 50% Exceedance                              | 1,760 | 1,619 | 1,645 | 2,224 | 2,919  | 2,888  | 3,902  | 3,011  | 1,786 | 1,244 | 1,114 | 1,119 |
| 60% Exceedance                              | 1,552 | 1,461 | 1,557 | 1,922 | 2,419  | 2,526  | 3,012  | 2,437  | 1,539 | 1,162 | 1,003 | 1,028 |
| 70% Exceedance                              | 1,434 | 1,371 | 1,441 | 1,782 | 2,177  | 2,236  | 2,696  | 2,071  | 1,383 | 1,011 | 943   | 963   |
| 80% Exceedance                              | 1,396 | 1,291 | 1,322 | 1,704 | 2,003  | 2,094  | 2,360  | 1,851  | 1,264 | 711   | 759   | 894   |
| 90% Exceedance                              | 1,321 | 1,202 | 1,200 | 1,586 | 1,861  | 1,977  | 2,107  | 1,529  | 1,160 | 611   | 674   | 750   |
| Full Simulation Period Average <sup>a</sup> | 2,074 | 1,993 | 2,782 | 4,595 | 6,319  | 6,019  | 6,421  | 5,309  | 3,549 | 1,950 | 1,404 | 1,414 |
| Wet Water Years (29%)                       | 2,429 | 2,731 | 5,205 | 9,837 | 12,638 | 12,148 | 12,401 | 10,928 | 7,387 | 3,833 | 2,356 | 2,255 |
| Above Normal Water Years (12%)              | 1,790 | 1,752 | 2,039 | 3,890 | 7,112  | 6,576  | 6,822  | 4,918  | 3,439 | 1,987 | 1,430 | 1,401 |
| Below Normal Water Years (18%)              | 2,237 | 1,980 | 2,102 | 2,614 | 4,351  | 4,070  | 5,039  | 3,845  | 2,411 | 1,437 | 1,174 | 1,194 |
| Dry Water Years (22%)                       | 2,061 | 1,667 | 1,664 | 2,071 | 2,725  | 2,641  | 2,973  | 2,417  | 1,512 | 997   | 957   | 1,033 |
| Critical Water Years (19%)                  | 1,574 | 1,410 | 1,491 | 1,836 | 2,198  | 2,070  | 2,340  | 1,713  | 1,195 | 644   | 670   | 788   |

**Table 4H-2-3-1b. San Joaquin River at Vernalis, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan   | Feb    | Mar    | Apr    | May    | Jun   | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|
| 10% Exceedance                              | 3,392 | 2,767 | 5,054 | 9,694 | 14,425 | 13,451 | 13,696 | 12,948 | 9,164 | 4,066 | 2,524 | 2,768 |
| 20% Exceedance                              | 2,671 | 2,305 | 2,827 | 4,811 | 9,296  | 9,069  | 9,404  | 7,989  | 4,473 | 2,695 | 1,714 | 1,740 |
| 30% Exceedance                              | 2,100 | 2,030 | 2,129 | 3,597 | 5,736  | 7,062  | 7,491  | 4,993  | 2,963 | 1,741 | 1,471 | 1,402 |
| 40% Exceedance                              | 1,905 | 1,856 | 1,844 | 2,793 | 4,251  | 4,524  | 6,453  | 4,352  | 2,474 | 1,628 | 1,326 | 1,345 |
| 50% Exceedance                              | 1,780 | 1,614 | 1,648 | 2,227 | 2,911  | 2,897  | 4,010  | 3,044  | 1,798 | 1,357 | 1,128 | 1,150 |
| 60% Exceedance                              | 1,578 | 1,459 | 1,558 | 1,923 | 2,405  | 2,515  | 3,072  | 2,456  | 1,559 | 1,195 | 1,020 | 1,056 |
| 70% Exceedance                              | 1,449 | 1,381 | 1,441 | 1,789 | 2,174  | 2,238  | 2,731  | 2,069  | 1,442 | 1,053 | 965   | 988   |
| 80% Exceedance                              | 1,408 | 1,298 | 1,301 | 1,699 | 2,000  | 2,089  | 2,364  | 1,855  | 1,300 | 802   | 832   | 899   |
| 90% Exceedance                              | 1,331 | 1,237 | 1,234 | 1,597 | 1,855  | 1,972  | 2,105  | 1,532  | 1,170 | 638   | 695   | 794   |
| Full Simulation Period Average <sup>a</sup> | 2,087 | 2,005 | 2,789 | 4,596 | 6,266  | 6,007  | 6,460  | 5,332  | 3,567 | 1,981 | 1,435 | 1,434 |
| Wet Water Years (29%)                       | 2,445 | 2,744 | 5,212 | 9,841 | 12,542 | 12,133 | 12,438 | 10,945 | 7,394 | 3,837 | 2,358 | 2,257 |
| Above Normal Water Years (12%)              | 1,809 | 1,760 | 2,043 | 3,869 | 6,897  | 6,523  | 6,919  | 5,003  | 3,430 | 1,991 | 1,435 | 1,409 |
| Below Normal Water Years (18%)              | 2,242 | 1,984 | 2,104 | 2,615 | 4,358  | 4,071  | 5,069  | 3,873  | 2,428 | 1,455 | 1,192 | 1,220 |
| Dry Water Years (22%)                       | 2,071 | 1,690 | 1,685 | 2,083 | 2,727  | 2,633  | 3,026  | 2,434  | 1,523 | 1,015 | 966   | 1,043 |
| Critical Water Years (19%)                  | 1,588 | 1,415 | 1,489 | 1,837 | 2,194  | 2,068  | 2,339  | 1,712  | 1,257 | 760   | 798   | 848   |

**Table 4H-2-3-1c. San Joaquin River at Vernalis, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov | Dec | Jan | Feb  | Mar | Apr  | May | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-----|-----|-----|------|-----|------|-----|-----|-----|-----|-----|
| 10% Exceedance                              | 3   | 4   | 3   | 12  | 91   | 58  | 74   | 14  | 24  | 10  | 3   | 3   |
| 20% Exceedance                              | 2   | 2   | 6   | 3   | 18   | 6   | -105 | 154 | 40  | -3  | -1  | 3   |
| 30% Exceedance                              | -3  | 5   | 2   | 0   | -1   | -5  | 1    | 16  | 7   | 23  | 69  | 5   |
| 40% Exceedance                              | 2   | 14  | 28  | 7   | 4    | -18 | 45   | 4   | 13  | 5   | 42  | 12  |
| 50% Exceedance                              | 20  | -5  | 3   | 3   | -8   | 9   | 107  | 33  | 11  | 114 | 14  | 31  |
| 60% Exceedance                              | 26  | -2  | 1   | 1   | -14  | -12 | 60   | 19  | 20  | 32  | 16  | 29  |
| 70% Exceedance                              | 14  | 9   | 0   | 7   | -3   | 1   | 35   | -2  | 59  | 42  | 22  | 25  |
| 80% Exceedance                              | 12  | 7   | -20 | -5  | -3   | -4  | 4    | 4   | 36  | 91  | 73  | 5   |
| 90% Exceedance                              | 10  | 35  | 34  | 11  | -5   | -5  | -2   | 3   | 10  | 27  | 22  | 43  |
| Full Simulation Period Average <sup>a</sup> | 13  | 11  | 7   | 2   | -53  | -13 | 39   | 24  | 18  | 31  | 31  | 20  |
| Wet Water Years (29%)                       | 16  | 13  | 7   | 4   | -96  | -15 | 36   | 17  | 7   | 4   | 2   | 2   |
| Above Normal Water Years (12%)              | 20  | 8   | 4   | -21 | -215 | -53 | 97   | 85  | -9  | 4   | 4   | 9   |
| Below Normal Water Years (18%)              | 4   | 3   | 2   | 1   | 7    | 0   | 31   | 28  | 16  | 18  | 18  | 26  |
| Dry Water Years (22%)                       | 9   | 23  | 21  | 12  | 2    | -8  | 52   | 17  | 11  | 18  | 9   | 10  |
| Critical Water Years (19%)                  | 14  | 5   | -2  | 1   | -4   | -2  | -1   | -1  | 61  | 116 | 128 | 60  |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-3-2a. San Joaquin River at Vernalis, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan   | Feb    | Mar    | Apr    | May    | Jun   | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|
| 10% Exceedance                              | 3,389 | 2,763 | 5,050 | 9,682 | 14,334 | 13,392 | 13,622 | 12,934 | 9,141 | 4,057 | 2,521 | 2,765 |
| 20% Exceedance                              | 2,669 | 2,303 | 2,821 | 4,809 | 9,278  | 9,063  | 9,509  | 7,836  | 4,433 | 2,698 | 1,715 | 1,737 |
| 30% Exceedance                              | 2,102 | 2,025 | 2,127 | 3,598 | 5,737  | 7,067  | 7,490  | 4,977  | 2,956 | 1,719 | 1,402 | 1,397 |
| 40% Exceedance                              | 1,903 | 1,842 | 1,816 | 2,787 | 4,247  | 4,542  | 6,408  | 4,348  | 2,460 | 1,623 | 1,285 | 1,333 |
| 50% Exceedance                              | 1,760 | 1,619 | 1,645 | 2,224 | 2,919  | 2,888  | 3,902  | 3,011  | 1,786 | 1,244 | 1,114 | 1,119 |
| 60% Exceedance                              | 1,552 | 1,461 | 1,557 | 1,922 | 2,419  | 2,526  | 3,012  | 2,437  | 1,539 | 1,162 | 1,003 | 1,028 |
| 70% Exceedance                              | 1,434 | 1,371 | 1,441 | 1,782 | 2,177  | 2,236  | 2,696  | 2,071  | 1,383 | 1,011 | 943   | 963   |
| 80% Exceedance                              | 1,396 | 1,291 | 1,322 | 1,704 | 2,003  | 2,094  | 2,360  | 1,851  | 1,264 | 711   | 759   | 894   |
| 90% Exceedance                              | 1,321 | 1,202 | 1,200 | 1,586 | 1,861  | 1,977  | 2,107  | 1,529  | 1,160 | 611   | 674   | 750   |
| Full Simulation Period Average <sup>a</sup> | 2,074 | 1,993 | 2,782 | 4,595 | 6,319  | 6,019  | 6,421  | 5,309  | 3,549 | 1,950 | 1,404 | 1,414 |
| Wet Water Years (29%)                       | 2,429 | 2,731 | 5,205 | 9,837 | 12,638 | 12,148 | 12,401 | 10,928 | 7,387 | 3,833 | 2,356 | 2,255 |
| Above Normal Water Years (12%)              | 1,790 | 1,752 | 2,039 | 3,890 | 7,112  | 6,576  | 6,822  | 4,918  | 3,439 | 1,987 | 1,430 | 1,401 |
| Below Normal Water Years (18%)              | 2,237 | 1,980 | 2,102 | 2,614 | 4,351  | 4,070  | 5,039  | 3,845  | 2,411 | 1,437 | 1,174 | 1,194 |
| Dry Water Years (22%)                       | 2,061 | 1,667 | 1,664 | 2,071 | 2,725  | 2,641  | 2,973  | 2,417  | 1,512 | 997   | 957   | 1,033 |
| Critical Water Years (19%)                  | 1,574 | 1,410 | 1,491 | 1,836 | 2,198  | 2,070  | 2,340  | 1,713  | 1,195 | 644   | 670   | 788   |

**Table 4H-2-3-2b. San Joaquin River at Vernalis, Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan   | Feb    | Mar    | Apr    | May    | Jun   | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|
| 10% Exceedance                              | 3,393 | 2,768 | 5,055 | 9,691 | 14,390 | 13,452 | 13,749 | 13,472 | 9,164 | 4,173 | 2,524 | 2,768 |
| 20% Exceedance                              | 2,671 | 2,305 | 2,827 | 4,811 | 9,297  | 9,069  | 10,214 | 8,364  | 4,474 | 2,719 | 1,716 | 1,740 |
| 30% Exceedance                              | 2,100 | 2,030 | 2,129 | 3,598 | 5,735  | 7,063  | 8,698  | 6,099  | 2,963 | 1,793 | 1,482 | 1,405 |
| 40% Exceedance                              | 1,906 | 1,856 | 1,844 | 2,794 | 4,267  | 4,524  | 7,780  | 5,466  | 2,475 | 1,694 | 1,327 | 1,344 |
| 50% Exceedance                              | 1,781 | 1,619 | 1,648 | 2,227 | 2,912  | 2,951  | 5,323  | 4,314  | 1,798 | 1,428 | 1,134 | 1,153 |
| 60% Exceedance                              | 1,590 | 1,459 | 1,570 | 1,922 | 2,436  | 2,634  | 4,143  | 3,517  | 1,559 | 1,208 | 1,027 | 1,071 |
| 70% Exceedance                              | 1,434 | 1,380 | 1,441 | 1,788 | 2,210  | 2,358  | 3,164  | 2,464  | 1,446 | 1,070 | 965   | 988   |
| 80% Exceedance                              | 1,399 | 1,301 | 1,319 | 1,695 | 2,026  | 2,166  | 2,802  | 2,268  | 1,320 | 846   | 832   | 908   |
| 90% Exceedance                              | 1,347 | 1,224 | 1,223 | 1,597 | 1,882  | 2,042  | 2,593  | 1,947  | 1,179 | 639   | 691   | 782   |
| Full Simulation Period Average <sup>a</sup> | 2,087 | 2,005 | 2,787 | 4,605 | 6,278  | 6,058  | 7,196  | 6,039  | 3,570 | 2,027 | 1,437 | 1,434 |
| Wet Water Years (29%)                       | 2,447 | 2,747 | 5,214 | 9,868 | 12,544 | 12,137 | 13,097 | 11,592 | 7,394 | 3,857 | 2,359 | 2,257 |
| Above Normal Water Years (12%)              | 1,823 | 1,770 | 2,050 | 3,870 | 6,908  | 6,534  | 7,873  | 5,930  | 3,430 | 2,117 | 1,441 | 1,411 |
| Below Normal Water Years (18%)              | 2,242 | 1,984 | 2,105 | 2,617 | 4,368  | 4,120  | 6,016  | 4,782  | 2,431 | 1,563 | 1,199 | 1,222 |
| Dry Water Years (22%)                       | 2,061 | 1,681 | 1,675 | 2,086 | 2,749  | 2,747  | 3,705  | 3,071  | 1,530 | 1,032 | 966   | 1,045 |
| Critical Water Years (19%)                  | 1,589 | 1,414 | 1,483 | 1,834 | 2,216  | 2,147  | 2,920  | 2,260  | 1,261 | 765   | 797   | 846   |

**Table 4H-2-3-2c. San Joaquin River at Vernalis, Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov | Dec | Jan | Feb  | Mar | Apr   | May   | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-----|-----|-----|------|-----|-------|-------|-----|-----|-----|-----|
| 10% Exceedance                              | 4   | 4   | 4   | 10  | 56   | 60  | 127   | 538   | 24  | 117 | 3   | 3   |
| 20% Exceedance                              | 2   | 3   | 6   | 2   | 19   | 5   | 705   | 528   | 42  | 22  | 1   | 3   |
| 30% Exceedance                              | -2  | 5   | 2   | 0   | -2   | -4  | 1,208 | 1,122 | 7   | 74  | 80  | 7   |
| 40% Exceedance                              | 3   | 14  | 29  | 7   | 20   | -18 | 1,372 | 1,118 | 14  | 71  | 43  | 11  |
| 50% Exceedance                              | 20  | -1  | 3   | 3   | -7   | 64  | 1,420 | 1,303 | 12  | 184 | 20  | 34  |
| 60% Exceedance                              | 39  | -2  | 13  | 0   | 17   | 108 | 1,131 | 1,080 | 19  | 46  | 24  | 44  |
| 70% Exceedance                              | -1  | 9   | 0   | 6   | 33   | 121 | 468   | 393   | 63  | 59  | 22  | 25  |
| 80% Exceedance                              | 3   | 11  | -3  | -9  | 22   | 72  | 442   | 418   | 56  | 135 | 73  | 14  |
| 90% Exceedance                              | 26  | 22  | 23  | 11  | 22   | 64  | 487   | 418   | 18  | 29  | 18  | 32  |
| Full Simulation Period Average <sup>a</sup> | 13  | 11  | 6   | 10  | -40  | 38  | 775   | 730   | 21  | 76  | 33  | 20  |
| Wet Water Years (29%)                       | 18  | 16  | 10  | 31  | -94  | -11 | 696   | 664   | 7   | 25  | 3   | 2   |
| Above Normal Water Years (12%)              | 33  | 18  | 11  | -20 | -205 | -43 | 1,051 | 1,011 | -9  | 130 | 10  | 11  |
| Below Normal Water Years (18%)              | 5   | 4   | 3   | 3   | 17   | 50  | 977   | 938   | 20  | 126 | 25  | 27  |
| Dry Water Years (22%)                       | -1  | 14  | 11  | 15  | 24   | 105 | 732   | 654   | 18  | 35  | 9   | 12  |
| Critical Water Years (19%)                  | 15  | 4   | -8  | -2  | 18   | 77  | 581   | 547   | 66  | 121 | 127 | 58  |

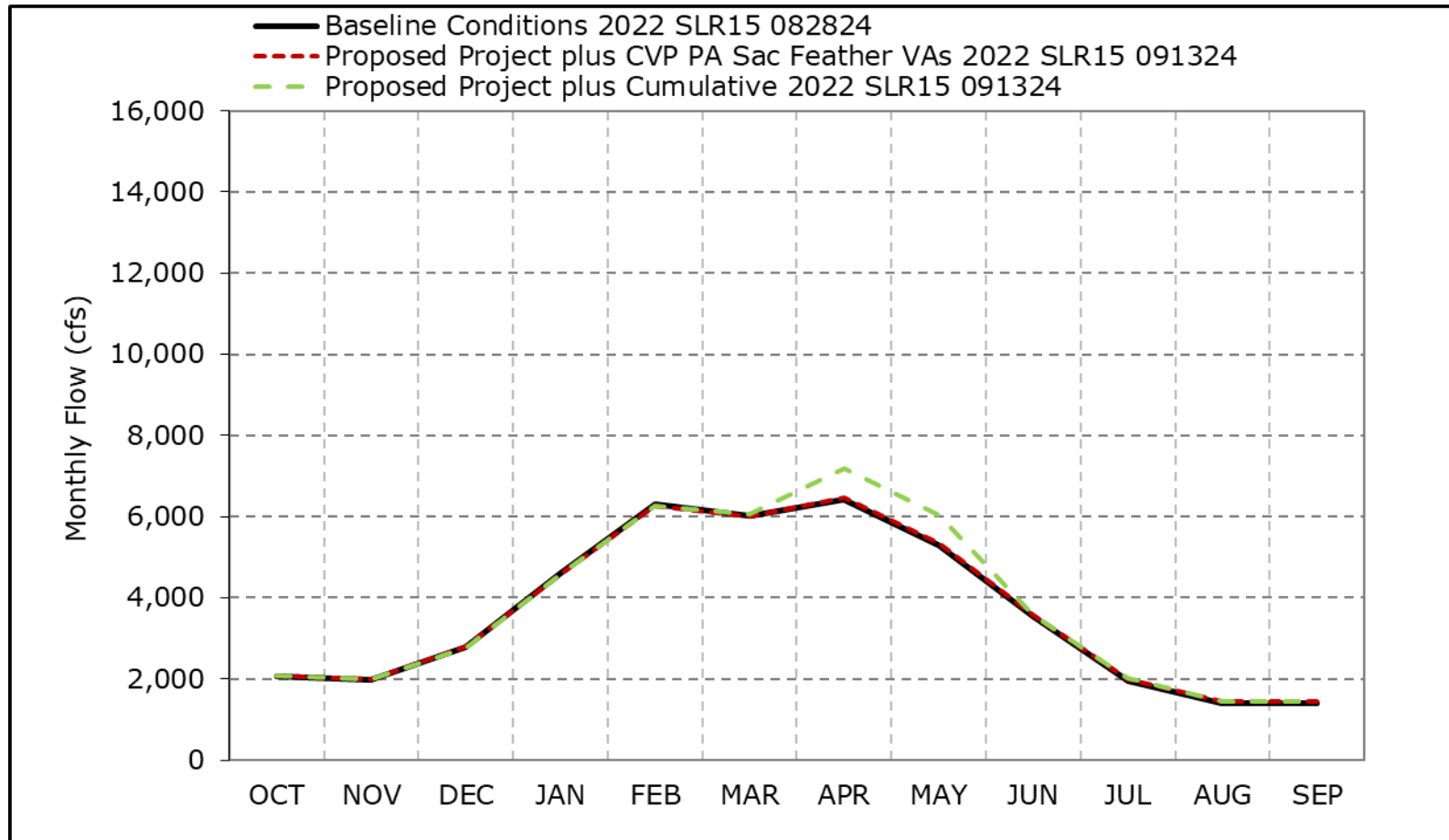
<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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 4H-2-3a. San Joaquin River at Vernalis, Long-Term Average Flow**

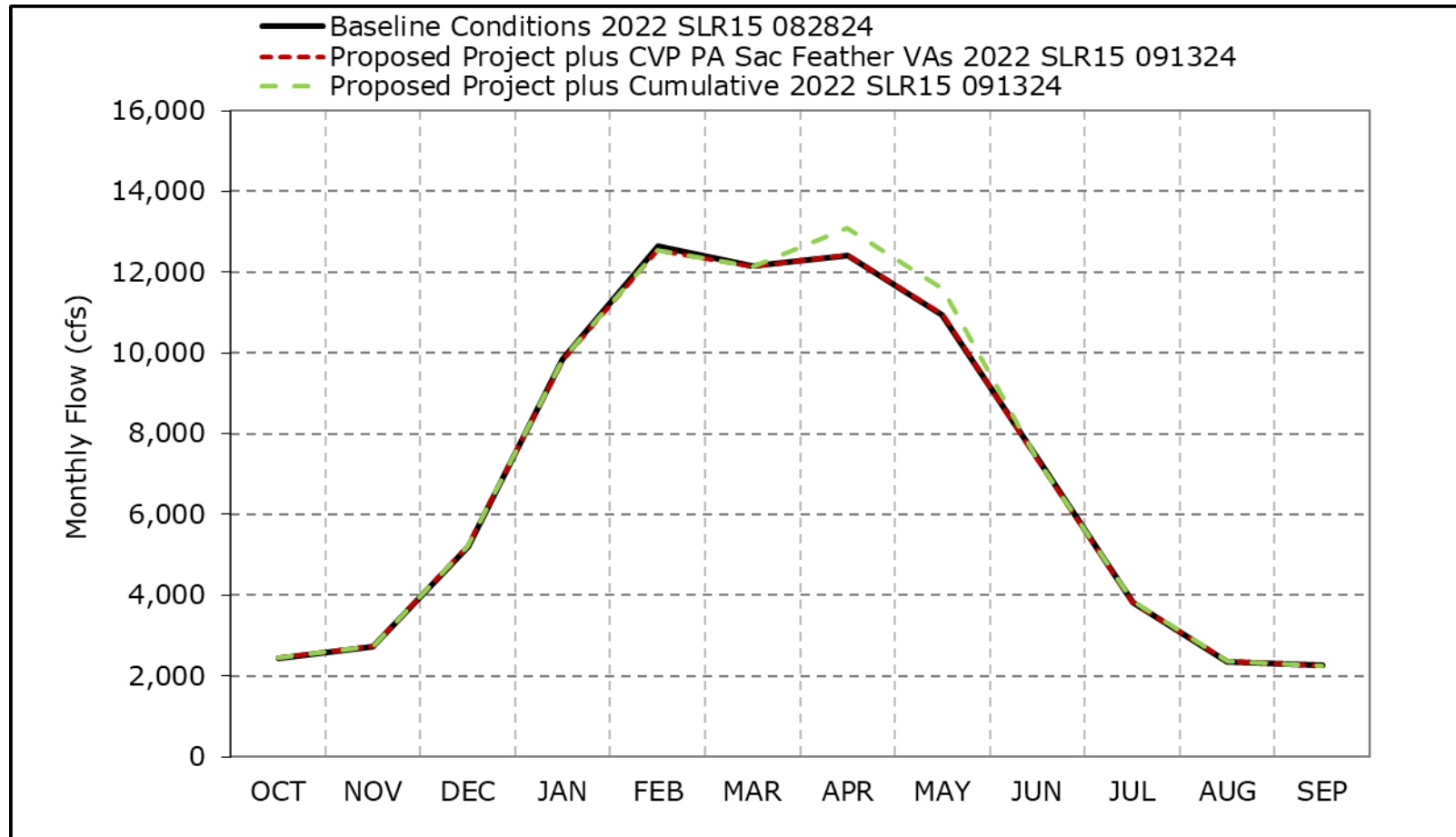


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3b. San Joaquin River at Vernalis, Wet Year Average Flow**

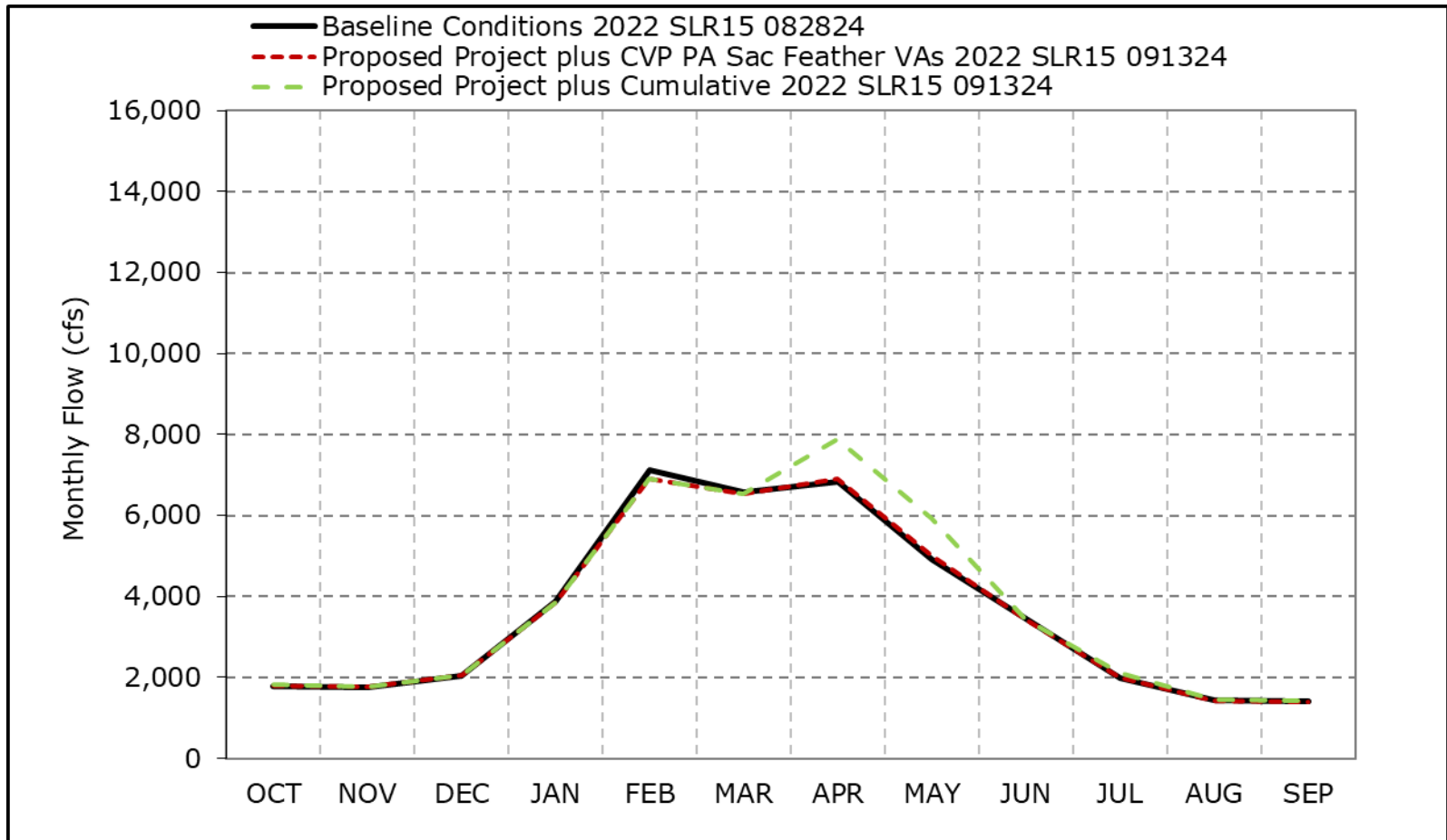


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3c. San Joaquin River at Vernalis, Above Normal Year Average Flow**

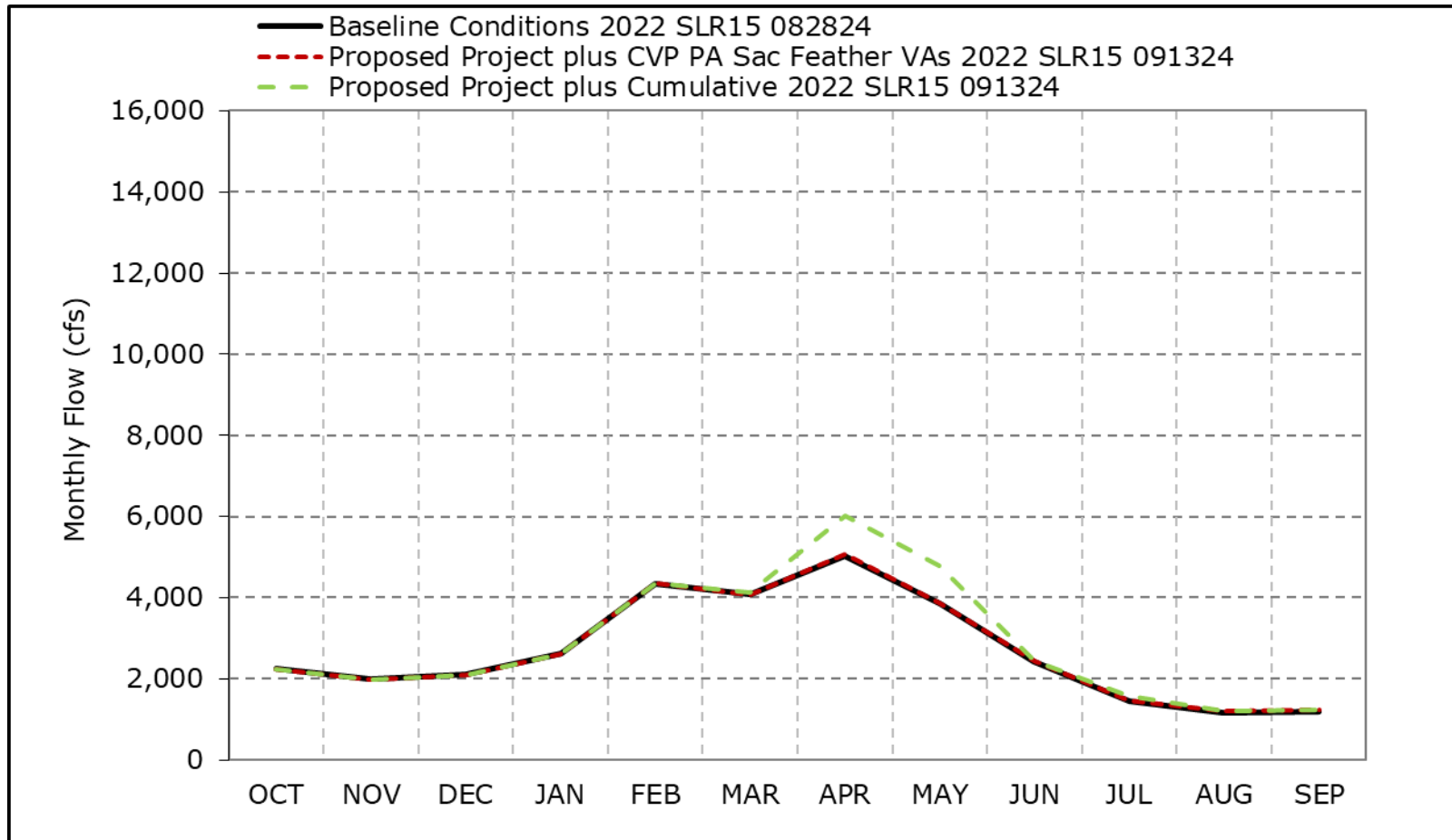


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3d. San Joaquin River at Vernalis, Below Normal Year Average Flow**



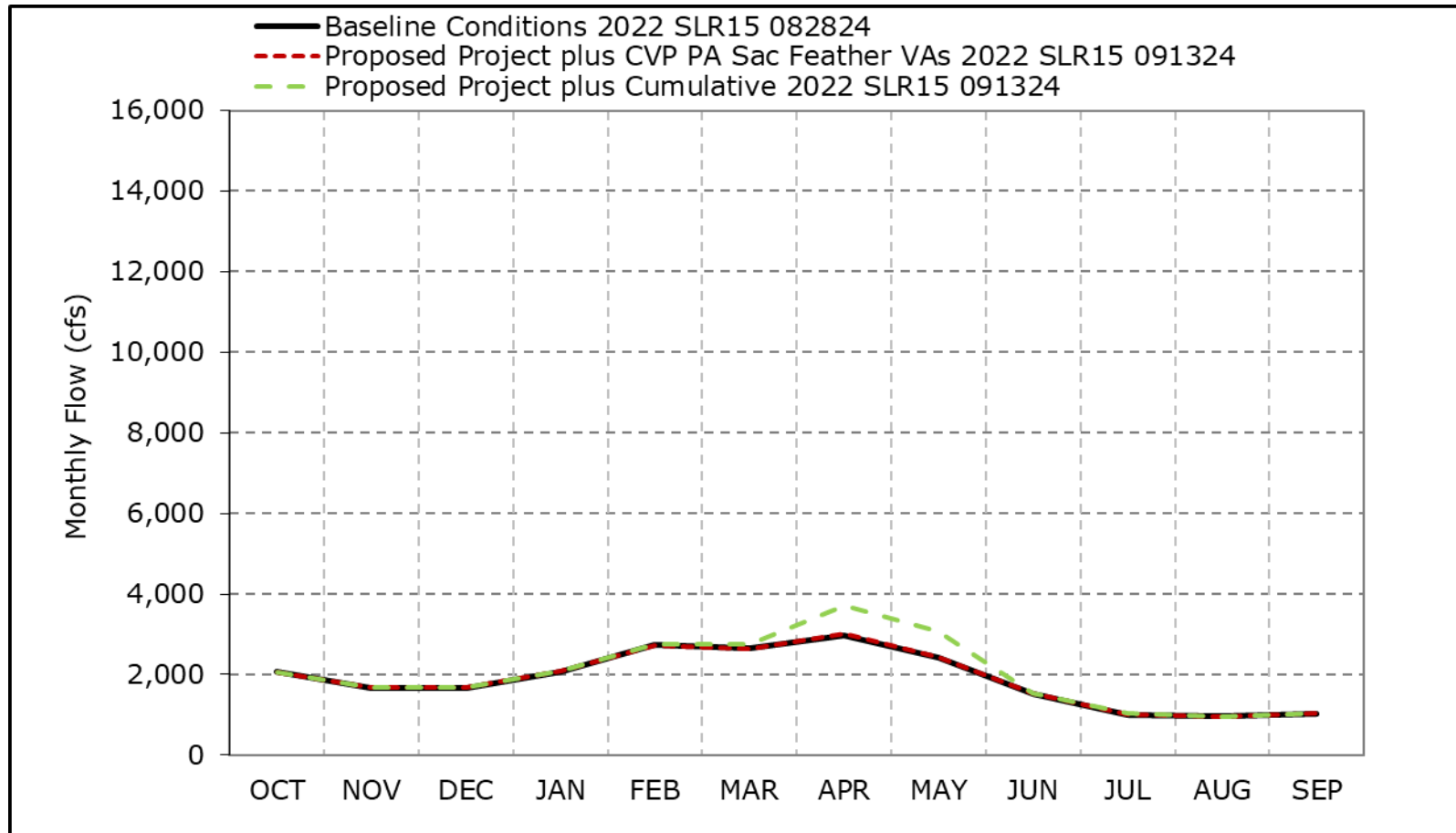
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.



**Figure 4H-2-3e. San Joaquin River at Vernalis, Dry Year Average Flow**

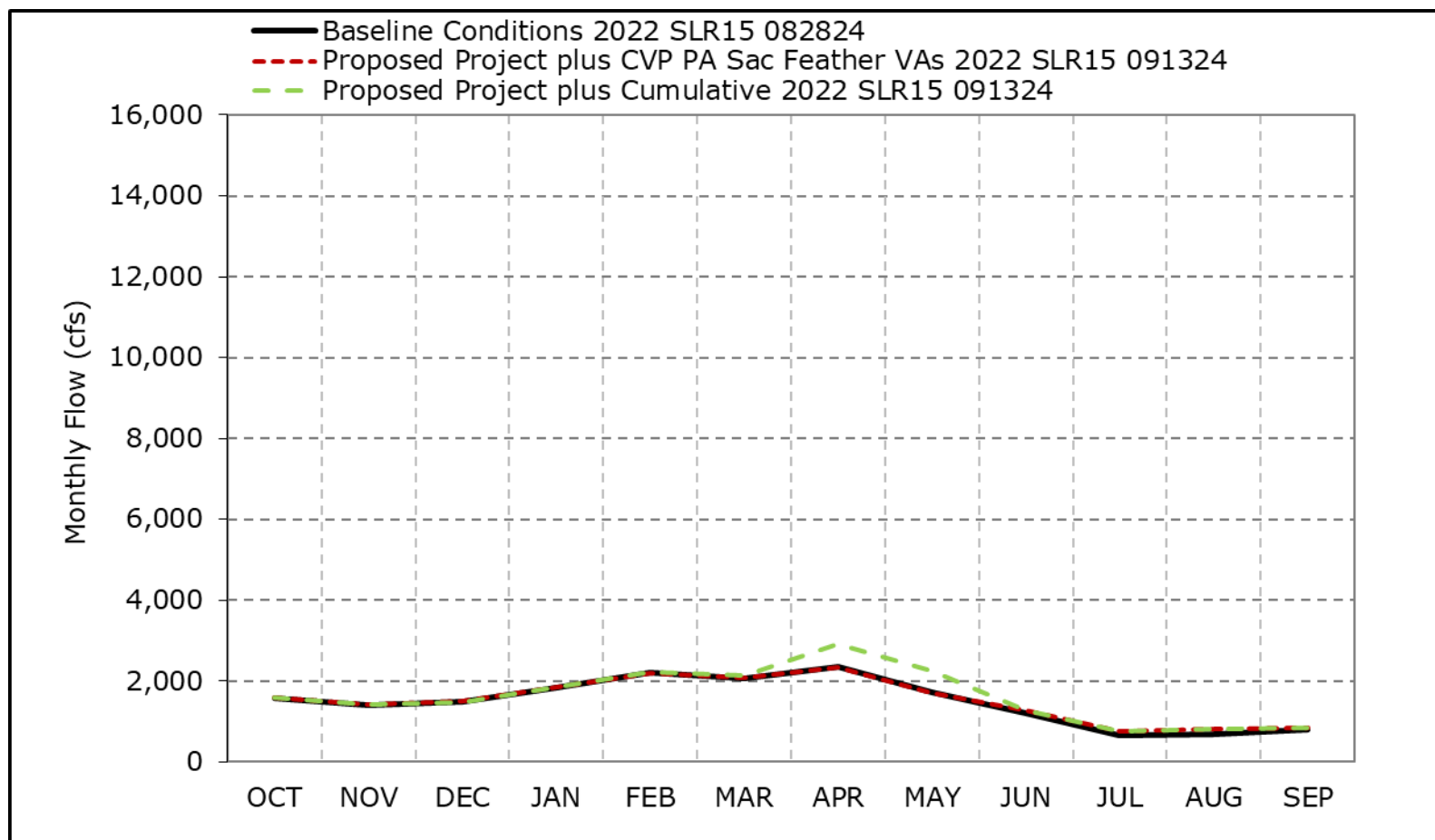


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3f. San Joaquin River at Vernalis, Critical Year Average Flow**

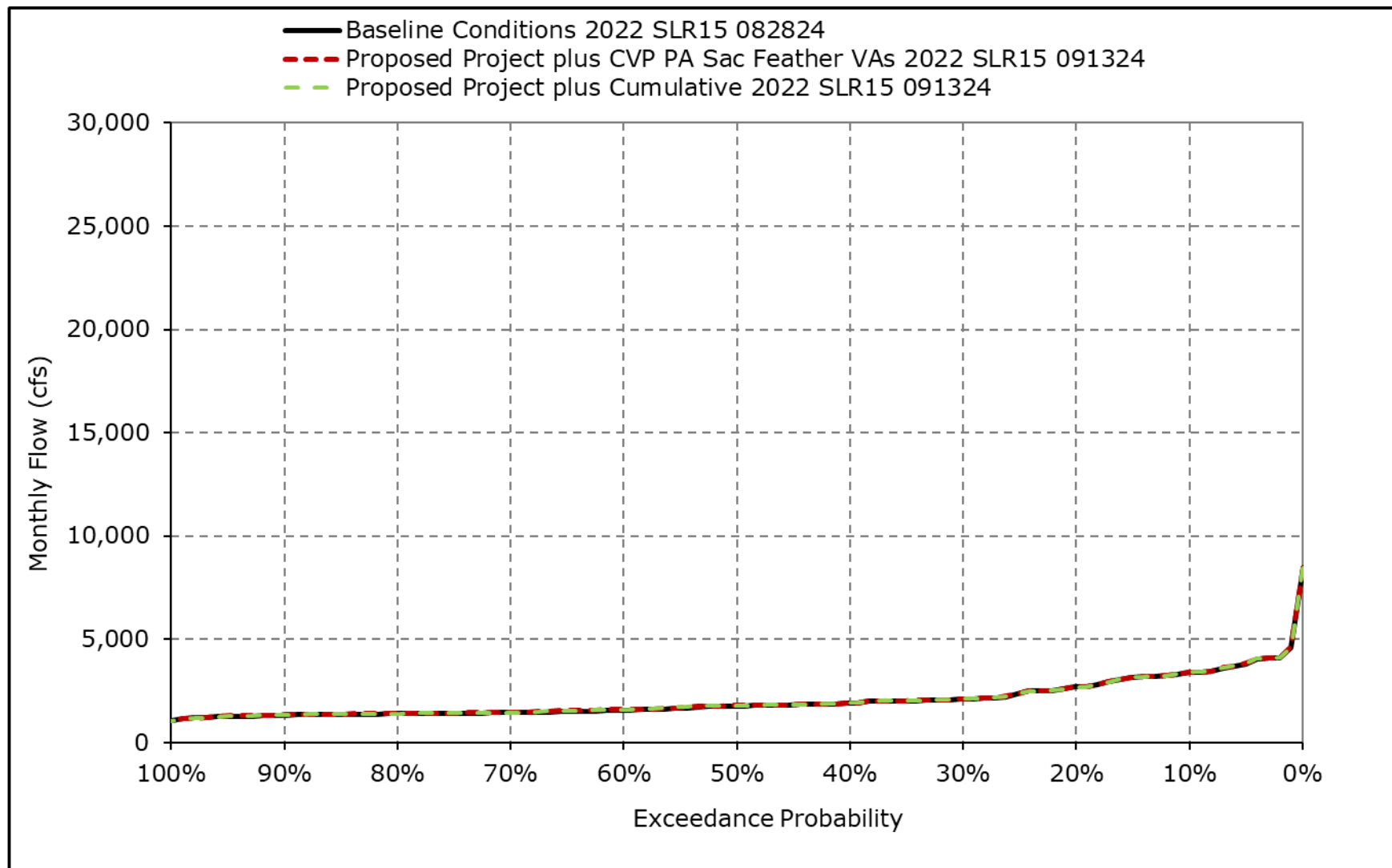


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

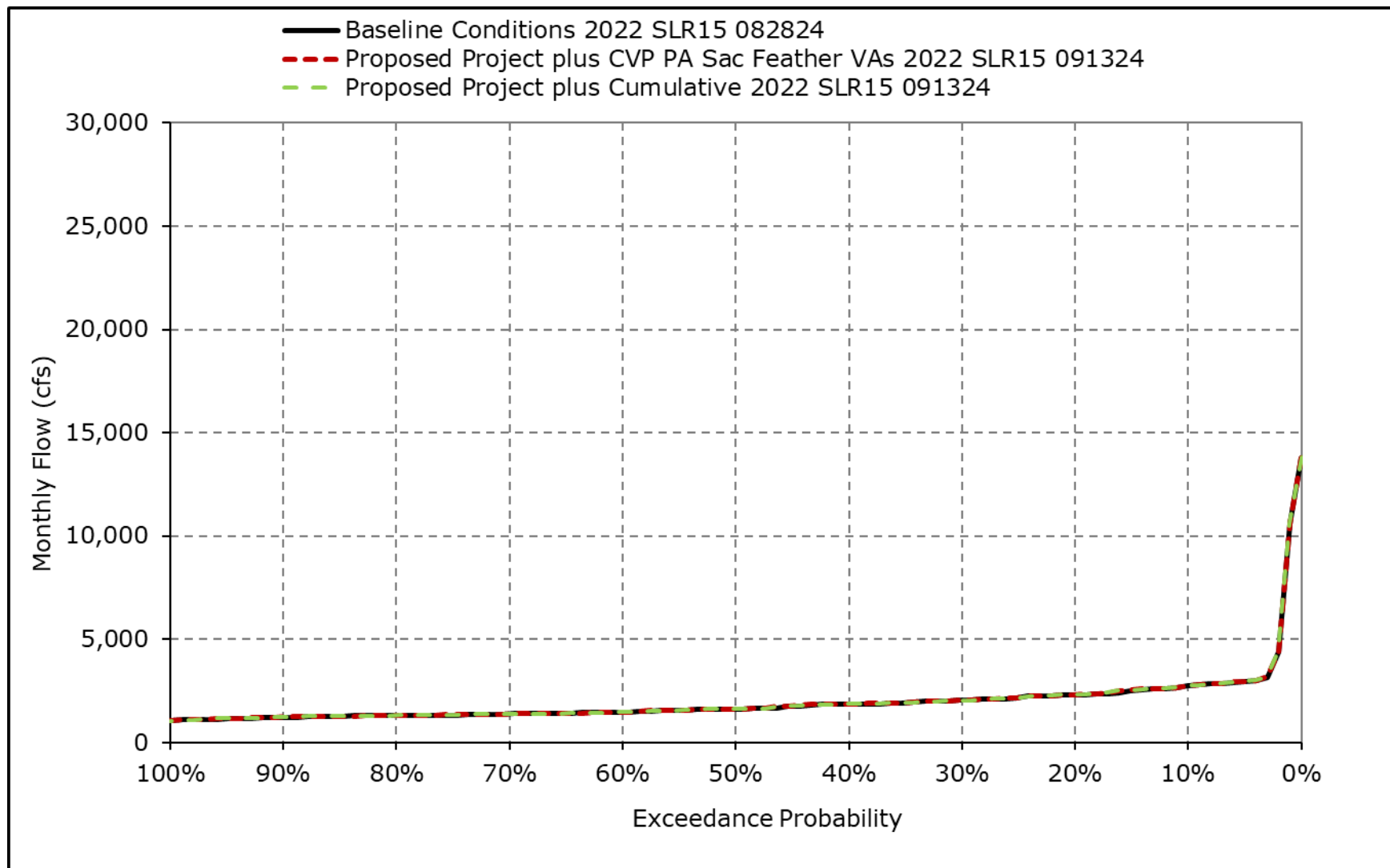
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3g. San Joaquin River at Vernalis, October**



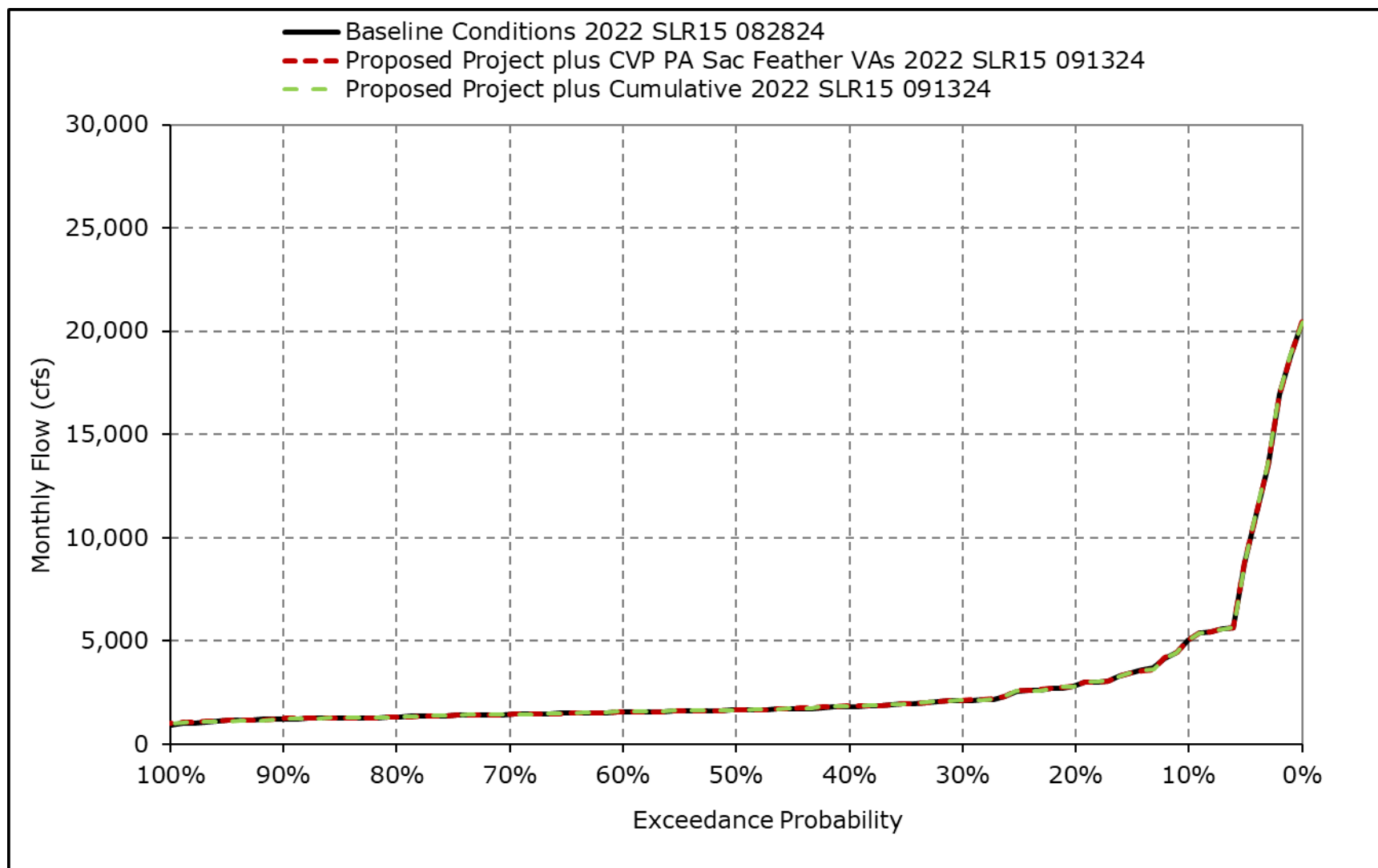
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3h. San Joaquin River at Vernalis, November**



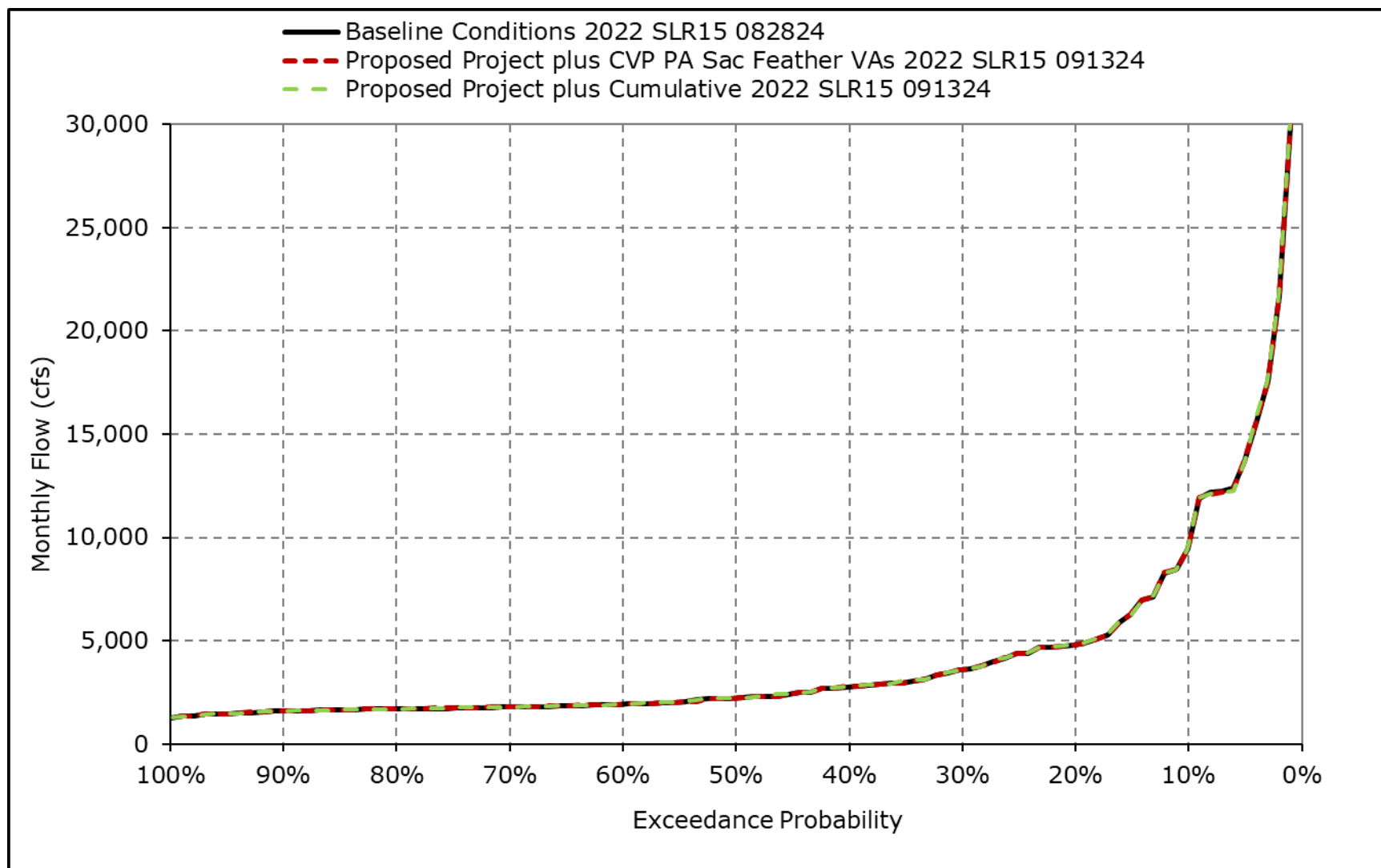
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3i. San Joaquin River at Vernalis, December**



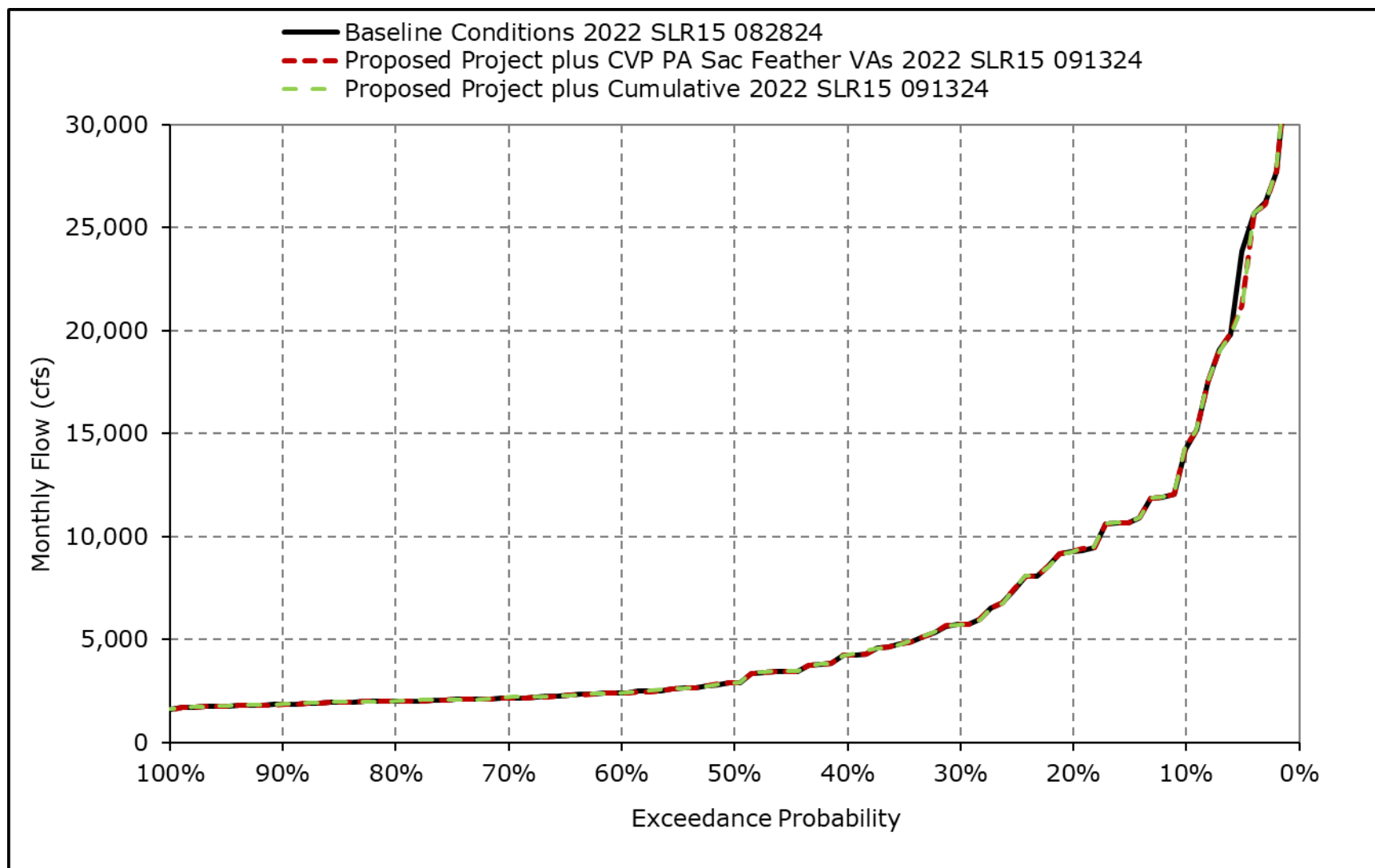
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3j. San Joaquin River at Vernalis, January**



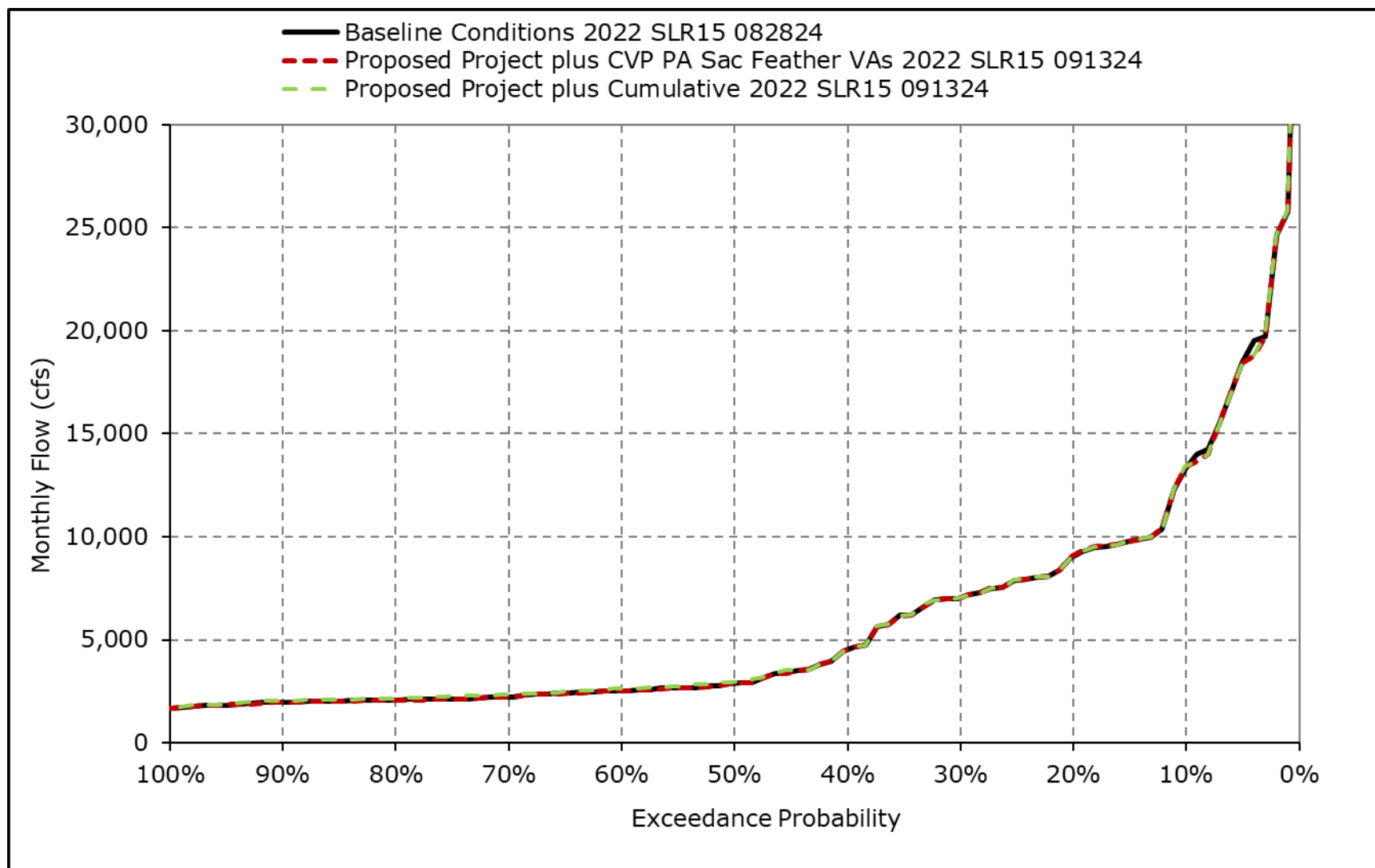
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3k. San Joaquin River at Vernalis, February**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

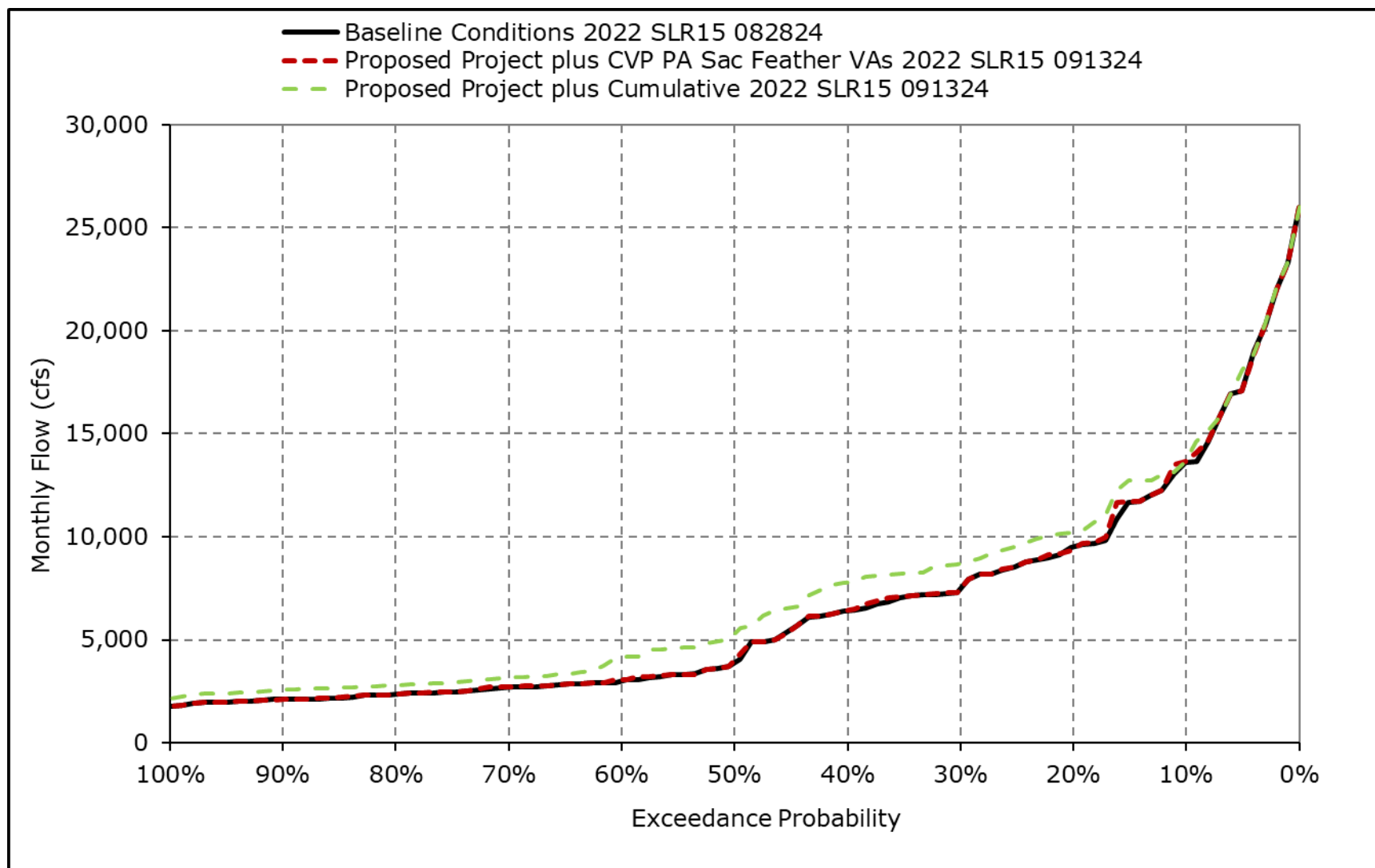
**Figure 4H-2-3I. San Joaquin River at Vernalis, March**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

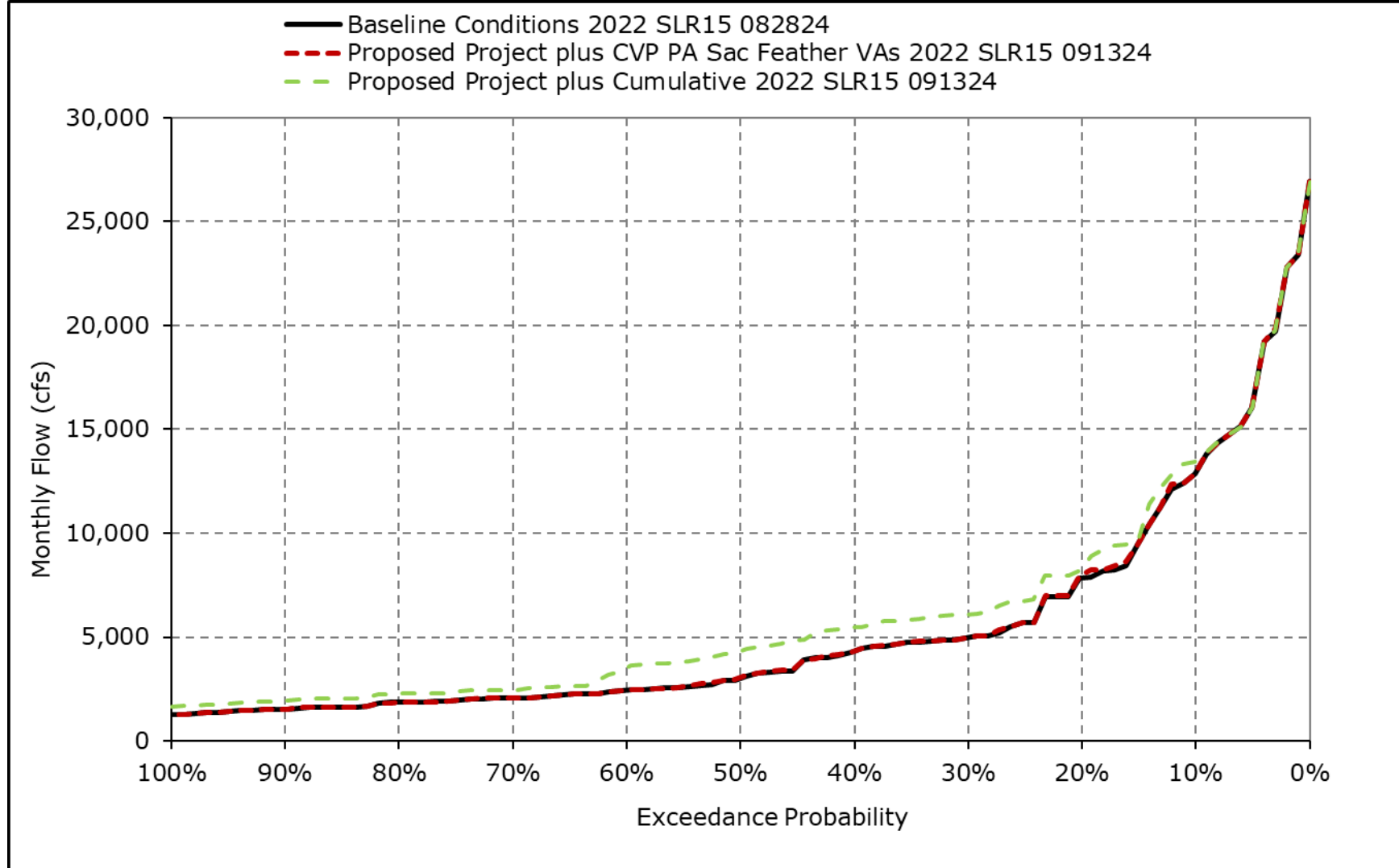


**Figure 4H-2-3m. San Joaquin River at Vernalis, April**



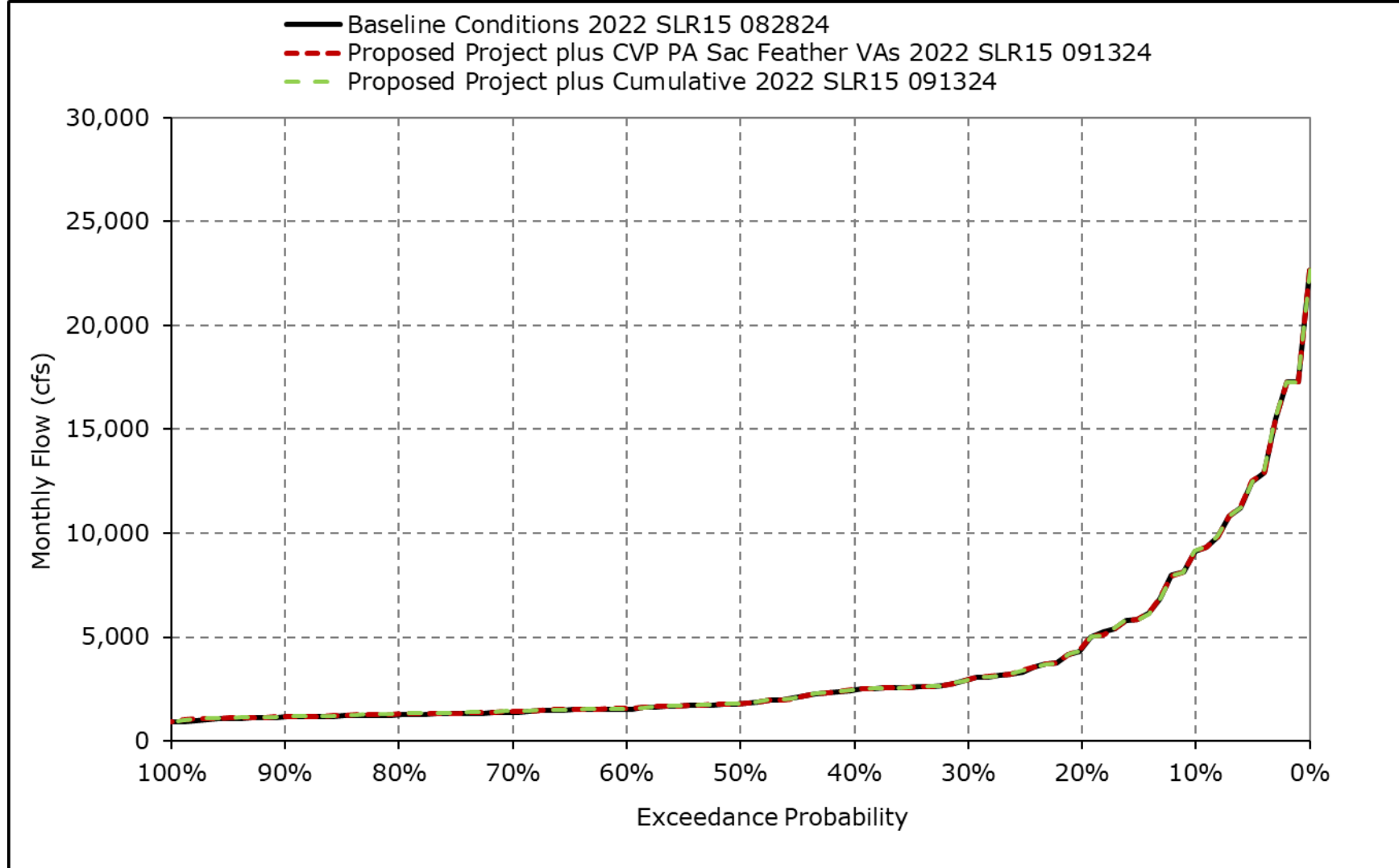
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3n. San Joaquin River at Vernalis, May**



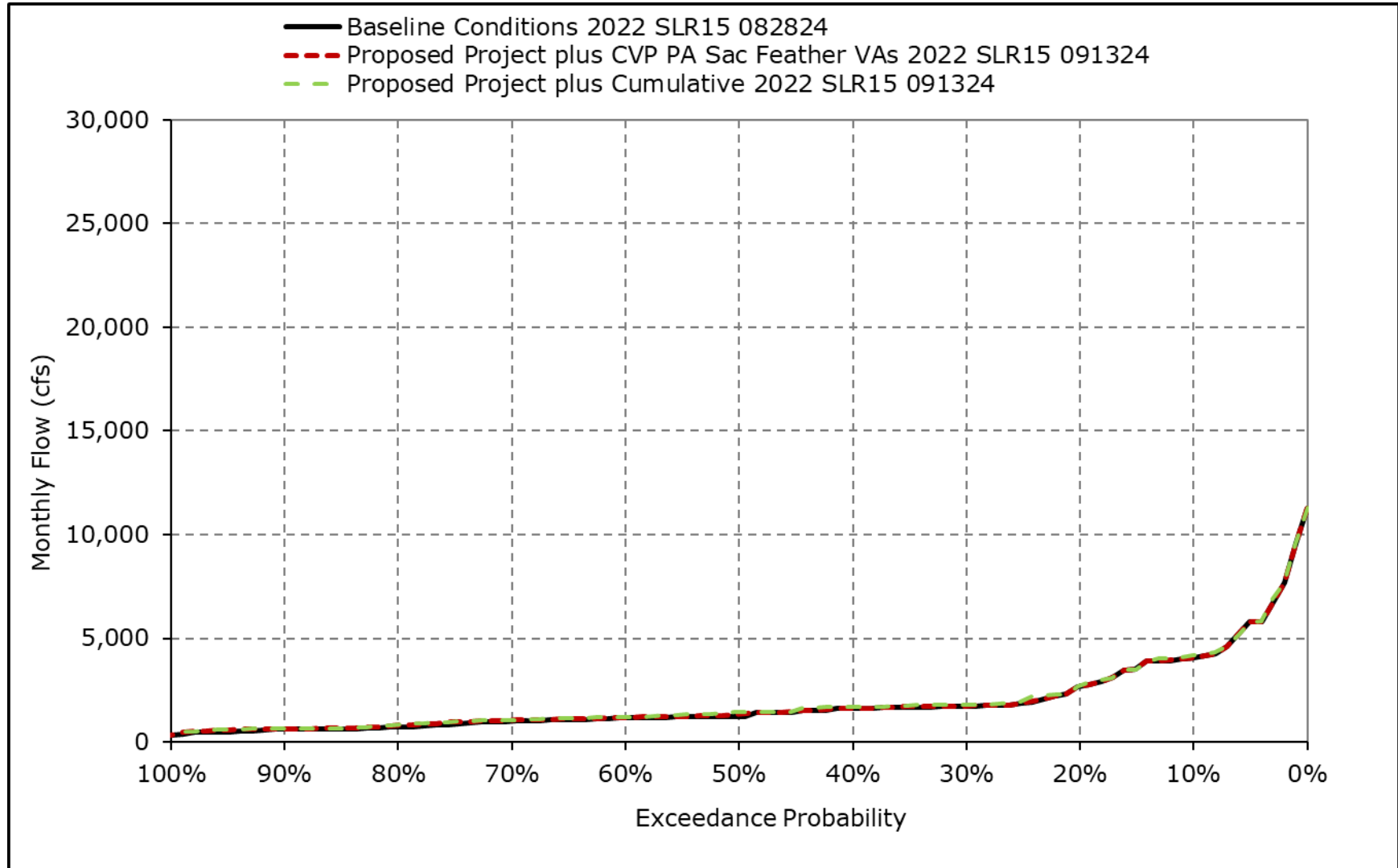
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3o. San Joaquin River at Vernalis, June**



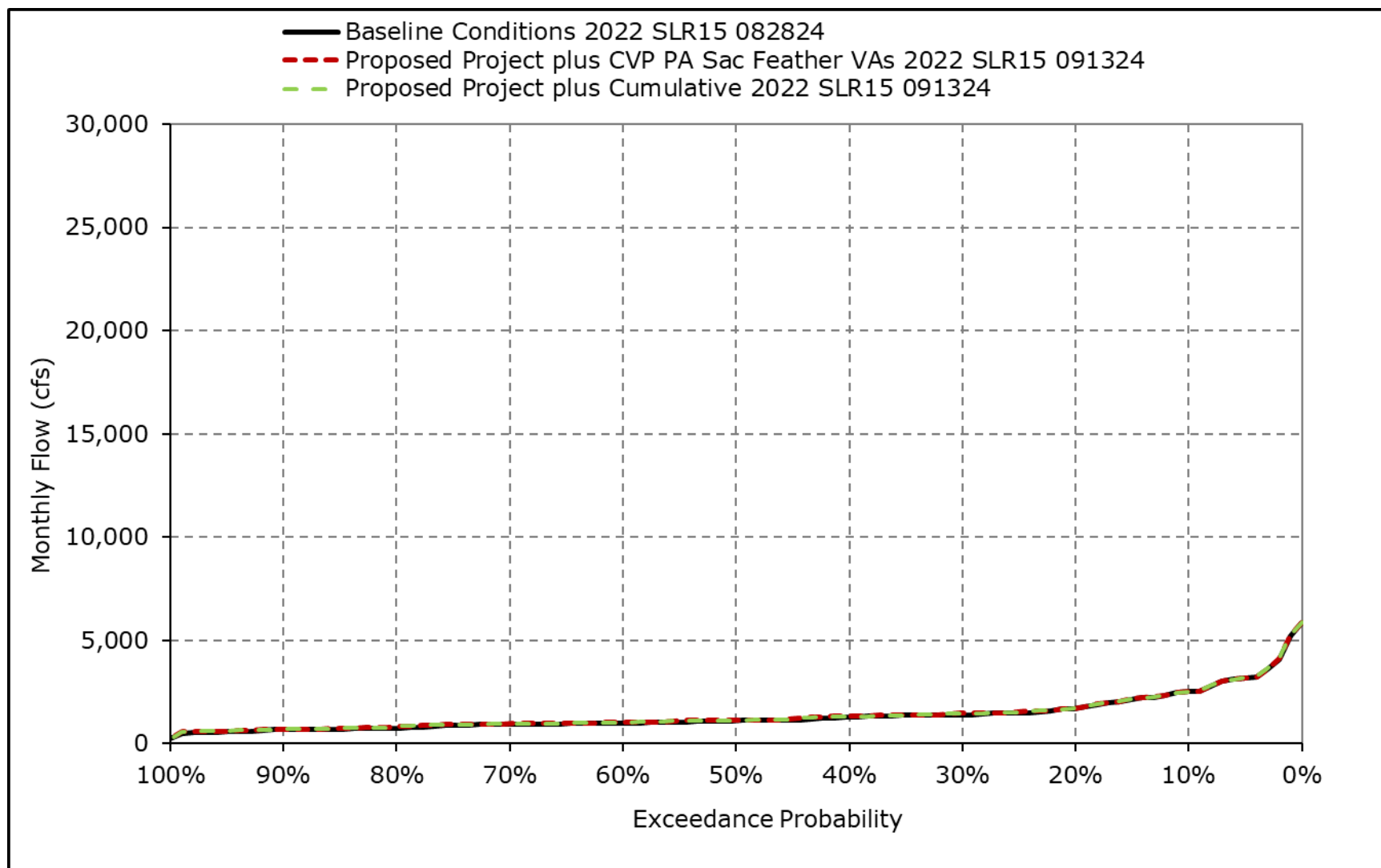
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3p. San Joaquin River at Vernalis, July**



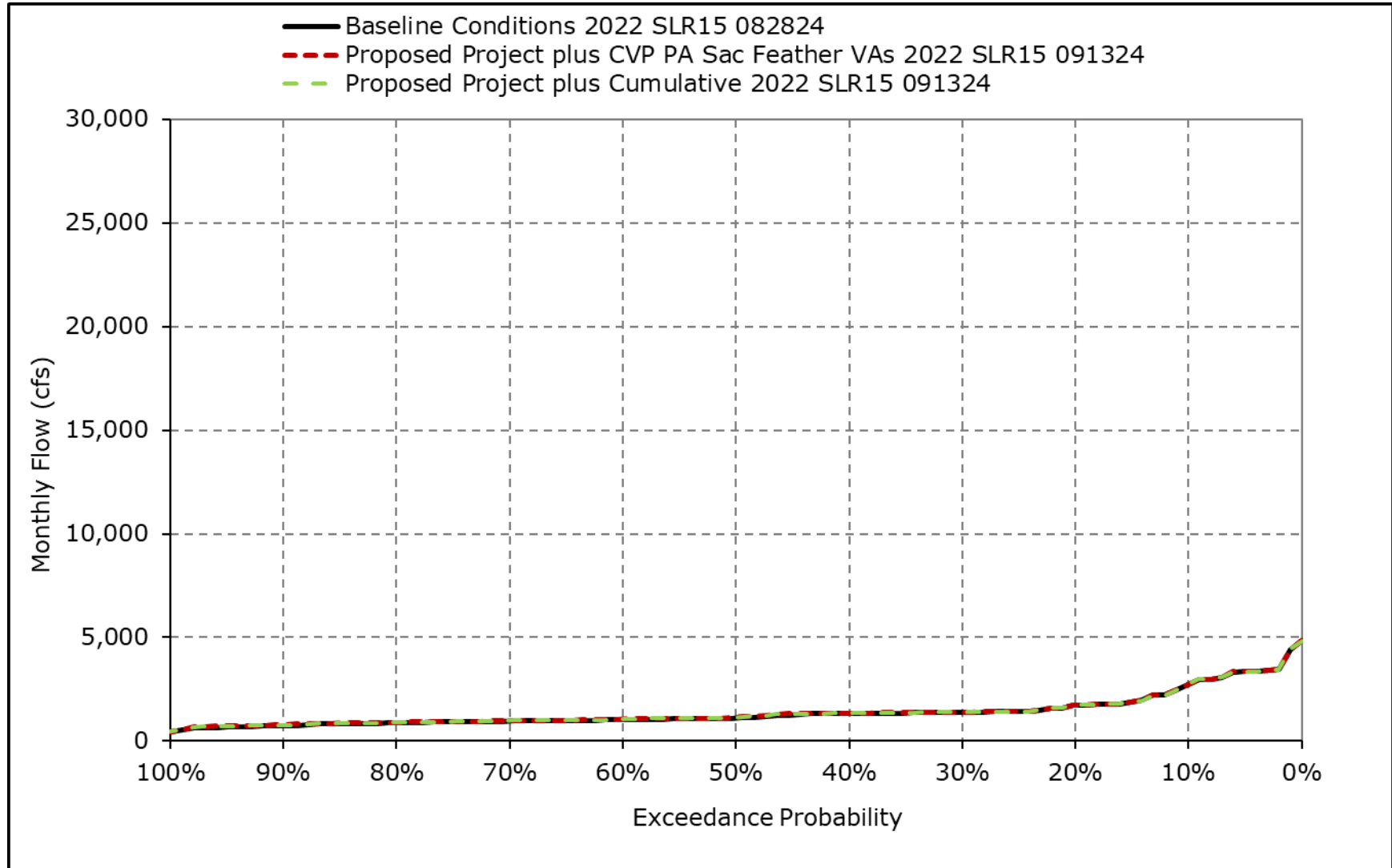
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3q. San Joaquin River at Vernalis, August**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-3r. San Joaquin River at Vernalis, September**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Table 4H-2-4-1a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 10% Exceedance                              | 3,389 | 2,763 | 5,050 | 9,682  | 14,334 | 13,392 | 13,622 | 12,934 | 9,141  | 4,057 | 2,521 | 2,765 |
| 20% Exceedance                              | 2,669 | 2,303 | 2,821 | 4,809  | 9,278  | 9,063  | 9,509  | 7,836  | 4,433  | 2,698 | 1,715 | 1,737 |
| 30% Exceedance                              | 2,102 | 2,025 | 2,127 | 3,598  | 5,737  | 7,067  | 7,490  | 4,977  | 2,956  | 1,719 | 1,402 | 1,397 |
| 40% Exceedance                              | 1,903 | 1,842 | 1,816 | 2,787  | 4,247  | 4,542  | 6,408  | 4,348  | 2,460  | 1,623 | 1,285 | 1,333 |
| 50% Exceedance                              | 1,760 | 1,619 | 1,645 | 2,224  | 2,919  | 2,888  | 3,902  | 3,011  | 1,786  | 1,244 | 1,114 | 1,119 |
| 60% Exceedance                              | 1,552 | 1,461 | 1,557 | 1,922  | 2,419  | 2,526  | 3,012  | 2,437  | 1,539  | 1,162 | 1,003 | 1,028 |
| 70% Exceedance                              | 1,434 | 1,371 | 1,441 | 1,782  | 2,177  | 2,236  | 2,696  | 2,071  | 1,383  | 1,011 | 943   | 963   |
| 80% Exceedance                              | 1,396 | 1,291 | 1,322 | 1,704  | 2,003  | 2,094  | 2,360  | 1,851  | 1,264  | 711   | 759   | 894   |
| 90% Exceedance                              | 1,321 | 1,202 | 1,200 | 1,586  | 1,861  | 1,977  | 2,107  | 1,529  | 1,160  | 611   | 674   | 750   |
| Full Simulation Period Average <sup>a</sup> | 2,074 | 1,993 | 2,782 | 4,595  | 6,319  | 6,019  | 6,421  | 5,309  | 3,549  | 1,950 | 1,404 | 1,414 |
| Wet Water Years (19%)                       | 2,212 | 2,236 | 4,920 | 11,321 | 16,043 | 15,525 | 15,197 | 14,238 | 10,174 | 5,080 | 2,939 | 2,806 |
| Above Normal Water Years (18%)              | 2,301 | 2,600 | 3,381 | 4,871  | 7,507  | 6,807  | 7,868  | 5,995  | 3,605  | 1,929 | 1,427 | 1,414 |
| Below Normal Water Years (12%)              | 2,211 | 2,134 | 3,454 | 4,837  | 6,225  | 5,297  | 6,472  | 4,196  | 2,290  | 1,562 | 1,266 | 1,178 |
| Dry Water Years (15%)                       | 1,895 | 1,861 | 1,724 | 2,079  | 2,347  | 2,814  | 3,336  | 2,597  | 1,654  | 1,187 | 1,001 | 1,019 |
| Critical Water Years (36%)                  | 1,918 | 1,570 | 1,570 | 1,873  | 2,278  | 2,184  | 2,333  | 1,754  | 1,233  | 757   | 796   | 923   |

**Table 4H-2-4-1b. San Joaquin River at Vernalis (60-20-20), Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 10% Exceedance                              | 3,392 | 2,767 | 5,054 | 9,694  | 14,425 | 13,451 | 13,696 | 12,948 | 9,164  | 4,066 | 2,524 | 2,768 |
| 20% Exceedance                              | 2,671 | 2,305 | 2,827 | 4,811  | 9,296  | 9,069  | 9,404  | 7,989  | 4,473  | 2,695 | 1,714 | 1,740 |
| 30% Exceedance                              | 2,100 | 2,030 | 2,129 | 3,597  | 5,736  | 7,062  | 7,491  | 4,993  | 2,963  | 1,741 | 1,471 | 1,402 |
| 40% Exceedance                              | 1,905 | 1,856 | 1,844 | 2,793  | 4,251  | 4,524  | 6,453  | 4,352  | 2,474  | 1,628 | 1,326 | 1,345 |
| 50% Exceedance                              | 1,780 | 1,614 | 1,648 | 2,227  | 2,911  | 2,897  | 4,010  | 3,044  | 1,798  | 1,357 | 1,128 | 1,150 |
| 60% Exceedance                              | 1,578 | 1,459 | 1,558 | 1,923  | 2,405  | 2,515  | 3,072  | 2,456  | 1,559  | 1,195 | 1,020 | 1,056 |
| 70% Exceedance                              | 1,449 | 1,381 | 1,441 | 1,789  | 2,174  | 2,238  | 2,731  | 2,069  | 1,442  | 1,053 | 965   | 988   |
| 80% Exceedance                              | 1,408 | 1,298 | 1,301 | 1,699  | 2,000  | 2,089  | 2,364  | 1,855  | 1,300  | 802   | 832   | 899   |
| 90% Exceedance                              | 1,331 | 1,237 | 1,234 | 1,597  | 1,855  | 1,972  | 2,105  | 1,532  | 1,170  | 638   | 695   | 794   |
| Full Simulation Period Average <sup>a</sup> | 2,087 | 2,005 | 2,789 | 4,596  | 6,266  | 6,007  | 6,460  | 5,332  | 3,567  | 1,981 | 1,435 | 1,434 |
| Wet Water Years (19%)                       | 2,249 | 2,258 | 4,930 | 11,312 | 15,759 | 15,464 | 15,278 | 14,302 | 10,174 | 5,085 | 2,943 | 2,809 |
| Above Normal Water Years (18%)              | 2,303 | 2,612 | 3,386 | 4,873  | 7,519  | 6,816  | 7,924  | 6,018  | 3,614  | 1,941 | 1,437 | 1,422 |
| Below Normal Water Years (12%)              | 2,210 | 2,132 | 3,445 | 4,835  | 6,224  | 5,292  | 6,503  | 4,227  | 2,299  | 1,572 | 1,275 | 1,184 |
| Dry Water Years (15%)                       | 1,901 | 1,869 | 1,741 | 2,090  | 2,347  | 2,809  | 3,374  | 2,616  | 1,664  | 1,200 | 1,008 | 1,035 |
| Critical Water Years (36%)                  | 1,930 | 1,581 | 1,578 | 1,879  | 2,276  | 2,181  | 2,345  | 1,756  | 1,271  | 825   | 869   | 963   |

**Table 4H-2-4-1c. San Joaquin River at Vernalis (60-20-20), Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov | Dec | Jan | Feb  | Mar | Apr  | May | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-----|-----|-----|------|-----|------|-----|-----|-----|-----|-----|
| 10% Exceedance                              | 3   | 4   | 3   | 12  | 91   | 58  | 74   | 14  | 24  | 10  | 3   | 3   |
| 20% Exceedance                              | 2   | 2   | 6   | 3   | 18   | 6   | -105 | 154 | 40  | -3  | -1  | 3   |
| 30% Exceedance                              | -3  | 5   | 2   | 0   | -1   | -5  | 1    | 16  | 7   | 23  | 69  | 5   |
| 40% Exceedance                              | 2   | 14  | 28  | 7   | 4    | -18 | 45   | 4   | 13  | 5   | 42  | 12  |
| 50% Exceedance                              | 20  | -5  | 3   | 3   | -8   | 9   | 107  | 33  | 11  | 114 | 14  | 31  |
| 60% Exceedance                              | 26  | -2  | 1   | 1   | -14  | -12 | 60   | 19  | 20  | 32  | 16  | 29  |
| 70% Exceedance                              | 14  | 9   | 0   | 7   | -3   | 1   | 35   | -2  | 59  | 42  | 22  | 25  |
| 80% Exceedance                              | 12  | 7   | -20 | -5  | -3   | -4  | 4    | 4   | 36  | 91  | 73  | 5   |
| 90% Exceedance                              | 10  | 35  | 34  | 11  | -5   | -5  | -2   | 3   | 10  | 27  | 22  | 43  |
| Full Simulation Period Average <sup>a</sup> | 13  | 11  | 7   | 2   | -53  | -13 | 39   | 24  | 18  | 31  | 31  | 20  |
| Wet Water Years (19%)                       | 36  | 22  | 10  | -10 | -284 | -61 | 81   | 65  | 0   | 5   | 5   | 3   |
| Above Normal Water Years (18%)              | 2   | 13  | 5   | 2   | 12   | 9   | 56   | 23  | 10  | 12  | 9   | 8   |
| Below Normal Water Years (12%)              | -2  | -3  | -9  | -2  | -1   | -5  | 31   | 31  | 9   | 10  | 9   | 6   |
| Dry Water Years (15%)                       | 6   | 8   | 17  | 12  | -1   | -5  | 37   | 20  | 10  | 13  | 7   | 16  |
| Critical Water Years (36%)                  | 13  | 11  | 8   | 5   | -2   | -3  | 12   | 2   | 38  | 68  | 72  | 41  |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-4-2a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 10% Exceedance                              | 3,389 | 2,763 | 5,050 | 9,682  | 14,334 | 13,392 | 13,622 | 12,934 | 9,141  | 4,057 | 2,521 | 2,765 |
| 20% Exceedance                              | 2,669 | 2,303 | 2,821 | 4,809  | 9,278  | 9,063  | 9,509  | 7,836  | 4,433  | 2,698 | 1,715 | 1,737 |
| 30% Exceedance                              | 2,102 | 2,025 | 2,127 | 3,598  | 5,737  | 7,067  | 7,490  | 4,977  | 2,956  | 1,719 | 1,402 | 1,397 |
| 40% Exceedance                              | 1,903 | 1,842 | 1,816 | 2,787  | 4,247  | 4,542  | 6,408  | 4,348  | 2,460  | 1,623 | 1,285 | 1,333 |
| 50% Exceedance                              | 1,760 | 1,619 | 1,645 | 2,224  | 2,919  | 2,888  | 3,902  | 3,011  | 1,786  | 1,244 | 1,114 | 1,119 |
| 60% Exceedance                              | 1,552 | 1,461 | 1,557 | 1,922  | 2,419  | 2,526  | 3,012  | 2,437  | 1,539  | 1,162 | 1,003 | 1,028 |
| 70% Exceedance                              | 1,434 | 1,371 | 1,441 | 1,782  | 2,177  | 2,236  | 2,696  | 2,071  | 1,383  | 1,011 | 943   | 963   |
| 80% Exceedance                              | 1,396 | 1,291 | 1,322 | 1,704  | 2,003  | 2,094  | 2,360  | 1,851  | 1,264  | 711   | 759   | 894   |
| 90% Exceedance                              | 1,321 | 1,202 | 1,200 | 1,586  | 1,861  | 1,977  | 2,107  | 1,529  | 1,160  | 611   | 674   | 750   |
| Full Simulation Period Average <sup>a</sup> | 2,074 | 1,993 | 2,782 | 4,595  | 6,319  | 6,019  | 6,421  | 5,309  | 3,549  | 1,950 | 1,404 | 1,414 |
| Wet Water Years (19%)                       | 2,212 | 2,236 | 4,920 | 11,321 | 16,043 | 15,525 | 15,197 | 14,238 | 10,174 | 5,080 | 2,939 | 2,806 |
| Above Normal Water Years (18%)              | 2,301 | 2,600 | 3,381 | 4,871  | 7,507  | 6,807  | 7,868  | 5,995  | 3,605  | 1,929 | 1,427 | 1,414 |
| Below Normal Water Years (12%)              | 2,211 | 2,134 | 3,454 | 4,837  | 6,225  | 5,297  | 6,472  | 4,196  | 2,290  | 1,562 | 1,266 | 1,178 |
| Dry Water Years (15%)                       | 1,895 | 1,861 | 1,724 | 2,079  | 2,347  | 2,814  | 3,336  | 2,597  | 1,654  | 1,187 | 1,001 | 1,019 |
| Critical Water Years (36%)                  | 1,918 | 1,570 | 1,570 | 1,873  | 2,278  | 2,184  | 2,333  | 1,754  | 1,233  | 757   | 796   | 923   |

**Table 4H-2-4-2b. San Joaquin River at Vernalis (60-20-20), Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov   | Dec   | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul   | Aug   | Sep   |
|---------------------------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 10% Exceedance                              | 3,393 | 2,768 | 5,055 | 9,691  | 14,390 | 13,452 | 13,749 | 13,472 | 9,164  | 4,173 | 2,524 | 2,768 |
| 20% Exceedance                              | 2,671 | 2,305 | 2,827 | 4,811  | 9,297  | 9,069  | 10,214 | 8,364  | 4,474  | 2,719 | 1,716 | 1,740 |
| 30% Exceedance                              | 2,100 | 2,030 | 2,129 | 3,598  | 5,735  | 7,063  | 8,698  | 6,099  | 2,963  | 1,793 | 1,482 | 1,405 |
| 40% Exceedance                              | 1,906 | 1,856 | 1,844 | 2,794  | 4,267  | 4,524  | 7,780  | 5,466  | 2,475  | 1,694 | 1,327 | 1,344 |
| 50% Exceedance                              | 1,781 | 1,619 | 1,648 | 2,227  | 2,912  | 2,951  | 5,323  | 4,314  | 1,798  | 1,428 | 1,134 | 1,153 |
| 60% Exceedance                              | 1,590 | 1,459 | 1,570 | 1,922  | 2,436  | 2,634  | 4,143  | 3,517  | 1,559  | 1,208 | 1,027 | 1,071 |
| 70% Exceedance                              | 1,434 | 1,380 | 1,441 | 1,788  | 2,210  | 2,358  | 3,164  | 2,464  | 1,446  | 1,070 | 965   | 988   |
| 80% Exceedance                              | 1,399 | 1,301 | 1,319 | 1,695  | 2,026  | 2,166  | 2,802  | 2,268  | 1,320  | 846   | 832   | 908   |
| 90% Exceedance                              | 1,347 | 1,224 | 1,223 | 1,597  | 1,882  | 2,042  | 2,593  | 1,947  | 1,179  | 639   | 691   | 782   |
| Full Simulation Period Average <sup>a</sup> | 2,087 | 2,005 | 2,787 | 4,605  | 6,278  | 6,058  | 7,196  | 6,039  | 3,570  | 2,027 | 1,437 | 1,434 |
| Wet Water Years (19%)                       | 2,251 | 2,262 | 4,934 | 11,349 | 15,760 | 15,468 | 15,582 | 14,610 | 10,174 | 5,103 | 2,944 | 2,810 |
| Above Normal Water Years (18%)              | 2,304 | 2,613 | 3,387 | 4,877  | 7,517  | 6,816  | 8,921  | 6,985  | 3,615  | 2,041 | 1,438 | 1,424 |
| Below Normal Water Years (12%)              | 2,218 | 2,142 | 3,453 | 4,836  | 6,238  | 5,304  | 7,921  | 5,603  | 2,299  | 1,628 | 1,285 | 1,185 |
| Dry Water Years (15%)                       | 1,893 | 1,863 | 1,735 | 2,099  | 2,353  | 2,858  | 4,444  | 3,651  | 1,663  | 1,265 | 1,012 | 1,033 |
| Critical Water Years (36%)                  | 1,929 | 1,578 | 1,571 | 1,875  | 2,304  | 2,296  | 2,812  | 2,183  | 1,279  | 847   | 868   | 965   |

**Table 4H-2-4-2c. San Joaquin River at Vernalis (60-20-20), Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov | Dec | Jan | Feb  | Mar | Apr   | May   | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-----|-----|-----|------|-----|-------|-------|-----|-----|-----|-----|
| 10% Exceedance                              | 4   | 4   | 4   | 10  | 56   | 60  | 127   | 538   | 24  | 117 | 3   | 3   |
| 20% Exceedance                              | 2   | 3   | 6   | 2   | 19   | 5   | 705   | 528   | 42  | 22  | 1   | 3   |
| 30% Exceedance                              | -2  | 5   | 2   | 0   | -2   | -4  | 1,208 | 1,122 | 7   | 74  | 80  | 7   |
| 40% Exceedance                              | 3   | 14  | 29  | 7   | 20   | -18 | 1,372 | 1,118 | 14  | 71  | 43  | 11  |
| 50% Exceedance                              | 20  | -1  | 3   | 3   | -7   | 64  | 1,420 | 1,303 | 12  | 184 | 20  | 34  |
| 60% Exceedance                              | 39  | -2  | 13  | 0   | 17   | 108 | 1,131 | 1,080 | 19  | 46  | 24  | 44  |
| 70% Exceedance                              | -1  | 9   | 0   | 6   | 33   | 121 | 468   | 393   | 63  | 59  | 22  | 25  |
| 80% Exceedance                              | 3   | 11  | -3  | -9  | 22   | 72  | 442   | 418   | 56  | 135 | 73  | 14  |
| 90% Exceedance                              | 26  | 22  | 23  | 11  | 22   | 64  | 487   | 418   | 18  | 29  | 18  | 32  |
| Full Simulation Period Average <sup>a</sup> | 13  | 11  | 6   | 10  | -40  | 38  | 775   | 730   | 21  | 76  | 33  | 20  |
| Wet Water Years (19%)                       | 39  | 26  | 14  | 27  | -283 | -57 | 385   | 372   | 0   | 23  | 6   | 3   |
| Above Normal Water Years (18%)              | 3   | 14  | 6   | 6   | 10   | 9   | 1,053 | 990   | 11  | 111 | 11  | 10  |
| Below Normal Water Years (12%)              | 7   | 8   | -1  | -1  | 13   | 7   | 1,449 | 1,407 | 9   | 65  | 19  | 7   |
| Dry Water Years (15%)                       | -2  | 2   | 11  | 21  | 5    | 43  | 1,108 | 1,054 | 9   | 78  | 11  | 14  |
| Critical Water Years (36%)                  | 12  | 7   | 1   | 2   | 26   | 112 | 479   | 430   | 45  | 90  | 72  | 42  |

<sup>a</sup> Based on the 100-year simulation period.

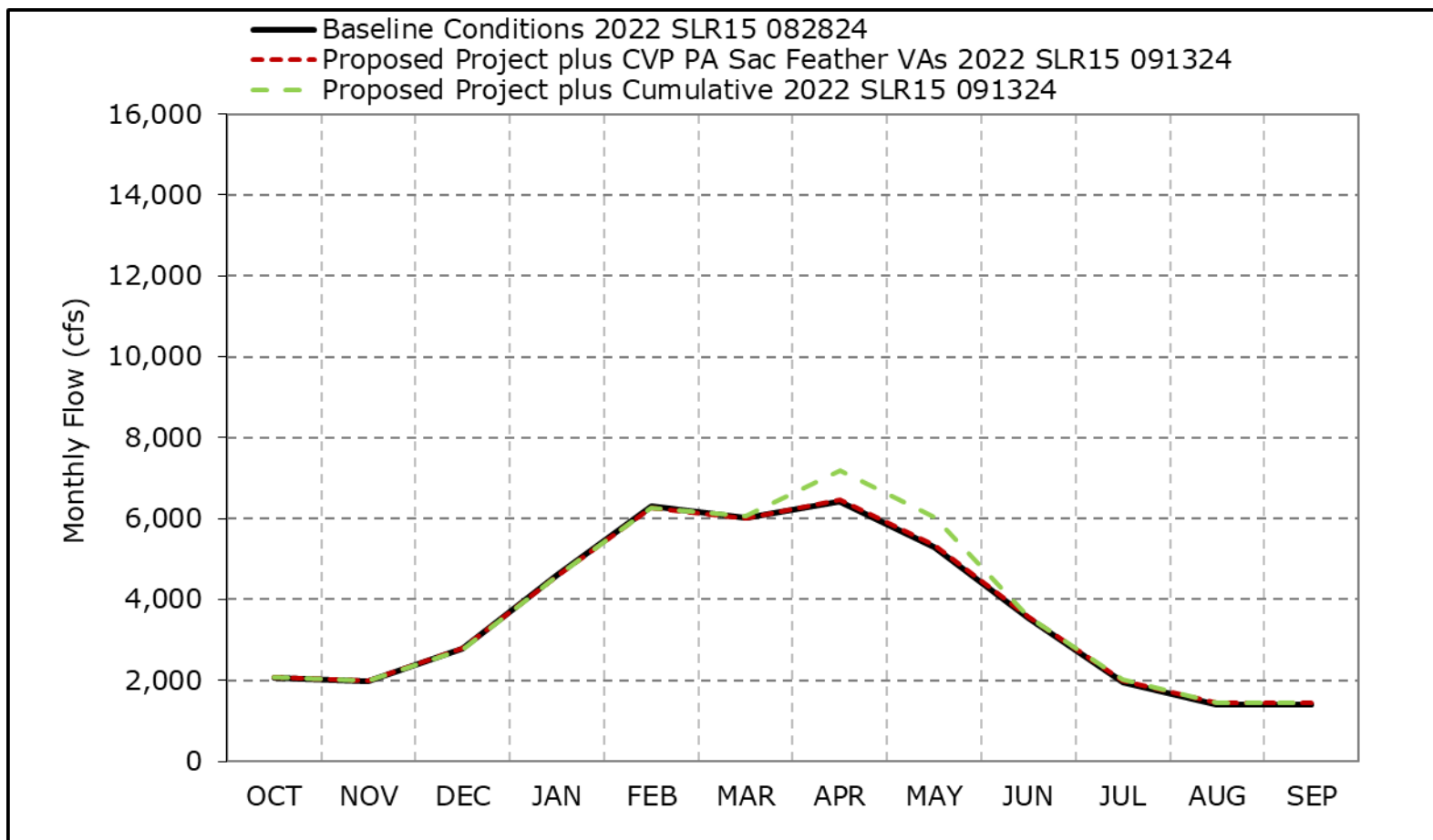
\* All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

\* 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 4H-2-4a. San Joaquin River at Vernalis (60-20-20), Long-Term Average Flow**

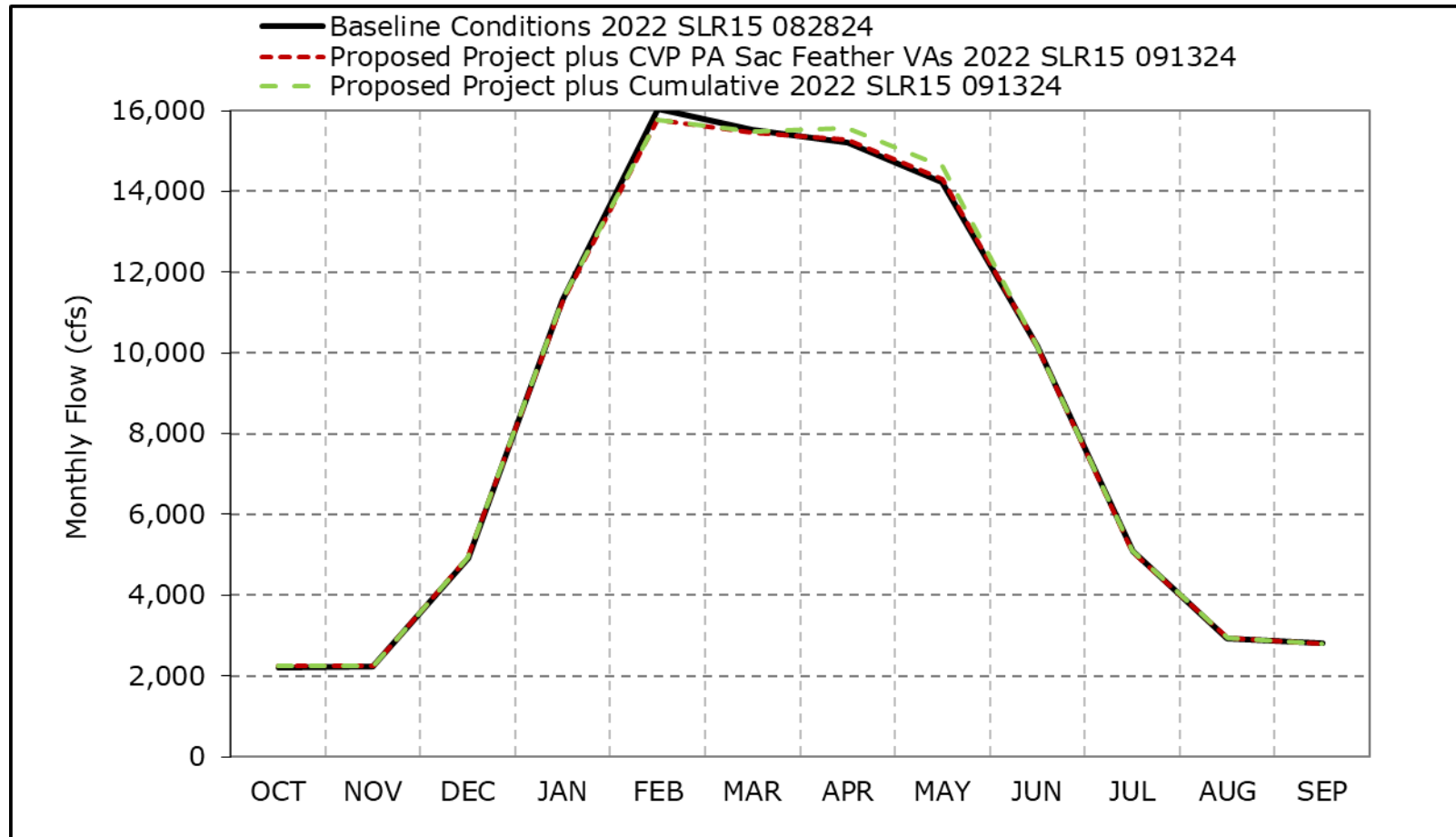


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-4b. San Joaquin River at Vernalis (60-20-20), Wet Year Average Flow**

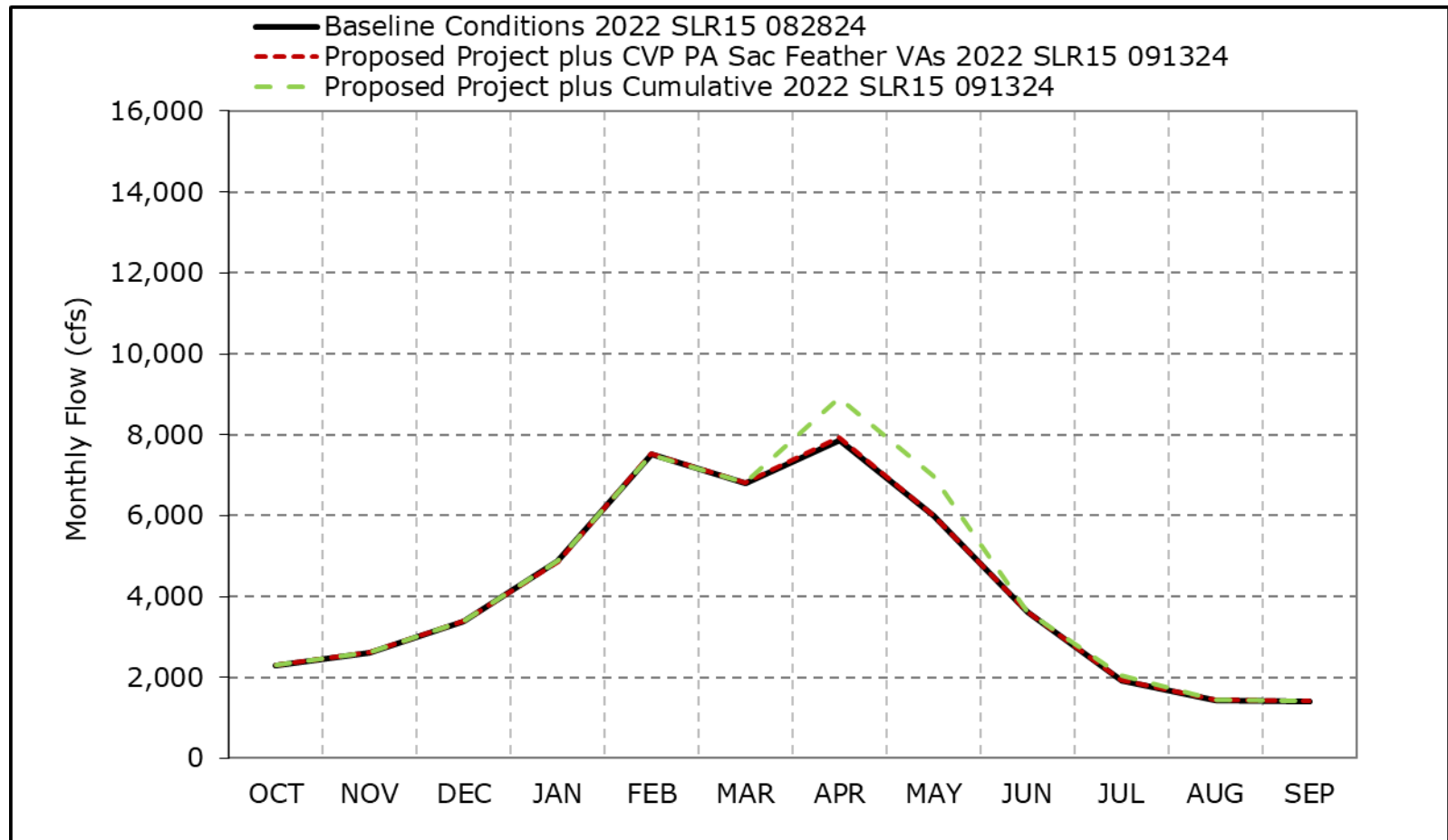


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-4c. San Joaquin River at Vernalis (60-20-20), Above Normal Year Average Flow**

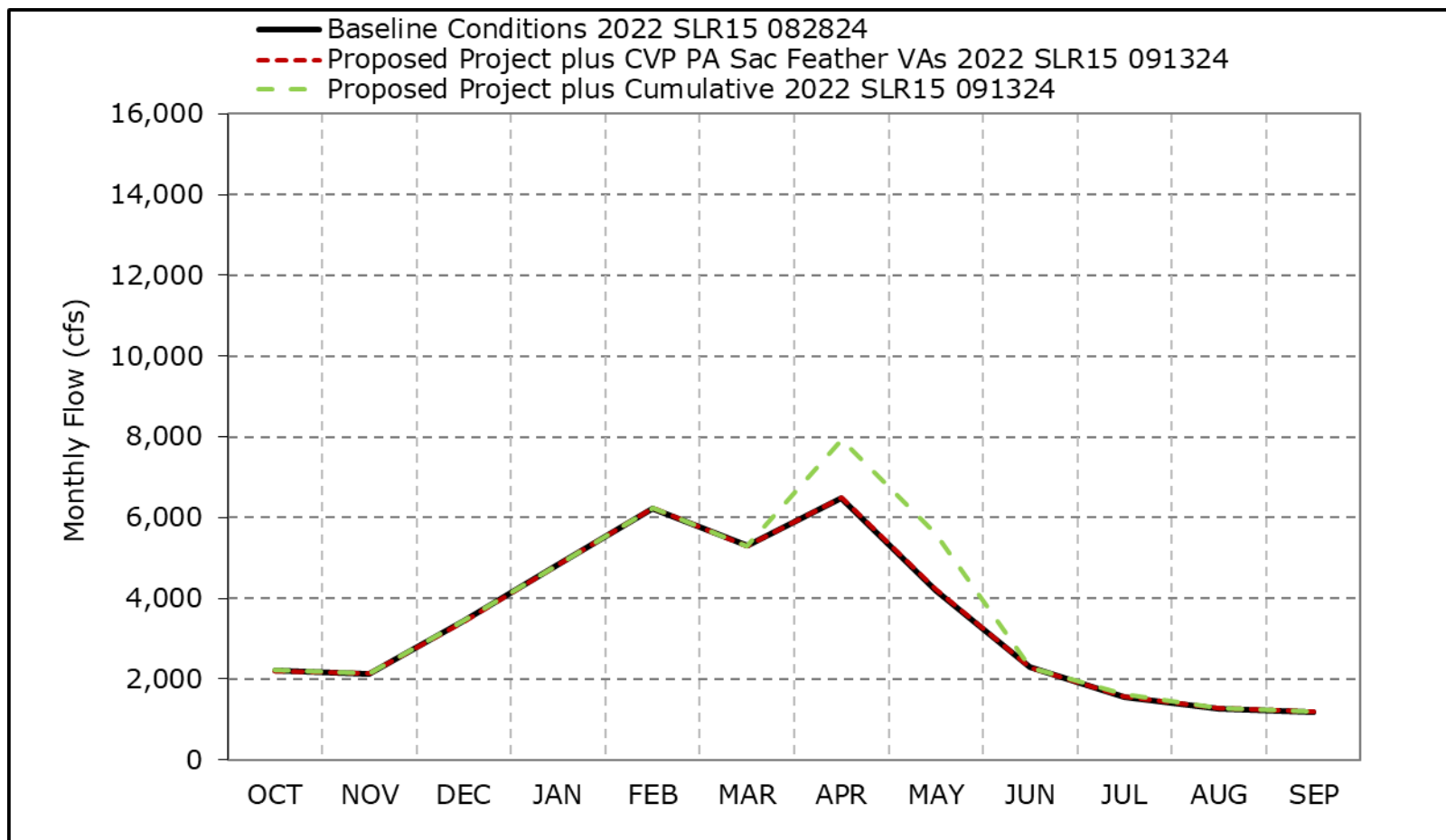


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-4d. San Joaquin River at Vernalis (60-20-20), Below Normal Year Average Flow**

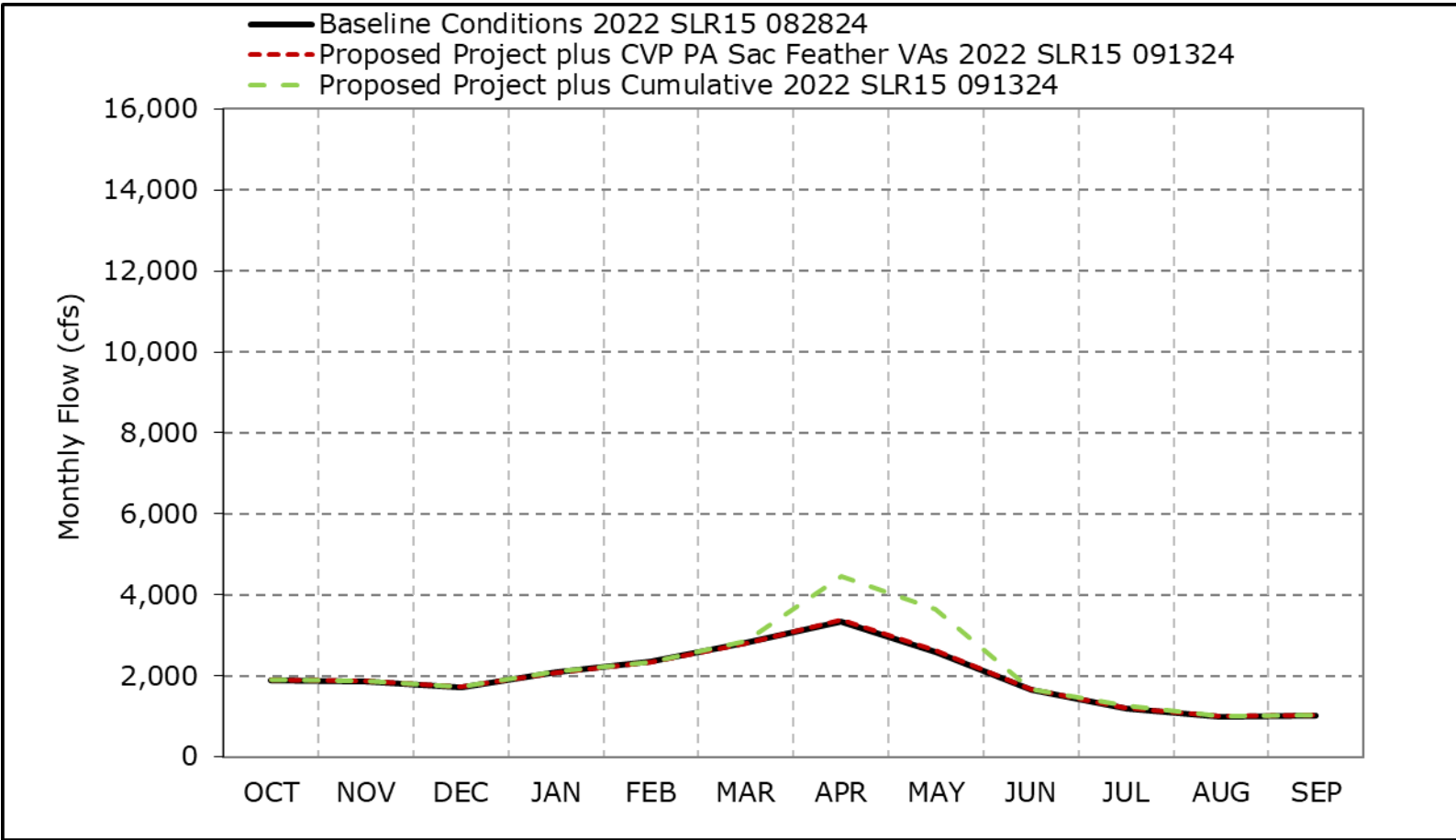


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-4e. San Joaquin River at Vernalis (60-20-20), Dry Year Average Flow**

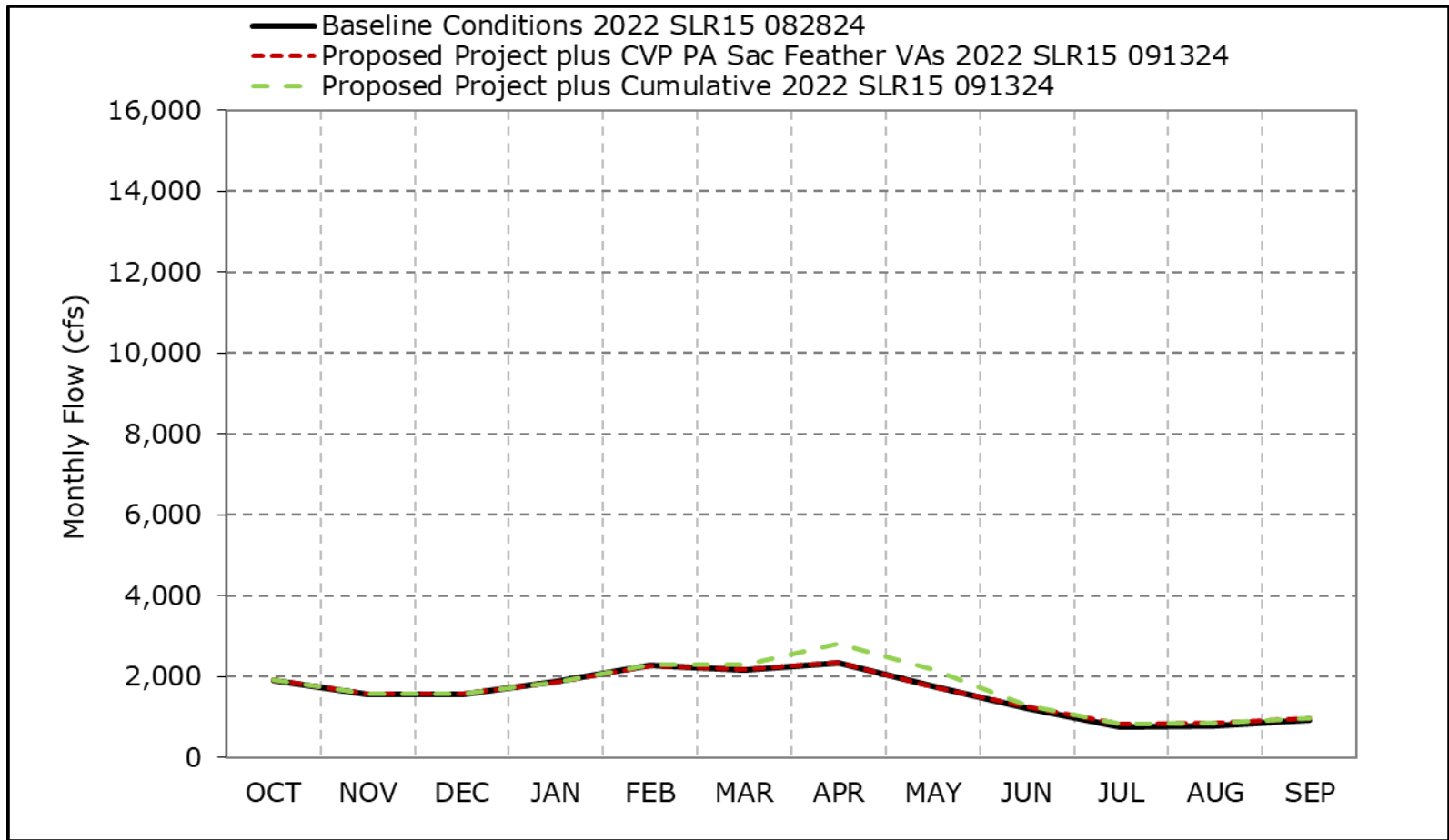


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-4f. 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 2022 Median climate condition and 15 cm sea level rise.

**Table 4H-2-5-1a. Mokelumne River below Cosumnes, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|
| 10% Exceedance                              | 454 | 893   | 3,685 | 7,116 | 7,068 | 5,604 | 4,043 | 3,293 | 1,229 | 655 | 685 | 817 |
| 20% Exceedance                              | 380 | 599   | 1,912 | 3,978 | 4,970 | 3,524 | 2,790 | 1,809 | 797   | 602 | 591 | 742 |
| 30% Exceedance                              | 351 | 443   | 963   | 2,312 | 3,175 | 2,710 | 2,205 | 1,042 | 559   | 359 | 546 | 684 |
| 40% Exceedance                              | 333 | 400   | 741   | 1,475 | 2,275 | 2,152 | 1,488 | 797   | 450   | 106 | 104 | 615 |
| 50% Exceedance                              | 315 | 380   | 576   | 1,083 | 1,588 | 1,526 | 1,137 | 613   | 335   | 79  | 66  | 150 |
| 60% Exceedance                              | 299 | 358   | 493   | 776   | 1,113 | 1,286 | 895   | 522   | 271   | 72  | 55  | 66  |
| 70% Exceedance                              | 243 | 325   | 425   | 563   | 875   | 964   | 705   | 418   | 134   | 63  | 47  | 53  |
| 80% Exceedance                              | 215 | 266   | 388   | 445   | 646   | 761   | 478   | 322   | 89    | 48  | 37  | 45  |
| 90% Exceedance                              | 199 | 223   | 285   | 384   | 457   | 505   | 300   | 169   | 64    | 36  | 26  | 32  |
| Full Simulation Period Average <sup>a</sup> | 344 | 638   | 1,527 | 2,420 | 3,000 | 2,390 | 1,848 | 1,182 | 526   | 262 | 263 | 373 |
| Wet Water Years (29%)                       | 469 | 1,250 | 3,486 | 5,362 | 5,961 | 4,528 | 3,606 | 2,567 | 1,066 | 580 | 548 | 710 |
| Above Normal Water Years (12%)              | 296 | 395   | 772   | 2,958 | 3,572 | 2,805 | 1,845 | 1,100 | 658   | 358 | 400 | 562 |
| Below Normal Water Years (18%)              | 327 | 429   | 1,045 | 1,347 | 2,133 | 1,906 | 1,608 | 833   | 443   | 149 | 166 | 279 |
| Dry Water Years (22%)                       | 298 | 428   | 617   | 775   | 1,371 | 1,220 | 971   | 455   | 177   | 75  | 91  | 176 |
| Critical Water Years (19%)                  | 255 | 298   | 527   | 511   | 828   | 681   | 407   | 295   | 101   | 39  | 33  | 58  |

**Table 4H-2-5-1b. Mokelumne River below Cosumnes, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|
| 10% Exceedance                              | 454 | 893   | 3,688 | 7,115 | 7,057 | 5,604 | 4,042 | 3,293 | 1,226 | 653 | 676 | 817 |
| 20% Exceedance                              | 380 | 599   | 1,912 | 3,976 | 4,970 | 3,520 | 2,790 | 1,808 | 789   | 602 | 591 | 741 |
| 30% Exceedance                              | 350 | 444   | 963   | 2,311 | 3,175 | 2,710 | 2,203 | 1,043 | 559   | 359 | 545 | 682 |
| 40% Exceedance                              | 333 | 400   | 741   | 1,475 | 2,274 | 2,152 | 1,487 | 797   | 450   | 106 | 103 | 615 |
| 50% Exceedance                              | 315 | 379   | 577   | 1,083 | 1,588 | 1,527 | 1,137 | 613   | 337   | 78  | 63  | 123 |
| 60% Exceedance                              | 303 | 358   | 493   | 776   | 1,112 | 1,276 | 879   | 522   | 271   | 71  | 55  | 64  |
| 70% Exceedance                              | 236 | 325   | 425   | 563   | 874   | 962   | 705   | 417   | 134   | 62  | 46  | 53  |
| 80% Exceedance                              | 214 | 266   | 387   | 445   | 646   | 760   | 478   | 323   | 89    | 48  | 36  | 45  |
| 90% Exceedance                              | 192 | 223   | 285   | 384   | 458   | 505   | 300   | 169   | 64    | 36  | 26  | 32  |
| Full Simulation Period Average <sup>a</sup> | 343 | 637   | 1,526 | 2,420 | 2,999 | 2,387 | 1,847 | 1,182 | 523   | 261 | 262 | 370 |
| Wet Water Years (29%)                       | 468 | 1,247 | 3,481 | 5,361 | 5,956 | 4,527 | 3,605 | 2,566 | 1,065 | 579 | 547 | 710 |
| Above Normal Water Years (12%)              | 295 | 395   | 771   | 2,957 | 3,571 | 2,806 | 1,845 | 1,099 | 635   | 356 | 399 | 562 |
| Below Normal Water Years (18%)              | 326 | 429   | 1,044 | 1,347 | 2,133 | 1,906 | 1,606 | 833   | 442   | 149 | 164 | 278 |
| Dry Water Years (22%)                       | 293 | 428   | 617   | 775   | 1,371 | 1,204 | 972   | 455   | 177   | 75  | 91  | 176 |
| Critical Water Years (19%)                  | 256 | 298   | 527   | 511   | 829   | 681   | 407   | 295   | 101   | 39  | 33  | 40  |

**Table 4H-2-5-1c. Mokelumne River below Cosumnes, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 10% Exceedance                              | 0   | 0   | 3   | -1  | -11 | 0   | 0   | 0   | -3  | -2  | -8  | 0   |
| 20% Exceedance                              | 0   | 0   | 0   | -2  | 0   | -5  | 0   | 0   | -9  | -1  | 0   | -1  |
| 30% Exceedance                              | 0   | 1   | 0   | -1  | 0   | 0   | -1  | 2   | 0   | -1  | -1  | -1  |
| 40% Exceedance                              | 0   | 0   | 0   | 0   | -1  | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 50% Exceedance                              | 0   | -1  | 0   | 0   | 0   | 1   | -1  | 0   | 2   | -1  | -3  | -27 |
| 60% Exceedance                              | 4   | 0   | 0   | 0   | -1  | -9  | -16 | -1  | 0   | -1  | 0   | -3  |
| 70% Exceedance                              | -7  | 0   | 0   | 0   | -1  | -1  | 0   | -1  | 0   | -1  | -1  | 0   |
| 80% Exceedance                              | -1  | 0   | -1  | 0   | 0   | -1  | 0   | 2   | 0   | 0   | -1  | 0   |
| 90% Exceedance                              | -6  | 0   | 0   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| Full Simulation Period Average <sup>a</sup> | -1  | -1  | -1  | 0   | -2  | -4  | 0   | 0   | -3  | -1  | -1  | -4  |
| Wet Water Years (29%)                       | 0   | -3  | -5  | 0   | -5  | -1  | -1  | 0   | -1  | -1  | -1  | -1  |
| Above Normal Water Years (12%)              | 0   | 0   | 0   | -1  | 0   | 1   | 0   | -1  | -22 | -2  | 0   | -1  |
| Below Normal Water Years (18%)              | -1  | -1  | 0   | 0   | -1  | 0   | -3  | 0   | -1  | 0   | -2  | -1  |
| Dry Water Years (22%)                       | -5  | 0   | 0   | 0   | 0   | -15 | 1   | 0   | 0   | 0   | 0   | 1   |
| Critical Water Years (19%)                  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | -18 |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-5-2a. Mokelumne River below Cosumnes, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|
| 10% Exceedance                              | 454 | 893   | 3,685 | 7,116 | 7,068 | 5,604 | 4,043 | 3,293 | 1,229 | 655 | 685 | 817 |
| 20% Exceedance                              | 380 | 599   | 1,912 | 3,978 | 4,970 | 3,524 | 2,790 | 1,809 | 797   | 602 | 591 | 742 |
| 30% Exceedance                              | 351 | 443   | 963   | 2,312 | 3,175 | 2,710 | 2,205 | 1,042 | 559   | 359 | 546 | 684 |
| 40% Exceedance                              | 333 | 400   | 741   | 1,475 | 2,275 | 2,152 | 1,488 | 797   | 450   | 106 | 104 | 615 |
| 50% Exceedance                              | 315 | 380   | 576   | 1,083 | 1,588 | 1,526 | 1,137 | 613   | 335   | 79  | 66  | 150 |
| 60% Exceedance                              | 299 | 358   | 493   | 776   | 1,113 | 1,286 | 895   | 522   | 271   | 72  | 55  | 66  |
| 70% Exceedance                              | 243 | 325   | 425   | 563   | 875   | 964   | 705   | 418   | 134   | 63  | 47  | 53  |
| 80% Exceedance                              | 215 | 266   | 388   | 445   | 646   | 761   | 478   | 322   | 89    | 48  | 37  | 45  |
| 90% Exceedance                              | 199 | 223   | 285   | 384   | 457   | 505   | 300   | 169   | 64    | 36  | 26  | 32  |
| Full Simulation Period Average <sup>a</sup> | 344 | 638   | 1,527 | 2,420 | 3,000 | 2,390 | 1,848 | 1,182 | 526   | 262 | 263 | 373 |
| Wet Water Years (29%)                       | 469 | 1,250 | 3,486 | 5,362 | 5,961 | 4,528 | 3,606 | 2,567 | 1,066 | 580 | 548 | 710 |
| Above Normal Water Years (12%)              | 296 | 395   | 772   | 2,958 | 3,572 | 2,805 | 1,845 | 1,100 | 658   | 358 | 400 | 562 |
| Below Normal Water Years (18%)              | 327 | 429   | 1,045 | 1,347 | 2,133 | 1,906 | 1,608 | 833   | 443   | 149 | 166 | 279 |
| Dry Water Years (22%)                       | 298 | 428   | 617   | 775   | 1,371 | 1,220 | 971   | 455   | 177   | 75  | 91  | 176 |
| Critical Water Years (19%)                  | 255 | 298   | 527   | 511   | 828   | 681   | 407   | 295   | 101   | 39  | 33  | 58  |

**Table 4H-2-5-2b. Mokelumne River below Cosumnes, Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul | Aug | Sep |
|---------------------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|
| 10% Exceedance                              | 562 | 886   | 3,508 | 6,984 | 6,836 | 5,601 | 4,158 | 3,289 | 1,223 | 652 | 675 | 815 |
| 20% Exceedance                              | 512 | 568   | 1,875 | 3,788 | 4,936 | 3,519 | 2,796 | 1,807 | 770   | 572 | 580 | 736 |
| 30% Exceedance                              | 486 | 428   | 945   | 2,242 | 3,149 | 2,708 | 2,193 | 1,195 | 546   | 170 | 505 | 681 |
| 40% Exceedance                              | 469 | 398   | 723   | 1,443 | 2,274 | 2,109 | 1,573 | 885   | 450   | 100 | 87  | 509 |
| 50% Exceedance                              | 454 | 377   | 577   | 1,082 | 1,588 | 1,544 | 1,394 | 721   | 331   | 78  | 63  | 80  |
| 60% Exceedance                              | 346 | 352   | 493   | 767   | 1,126 | 1,312 | 1,036 | 604   | 271   | 70  | 54  | 62  |
| 70% Exceedance                              | 254 | 322   | 429   | 563   | 874   | 977   | 768   | 484   | 134   | 62  | 46  | 50  |
| 80% Exceedance                              | 234 | 265   | 387   | 445   | 615   | 778   | 539   | 370   | 89    | 48  | 36  | 42  |
| 90% Exceedance                              | 202 | 228   | 284   | 374   | 458   | 508   | 300   | 169   | 64    | 35  | 25  | 29  |
| Full Simulation Period Average <sup>a</sup> | 421 | 621   | 1,502 | 2,401 | 2,966 | 2,395 | 1,903 | 1,230 | 512   | 249 | 251 | 354 |
| Wet Water Years (29%)                       | 547 | 1,218 | 3,412 | 5,329 | 5,918 | 4,530 | 3,667 | 2,609 | 1,060 | 555 | 528 | 692 |
| Above Normal Water Years (12%)              | 380 | 384   | 761   | 2,915 | 3,515 | 2,820 | 1,934 | 1,133 | 615   | 331 | 376 | 553 |
| Below Normal Water Years (18%)              | 426 | 415   | 1,041 | 1,337 | 2,089 | 1,918 | 1,676 | 915   | 406   | 138 | 151 | 244 |
| Dry Water Years (22%)                       | 378 | 412   | 612   | 769   | 1,342 | 1,212 | 1,017 | 507   | 174   | 71  | 87  | 163 |
| Critical Water Years (19%)                  | 298 | 294   | 523   | 507   | 825   | 687   | 433   | 319   | 101   | 39  | 33  | 37  |

**Table 4H-2-5-2c. Mokelumne River below Cosumnes, Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov | Dec  | Jan  | Feb  | Mar | Apr | May | Jun | Jul  | Aug | Sep  |
|---------------------------------------------|-----|-----|------|------|------|-----|-----|-----|-----|------|-----|------|
| 10% Exceedance                              | 108 | -7  | -177 | -133 | -232 | -3  | 115 | -4  | -6  | -3   | -10 | -2   |
| 20% Exceedance                              | 132 | -30 | -38  | -189 | -34  | -5  | 5   | -2  | -27 | -31  | -11 | -5   |
| 30% Exceedance                              | 136 | -15 | -19  | -70  | -26  | -2  | -11 | 153 | -12 | -190 | -41 | -2   |
| 40% Exceedance                              | 135 | -2  | -18  | -32  | -1   | -43 | 86  | 88  | 0   | -6   | -16 | -106 |
| 50% Exceedance                              | 139 | -3  | 0    | 0    | 0    | 18  | 257 | 108 | -4  | -1   | -3  | -70  |
| 60% Exceedance                              | 47  | -6  | 0    | -9   | 13   | 26  | 141 | 82  | 0   | -1   | -1  | -4   |
| 70% Exceedance                              | 11  | -2  | 4    | 0    | -1   | 14  | 62  | 66  | 0   | -1   | -1  | -4   |
| 80% Exceedance                              | 20  | -1  | -1   | -1   | -31  | 16  | 61  | 48  | 0   | -1   | -1  | -4   |
| 90% Exceedance                              | 3   | 5   | 0    | -9   | 2    | 3   | 0   | 0   | 0   | 0    | 0   | -3   |
| Full Simulation Period Average <sup>a</sup> | 77  | -17 | -25  | -18  | -34  | 4   | 56  | 47  | -14 | -13  | -12 | -20  |
| Wet Water Years (29%)                       | 78  | -31 | -74  | -32  | -43  | 2   | 61  | 43  | -7  | -24  | -20 | -18  |
| Above Normal Water Years (12%)              | 84  | -11 | -11  | -43  | -57  | 16  | 89  | 33  | -43 | -27  | -23 | -9   |
| Below Normal Water Years (18%)              | 99  | -14 | -4   | -10  | -45  | 12  | 67  | 82  | -37 | -11  | -16 | -35  |
| Dry Water Years (22%)                       | 80  | -16 | -5   | -6   | -29  | -7  | 46  | 52  | -3  | -4   | -4  | -13  |
| Critical Water Years (19%)                  | 43  | -4  | -4   | -4   | -4   | 7   | 26  | 24  | 0   | 0    | 0   | -21  |

<sup>a</sup> Based on the 100-year simulation period.

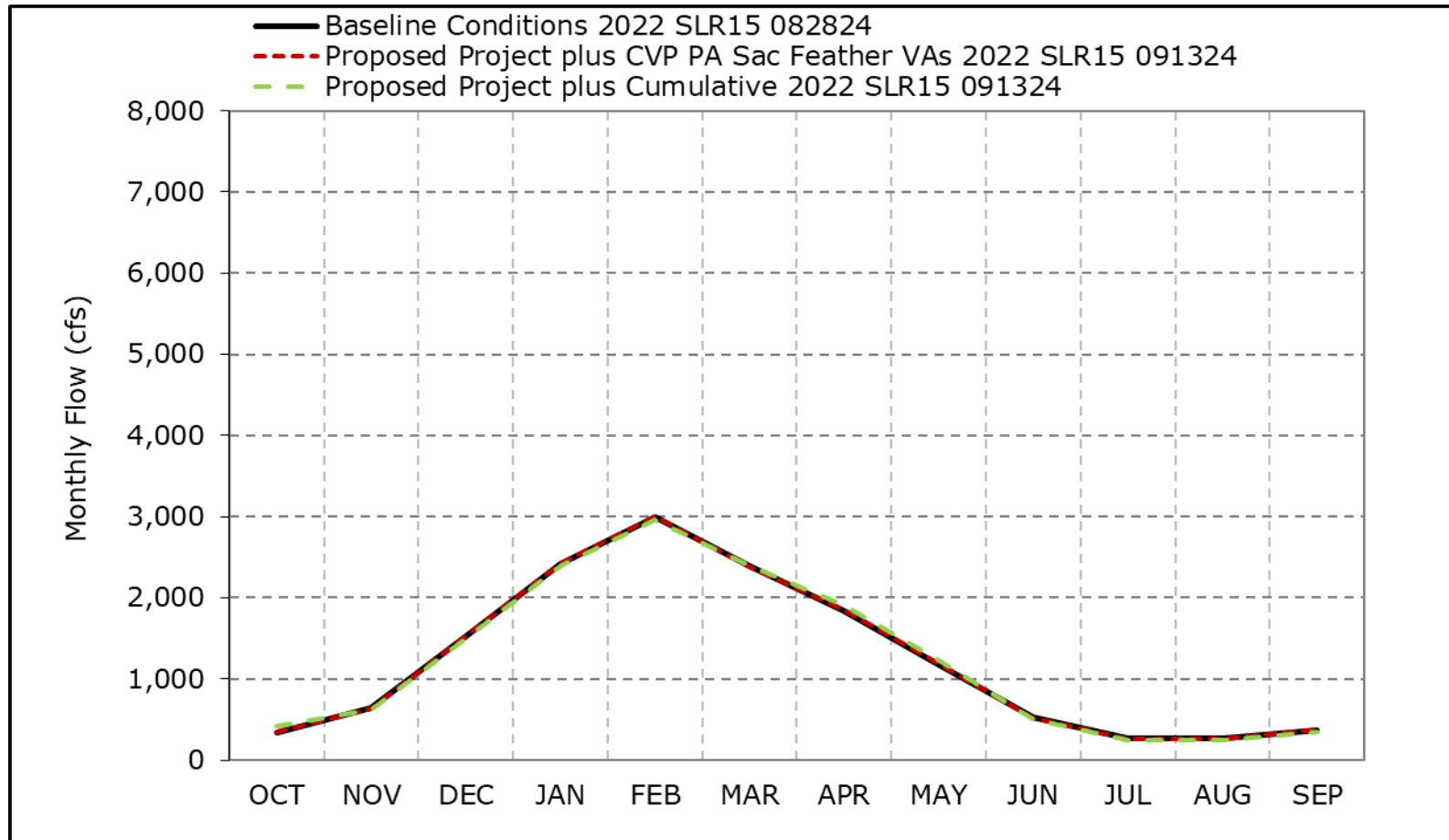
\* All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

\* 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 4H-2-5a. Mokelumne River below Cosumnes, Long-Term Average Flow**

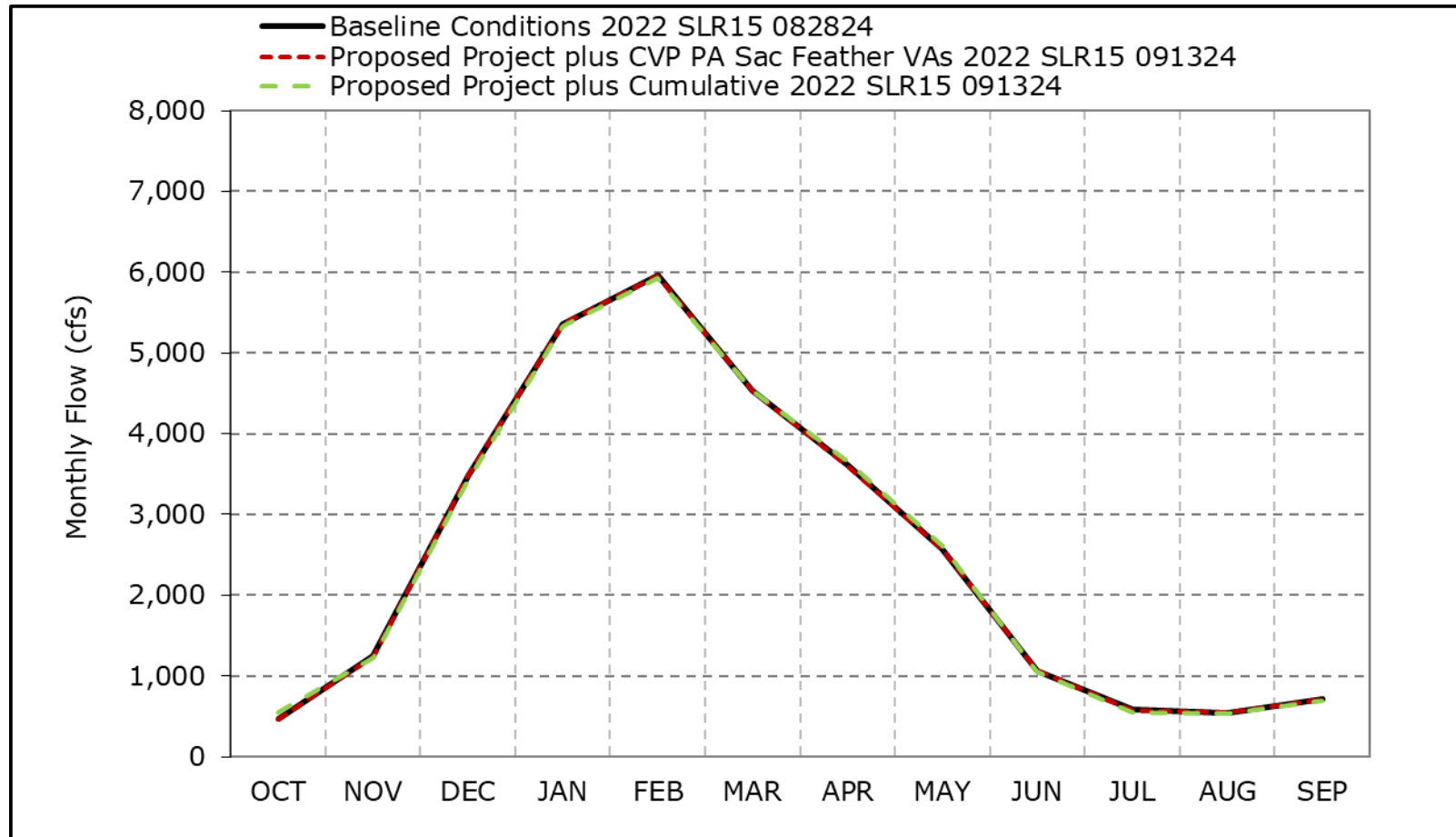


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5b. Mokelumne River below Cosumnes, Wet Year Average Flow**

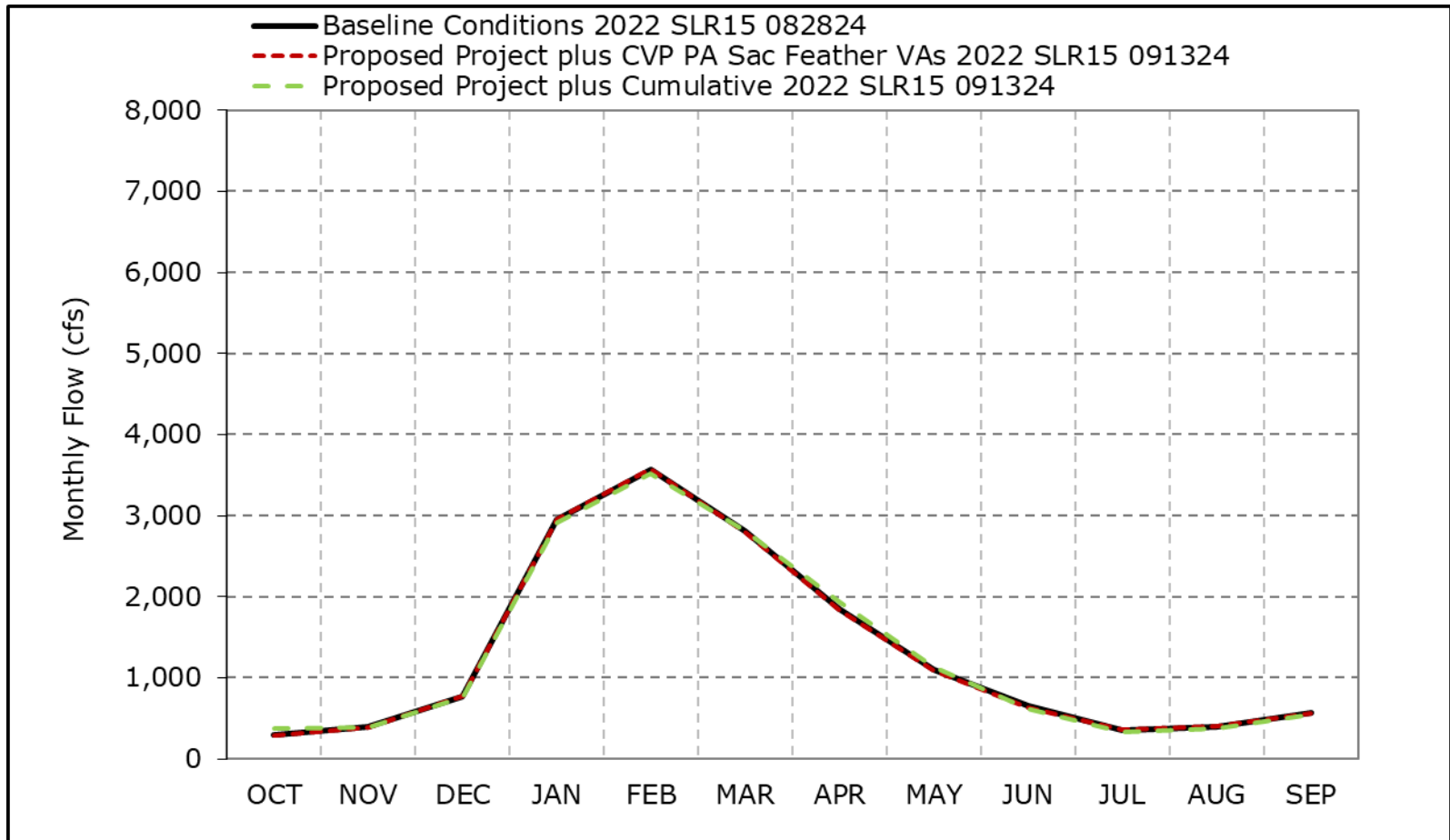


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5c. Mokelumne River below Cosumnes, Above Normal Year Average Flow**

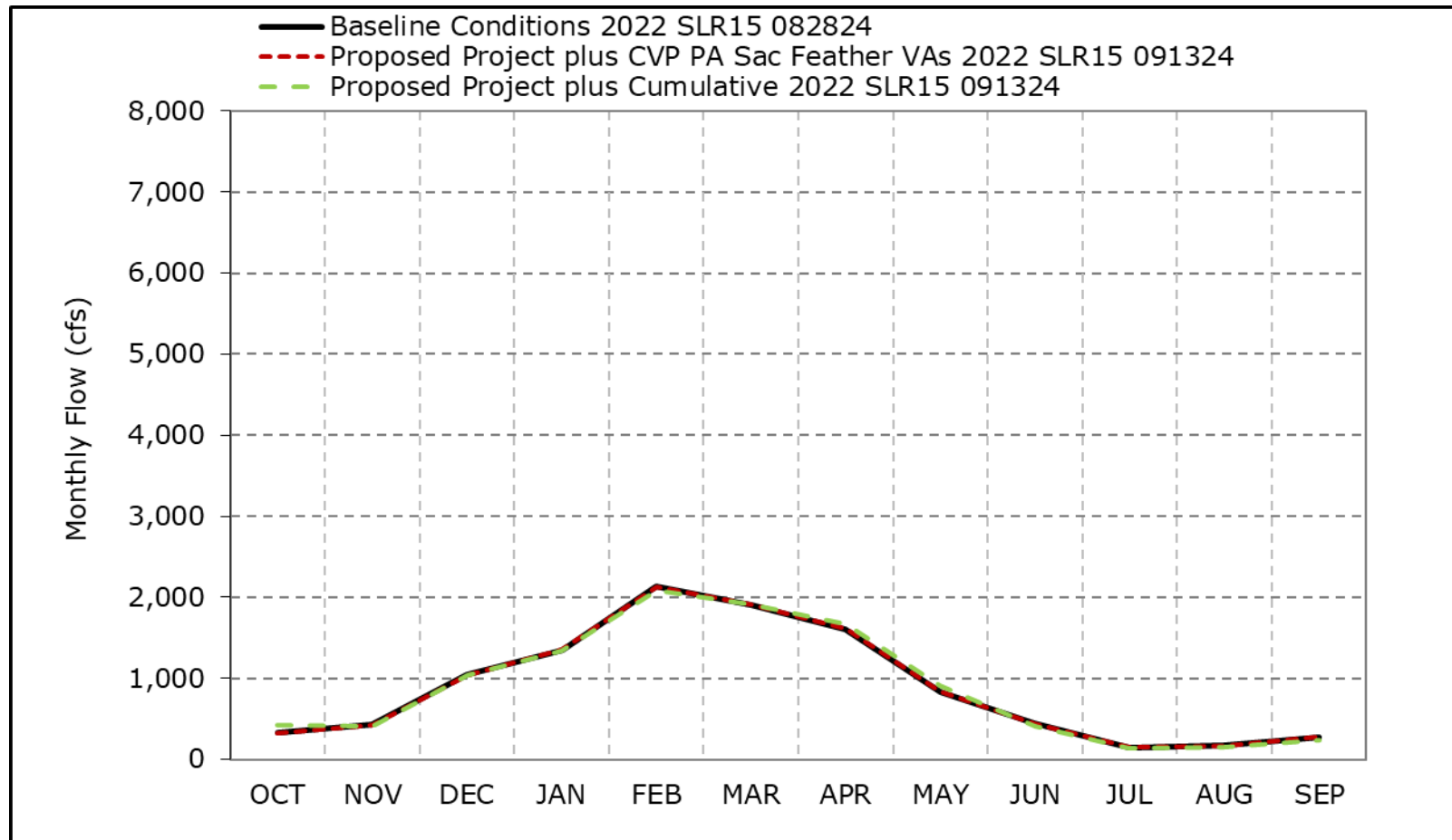


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5d. Mokelumne River below Cosumnes, Below Normal Year Average Flow**

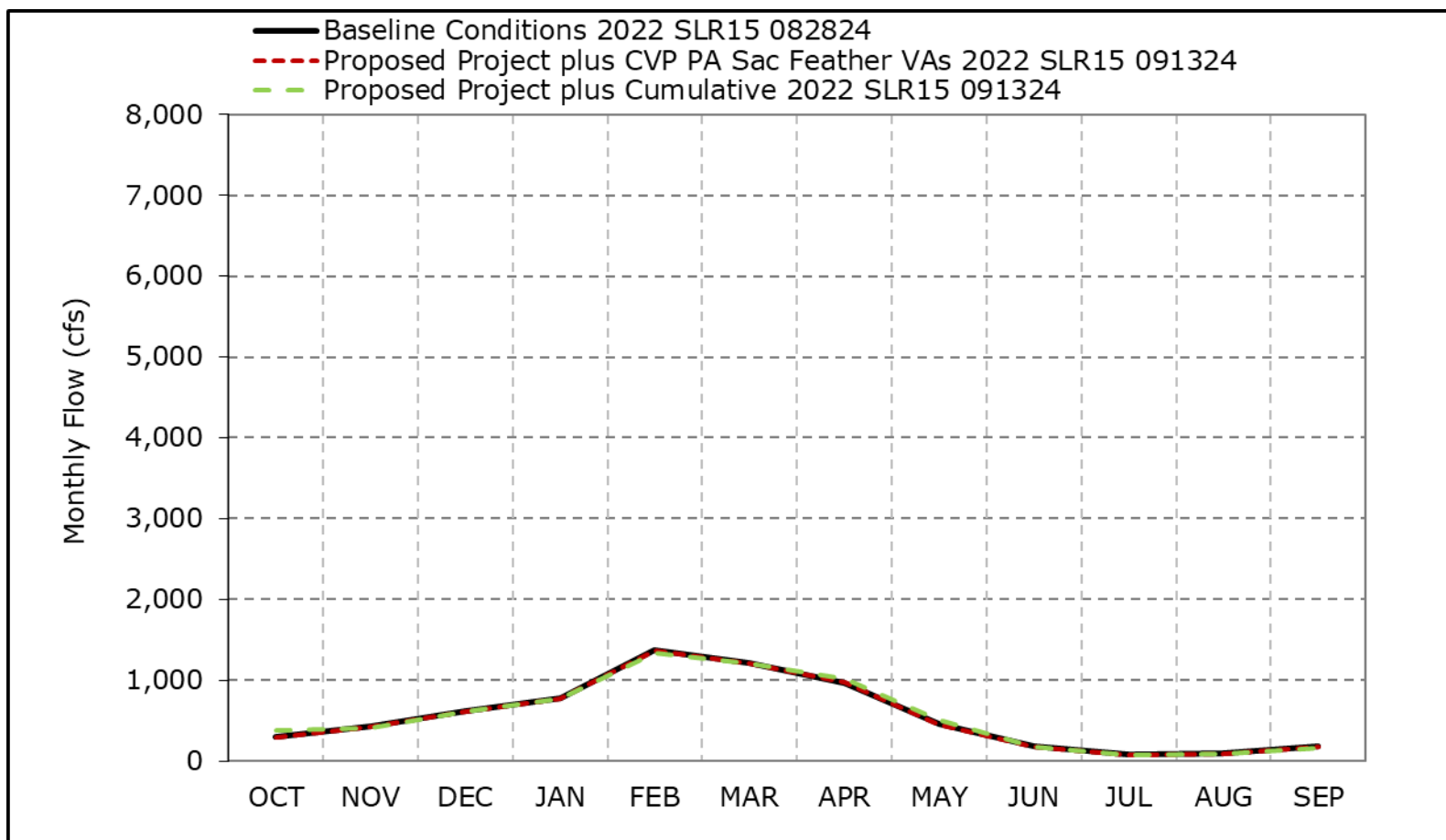


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5e. Mokelumne River below Cosumnes, Dry Year Average Flow**

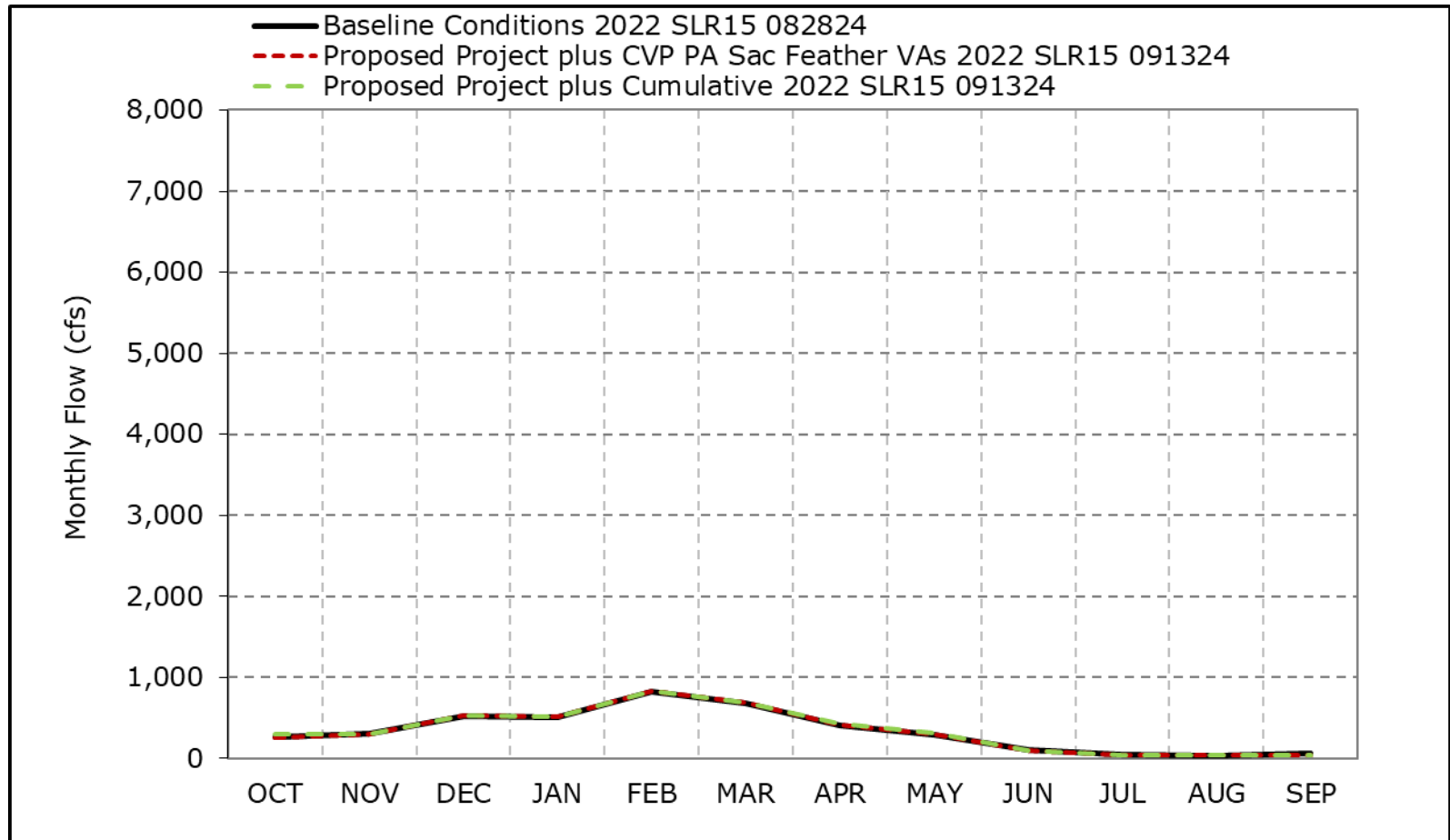


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5f. Mokelumne River below Cosumnes, Critical Year Average Flow**

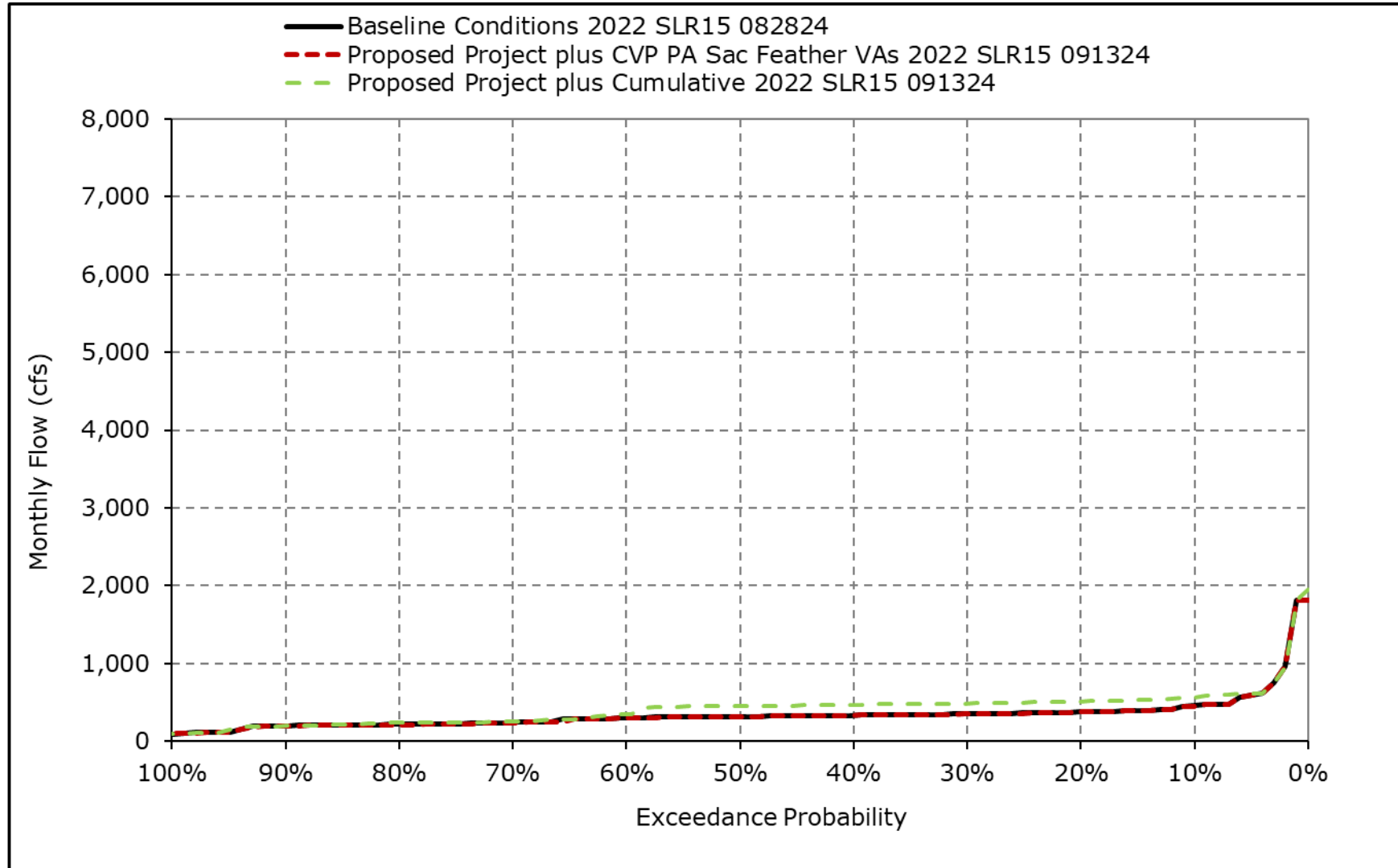


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

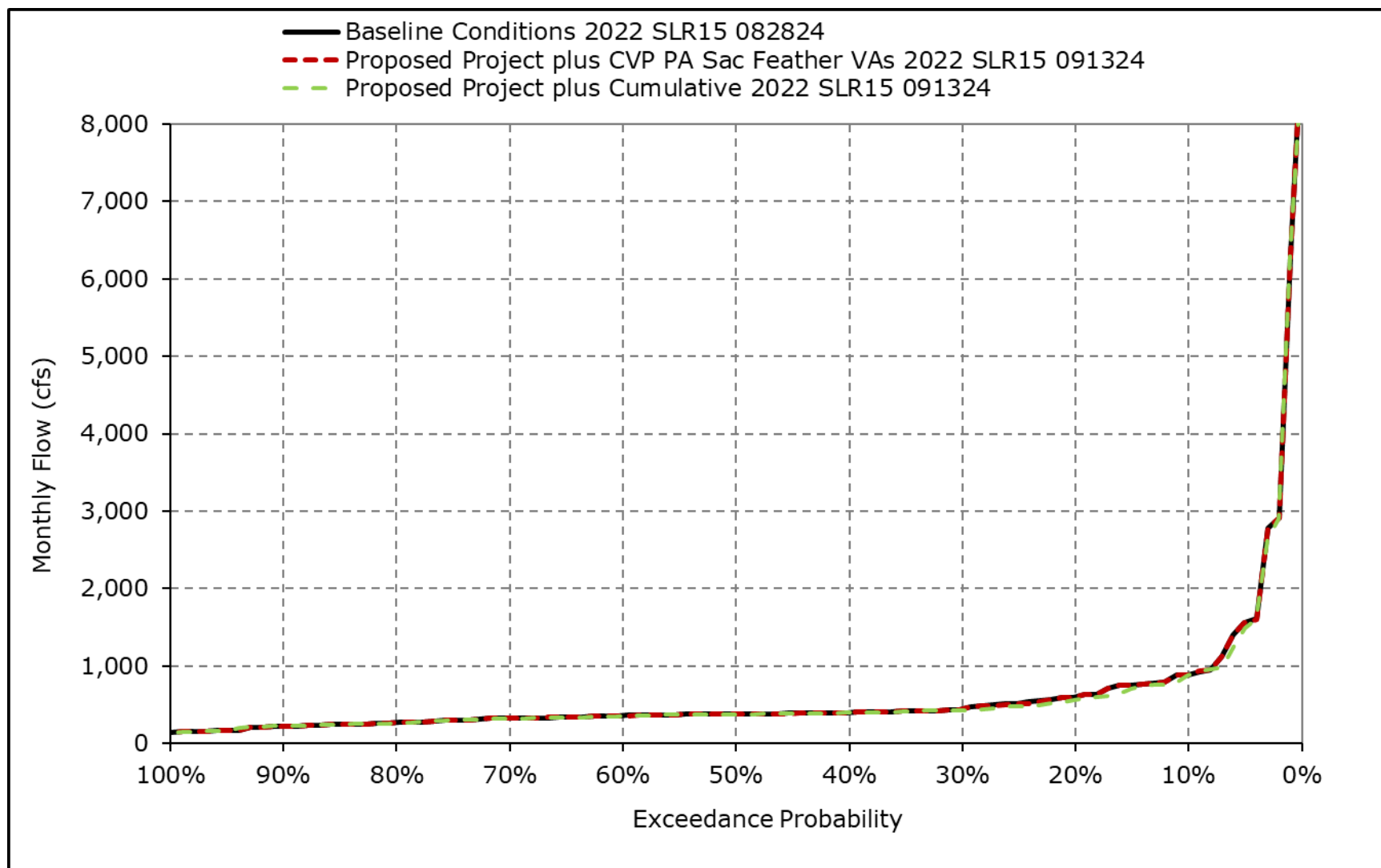
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5g. Mokelumne River below Cosumnes, October**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

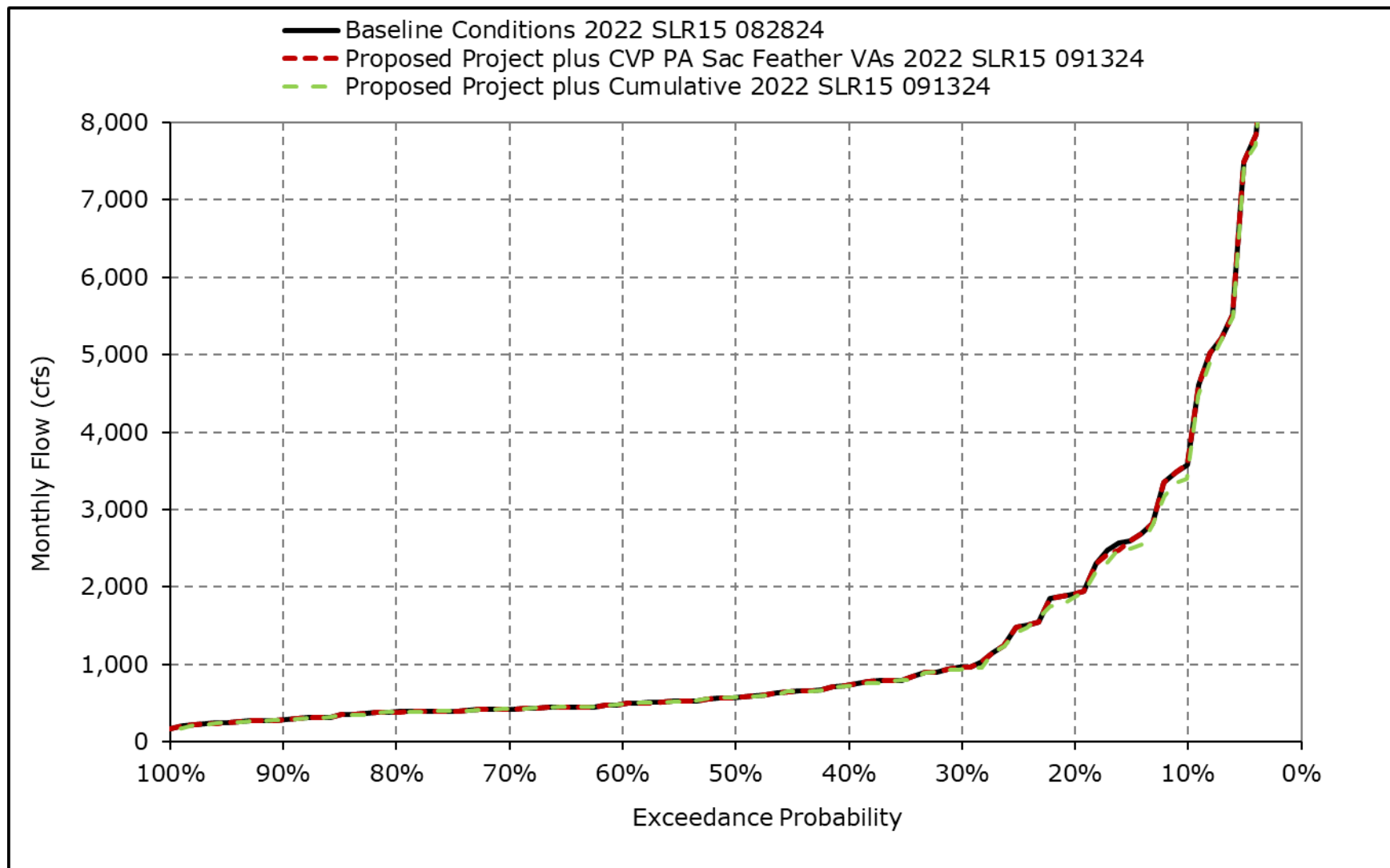
**Figure 4H-2-5h. Mokelumne River below Cosumnes, November**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

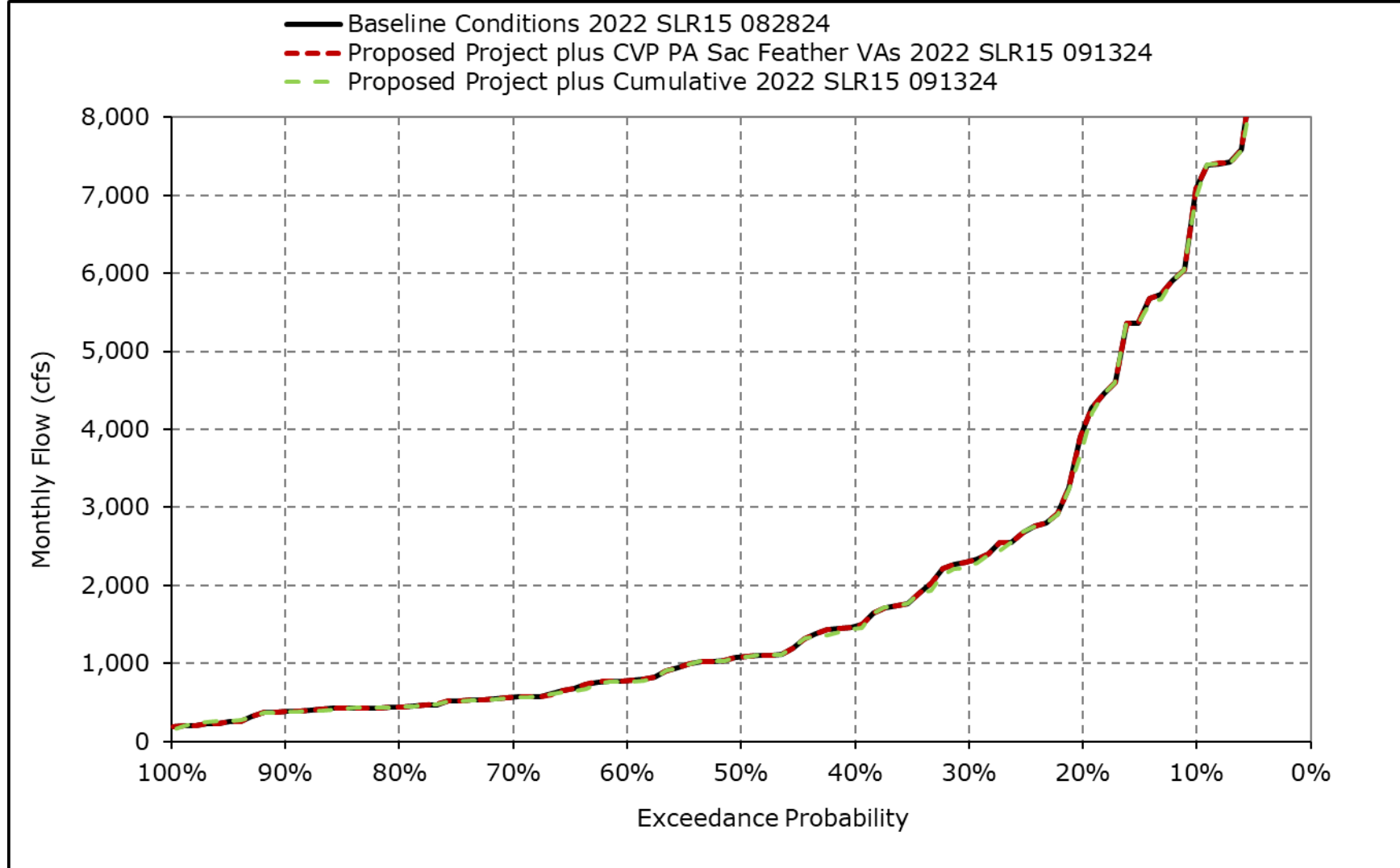


**Figure 4H-2-5i. Mokelumne River below Cosumnes, December**



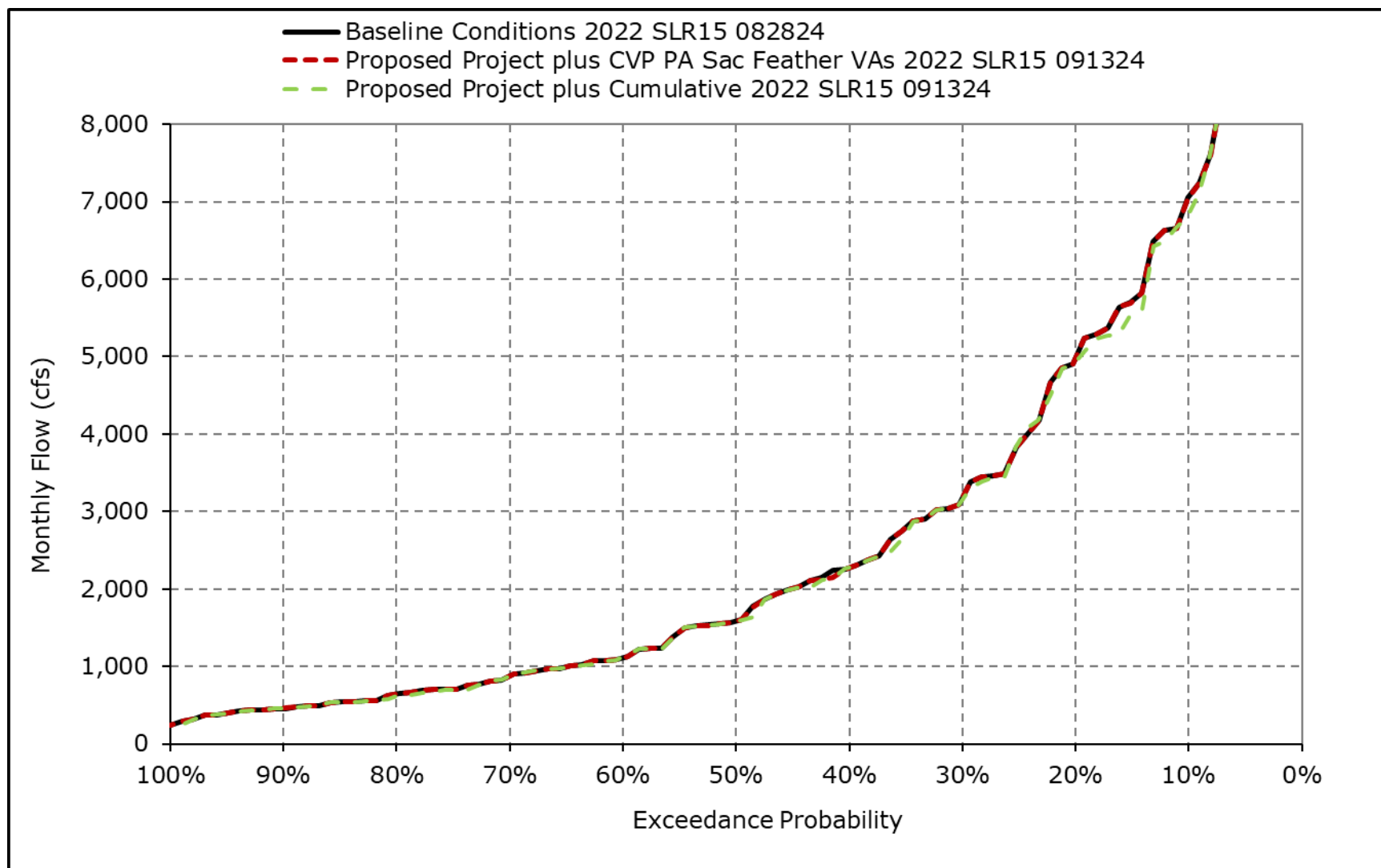
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5j. Mokelumne River below Cosumnes, January**



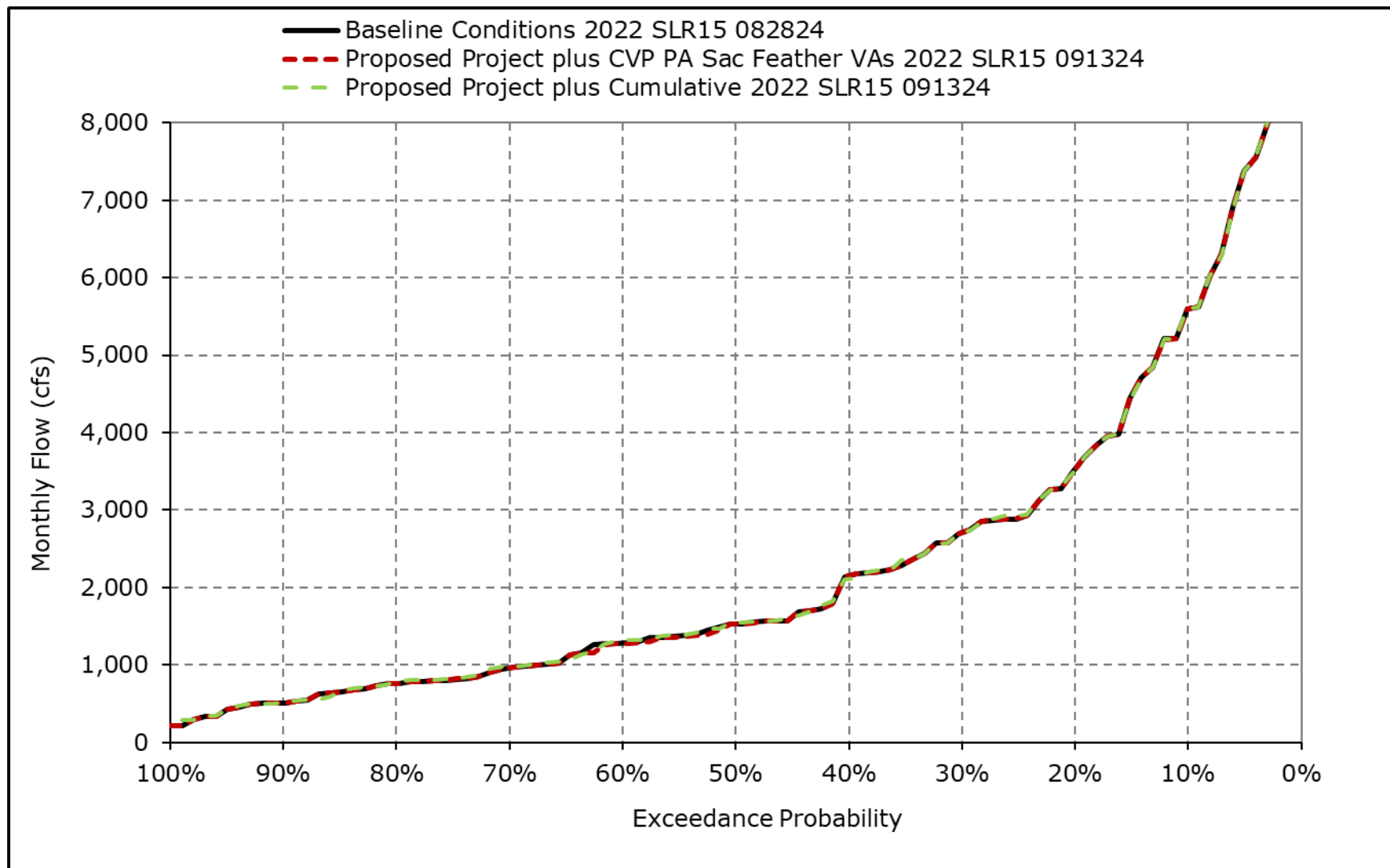
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5k. Mokelumne River below Cosumnes, February**



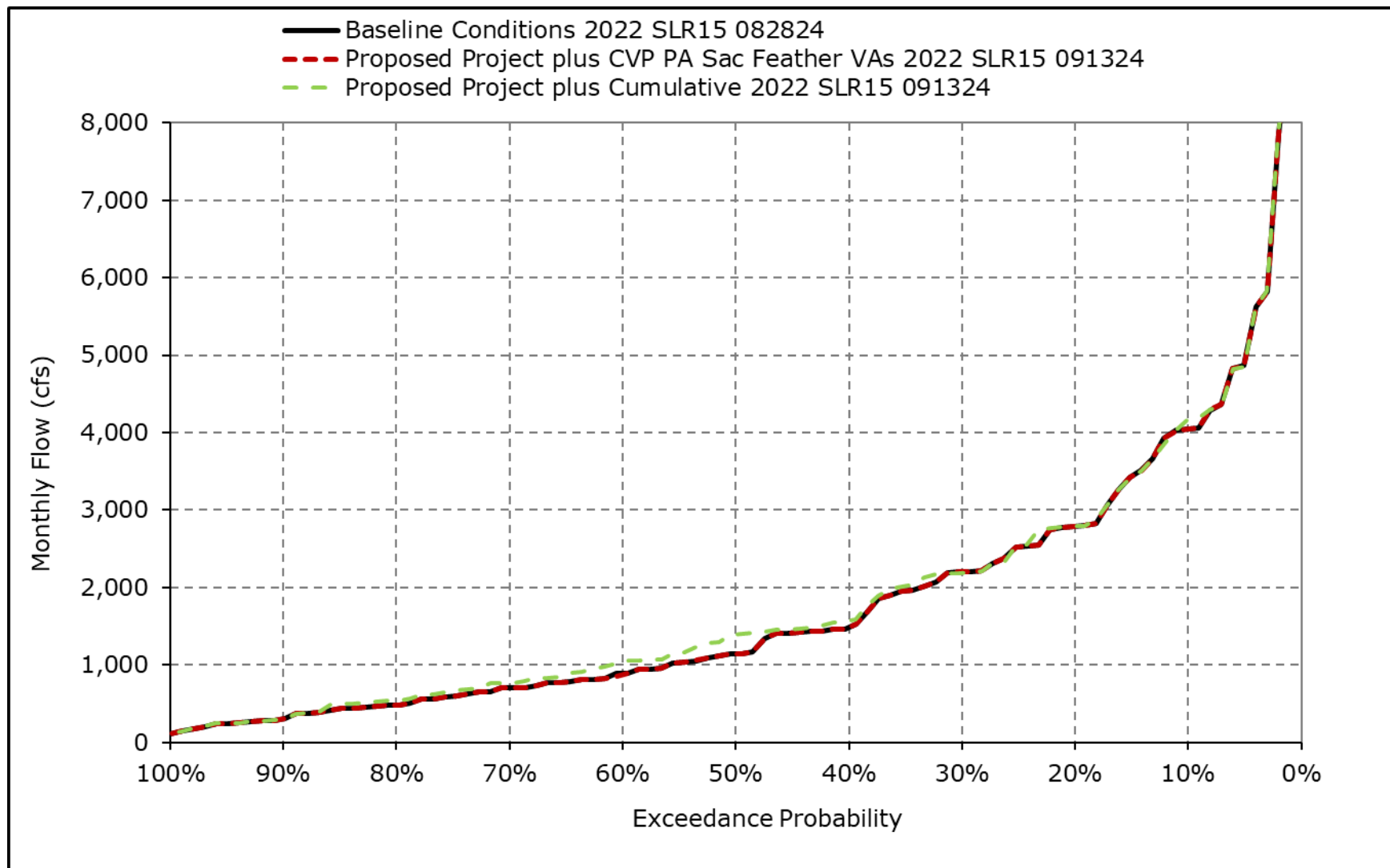
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5I. Mokelumne River below Cosumnes, March**



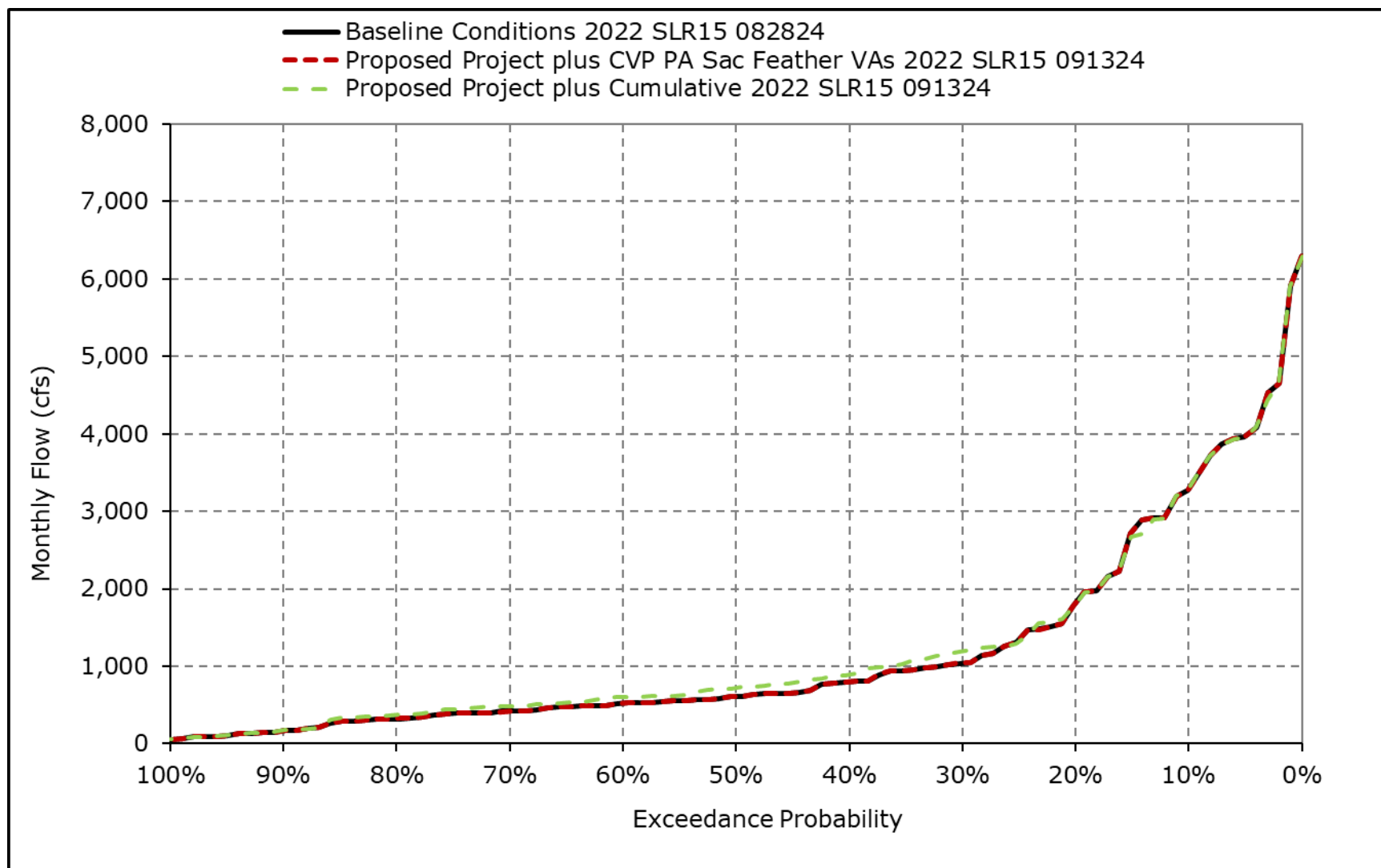
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5m. Mokelumne River below Cosumnes, April**



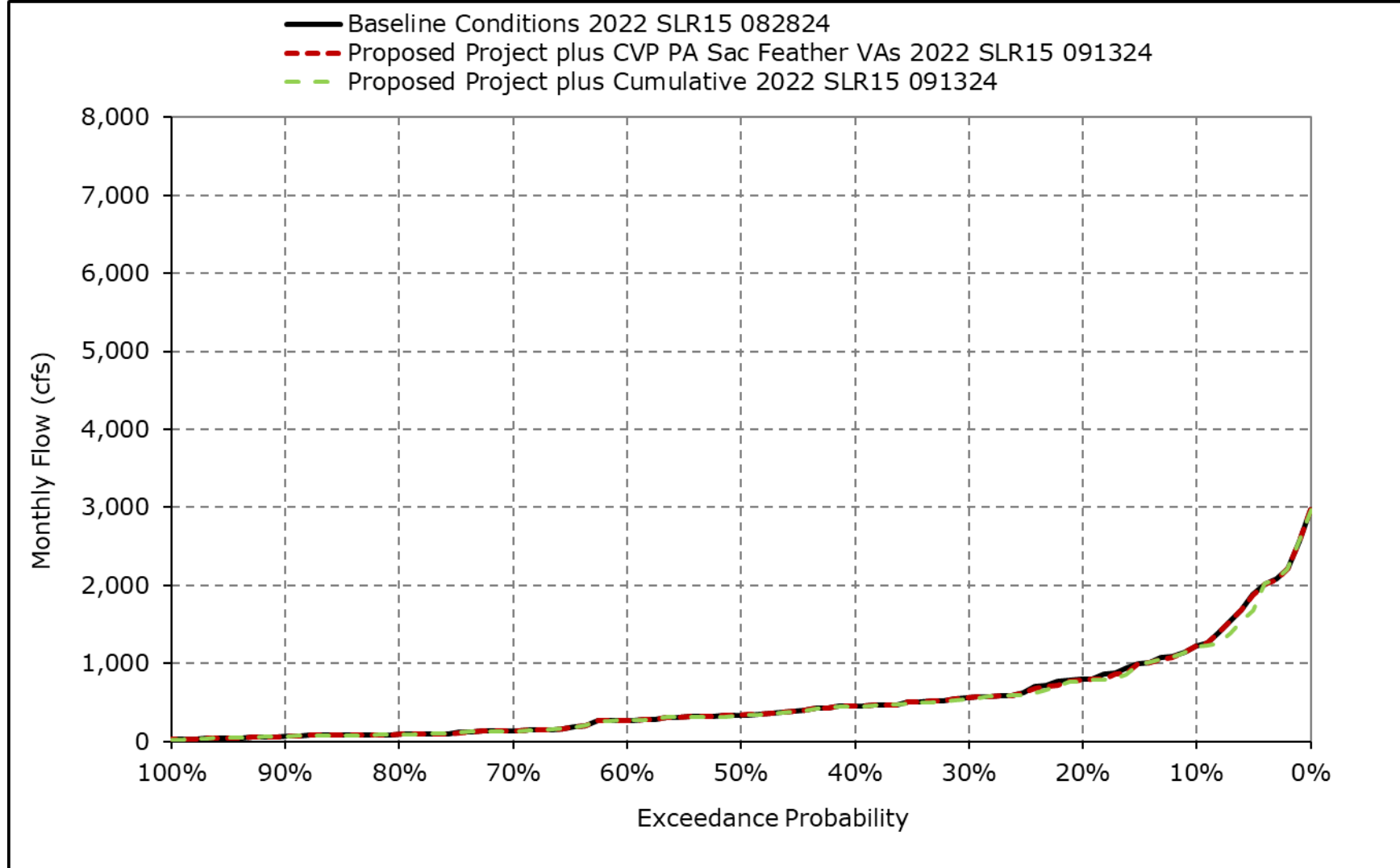
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5n. Mokelumne River below Cosumnes, May**



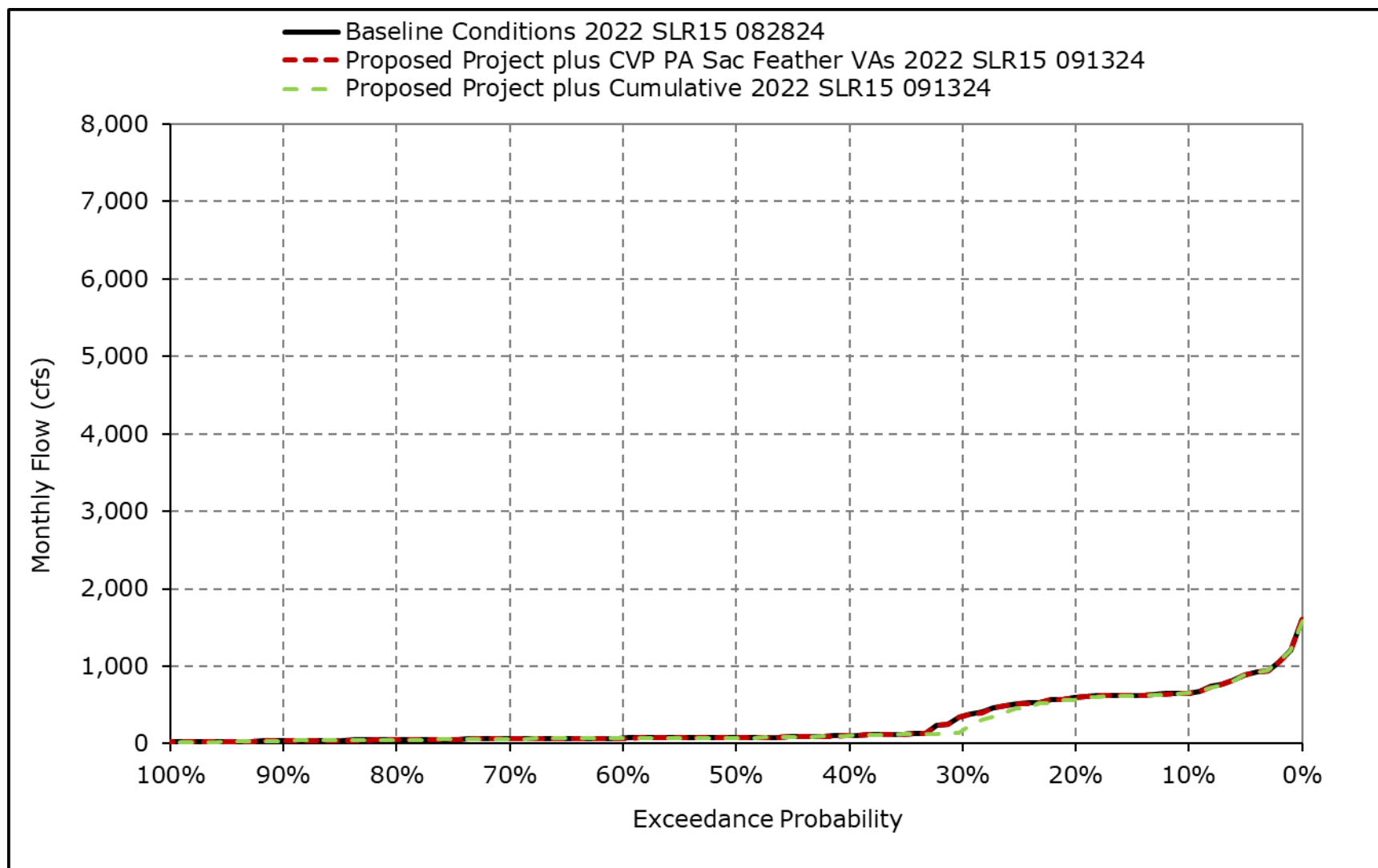
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5o. Mokelumne River below Cosumnes, June**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

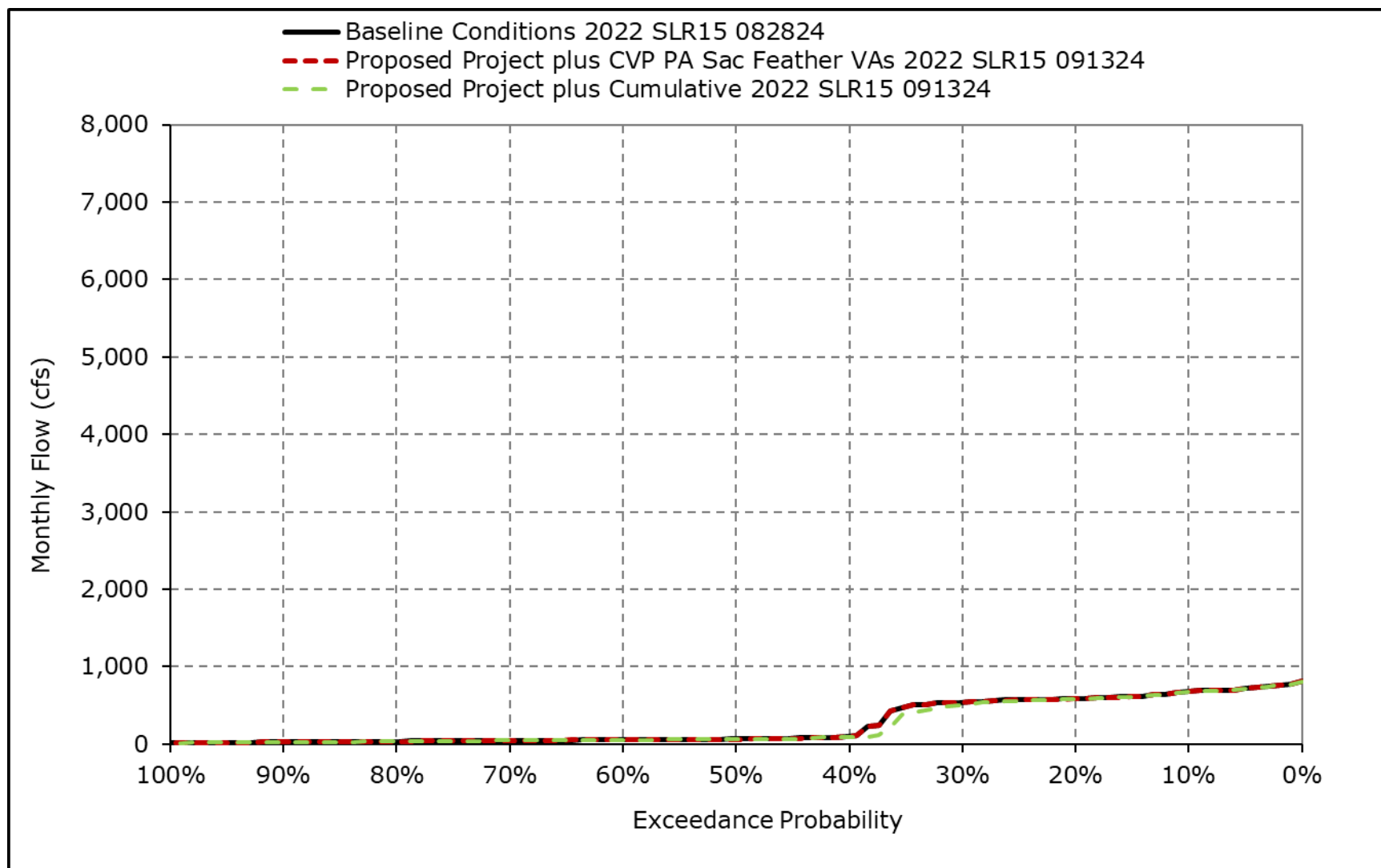
**Figure 4H-2-5p. Mokelumne River below Cosumnes, July**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

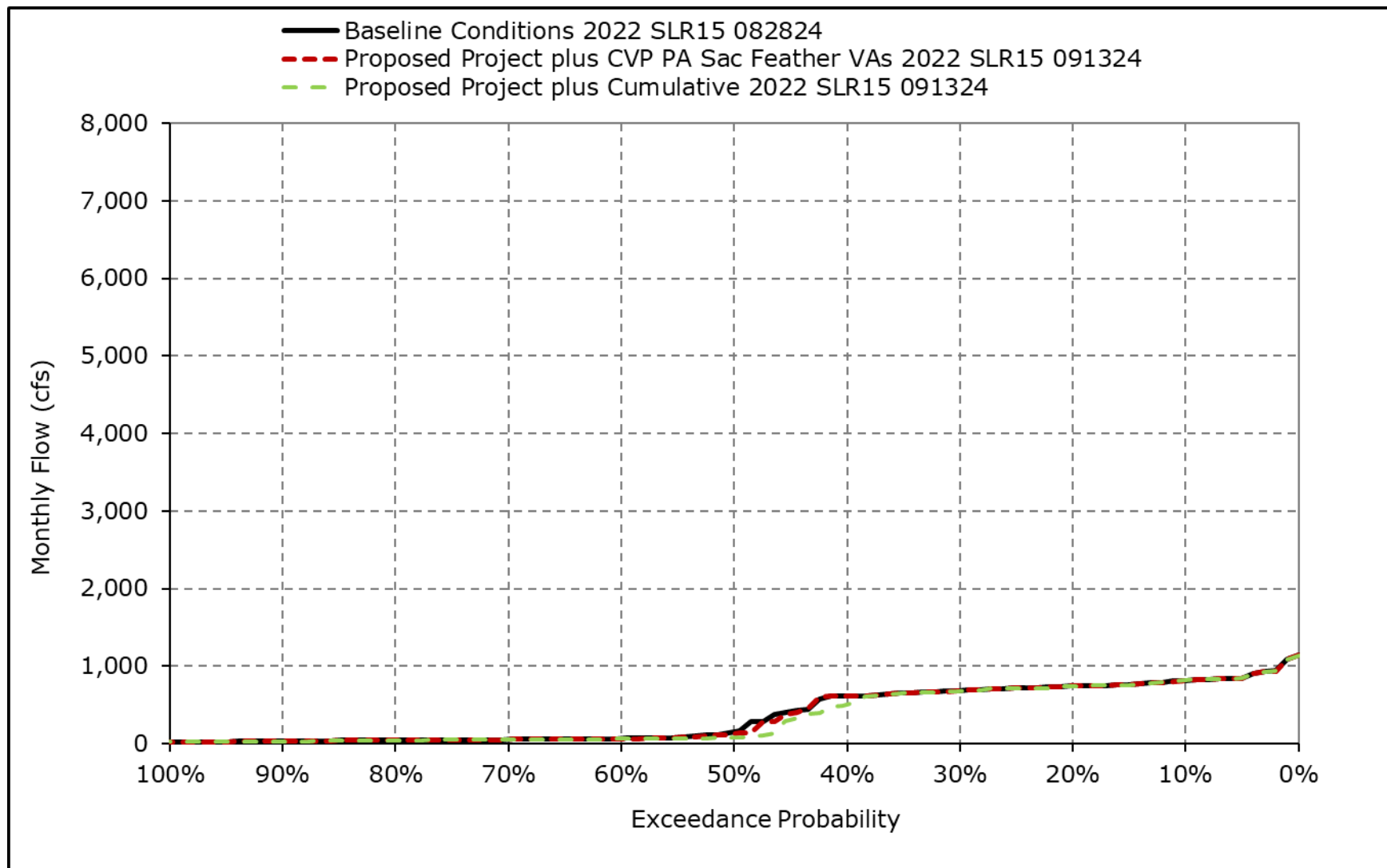


**Figure 4H-2-5q. Mokelumne River below Cosumnes, August**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-5r. Mokelumne River below Cosumnes, September**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Table 4H-2-6-1a. Old and Middle River Flow, Baseline Conditions 2022 SLR15 082824, Monthly Flow (combined flows)(cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul     | Aug     | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 10% Exceedance                              | -2,110 | -1,761 | -2,190 | -2,870 | -1,801 | -898   | 1,285  | 176    | -1,977 | -3,605  | -2,540  | -3,548 |
| 20% Exceedance                              | -3,062 | -3,147 | -3,164 | -3,645 | -3,913 | -3,123 | 63     | -750   | -2,908 | -4,664  | -3,527  | -4,074 |
| 30% Exceedance                              | -3,809 | -4,088 | -5,290 | -3,645 | -4,292 | -3,370 | -357   | -1,051 | -3,862 | -6,785  | -4,617  | -4,550 |
| 40% Exceedance                              | -4,168 | -5,541 | -5,290 | -4,110 | -4,329 | -3,416 | -604   | -1,272 | -4,533 | -7,867  | -5,840  | -5,132 |
| 50% Exceedance                              | -4,800 | -7,192 | -5,290 | -4,516 | -4,346 | -3,422 | -750   | -1,374 | -4,807 | -8,924  | -9,206  | -5,455 |
| 60% Exceedance                              | -5,252 | -8,153 | -5,290 | -4,516 | -4,464 | -3,431 | -1,045 | -1,515 | -5,000 | -9,785  | -9,832  | -6,120 |
| 70% Exceedance                              | -5,815 | -8,550 | -5,290 | -4,516 | -4,464 | -3,634 | -1,247 | -1,656 | -5,000 | -10,376 | -10,183 | -6,950 |
| 80% Exceedance                              | -6,338 | -8,959 | -5,540 | -4,516 | -4,464 | -4,196 | -1,500 | -1,980 | -5,000 | -10,831 | -10,514 | -7,491 |
| 90% Exceedance                              | -7,307 | -9,312 | -7,504 | -5,000 | -4,483 | -4,211 | -1,996 | -2,294 | -5,000 | -11,137 | -11,104 | -8,513 |
| Full Simulation Period Average <sup>a</sup> | -4,834 | -6,118 | -4,849 | -3,702 | -3,483 | -2,845 | -553   | -1,218 | -4,107 | -8,109  | -7,399  | -5,823 |
| Wet Water Years (29%)                       | -5,998 | -7,213 | -4,890 | -2,895 | -2,050 | -1,306 | -738   | -1,282 | -3,998 | -9,260  | -10,183 | -7,029 |
| Above Normal Water Years (12%)              | -4,150 | -6,607 | -5,465 | -4,266 | -3,942 | -3,215 | -467   | -2,293 | -4,699 | -9,603  | -10,366 | -5,597 |
| Below Normal Water Years (18%)              | -5,039 | -6,575 | -5,056 | -4,043 | -4,107 | -3,737 | 27     | -714   | -4,658 | -10,572 | -9,184  | -6,528 |
| Dry Water Years (22%)                       | -4,556 | -6,375 | -5,041 | -4,234 | -4,172 | -3,905 | -691   | -1,051 | -4,802 | -7,837  | -4,804  | -5,545 |
| Critical Water Years (19%)                  | -3,619 | -3,405 | -3,980 | -3,641 | -3,991 | -2,886 | -713   | -1,112 | -2,574 | -3,392  | -2,592  | -3,779 |

**Table 4H-2-6-1b. Old and Middle River Flow, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Flow (combined flows)(cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul     | Aug     | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 10% Exceedance                              | -2,108 | -2,005 | -2,482 | -2,737 | -1,867 | -987   | 707    | -1,600 | -1,593 | -2,814  | -2,193  | -3,569 |
| 20% Exceedance                              | -3,092 | -3,315 | -3,421 | -3,382 | -3,589 | -1,257 | -275   | -1,929 | -2,815 | -4,163  | -3,146  | -4,266 |
| 30% Exceedance                              | -3,770 | -4,154 | -5,179 | -3,619 | -3,742 | -1,410 | -687   | -2,228 | -3,657 | -6,314  | -4,031  | -4,661 |
| 40% Exceedance                              | -4,149 | -5,476 | -5,290 | -3,910 | -3,924 | -1,566 | -1,161 | -2,637 | -4,115 | -7,905  | -5,857  | -5,237 |
| 50% Exceedance                              | -4,726 | -7,440 | -5,290 | -4,125 | -3,963 | -2,054 | -1,273 | -2,905 | -4,129 | -9,147  | -9,029  | -5,740 |
| 60% Exceedance                              | -5,157 | -8,121 | -5,290 | -4,235 | -4,013 | -3,467 | -1,539 | -3,152 | -4,205 | -9,851  | -9,893  | -6,232 |
| 70% Exceedance                              | -5,800 | -8,548 | -5,290 | -4,385 | -4,202 | -3,729 | -1,691 | -3,349 | -4,310 | -10,462 | -10,319 | -6,953 |
| 80% Exceedance                              | -6,259 | -8,927 | -5,803 | -4,419 | -4,357 | -3,783 | -1,893 | -3,675 | -4,310 | -10,929 | -10,661 | -8,007 |
| 90% Exceedance                              | -7,190 | -9,316 | -7,310 | -4,700 | -4,535 | -4,196 | -2,213 | -3,922 | -4,400 | -11,178 | -11,246 | -9,275 |
| Full Simulation Period Average <sup>a</sup> | -4,795 | -6,223 | -4,948 | -3,515 | -3,301 | -2,084 | -962   | -2,648 | -3,614 | -7,974  | -7,288  | -6,064 |
| Wet Water Years (29%)                       | -5,950 | -7,346 | -4,922 | -2,789 | -2,131 | -1,241 | -785   | -2,732 | -3,594 | -9,439  | -10,425 | -7,555 |
| Above Normal Water Years (12%)              | -4,126 | -6,771 | -5,442 | -4,172 | -3,684 | -1,876 | -357   | -3,003 | -4,082 | -10,106 | -10,545 | -6,305 |
| Below Normal Water Years (18%)              | -4,831 | -6,582 | -5,277 | -3,903 | -3,885 | -2,228 | -978   | -2,844 | -4,239 | -10,453 | -8,733  | -6,631 |
| Dry Water Years (22%)                       | -4,466 | -6,414 | -5,083 | -4,079 | -3,802 | -2,754 | -1,092 | -2,741 | -4,204 | -7,258  | -4,533  | -5,508 |
| Critical Water Years (19%)                  | -3,800 | -3,603 | -4,210 | -3,189 | -3,714 | -2,591 | -1,448 | -2,002 | -2,073 | -2,873  | -2,265  | -3,742 |

**Table 4H-2-6-1c. Old and Middle River Flow, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (combined flows)(cfs)**

| Statistic                                   | Oct  | Nov  | Dec  | Jan | Feb | Mar   | Apr    | May    | Jun | Jul  | Aug  | Sep  |
|---------------------------------------------|------|------|------|-----|-----|-------|--------|--------|-----|------|------|------|
| 10% Exceedance                              | 2    | -243 | -292 | 134 | -66 | -89   | -578   | -1,776 | 384 | 791  | 347  | -21  |
| 20% Exceedance                              | -30  | -168 | -257 | 263 | 324 | 1,866 | -338   | -1,179 | 93  | 501  | 381  | -192 |
| 30% Exceedance                              | 39   | -65  | 112  | 26  | 550 | 1,960 | -329   | -1,177 | 204 | 470  | 586  | -111 |
| 40% Exceedance                              | 19   | 65   | 0    | 200 | 405 | 1,850 | -557   | -1,365 | 418 | -38  | -17  | -105 |
| 50% Exceedance                              | 74   | -248 | 0    | 391 | 383 | 1,368 | -523   | -1,531 | 678 | -223 | 177  | -285 |
| 60% Exceedance                              | 96   | 31   | 0    | 281 | 452 | -36   | -494   | -1,637 | 795 | -66  | -61  | -112 |
| 70% Exceedance                              | 14   | 2    | 0    | 131 | 263 | -95   | -445   | -1,693 | 690 | -86  | -136 | -3   |
| 80% Exceedance                              | 79   | 32   | -264 | 97  | 107 | 413   | -392   | -1,695 | 690 | -99  | -147 | -516 |
| 90% Exceedance                              | 117  | -4   | 194  | 300 | -52 | 15    | -216   | -1,628 | 600 | -41  | -142 | -762 |
| Full Simulation Period Average <sup>a</sup> | 39   | -105 | -99  | 187 | 182 | 761   | -409   | -1,430 | 493 | 135  | 111  | -241 |
| Wet Water Years (29%)                       | 48   | -133 | -33  | 106 | -80 | 65    | -47    | -1,449 | 404 | -179 | -242 | -526 |
| Above Normal Water Years (12%)              | 24   | -165 | 24   | 95  | 258 | 1,339 | 109    | -710   | 617 | -503 | -179 | -708 |
| Below Normal Water Years (18%)              | 208  | -7   | -221 | 140 | 222 | 1,509 | -1,005 | -2,130 | 419 | 118  | 451  | -103 |
| Dry Water Years (22%)                       | 90   | -38  | -41  | 155 | 370 | 1,151 | -401   | -1,691 | 597 | 579  | 271  | 37   |
| Critical Water Years (19%)                  | -181 | -197 | -230 | 452 | 277 | 295   | -735   | -890   | 501 | 519  | 327  | 37   |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-6-2a. Old and Middle River Flow, Baseline Conditions 2022 SLR15 082824, Monthly Flow (combined flows)(cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul     | Aug     | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 10% Exceedance                              | -2,110 | -1,761 | -2,190 | -2,870 | -1,801 | -898   | 1,285  | 176    | -1,977 | -3,605  | -2,540  | -3,548 |
| 20% Exceedance                              | -3,062 | -3,147 | -3,164 | -3,645 | -3,913 | -3,123 | 63     | -750   | -2,908 | -4,664  | -3,527  | -4,074 |
| 30% Exceedance                              | -3,809 | -4,088 | -5,290 | -3,645 | -4,292 | -3,370 | -357   | -1,051 | -3,862 | -6,785  | -4,617  | -4,550 |
| 40% Exceedance                              | -4,168 | -5,541 | -5,290 | -4,110 | -4,329 | -3,416 | -604   | -1,272 | -4,533 | -7,867  | -5,840  | -5,132 |
| 50% Exceedance                              | -4,800 | -7,192 | -5,290 | -4,516 | -4,346 | -3,422 | -750   | -1,374 | -4,807 | -8,924  | -9,206  | -5,455 |
| 60% Exceedance                              | -5,252 | -8,153 | -5,290 | -4,516 | -4,464 | -3,431 | -1,045 | -1,515 | -5,000 | -9,785  | -9,832  | -6,120 |
| 70% Exceedance                              | -5,815 | -8,550 | -5,290 | -4,516 | -4,464 | -3,634 | -1,247 | -1,656 | -5,000 | -10,376 | -10,183 | -6,950 |
| 80% Exceedance                              | -6,338 | -8,959 | -5,540 | -4,516 | -4,464 | -4,196 | -1,500 | -1,980 | -5,000 | -10,831 | -10,514 | -7,491 |
| 90% Exceedance                              | -7,307 | -9,312 | -7,504 | -5,000 | -4,483 | -4,211 | -1,996 | -2,294 | -5,000 | -11,137 | -11,104 | -8,513 |
| Full Simulation Period Average <sup>a</sup> | -4,834 | -6,118 | -4,849 | -3,702 | -3,483 | -2,845 | -553   | -1,218 | -4,107 | -8,109  | -7,399  | -5,823 |
| Wet Water Years (29%)                       | -5,998 | -7,213 | -4,890 | -2,895 | -2,050 | -1,306 | -738   | -1,282 | -3,998 | -9,260  | -10,183 | -7,029 |
| Above Normal Water Years (12%)              | -4,150 | -6,607 | -5,465 | -4,266 | -3,942 | -3,215 | -467   | -2,293 | -4,699 | -9,603  | -10,366 | -5,597 |
| Below Normal Water Years (18%)              | -5,039 | -6,575 | -5,056 | -4,043 | -4,107 | -3,737 | 27     | -714   | -4,658 | -10,572 | -9,184  | -6,528 |
| Dry Water Years (22%)                       | -4,556 | -6,375 | -5,041 | -4,234 | -4,172 | -3,905 | -691   | -1,051 | -4,802 | -7,837  | -4,804  | -5,545 |
| Critical Water Years (19%)                  | -3,619 | -3,405 | -3,980 | -3,641 | -3,991 | -2,886 | -713   | -1,112 | -2,574 | -3,392  | -2,592  | -3,779 |

**Table 4H-2-6-2b. Old and Middle River Flow, Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Flow (combined flows)(cfs)**

| Statistic                                   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul     | Aug     | Sep    |
|---------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 10% Exceedance                              | -2,140 | -2,080 | -2,472 | -2,582 | -2,488 | -1,000 | 1,314  | -1,423 | -1,543 | -2,747  | -2,143  | -3,566 |
| 20% Exceedance                              | -3,064 | -3,292 | -3,332 | -3,367 | -3,585 | -1,234 | 209    | -1,681 | -2,904 | -4,147  | -3,195  | -4,228 |
| 30% Exceedance                              | -3,798 | -4,166 | -5,117 | -3,624 | -3,714 | -1,383 | -349   | -1,952 | -3,657 | -6,309  | -4,279  | -4,636 |
| 40% Exceedance                              | -4,180 | -5,494 | -5,290 | -3,914 | -3,902 | -1,541 | -862   | -2,287 | -4,115 | -7,938  | -5,953  | -5,204 |
| 50% Exceedance                              | -4,754 | -7,423 | -5,290 | -4,125 | -3,948 | -2,048 | -1,048 | -2,486 | -4,143 | -9,055  | -9,323  | -5,809 |
| 60% Exceedance                              | -5,172 | -8,160 | -5,290 | -4,291 | -3,999 | -3,454 | -1,176 | -2,748 | -4,205 | -9,745  | -9,826  | -6,225 |
| 70% Exceedance                              | -5,894 | -8,546 | -5,290 | -4,395 | -4,202 | -3,690 | -1,357 | -3,019 | -4,310 | -10,476 | -10,292 | -6,795 |
| 80% Exceedance                              | -6,329 | -8,962 | -5,676 | -4,435 | -4,357 | -3,797 | -1,565 | -3,161 | -4,320 | -10,925 | -10,643 | -8,012 |
| 90% Exceedance                              | -7,270 | -9,313 | -7,254 | -4,700 | -4,535 | -4,114 | -1,955 | -3,531 | -4,400 | -11,193 | -11,245 | -9,233 |
| Full Simulation Period Average <sup>a</sup> | -4,834 | -6,234 | -4,939 | -3,508 | -3,298 | -2,054 | -630   | -2,343 | -3,614 | -7,960  | -7,307  | -6,041 |
| Wet Water Years (29%)                       | -5,988 | -7,324 | -4,896 | -2,790 | -2,130 | -1,215 | -470   | -2,457 | -3,594 | -9,435  | -10,432 | -7,555 |
| Above Normal Water Years (12%)              | -4,144 | -6,792 | -5,411 | -4,172 | -3,670 | -1,869 | 79     | -2,575 | -4,084 | -10,061 | -10,485 | -6,275 |
| Below Normal Water Years (18%)              | -4,903 | -6,613 | -5,279 | -3,907 | -3,833 | -2,227 | -557   | -2,450 | -4,234 | -10,409 | -8,736  | -6,576 |
| Dry Water Years (22%)                       | -4,522 | -6,395 | -5,066 | -4,109 | -3,793 | -2,675 | -808   | -2,470 | -4,215 | -7,320  | -4,633  | -5,476 |
| Critical Water Years (19%)                  | -3,806 | -3,671 | -4,235 | -3,109 | -3,767 | -2,570 | -1,184 | -1,776 | -2,061 | -2,805  | -2,273  | -3,730 |

**Table 4H-2-6-2c. Old and Middle River Flow, Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (combined flows)(cfs)**

| Statistic                                   | Oct  | Nov  | Dec  | Jan | Feb  | Mar   | Apr  | May    | Jun | Jul  | Aug  | Sep  |
|---------------------------------------------|------|------|------|-----|------|-------|------|--------|-----|------|------|------|
| 10% Exceedance                              | -30  | -319 | -282 | 288 | -687 | -102  | 29   | -1,599 | 434 | 858  | 397  | -18  |
| 20% Exceedance                              | -2   | -145 | -168 | 278 | 329  | 1,889 | 146  | -931   | 4   | 516  | 332  | -154 |
| 30% Exceedance                              | 11   | -77  | 173  | 22  | 578  | 1,988 | 9    | -900   | 204 | 476  | 338  | -86  |
| 40% Exceedance                              | -12  | 47   | 0    | 197 | 426  | 1,874 | -258 | -1,015 | 418 | -71  | -113 | -72  |
| 50% Exceedance                              | 47   | -231 | 0    | 391 | 398  | 1,374 | -298 | -1,112 | 664 | -130 | -117 | -354 |
| 60% Exceedance                              | 80   | -8   | 0    | 225 | 465  | -23   | -131 | -1,233 | 795 | 40   | 6    | -105 |
| 70% Exceedance                              | -79  | 4    | 0    | 121 | 263  | -56   | -110 | -1,362 | 690 | -101 | -109 | 155  |
| 80% Exceedance                              | 8    | -3   | -136 | 82  | 107  | 399   | -65  | -1,182 | 680 | -95  | -129 | -521 |
| 90% Exceedance                              | 37   | -1   | 250  | 300 | -52  | 97    | 42   | -1,238 | 600 | -57  | -141 | -721 |
| Full Simulation Period Average <sup>a</sup> | 0    | -116 | -89  | 195 | 185  | 790   | -77  | -1,125 | 494 | 149  | 92   | -218 |
| Wet Water Years (29%)                       | 10   | -111 | -6   | 105 | -80  | 91    | 267  | -1,175 | 404 | -175 | -249 | -526 |
| Above Normal Water Years (12%)              | 6    | -186 | 55   | 95  | 272  | 1,346 | 546  | -282   | 615 | -457 | -119 | -678 |
| Below Normal Water Years (18%)              | 136  | -38  | -223 | 135 | 274  | 1,510 | -584 | -1,736 | 423 | 162  | 448  | -48  |
| Dry Water Years (22%)                       | 33   | -20  | -25  | 125 | 379  | 1,230 | -117 | -1,419 | 586 | 516  | 170  | 68   |
| Critical Water Years (19%)                  | -187 | -266 | -255 | 531 | 224  | 316   | -470 | -664   | 513 | 587  | 319  | 49   |

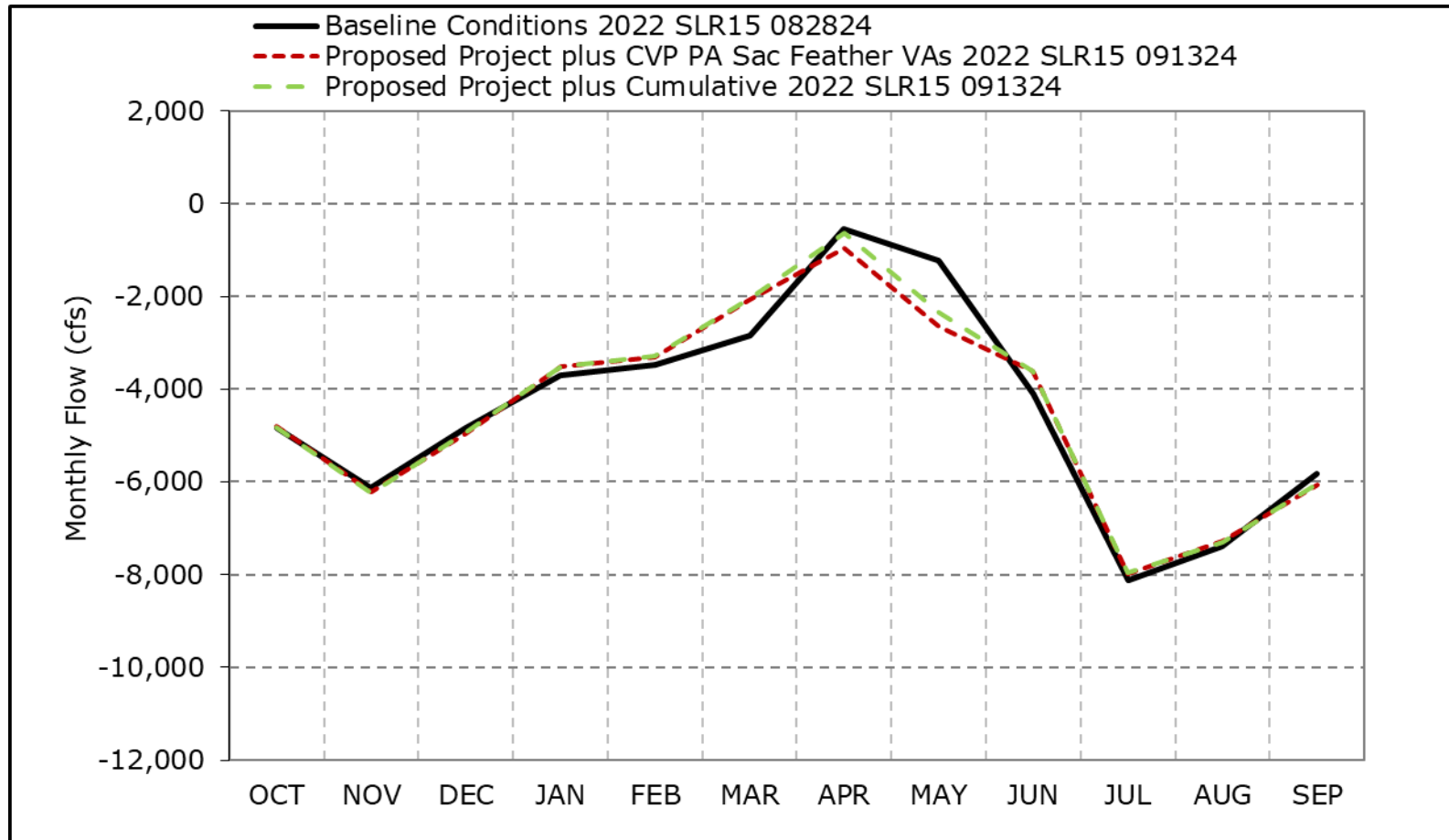
<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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 4H-2-6a. Old and Middle River Flow, Long-Term Average Flow**

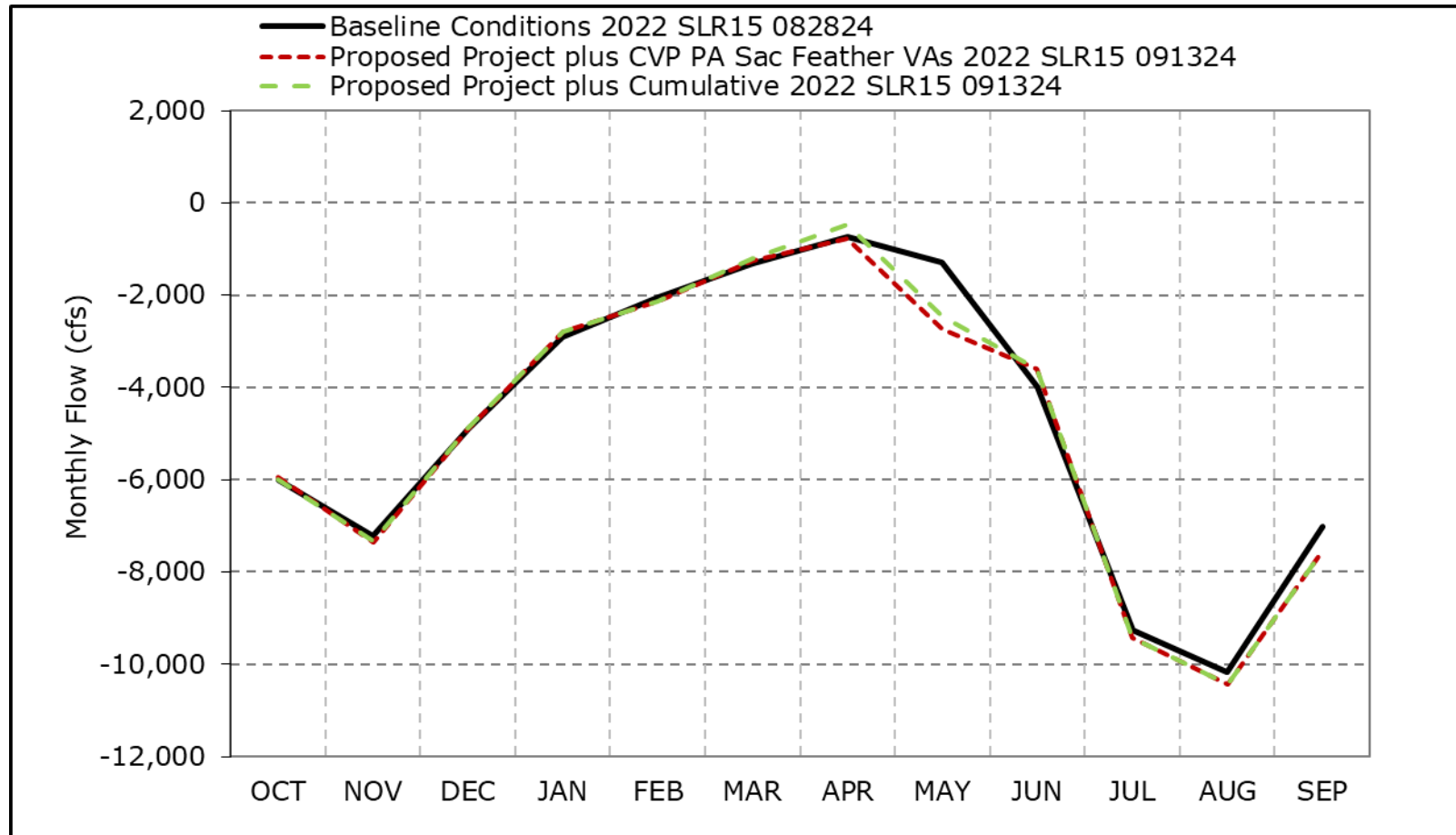


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6b. Old and Middle River Flow, Wet Year Average Flow**

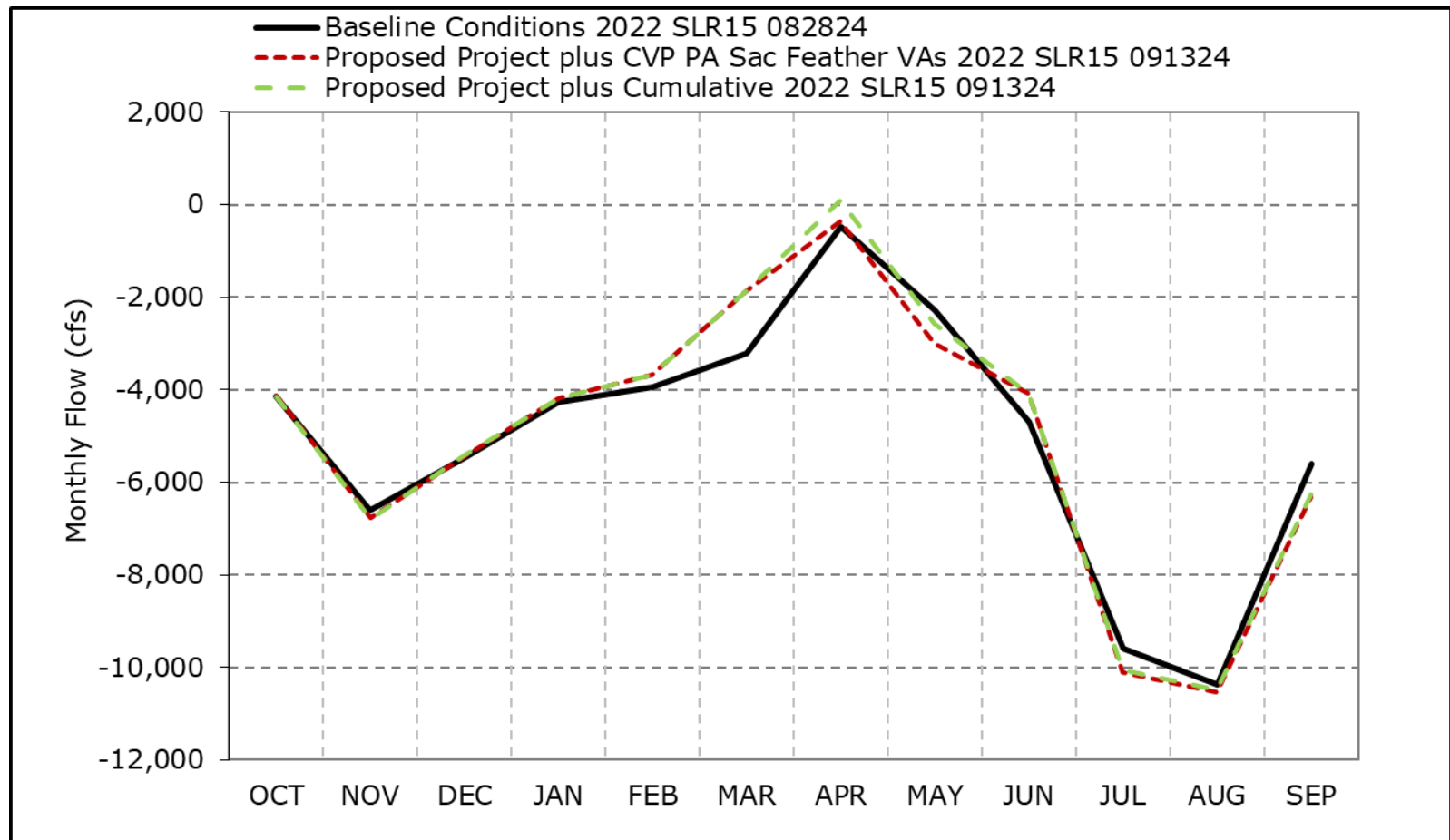


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6c. Old and Middle River Flow, Above Normal Year Average Flow**

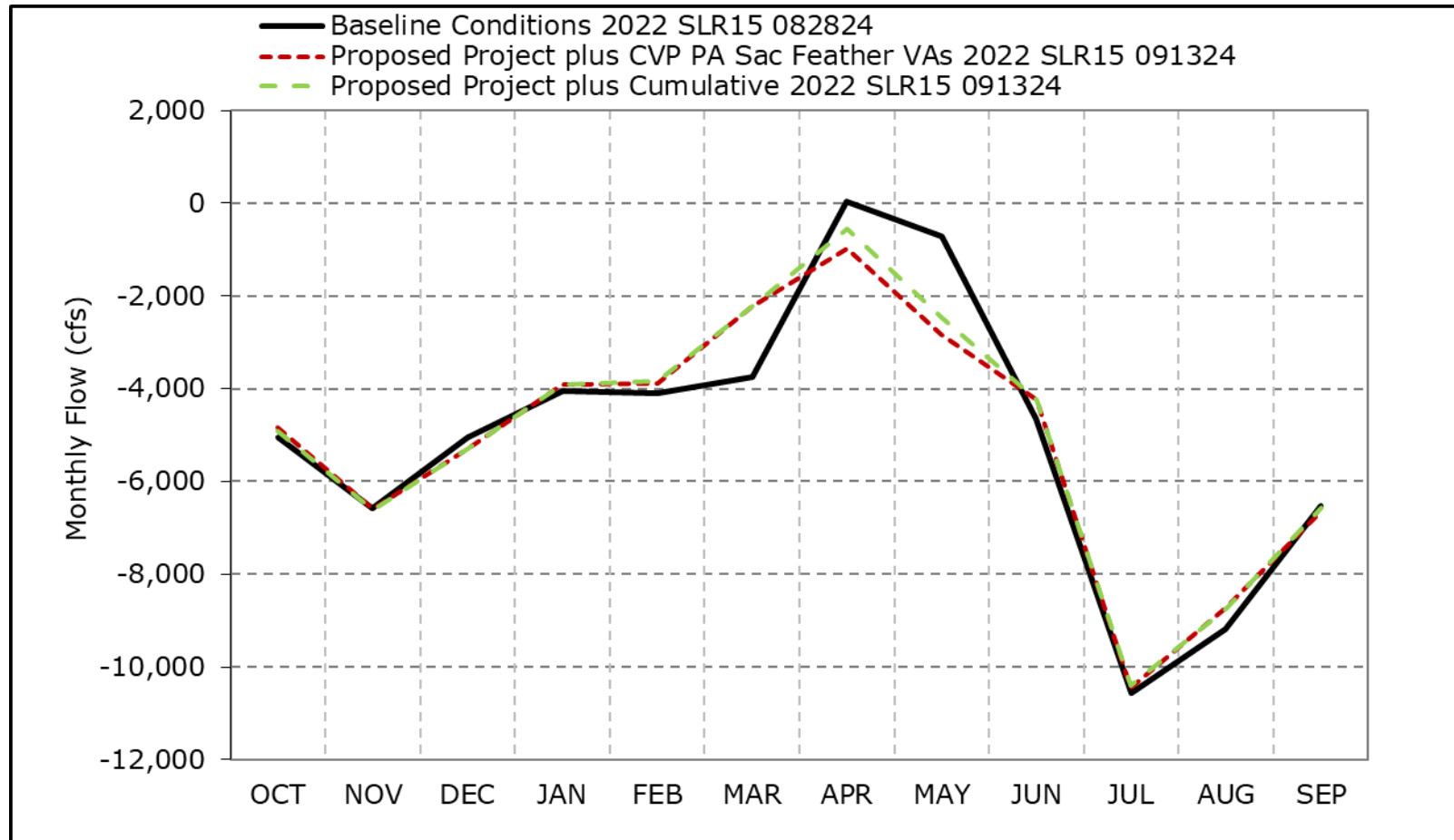


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6d. Old and Middle River Flow, Below Normal Year Average Flow**



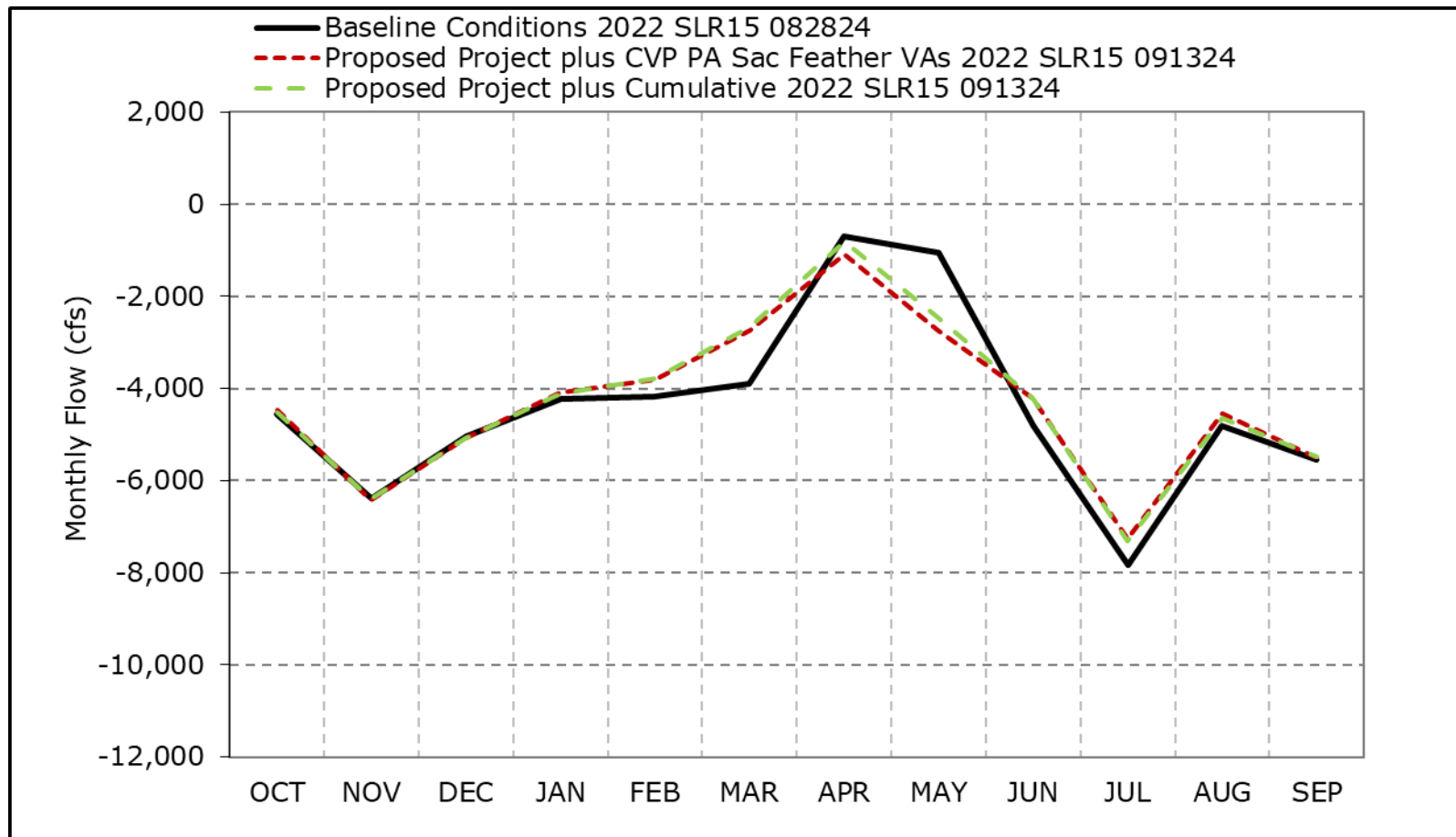
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.



**Figure 4H-2-6e. Old and Middle River Flow, Dry Year Average Flow**

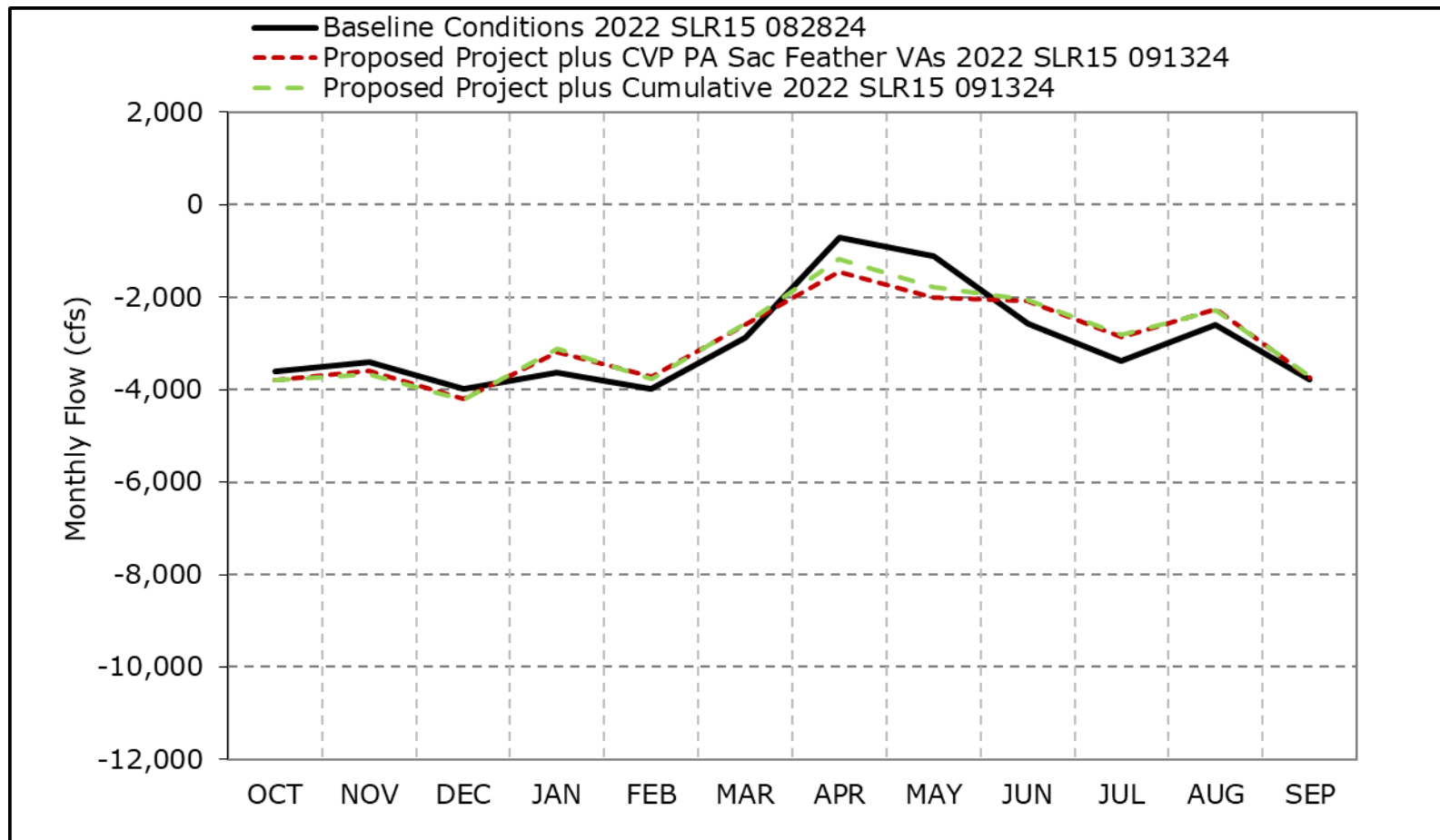


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6f. Old and Middle River Flow, Critical Year Average Flow**

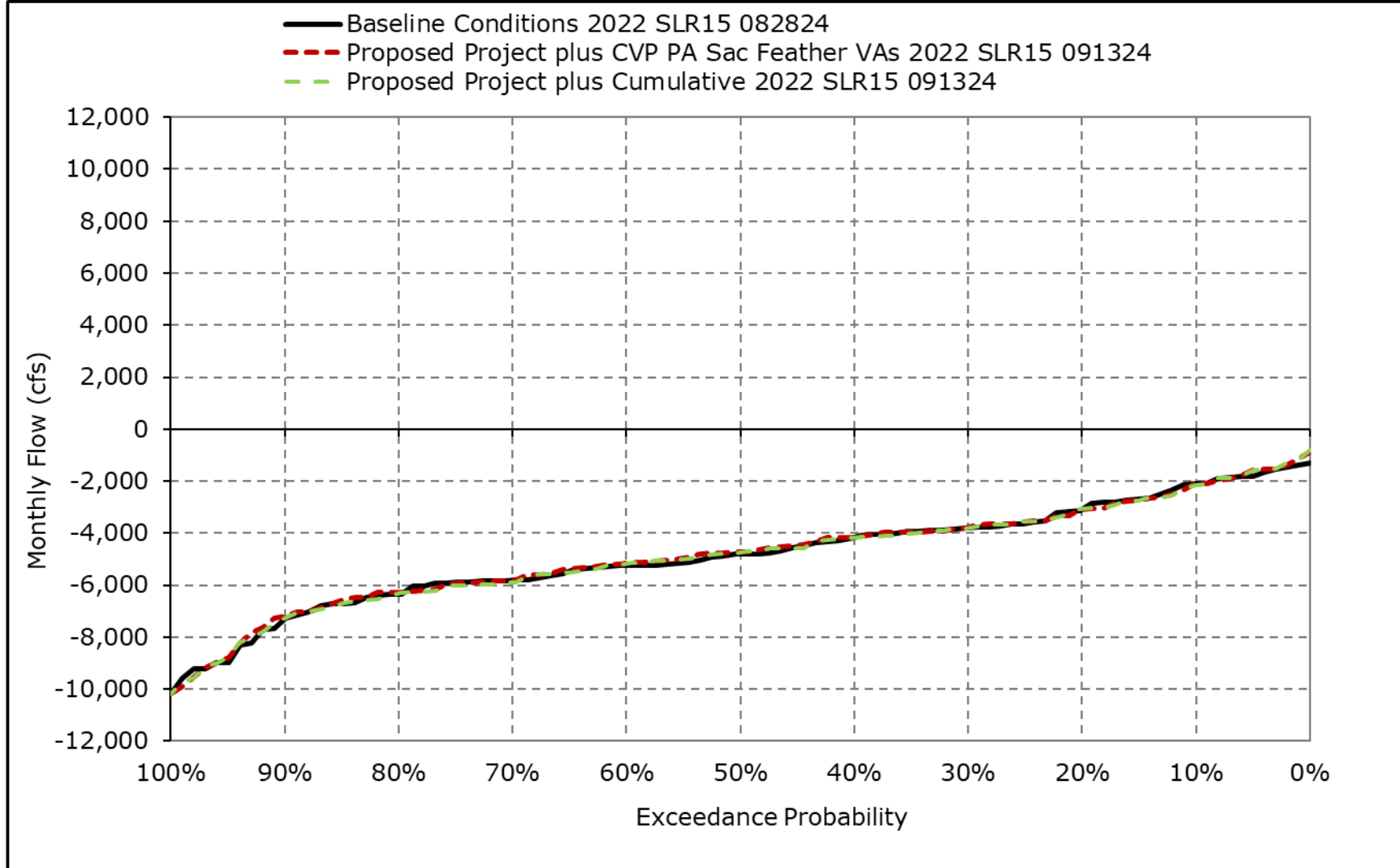


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

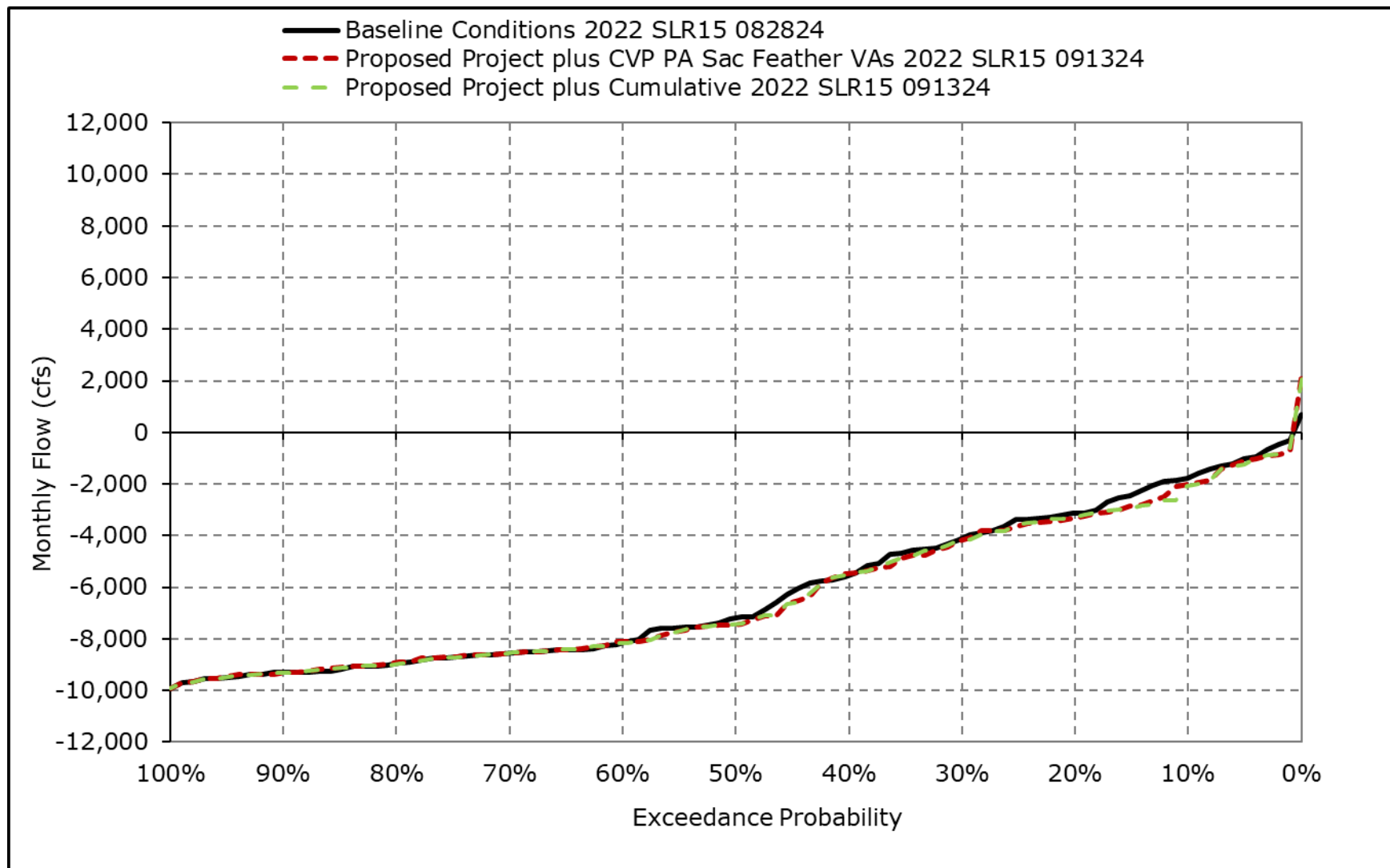
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6g. Old and Middle River Flow, October**



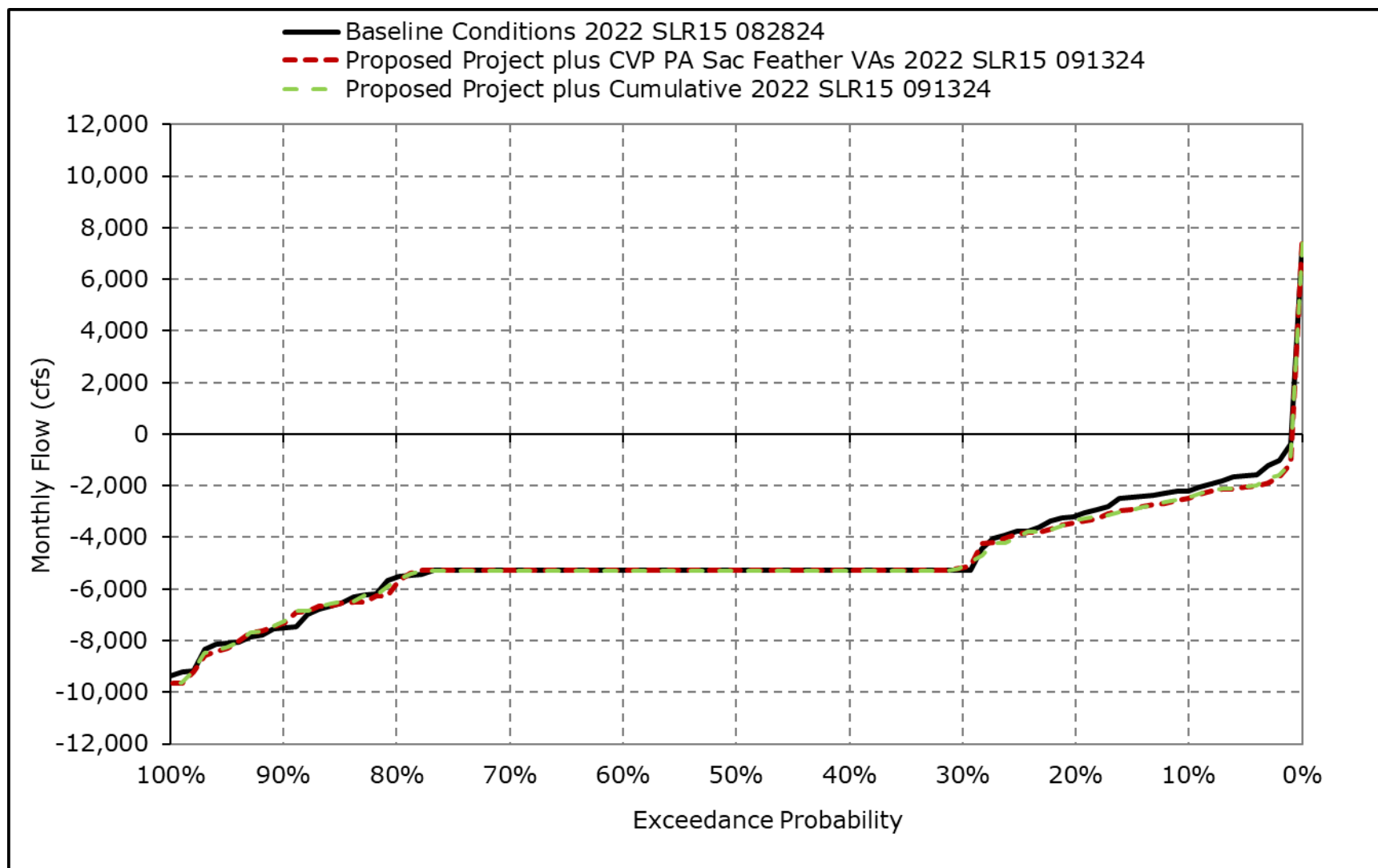
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6h. Old and Middle River Flow, November**



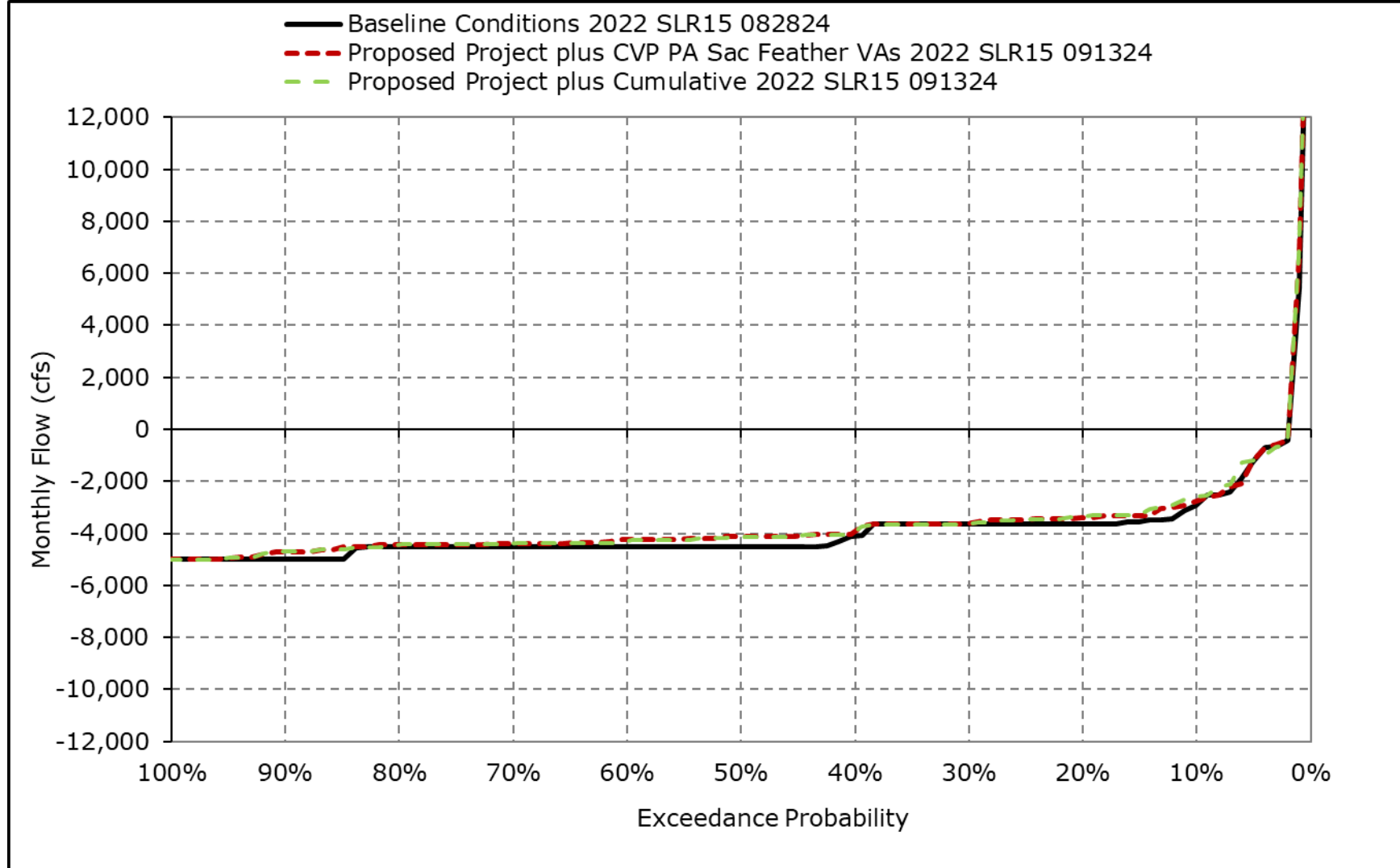
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6i. Old and Middle River Flow, December**



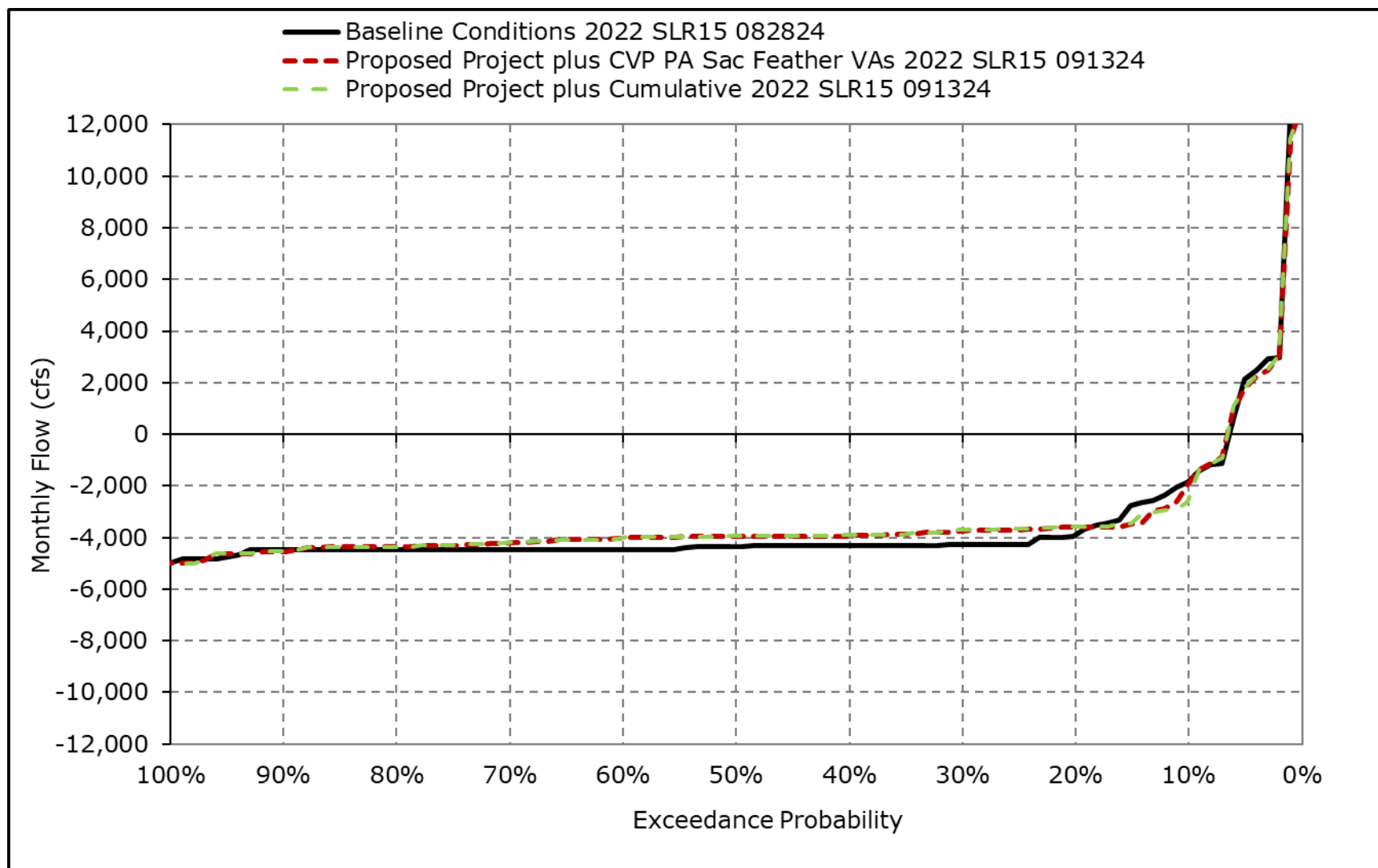
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6j. Old and Middle River Flow, January**



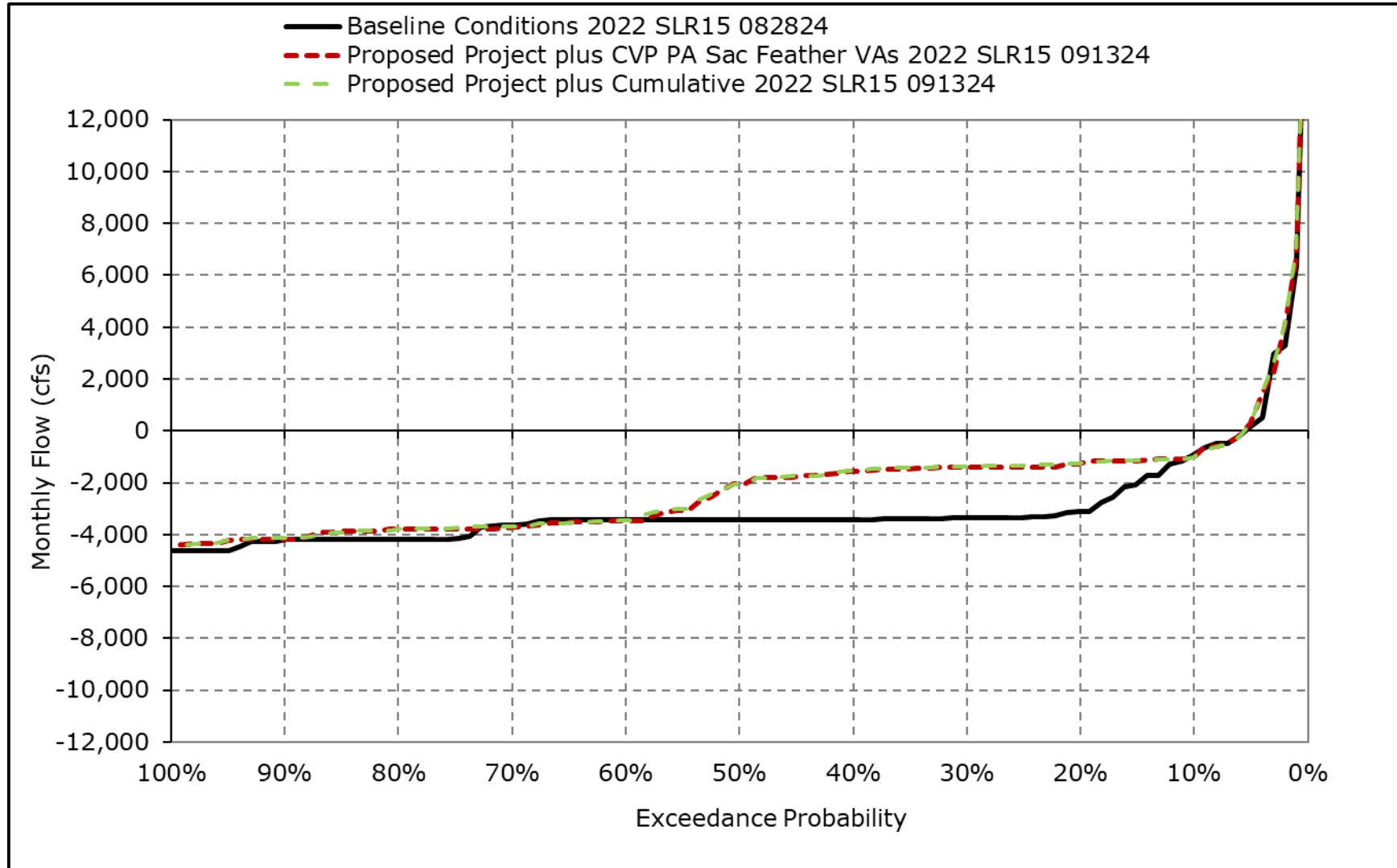
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6k. Old and Middle River Flow, February**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

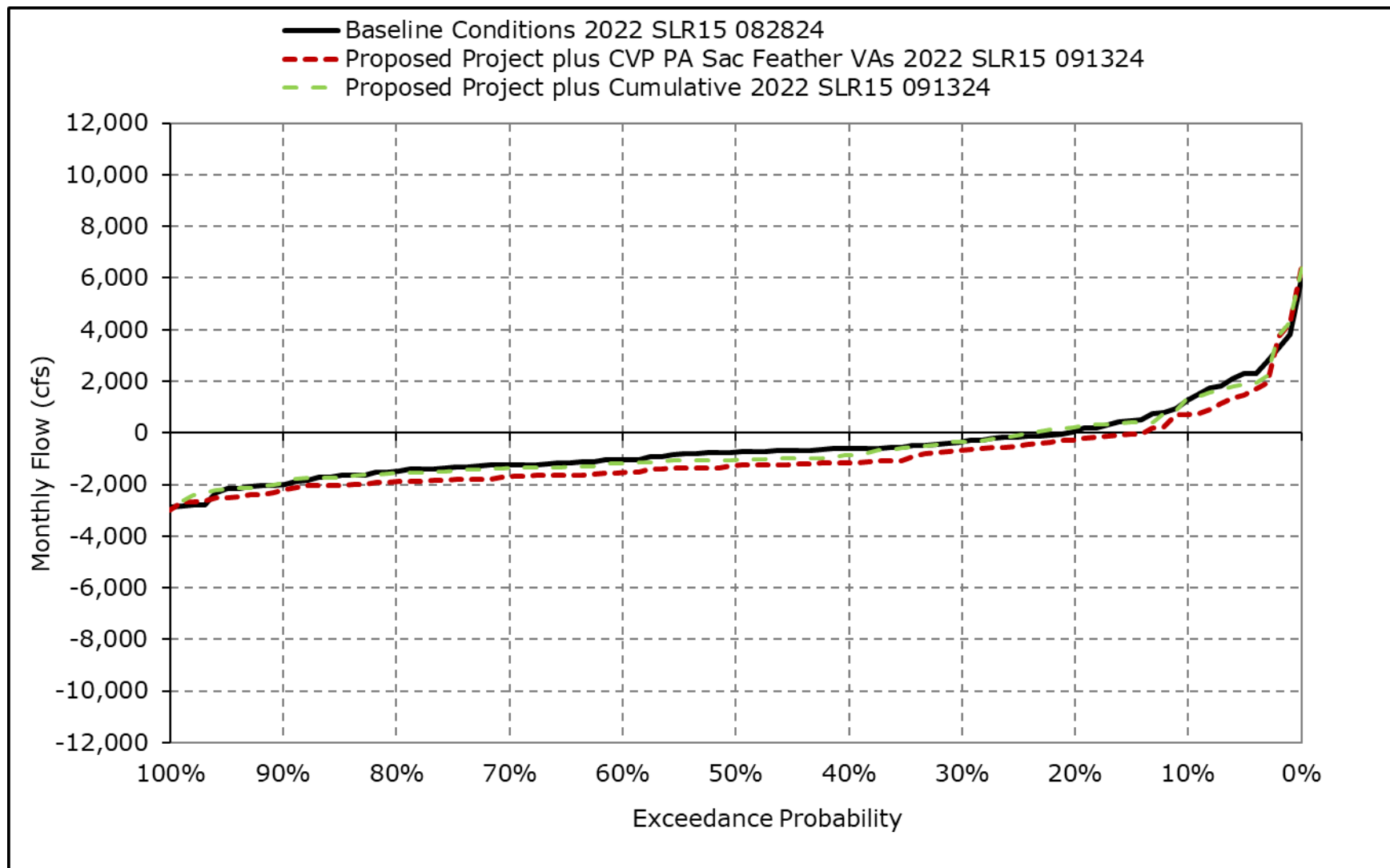
**Figure 4H-2-6I. Old and Middle River Flow, March**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

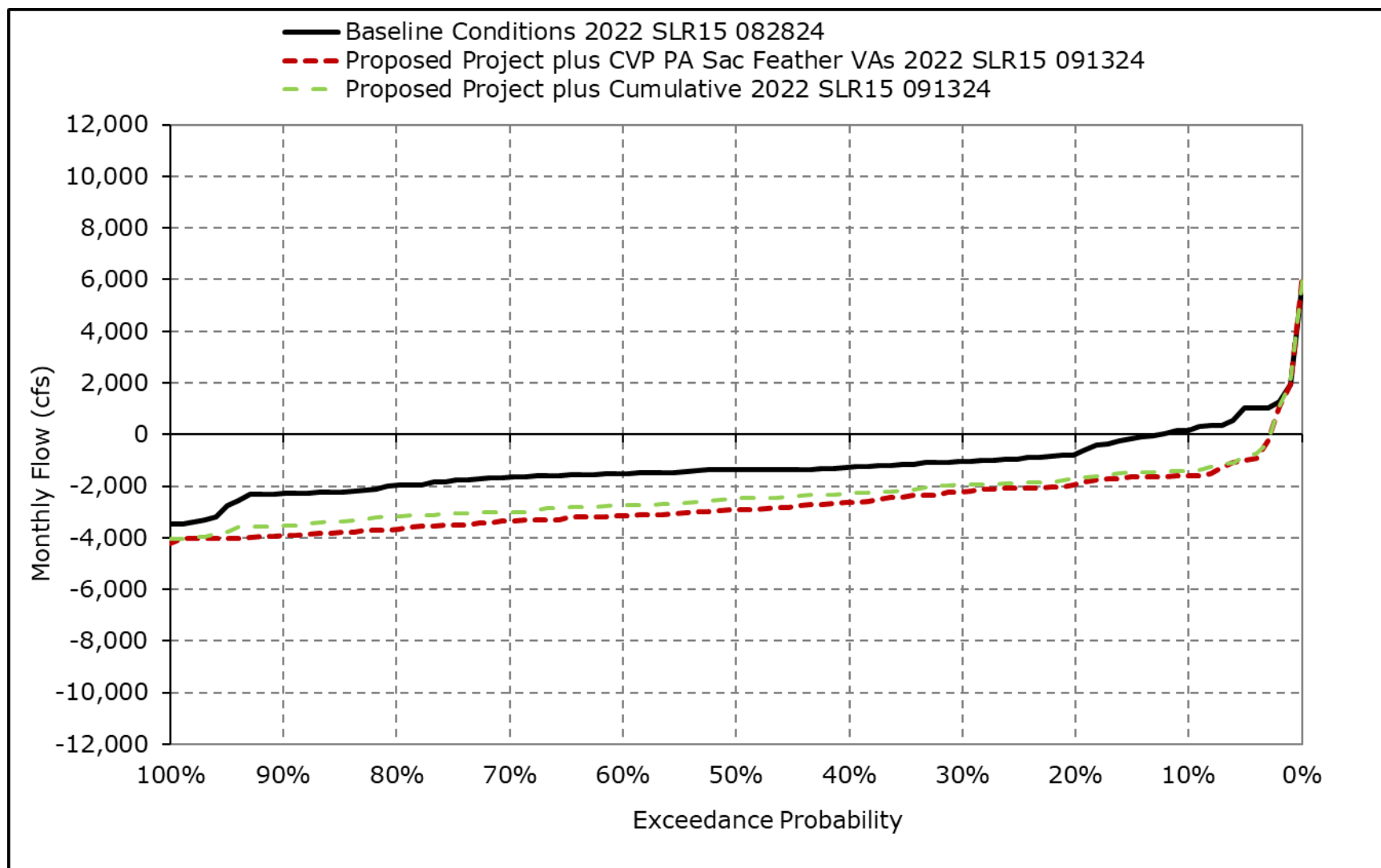


**Figure 4H-2-6m. Old and Middle River Flow, April**



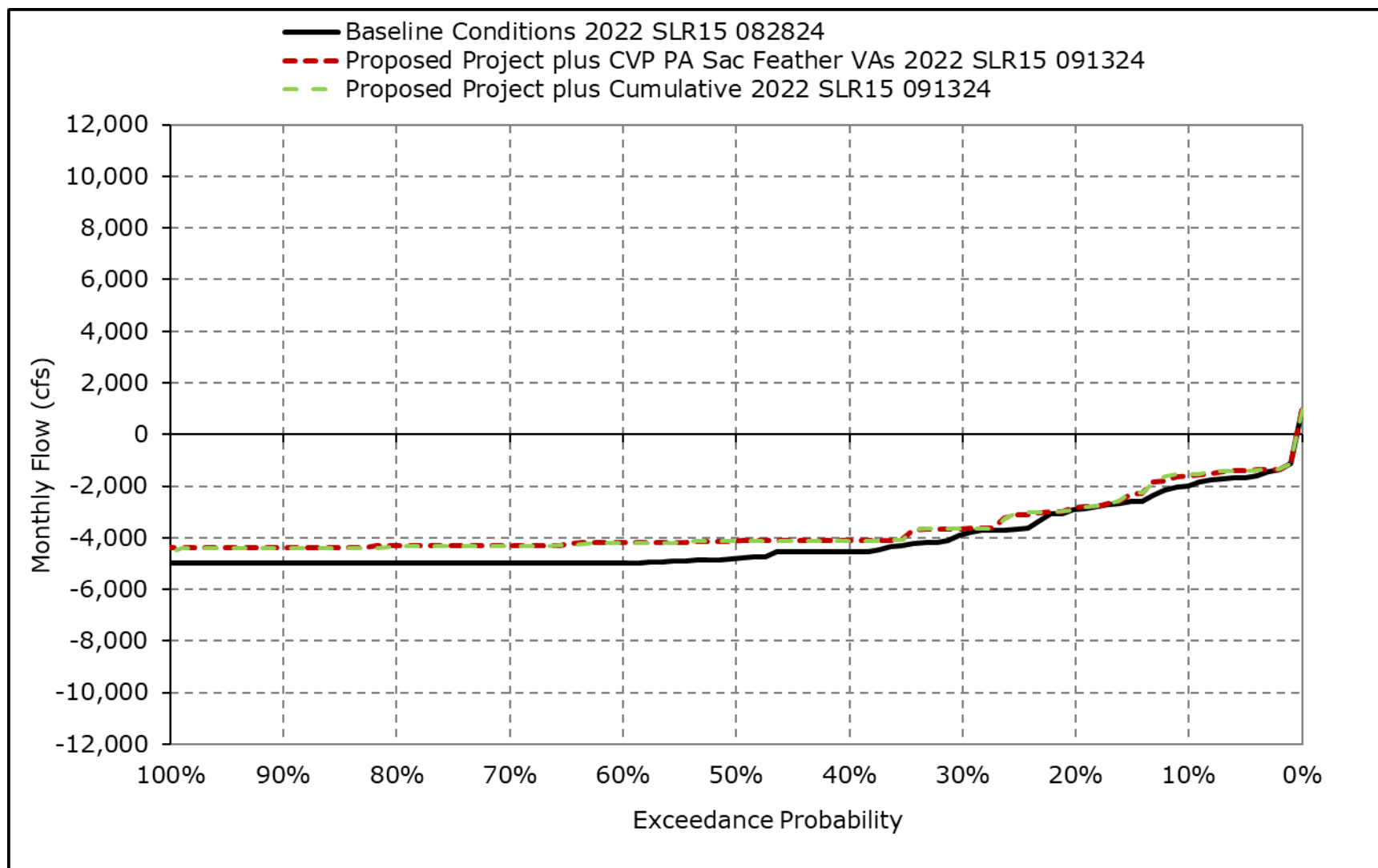
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6n. Old and Middle River Flow, May**



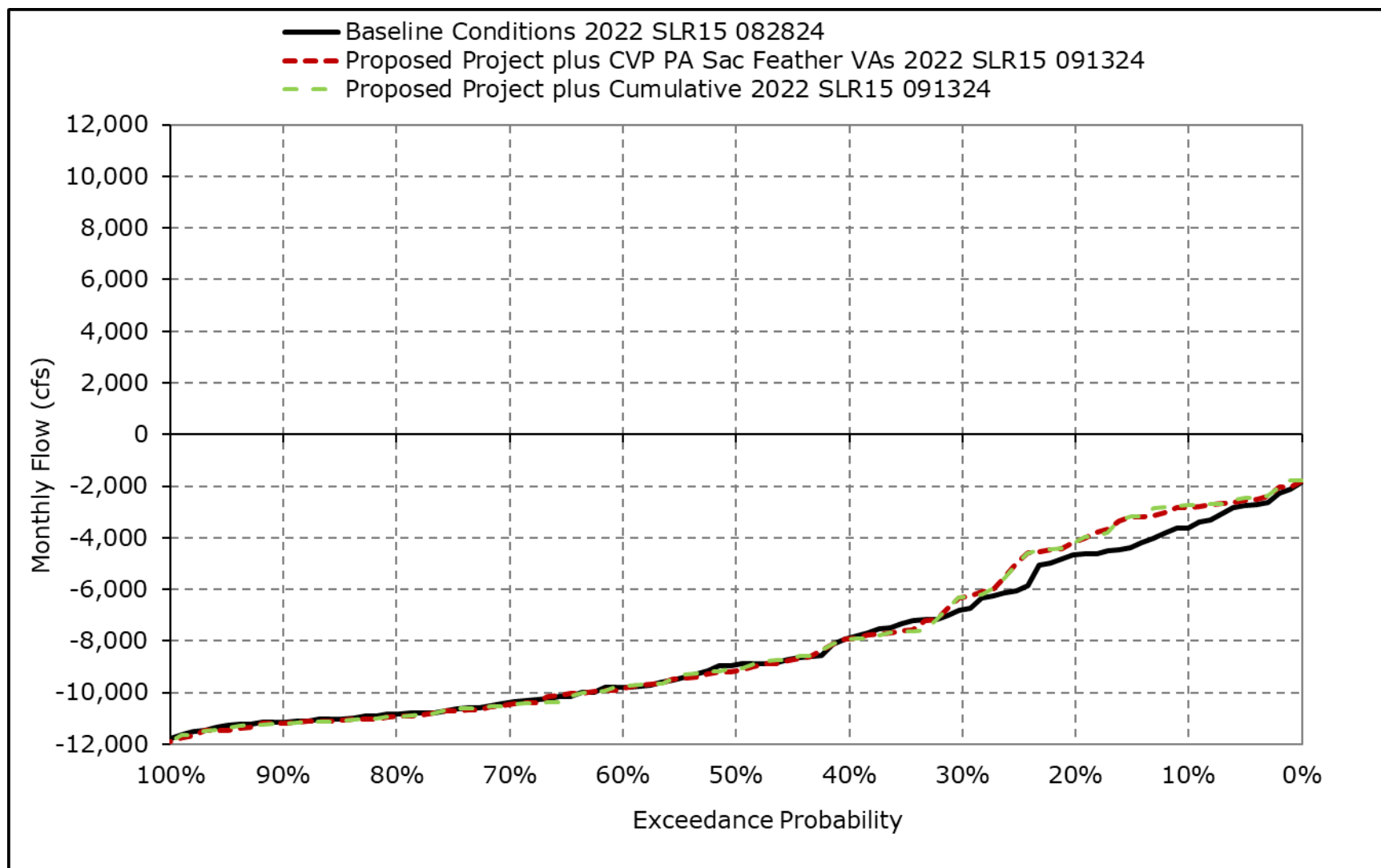
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6o. Old and Middle River Flow, June**



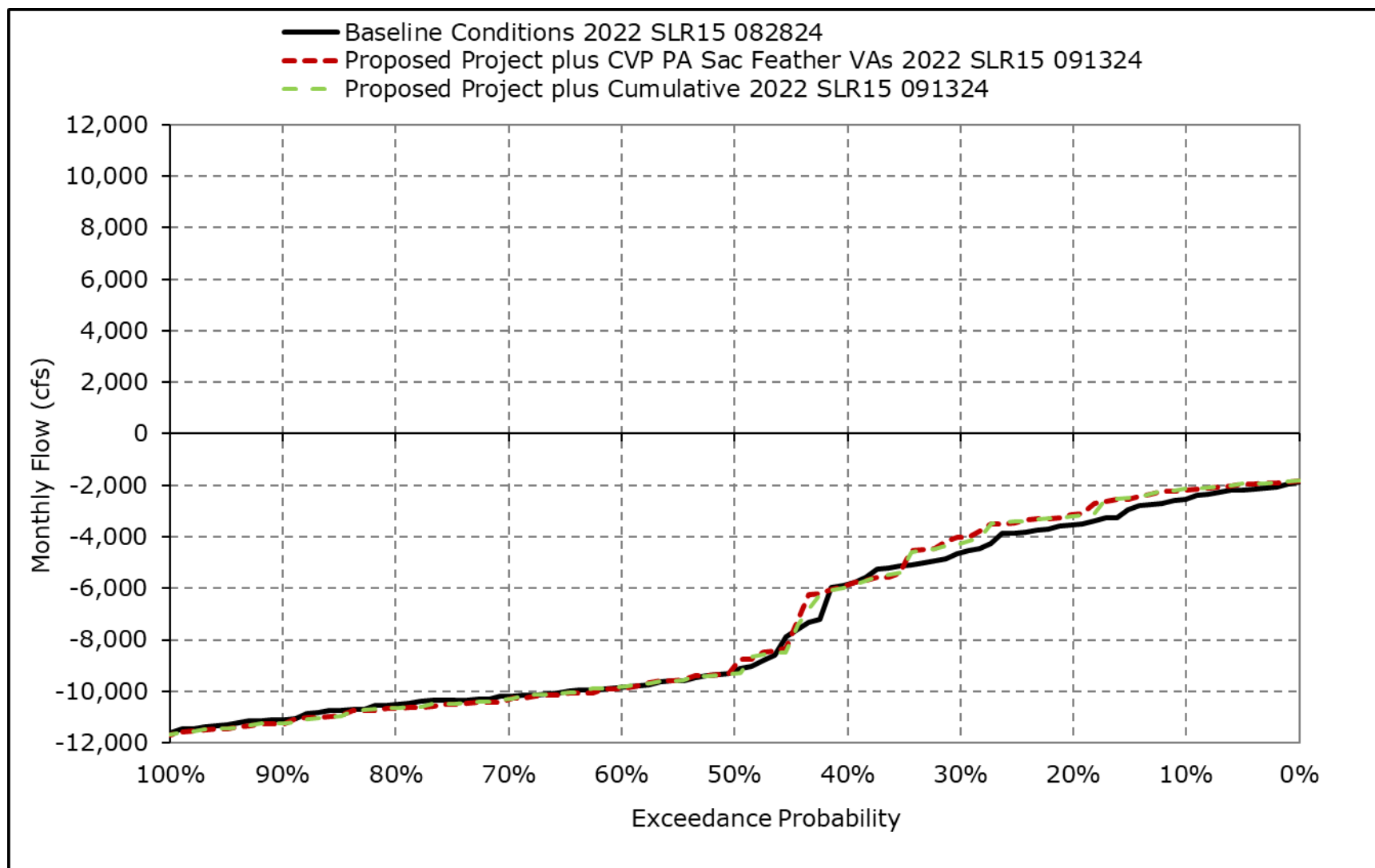
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6p. Old and Middle River Flow, July**



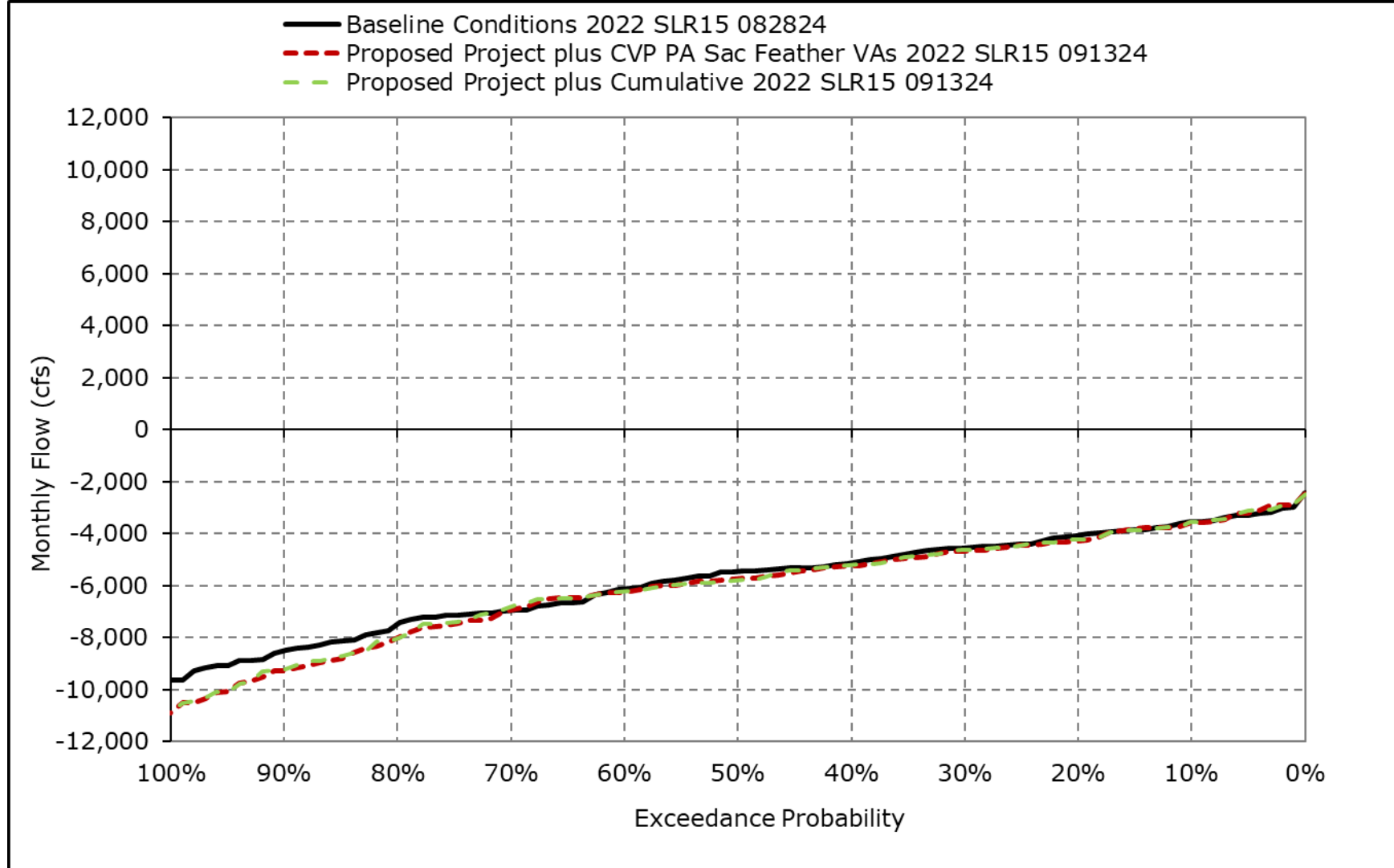
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6q. Old and Middle River Flow, August**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-6r. Old and Middle River Flow, September**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Table 4H-2-7-1a. Qwest, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun   | Jul    | Aug    | Sep    |
|---------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| 10% Exceedance                              | 1,856 | 1,554  | 10,077 | 19,192 | 23,292 | 20,053 | 16,062 | 13,145 | 7,107 | 1,789  | 1,462  | 3,022  |
| 20% Exceedance                              | 1,558 | -33    | 4,880  | 11,694 | 14,825 | 13,748 | 12,207 | 7,368  | 3,770 | 868    | 932    | 1,643  |
| 30% Exceedance                              | 1,131 | -320   | 1,901  | 5,838  | 12,049 | 8,907  | 10,443 | 5,361  | 2,393 | 250    | 287    | 991    |
| 40% Exceedance                              | 937   | -925   | 627    | 3,773  | 7,387  | 6,620  | 7,964  | 4,000  | 1,916 | -281   | -406   | 618    |
| 50% Exceedance                              | 813   | -1,568 | 385    | 2,592  | 5,086  | 4,210  | 6,208  | 3,386  | 1,431 | -849   | -1,720 | 98     |
| 60% Exceedance                              | 563   | -2,239 | -66    | 1,492  | 2,494  | 2,660  | 4,710  | 2,865  | 1,078 | -1,474 | -2,192 | -149   |
| 70% Exceedance                              | 308   | -3,089 | -1,204 | 326    | 1,560  | 2,088  | 3,608  | 2,297  | 735   | -1,829 | -2,694 | -453   |
| 80% Exceedance                              | -98   | -3,524 | -2,811 | -1,038 | 709    | 1,664  | 2,789  | 2,057  | 566   | -2,442 | -3,164 | -663   |
| 90% Exceedance                              | -830  | -3,949 | -4,312 | -2,128 | 157    | 571    | 2,381  | 1,735  | 456   | -3,001 | -3,657 | -1,101 |
| Full Simulation Period Average <sup>a</sup> | 640   | -1,154 | 2,259  | 6,219  | 9,563  | 8,225  | 8,373  | 5,461  | 2,636 | -713   | -1,263 | 500    |
| Wet Water Years (29%)                       | 61    | -367   | 8,598  | 16,787 | 21,234 | 18,085 | 15,333 | 10,426 | 5,412 | 39     | -2,387 | 1,597  |
| Above Normal Water Years (12%)              | 1,320 | -2,113 | -318   | 7,543  | 12,110 | 10,582 | 9,155  | 4,263  | 2,342 | -846   | -2,833 | 2,365  |
| Below Normal Water Years (18%)              | 595   | -1,939 | 102    | 2,599  | 5,979  | 5,077  | 7,483  | 5,018  | 1,344 | -2,442 | -2,847 | -1,011 |
| Dry Water Years (22%)                       | 1,066 | -1,856 | -762   | 177    | 3,057  | 2,244  | 4,250  | 2,961  | 711   | -1,748 | 158    | -596   |
| Critical Water Years (19%)                  | 645   | -192   | -245   | -321   | 1,067  | 1,595  | 2,874  | 1,955  | 2,038 | 1,060  | 1,300  | 349    |

**Table 4H-2-7-1b. Qwest, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun   | Jul    | Aug    | Sep    |
|---------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| 10% Exceedance                              | 2,196 | 1,554  | 10,200 | 19,298 | 23,369 | 21,170 | 16,593 | 10,334 | 7,303 | 1,847  | 1,740  | 2,530  |
| 20% Exceedance                              | 1,584 | -63    | 4,833  | 12,057 | 15,505 | 14,187 | 11,988 | 5,725  | 3,795 | 1,292  | 1,139  | 1,637  |
| 30% Exceedance                              | 1,249 | -372   | 1,777  | 6,107  | 11,814 | 10,022 | 9,413  | 3,151  | 2,947 | 635    | 665    | 776    |
| 40% Exceedance                              | 994   | -1,033 | 578    | 3,898  | 7,715  | 7,028  | 7,349  | 2,395  | 2,419 | -242   | -554   | 463    |
| 50% Exceedance                              | 878   | -1,661 | 309    | 2,671  | 5,751  | 5,500  | 5,608  | 1,674  | 2,044 | -1,012 | -1,999 | -72    |
| 60% Exceedance                              | 693   | -2,512 | -37    | 1,495  | 3,071  | 4,459  | 4,318  | 1,344  | 1,714 | -1,751 | -2,410 | -212   |
| 70% Exceedance                              | 307   | -3,059 | -1,173 | 428    | 1,845  | 2,938  | 3,459  | 1,176  | 1,344 | -2,086 | -2,760 | -540   |
| 80% Exceedance                              | -96   | -3,497 | -2,907 | -644   | 1,166  | 2,211  | 2,487  | 969    | 1,136 | -2,765 | -3,294 | -771   |
| 90% Exceedance                              | -740  | -3,972 | -4,047 | -1,621 | 202    | 1,286  | 1,852  | 729    | 996   | -3,167 | -3,759 | -1,217 |
| Full Simulation Period Average <sup>a</sup> | 739   | -1,188 | 2,207  | 6,451  | 9,786  | 9,054  | 8,049  | 3,971  | 3,078 | -737   | -1,209 | 356    |
| Wet Water Years (29%)                       | 166   | -440   | 8,652  | 16,932 | 21,127 | 18,152 | 15,328 | 8,855  | 5,847 | -196   | -2,621 | 1,225  |
| Above Normal Water Years (12%)              | 1,414 | -2,217 | -280   | 7,672  | 12,355 | 12,064 | 9,553  | 3,642  | 2,818 | -1,428 | -3,062 | 1,945  |
| Below Normal Water Years (18%)              | 810   | -1,916 | -110   | 2,799  | 6,274  | 6,745  | 6,563  | 2,789  | 1,831 | -2,609 | -2,505 | -1,050 |
| Dry Water Years (22%)                       | 1,166 | -1,872 | -756   | 372    | 3,495  | 3,482  | 3,976  | 1,280  | 1,201 | -1,419 | 266    | -528   |
| Critical Water Years (19%)                  | 627   | -196   | -435   | 181    | 1,466  | 1,904  | 2,112  | 962    | 2,371 | 1,439  | 1,635  | 385    |

**Table 4H-2-7-1c. Qwest, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov  | Dec  | Jan | Feb  | Mar   | Apr    | May    | Jun | Jul  | Aug  | Sep  |
|---------------------------------------------|-----|------|------|-----|------|-------|--------|--------|-----|------|------|------|
| 10% Exceedance                              | 340 | 0    | 123  | 106 | 77   | 1,117 | 532    | -2,811 | 196 | 58   | 278  | -491 |
| 20% Exceedance                              | 26  | -31  | -47  | 363 | 680  | 439   | -219   | -1,643 | 25  | 424  | 207  | -6   |
| 30% Exceedance                              | 118 | -52  | -124 | 269 | -235 | 1,116 | -1,029 | -2,210 | 554 | 385  | 379  | -216 |
| 40% Exceedance                              | 57  | -108 | -49  | 125 | 328  | 408   | -615   | -1,605 | 502 | 39   | -148 | -155 |
| 50% Exceedance                              | 65  | -93  | -76  | 79  | 664  | 1,290 | -600   | -1,712 | 613 | -163 | -280 | -170 |
| 60% Exceedance                              | 130 | -273 | 29   | 3   | 577  | 1,799 | -392   | -1,521 | 636 | -277 | -219 | -63  |
| 70% Exceedance                              | -1  | 29   | 32   | 102 | 285  | 850   | -149   | -1,121 | 609 | -258 | -66  | -88  |
| 80% Exceedance                              | 2   | 27   | -96  | 394 | 457  | 547   | -302   | -1,088 | 569 | -323 | -130 | -108 |
| 90% Exceedance                              | 90  | -23  | 265  | 507 | 45   | 714   | -530   | -1,007 | 540 | -167 | -102 | -116 |
| Full Simulation Period Average <sup>a</sup> | 99  | -34  | -53  | 232 | 224  | 828   | -325   | -1,490 | 442 | -24  | 54   | -144 |
| Wet Water Years (29%)                       | 105 | -73  | 54   | 145 | -107 | 67    | -6     | -1,571 | 435 | -234 | -234 | -372 |
| Above Normal Water Years (12%)              | 93  | -104 | 37   | 129 | 244  | 1,482 | 398    | -621   | 475 | -582 | -229 | -419 |
| Below Normal Water Years (18%)              | 215 | 23   | -212 | 200 | 295  | 1,667 | -921   | -2,229 | 487 | -167 | 341  | -40  |
| Dry Water Years (22%)                       | 99  | -16  | 6    | 195 | 439  | 1,238 | -274   | -1,681 | 490 | 328  | 108  | 68   |
| Critical Water Years (19%)                  | -18 | -4   | -189 | 502 | 399  | 309   | -763   | -993   | 333 | 379  | 335  | 36   |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-7-2a. Qwest, Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun   | Jul    | Aug    | Sep    |
|---------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| 10% Exceedance                              | 1,856 | 1,554  | 10,077 | 19,192 | 23,292 | 20,053 | 16,062 | 13,145 | 7,107 | 1,789  | 1,462  | 3,022  |
| 20% Exceedance                              | 1,558 | -33    | 4,880  | 11,694 | 14,825 | 13,748 | 12,207 | 7,368  | 3,770 | 868    | 932    | 1,643  |
| 30% Exceedance                              | 1,131 | -320   | 1,901  | 5,838  | 12,049 | 8,907  | 10,443 | 5,361  | 2,393 | 250    | 287    | 991    |
| 40% Exceedance                              | 937   | -925   | 627    | 3,773  | 7,387  | 6,620  | 7,964  | 4,000  | 1,916 | -281   | -406   | 618    |
| 50% Exceedance                              | 813   | -1,568 | 385    | 2,592  | 5,086  | 4,210  | 6,208  | 3,386  | 1,431 | -849   | -1,720 | 98     |
| 60% Exceedance                              | 563   | -2,239 | -66    | 1,492  | 2,494  | 2,660  | 4,710  | 2,865  | 1,078 | -1,474 | -2,192 | -149   |
| 70% Exceedance                              | 308   | -3,089 | -1,204 | 326    | 1,560  | 2,088  | 3,608  | 2,297  | 735   | -1,829 | -2,694 | -453   |
| 80% Exceedance                              | -98   | -3,524 | -2,811 | -1,038 | 709    | 1,664  | 2,789  | 2,057  | 566   | -2,442 | -3,164 | -663   |
| 90% Exceedance                              | -830  | -3,949 | -4,312 | -2,128 | 157    | 571    | 2,381  | 1,735  | 456   | -3,001 | -3,657 | -1,101 |
| Full Simulation Period Average <sup>a</sup> | 640   | -1,154 | 2,259  | 6,219  | 9,563  | 8,225  | 8,373  | 5,461  | 2,636 | -713   | -1,263 | 500    |
| Wet Water Years (29%)                       | 61    | -367   | 8,598  | 16,787 | 21,234 | 18,085 | 15,333 | 10,426 | 5,412 | 39     | -2,387 | 1,597  |
| Above Normal Water Years (12%)              | 1,320 | -2,113 | -318   | 7,543  | 12,110 | 10,582 | 9,155  | 4,263  | 2,342 | -846   | -2,833 | 2,365  |
| Below Normal Water Years (18%)              | 595   | -1,939 | 102    | 2,599  | 5,979  | 5,077  | 7,483  | 5,018  | 1,344 | -2,442 | -2,847 | -1,011 |
| Dry Water Years (22%)                       | 1,066 | -1,856 | -762   | 177    | 3,057  | 2,244  | 4,250  | 2,961  | 711   | -1,748 | 158    | -596   |
| Critical Water Years (19%)                  | 645   | -192   | -245   | -321   | 1,067  | 1,595  | 2,874  | 1,955  | 2,038 | 1,060  | 1,300  | 349    |

**Table 4H-2-7-2b. Qwest, Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Flow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun   | Jul    | Aug    | Sep    |
|---------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| 10% Exceedance                              | 2,175 | 1,446  | 9,816  | 19,327 | 23,352 | 21,189 | 17,262 | 10,544 | 7,301 | 1,903  | 1,692  | 2,483  |
| 20% Exceedance                              | 1,577 | 61     | 4,740  | 12,054 | 15,368 | 14,107 | 13,164 | 6,814  | 3,582 | 1,384  | 1,124  | 1,505  |
| 30% Exceedance                              | 1,286 | -488   | 1,771  | 6,043  | 11,803 | 10,015 | 10,264 | 4,471  | 2,947 | 639    | 518    | 774    |
| 40% Exceedance                              | 988   | -973   | 539    | 3,859  | 7,686  | 7,156  | 8,808  | 3,669  | 2,392 | -191   | -601   | 459    |
| 50% Exceedance                              | 910   | -1,723 | 350    | 2,803  | 5,752  | 5,558  | 7,113  | 3,012  | 2,041 | -1,048 | -1,968 | -56    |
| 60% Exceedance                              | 731   | -2,520 | -92    | 1,410  | 3,071  | 4,516  | 5,535  | 2,482  | 1,707 | -1,786 | -2,454 | -200   |
| 70% Exceedance                              | 341   | -3,086 | -1,273 | 419    | 1,915  | 2,982  | 4,564  | 1,904  | 1,329 | -2,161 | -2,807 | -541   |
| 80% Exceedance                              | -99   | -3,540 | -2,792 | -669   | 1,232  | 2,316  | 3,199  | 1,561  | 1,097 | -2,602 | -3,267 | -805   |
| 90% Exceedance                              | -672  | -3,972 | -3,930 | -1,808 | -59    | 1,404  | 2,366  | 1,335  | 1,013 | -3,014 | -3,750 | -1,218 |
| Full Simulation Period Average <sup>a</sup> | 766   | -1,211 | 2,175  | 6,439  | 9,759  | 9,133  | 9,004  | 4,850  | 3,061 | -695   | -1,231 | 361    |
| Wet Water Years (29%)                       | 195   | -462   | 8,598  | 16,914 | 21,091 | 18,187 | 16,183 | 9,646  | 5,837 | -186   | -2,640 | 1,213  |
| Above Normal Water Years (12%)              | 1,467 | -2,256 | -275   | 7,621  | 12,323 | 12,117 | 10,791 | 4,757  | 2,799 | -1,292 | -3,044 | 1,979  |
| Below Normal Water Years (18%)              | 830   | -1,959 | -127   | 2,774  | 6,285  | 6,789  | 7,775  | 3,902  | 1,783 | -2,499 | -2,516 | -1,040 |
| Dry Water Years (22%)                       | 1,178 | -1,886 | -754   | 327    | 3,474  | 3,654  | 4,915  | 2,125  | 1,186 | -1,456 | 197    | -521   |
| Critical Water Years (19%)                  | 657   | -207   | -509   | 253    | 1,413  | 1,991  | 2,816  | 1,640  | 2,373 | 1,493  | 1,628  | 389    |

**Table 4H-2-7-2c. Qwest, Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Flow (cfs)**

| Statistic                                   | Oct | Nov  | Dec  | Jan | Feb  | Mar   | Apr   | May    | Jun  | Jul  | Aug  | Sep  |
|---------------------------------------------|-----|------|------|-----|------|-------|-------|--------|------|------|------|------|
| 10% Exceedance                              | 319 | -108 | -261 | 135 | 60   | 1,136 | 1,200 | -2,602 | 194  | 115  | 230  | -539 |
| 20% Exceedance                              | 19  | 93   | -140 | 360 | 543  | 359   | 957   | -554   | -187 | 516  | 192  | -138 |
| 30% Exceedance                              | 155 | -168 | -130 | 205 | -246 | 1,108 | -179  | -890   | 555  | 389  | 231  | -218 |
| 40% Exceedance                              | 51  | -48  | -88  | 87  | 298  | 536   | 844   | -331   | 475  | 90   | -195 | -159 |
| 50% Exceedance                              | 97  | -155 | -35  | 211 | 666  | 1,348 | 904   | -374   | 609  | -200 | -248 | -154 |
| 60% Exceedance                              | 168 | -281 | -26  | -82 | 578  | 1,856 | 825   | -382   | 629  | -312 | -262 | -50  |
| 70% Exceedance                              | 33  | 2    | -68  | 93  | 356  | 894   | 956   | -393   | 595  | -332 | -113 | -89  |
| 80% Exceedance                              | -1  | -16  | 19   | 370 | 523  | 653   | 410   | -496   | 531  | -161 | -103 | -142 |
| 90% Exceedance                              | 158 | -22  | 382  | 319 | -216 | 833   | -15   | -400   | 557  | -14  | -92  | -117 |
| Full Simulation Period Average <sup>a</sup> | 126 | -58  | -85  | 220 | 197  | 907   | 631   | -612   | 425  | 17   | 32   | -139 |
| Wet Water Years (29%)                       | 134 | -95  | -1   | 128 | -143 | 102   | 849   | -780   | 424  | -225 | -253 | -384 |
| Above Normal Water Years (12%)              | 146 | -142 | 43   | 79  | 212  | 1,535 | 1,636 | 494    | 457  | -446 | -211 | -385 |
| Below Normal Water Years (18%)              | 235 | -20  | -230 | 175 | 305  | 1,712 | 292   | -1,116 | 439  | -57  | 331  | -29  |
| Dry Water Years (22%)                       | 111 | -30  | 8    | 150 | 418  | 1,410 | 666   | -836   | 475  | 292  | 39   | 75   |
| Critical Water Years (19%)                  | 12  | -15  | -264 | 574 | 346  | 396   | -58   | -315   | 336  | 433  | 328  | 40   |

<sup>a</sup> Based on the 100-year simulation period.

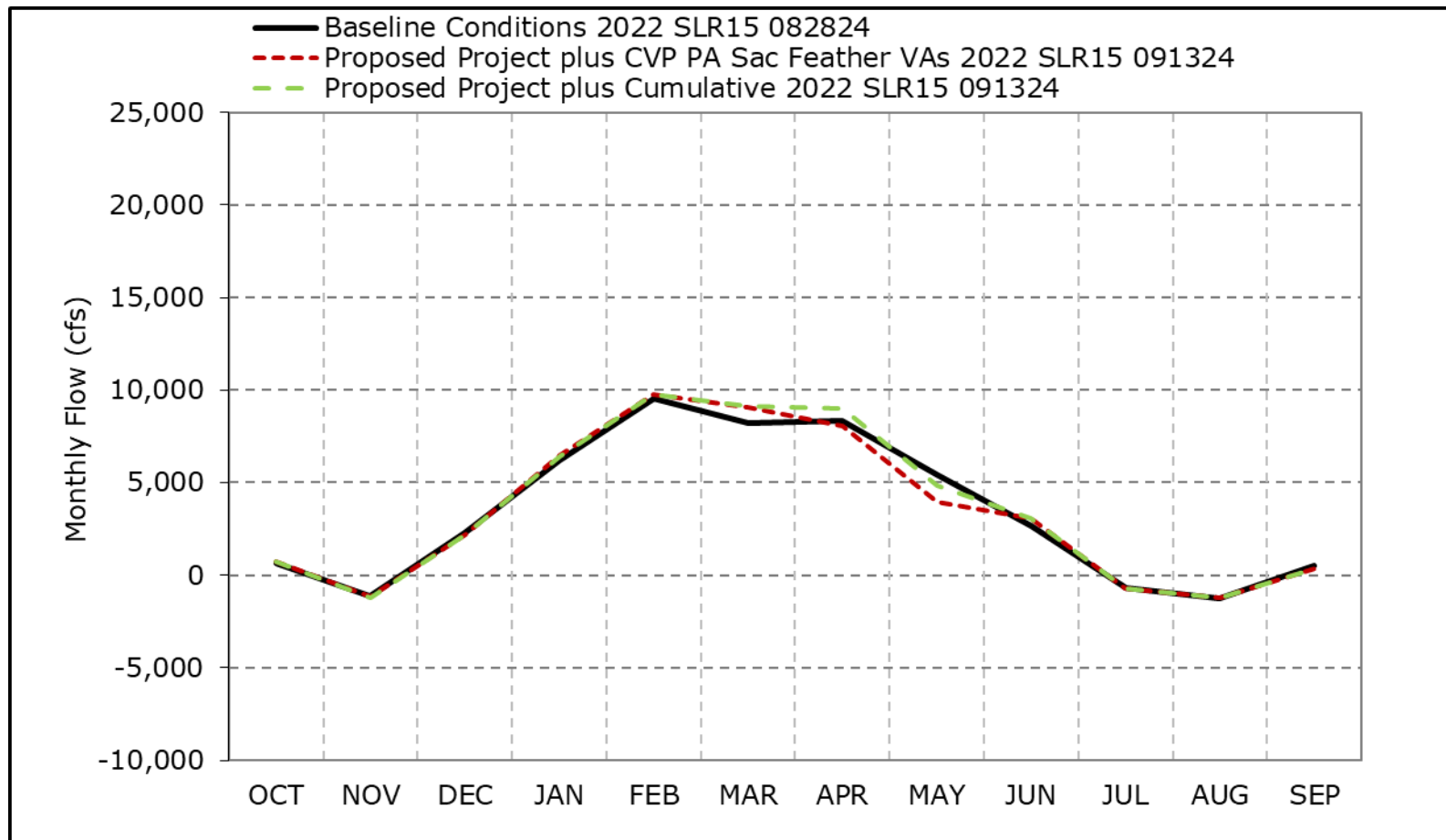
\* All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

\* 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 4H-2-7a. Qwest, Long-Term Average Flow**

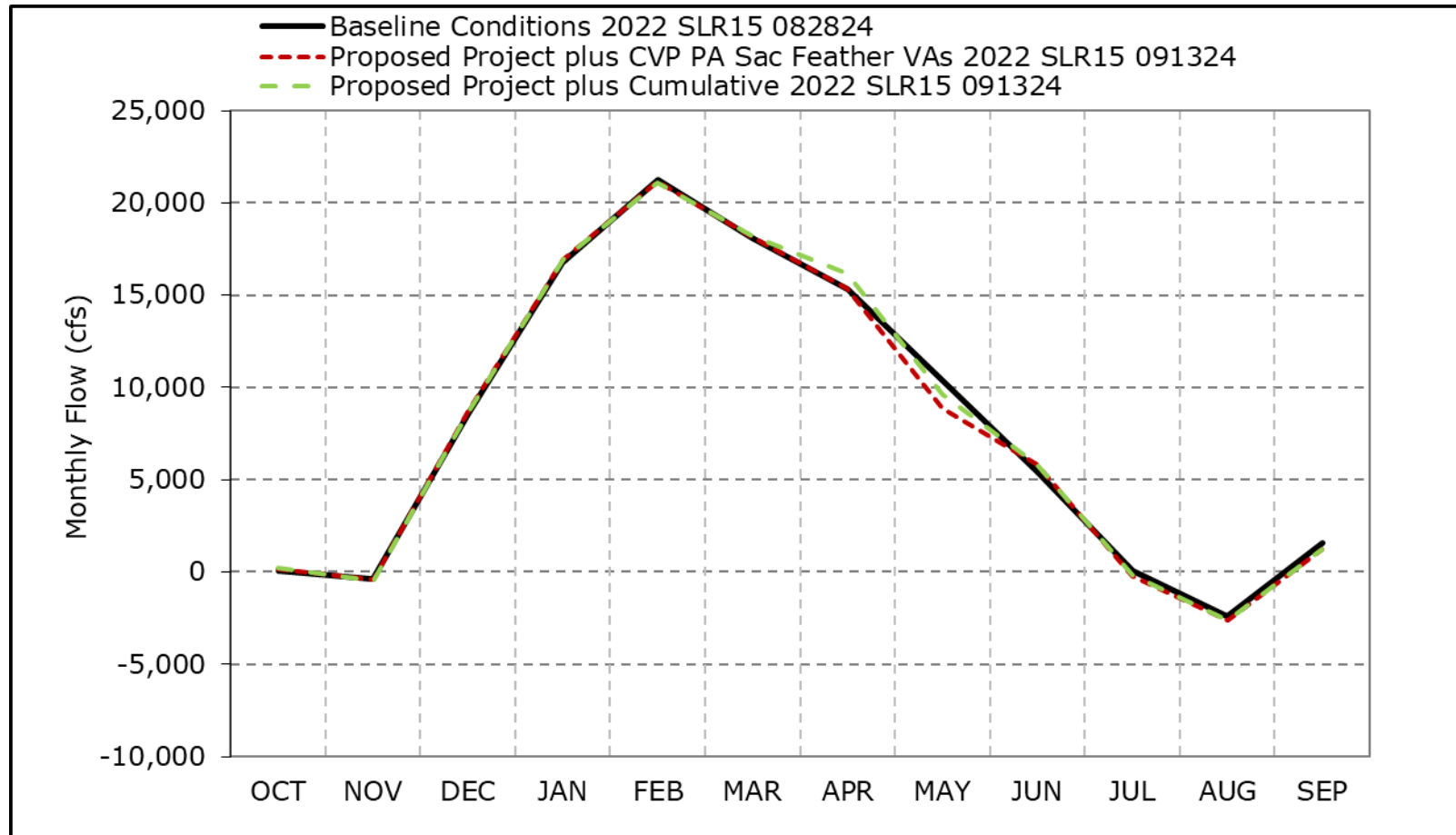


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7b. Qwest, Wet Year Average Flow**

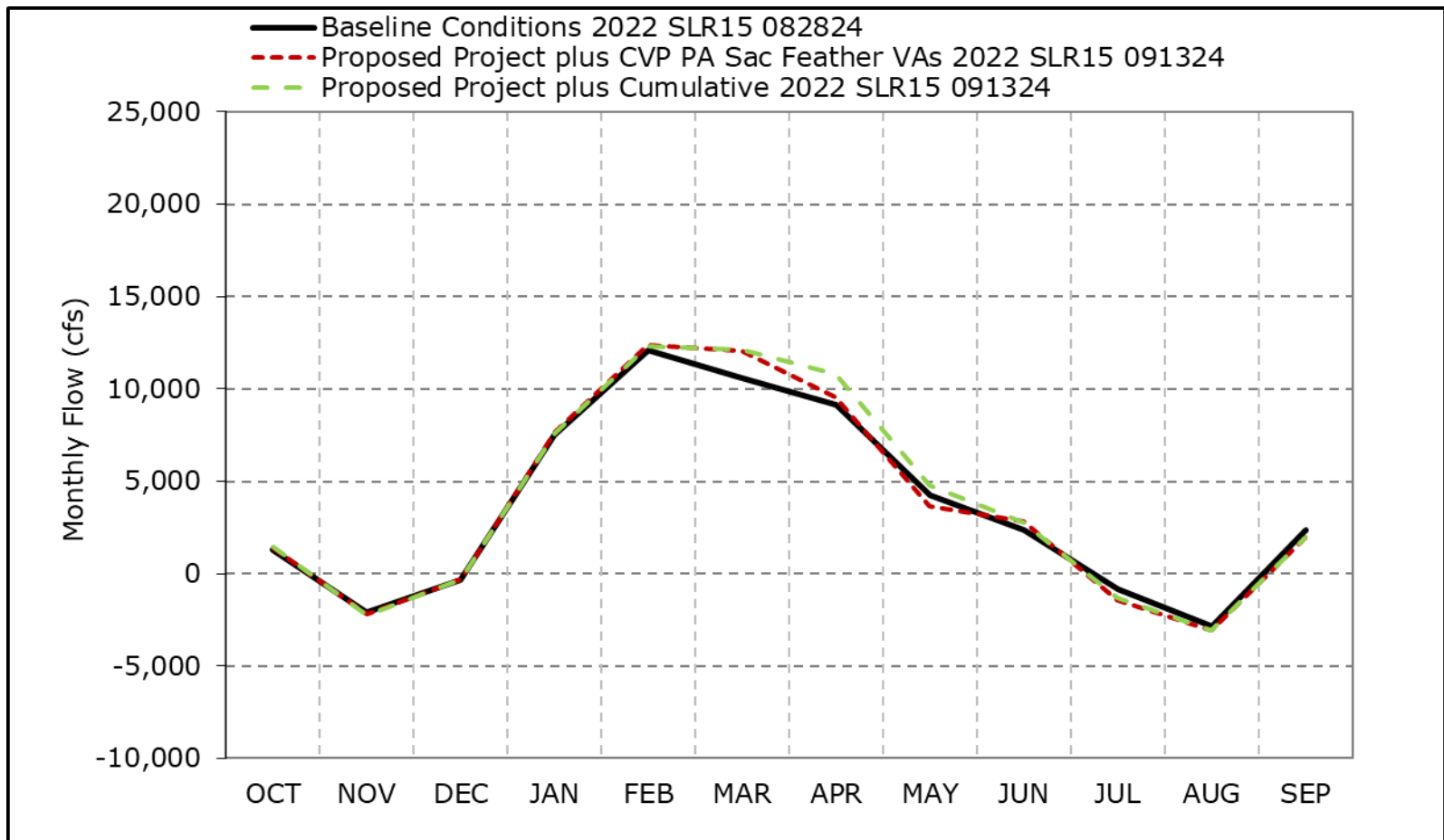


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7c. Qwest, Above Normal Year Average Flow**

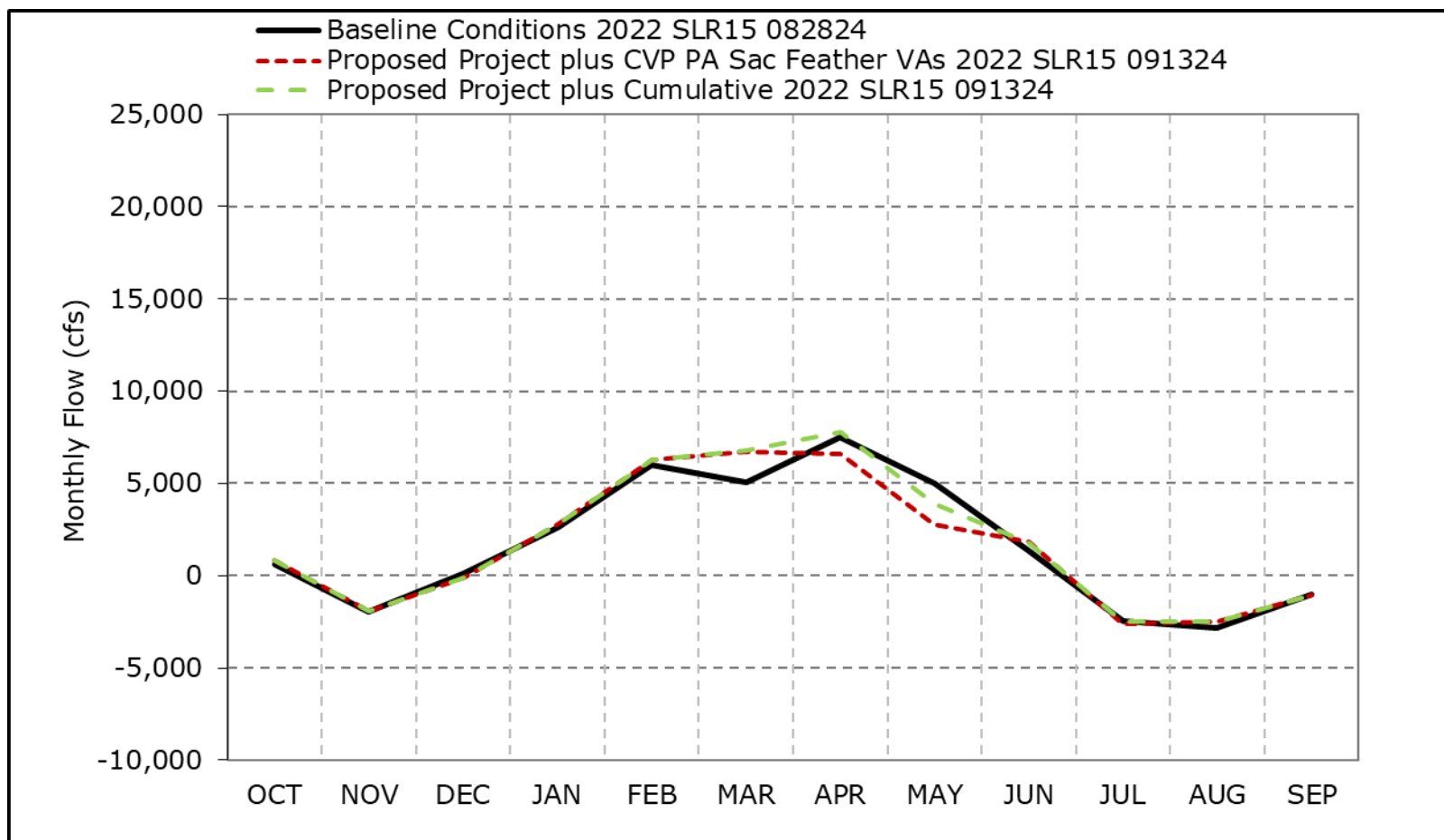


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7d. Qwest, Below Normal Year Average Flow**

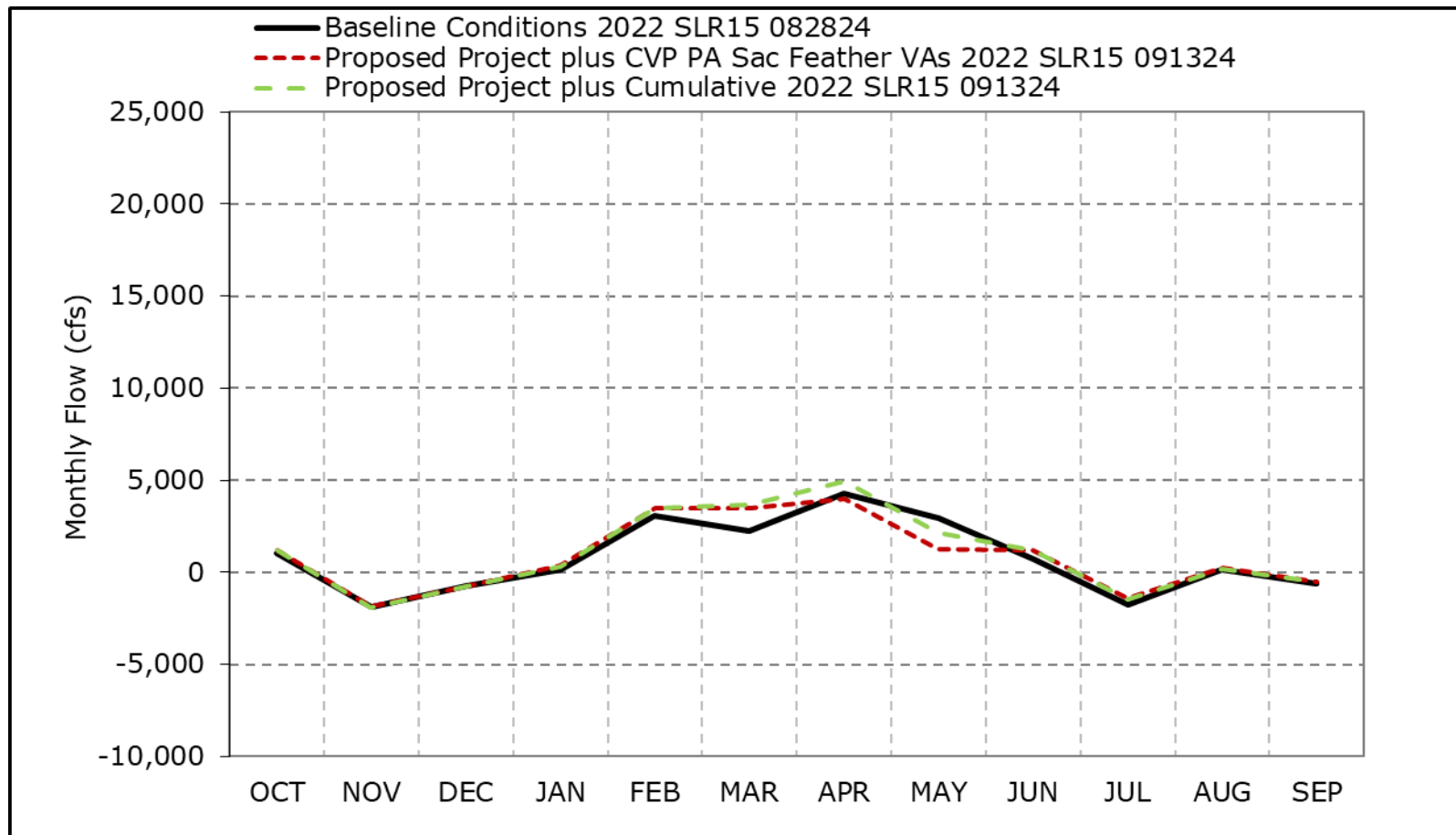


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7e. Qwest, Dry Year Average Flow**

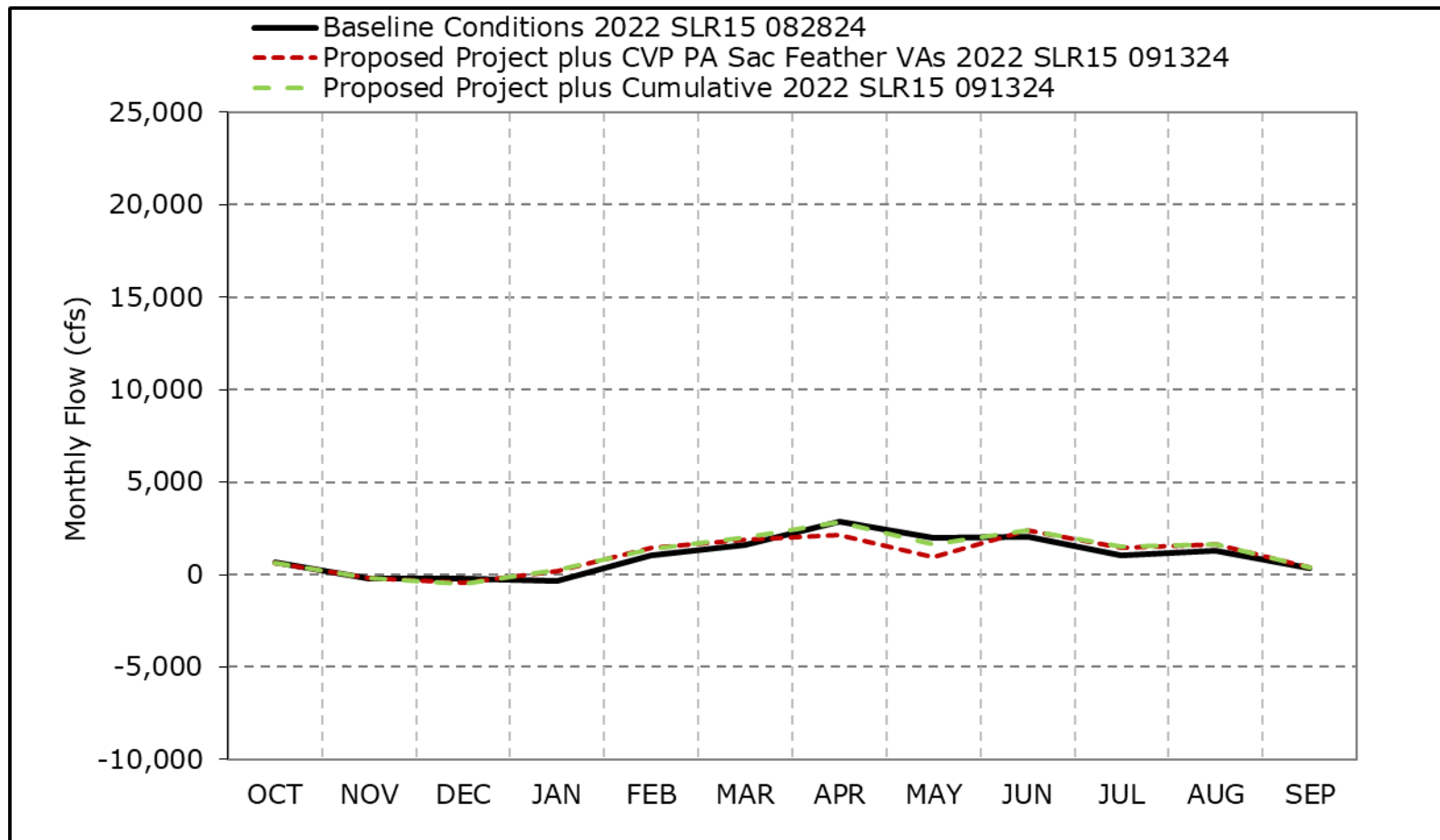


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7f. Qwest, Critical Year Average Flow**

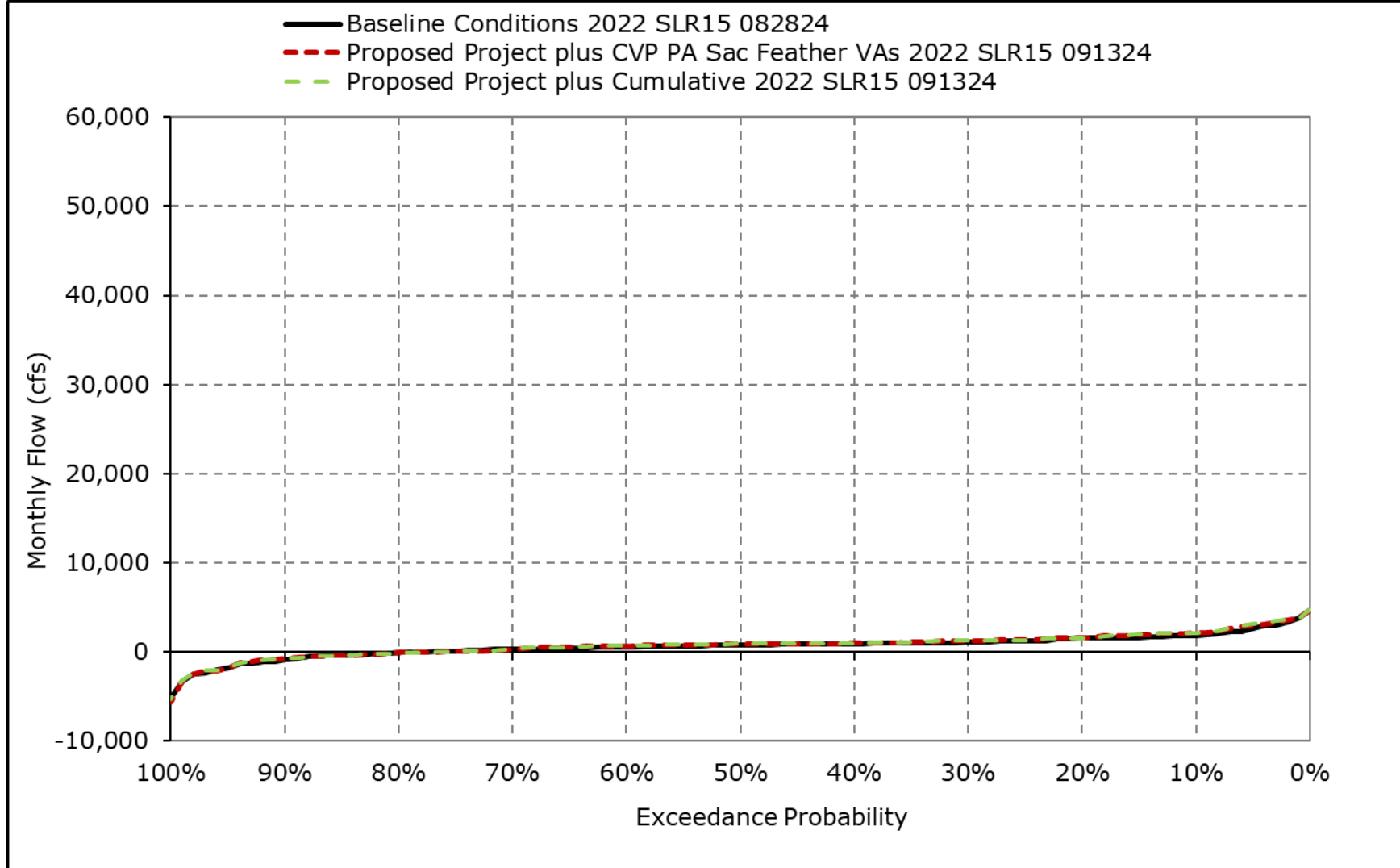


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

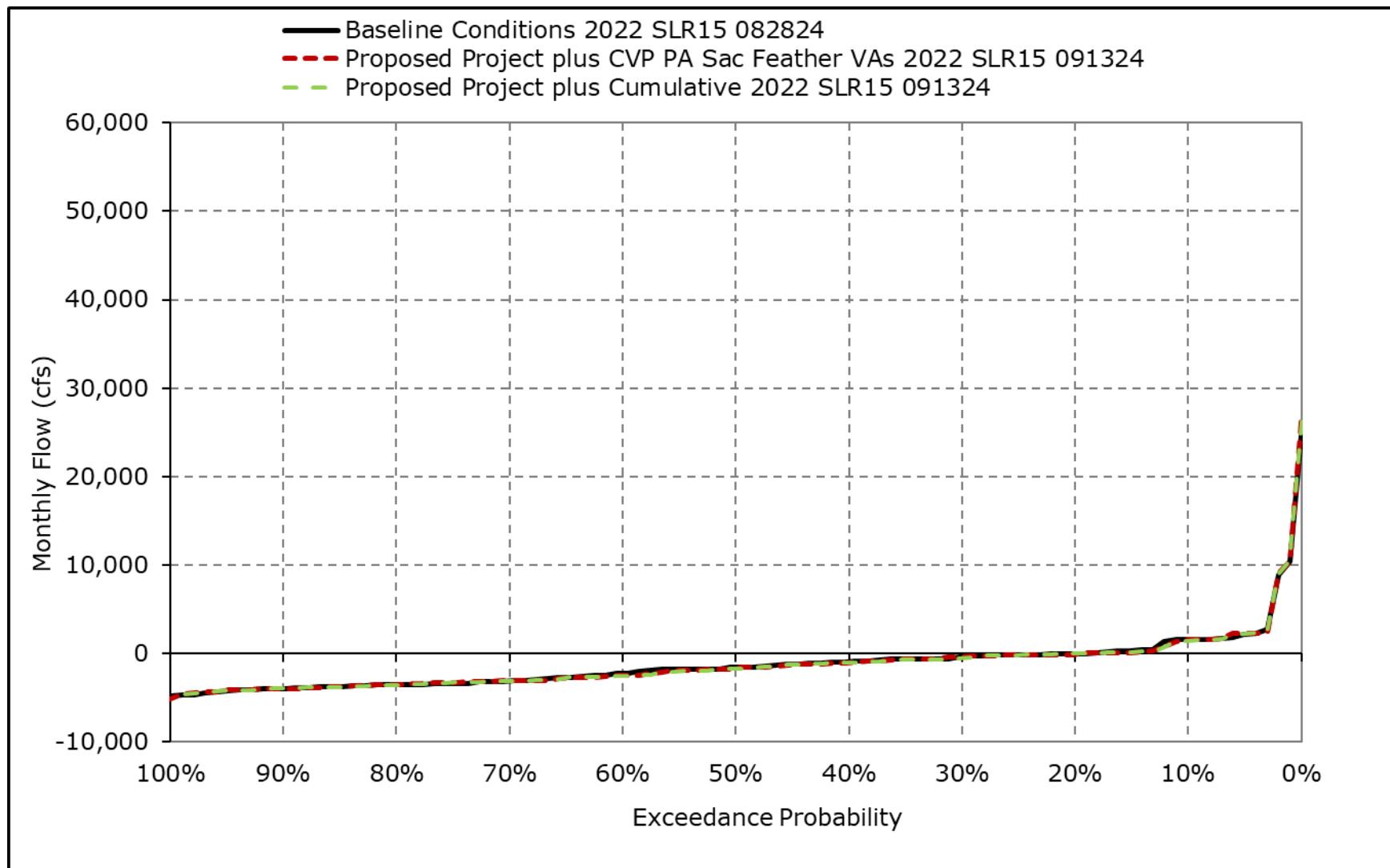
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7g. Qwest, October**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

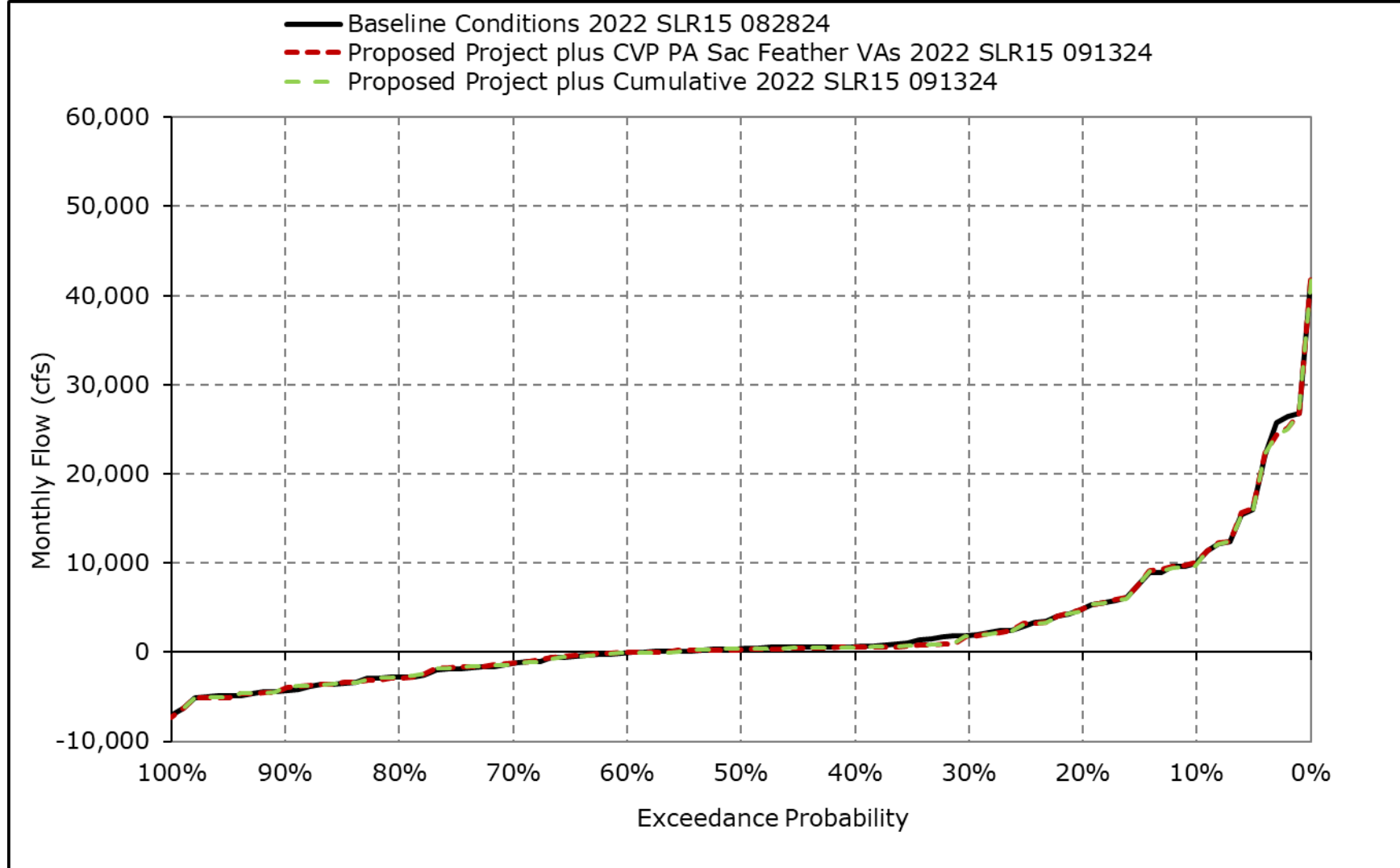
**Figure 4H-2-7h. Qwest, November**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

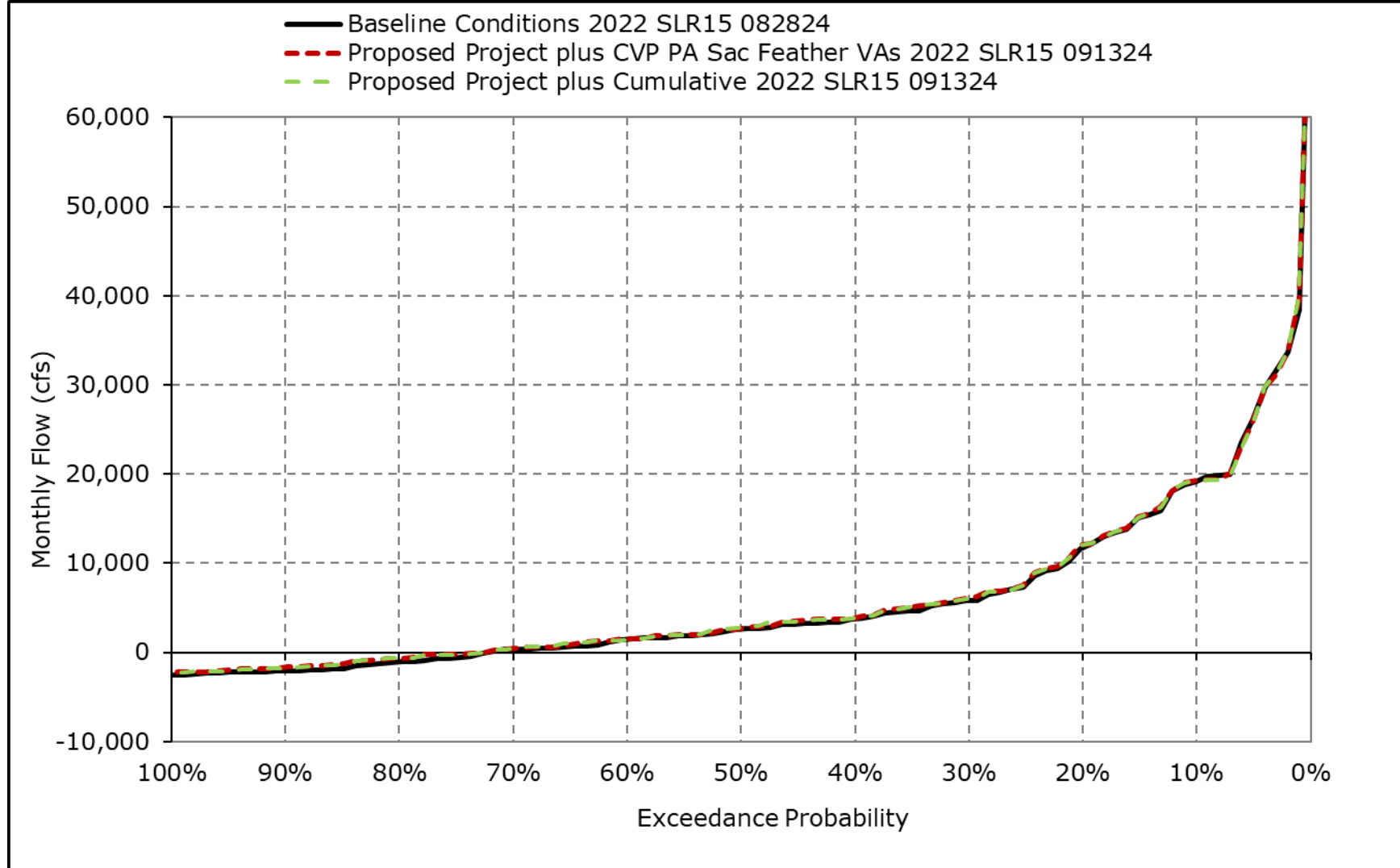


**Figure 4H-2-7i. Qwest, December**



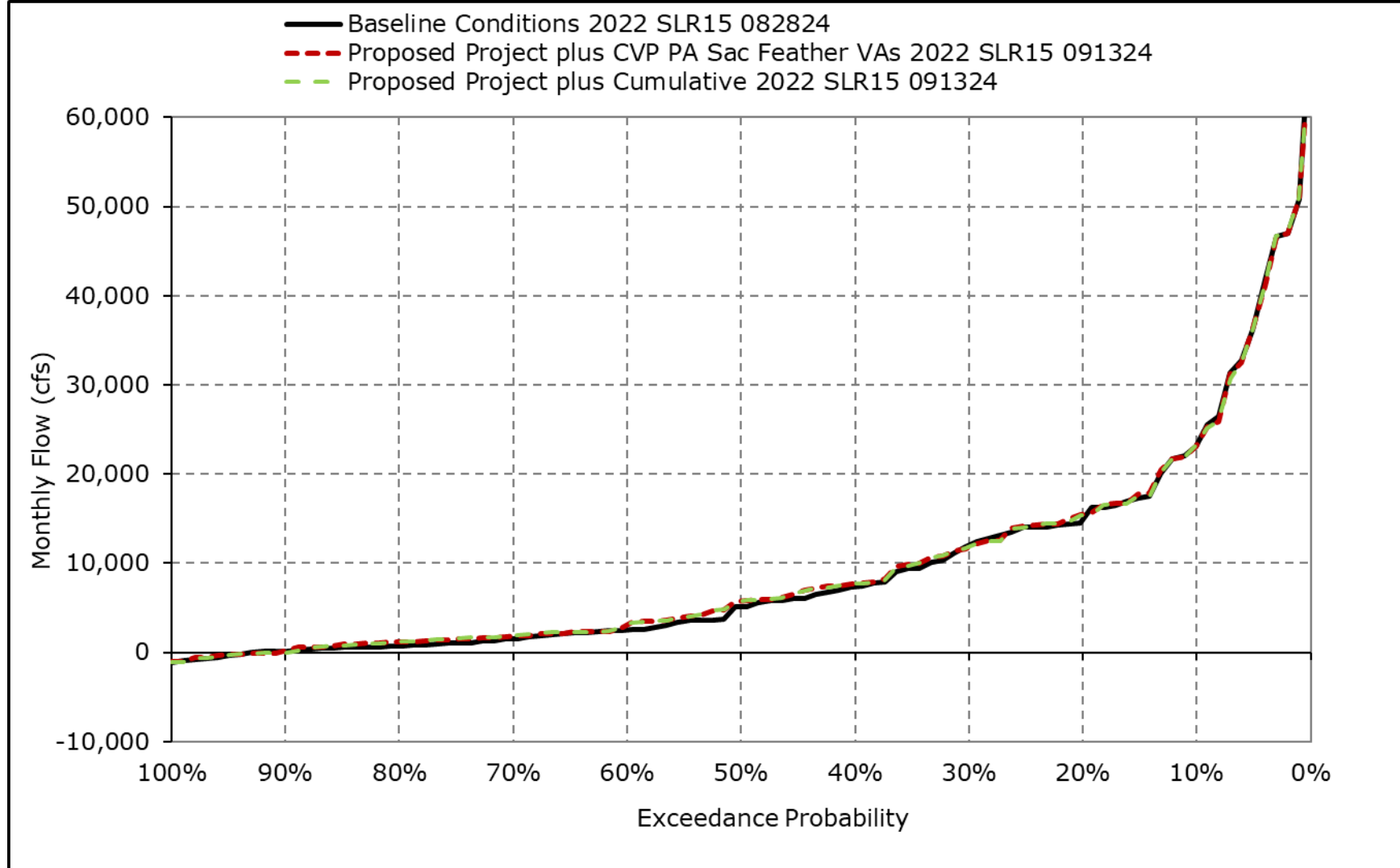
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7j. Qwest, January**



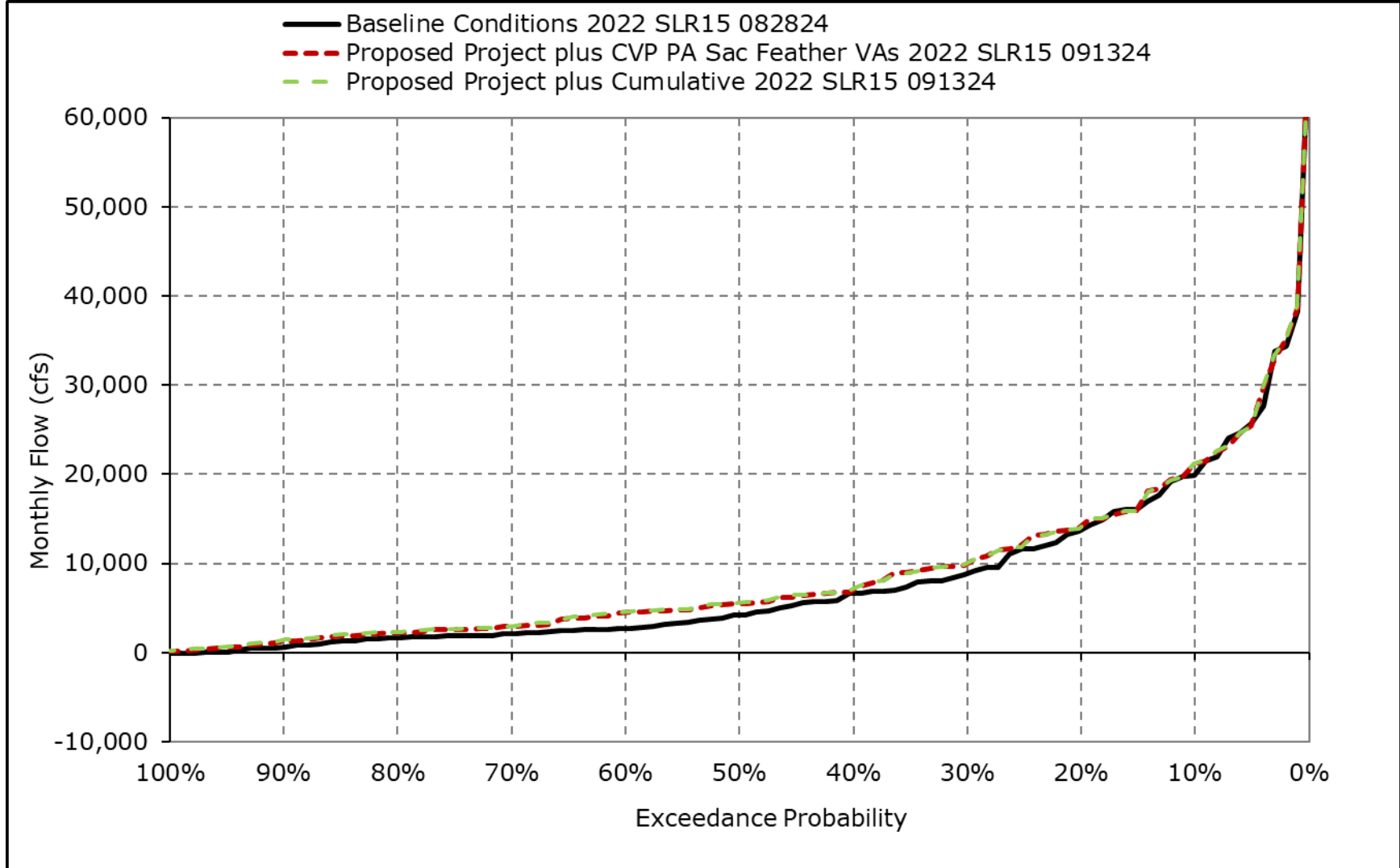
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7k. Qwest, February**



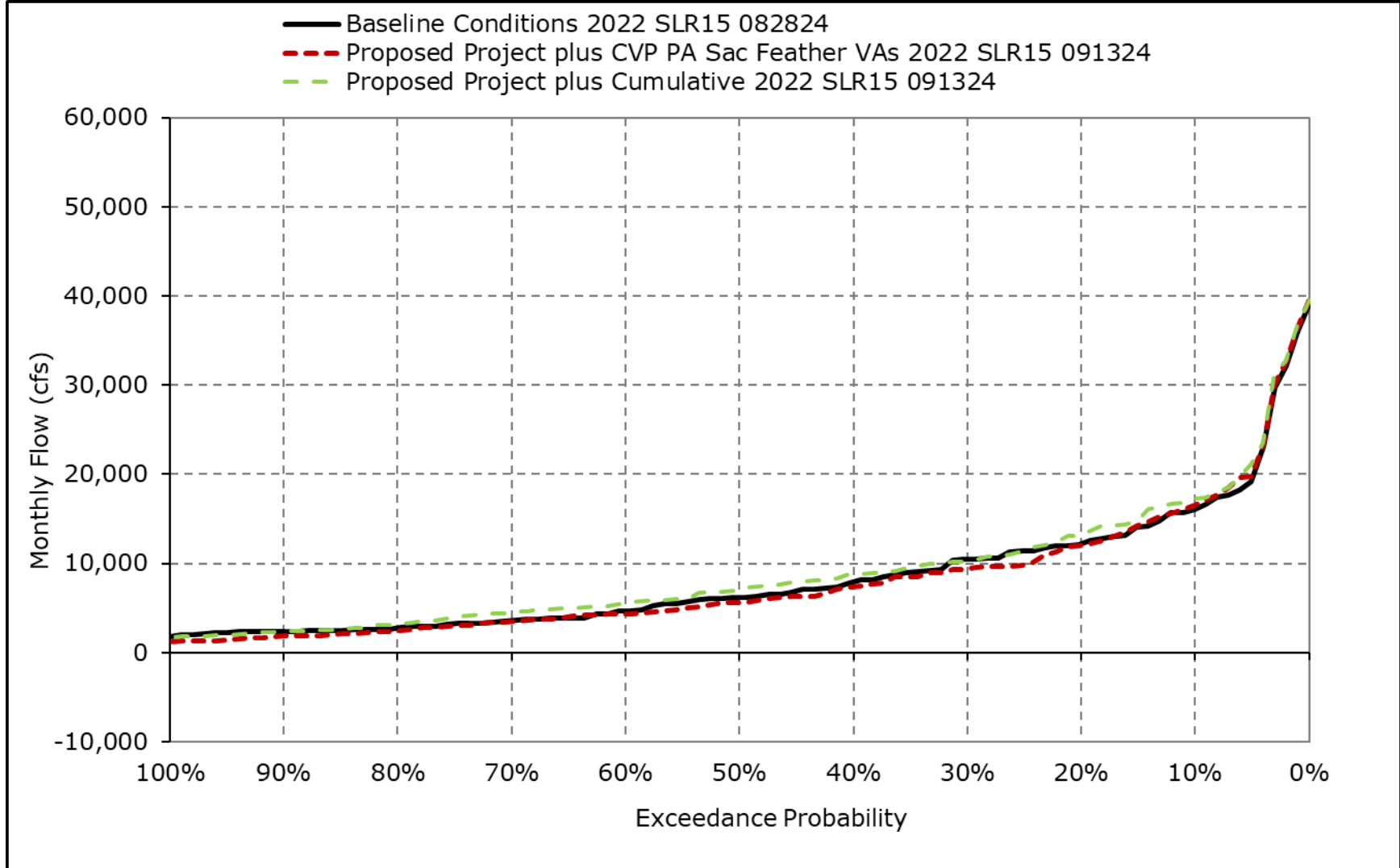
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7I. Qwest, March**



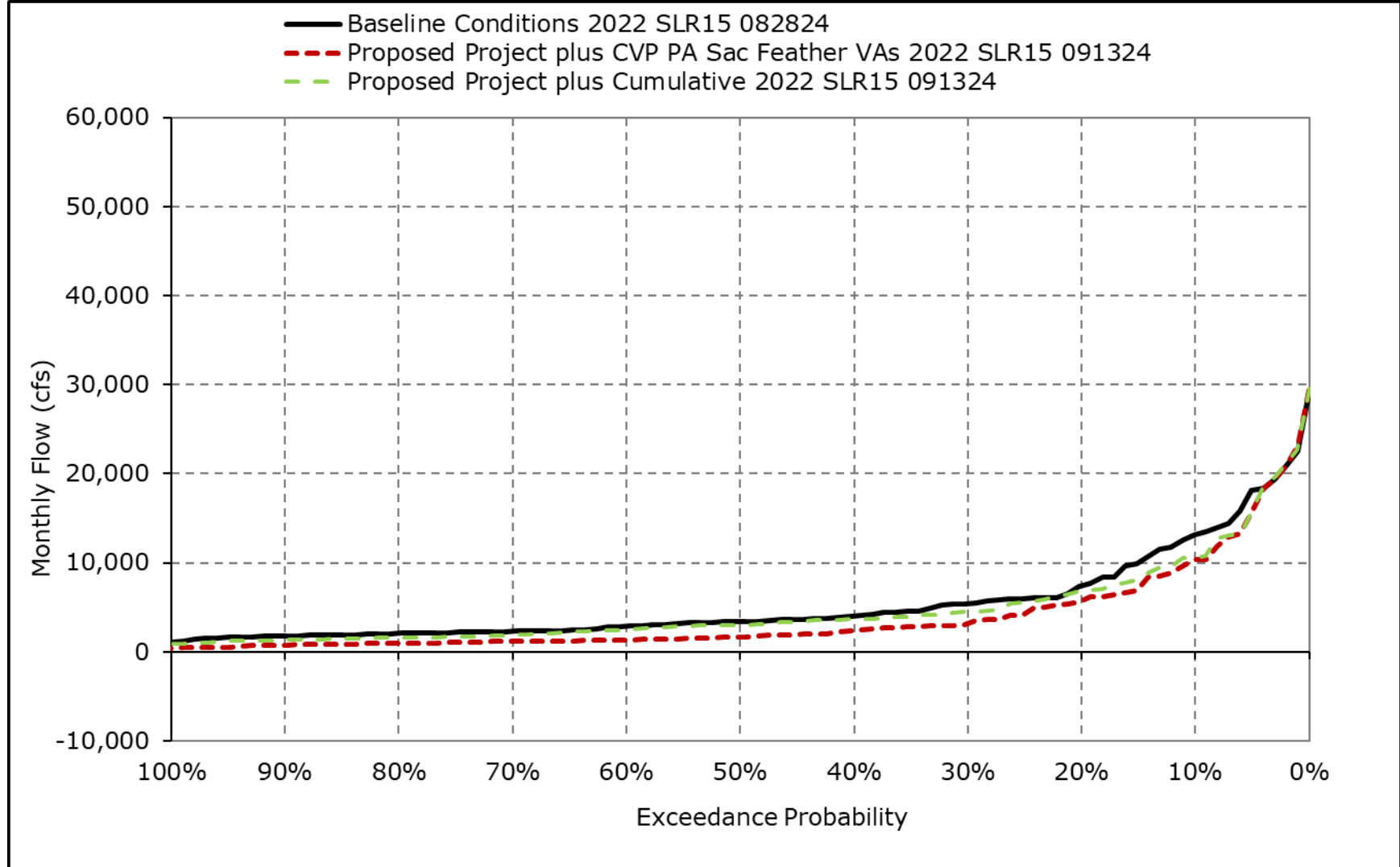
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7m. Qwest, April**



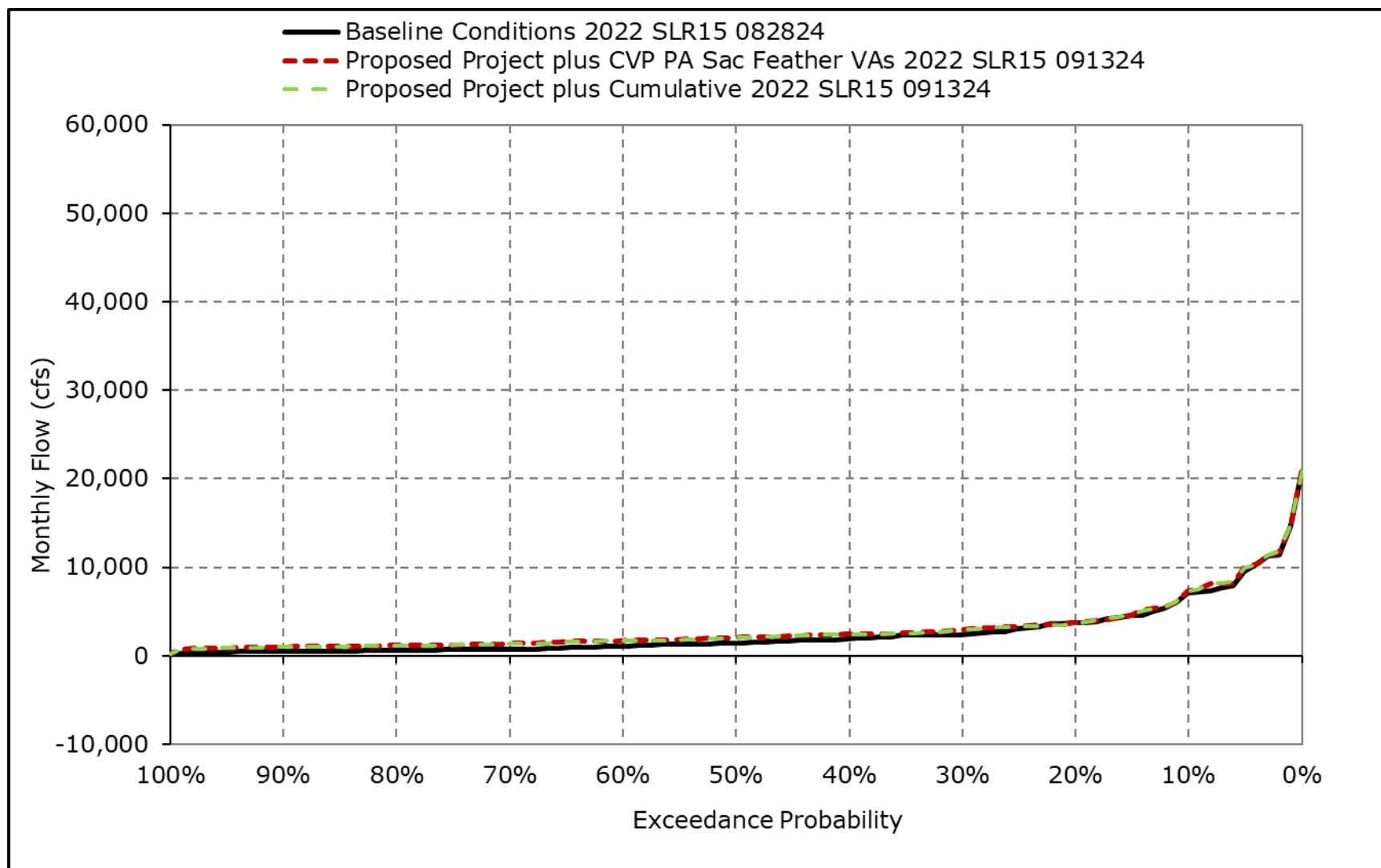
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7n. Qwest, May**



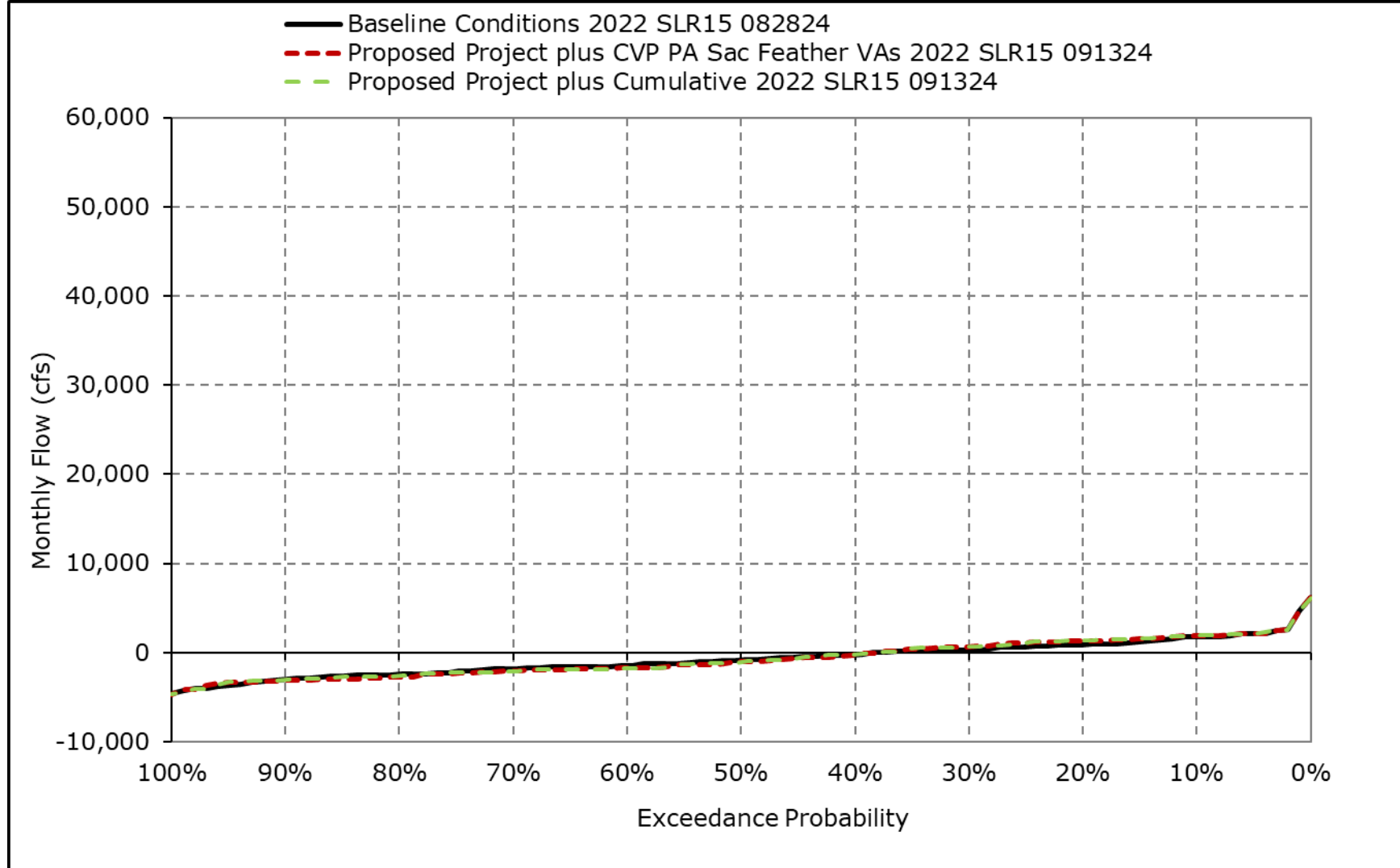
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7o. Qwest, June**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

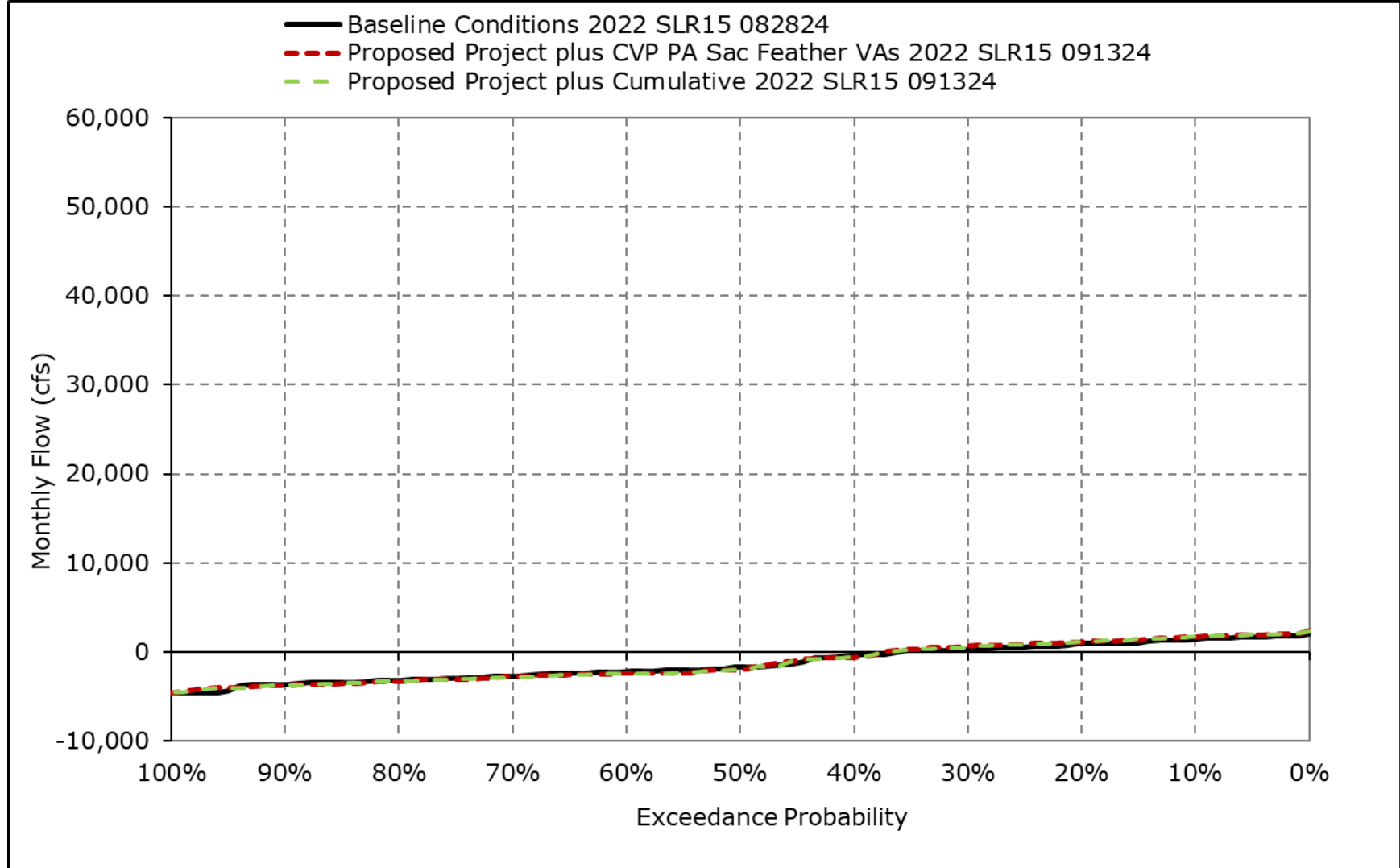
**Figure 4H-2-7p. Qwest, July**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

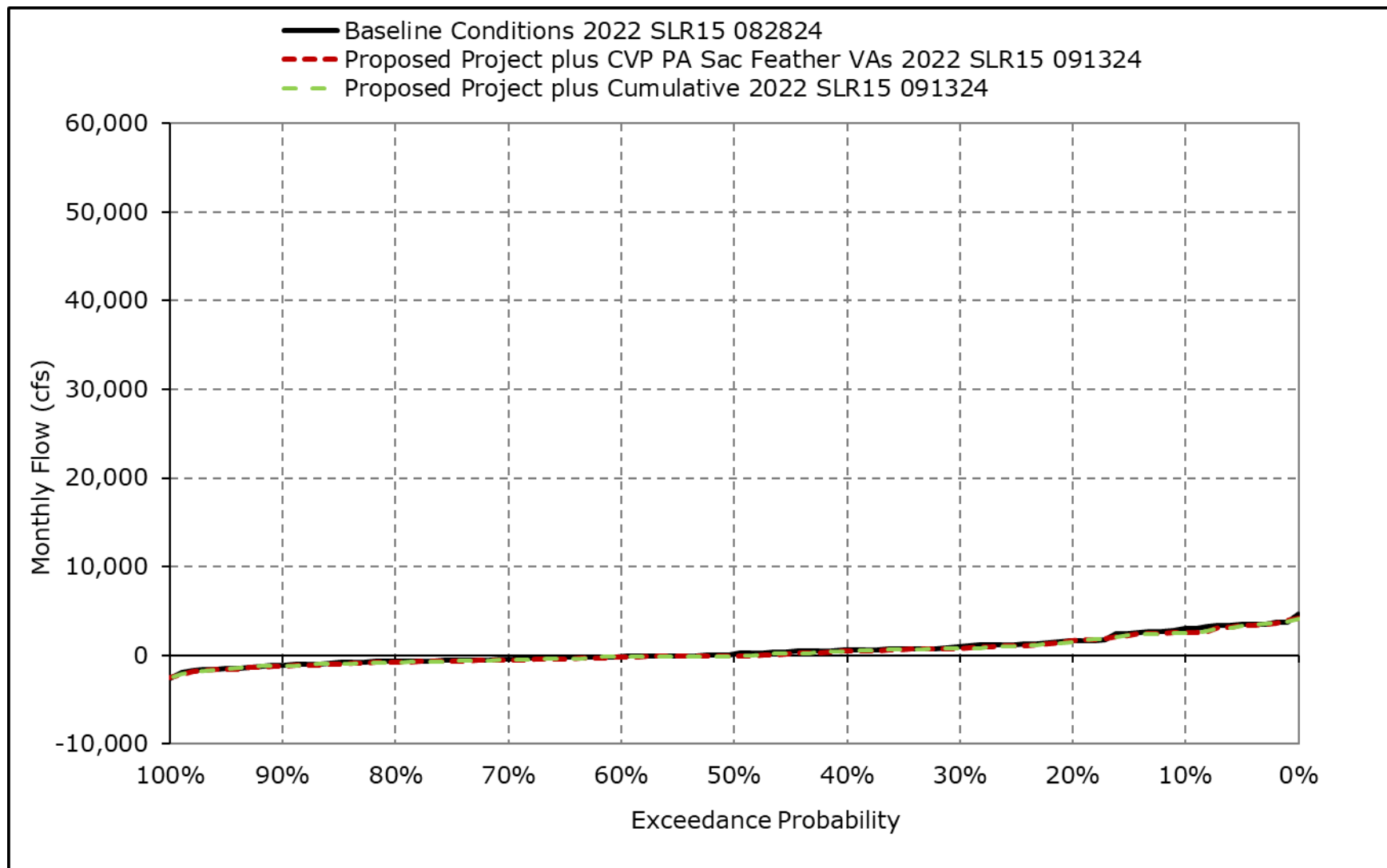


**Figure 4H-2-7q. Qwest, August**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-7r. Qwest, September**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Table 4H-2-8-1a. Delta Outflow, Baseline Conditions 2022 SLR15 082824, Monthly Outflow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan     | Feb     | Mar     | Apr    | May    | Jun    | Jul    | Aug   | Sep    |
|---------------------------------------------|-------|--------|--------|---------|---------|---------|--------|--------|--------|--------|-------|--------|
| 10% Exceedance                              | 8,438 | 13,721 | 74,572 | 110,169 | 144,509 | 104,906 | 58,174 | 37,316 | 14,212 | 11,280 | 6,138 | 10,938 |
| 20% Exceedance                              | 8,125 | 7,635  | 39,348 | 74,246  | 94,647  | 69,869  | 45,749 | 25,998 | 9,356  | 10,180 | 5,910 | 10,781 |
| 30% Exceedance                              | 8,125 | 6,855  | 22,567 | 40,991  | 62,534  | 48,327  | 31,591 | 17,405 | 8,498  | 9,328  | 5,771 | 10,625 |
| 40% Exceedance                              | 7,969 | 6,069  | 16,845 | 30,406  | 52,512  | 35,596  | 23,700 | 14,654 | 7,620  | 9,082  | 5,418 | 10,313 |
| 50% Exceedance                              | 5,259 | 5,668  | 11,066 | 23,356  | 32,547  | 25,174  | 19,170 | 12,555 | 7,100  | 8,544  | 4,309 | 3,785  |
| 60% Exceedance                              | 4,347 | 5,320  | 8,025  | 17,656  | 22,147  | 21,061  | 15,510 | 11,353 | 7,100  | 5,645  | 4,000 | 3,199  |
| 70% Exceedance                              | 4,033 | 4,916  | 7,043  | 11,878  | 18,342  | 17,683  | 13,143 | 10,527 | 6,941  | 5,434  | 4,000 | 3,013  |
| 80% Exceedance                              | 4,000 | 4,517  | 5,996  | 9,453   | 13,045  | 14,220  | 11,429 | 9,430  | 6,534  | 5,000  | 3,500 | 3,000  |
| 90% Exceedance                              | 3,706 | 4,500  | 5,121  | 7,497   | 11,119  | 10,299  | 9,944  | 7,716  | 4,006  | 4,000  | 3,000 | 3,000  |
| Full Simulation Period Average <sup>a</sup> | 6,468 | 8,798  | 26,396 | 44,166  | 58,539  | 45,533  | 29,043 | 18,112 | 8,991  | 7,627  | 4,694 | 6,508  |
| Wet Water Years (29%)                       | 8,072 | 15,407 | 58,523 | 96,589  | 121,241 | 89,120  | 54,514 | 30,392 | 13,739 | 9,943  | 5,981 | 11,257 |
| Above Normal Water Years (12%)              | 6,479 | 5,835  | 16,234 | 52,397  | 68,686  | 61,672  | 31,717 | 18,776 | 9,262  | 10,550 | 6,210 | 10,915 |
| Below Normal Water Years (18%)              | 6,446 | 5,797  | 15,672 | 24,653  | 36,679  | 29,838  | 23,350 | 17,867 | 7,378  | 8,625  | 4,145 | 3,538  |
| Dry Water Years (22%)                       | 5,993 | 6,940  | 13,164 | 15,163  | 25,653  | 20,015  | 14,724 | 11,190 | 6,928  | 5,292  | 4,009 | 3,302  |
| Critical Water Years (19%)                  | 4,585 | 5,578  | 9,261  | 11,019  | 15,214  | 13,230  | 10,450 | 7,199  | 5,491  | 4,002  | 3,087 | 3,001  |

**Table 4H-2-8-1b. Delta Outflow, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324, Monthly Outflow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan     | Feb     | Mar     | Apr    | May    | Jun    | Jul    | Aug   | Sep    |
|---------------------------------------------|-------|--------|--------|---------|---------|---------|--------|--------|--------|--------|-------|--------|
| 10% Exceedance                              | 9,063 | 13,852 | 76,389 | 112,005 | 144,497 | 104,391 | 58,669 | 35,738 | 14,035 | 10,416 | 5,792 | 11,263 |
| 20% Exceedance                              | 8,251 | 7,709  | 40,262 | 74,393  | 94,795  | 71,748  | 44,623 | 26,214 | 10,075 | 9,205  | 5,630 | 10,938 |
| 30% Exceedance                              | 8,125 | 6,908  | 23,267 | 42,017  | 62,771  | 50,022  | 31,071 | 17,752 | 8,896  | 9,024  | 5,532 | 10,793 |
| 40% Exceedance                              | 7,813 | 6,138  | 16,792 | 32,642  | 53,353  | 36,969  | 24,422 | 13,163 | 8,002  | 8,535  | 5,284 | 10,625 |
| 50% Exceedance                              | 5,350 | 5,584  | 11,591 | 24,346  | 35,477  | 27,338  | 19,411 | 11,793 | 7,241  | 7,910  | 4,006 | 3,864  |
| 60% Exceedance                              | 4,360 | 5,335  | 8,023  | 17,621  | 22,551  | 23,218  | 15,807 | 10,335 | 7,100  | 5,243  | 4,000 | 3,347  |
| 70% Exceedance                              | 4,071 | 4,963  | 6,920  | 11,945  | 18,443  | 17,937  | 13,525 | 9,477  | 7,100  | 5,010  | 3,597 | 3,032  |
| 80% Exceedance                              | 4,001 | 4,510  | 6,072  | 9,694   | 14,714  | 14,709  | 11,531 | 8,854  | 6,863  | 5,000  | 3,500 | 3,017  |
| 90% Exceedance                              | 3,503 | 4,500  | 5,139  | 7,658   | 10,879  | 10,230  | 10,027 | 7,039  | 4,169  | 4,000  | 3,025 | 3,000  |
| Full Simulation Period Average <sup>a</sup> | 6,573 | 8,917  | 26,757 | 44,701  | 59,156  | 46,442  | 29,238 | 17,098 | 9,259  | 7,251  | 4,524 | 6,585  |
| Wet Water Years (29%)                       | 8,217 | 15,673 | 59,594 | 97,312  | 121,532 | 89,255  | 54,650 | 28,933 | 14,147 | 9,626  | 5,792 | 11,257 |
| Above Normal Water Years (12%)              | 6,600 | 5,926  | 16,390 | 53,035  | 69,173  | 63,801  | 33,084 | 18,960 | 9,356  | 9,902  | 5,795 | 11,246 |
| Below Normal Water Years (18%)              | 6,538 | 5,893  | 15,578 | 25,198  | 37,391  | 31,546  | 23,341 | 16,173 | 7,934  | 7,804  | 4,122 | 3,611  |
| Dry Water Years (22%)                       | 6,097 | 6,961  | 13,526 | 15,221  | 26,429  | 21,232  | 15,113 | 10,369 | 7,077  | 5,027  | 3,699 | 3,411  |
| Critical Water Years (19%)                  | 4,629 | 5,627  | 9,093  | 11,750  | 16,138  | 13,435  | 9,967  | 6,526  | 5,515  | 4,002  | 3,124 | 3,003  |

**Table 4H-2-8-1c. Delta Outflow, Proposed Project plus CVP PA Sac Feather VAs 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Outflow (cfs)**

| Statistic                                   | Oct  | Nov | Dec   | Jan   | Feb   | Mar   | Apr    | May    | Jun  | Jul  | Aug  | Sep |
|---------------------------------------------|------|-----|-------|-------|-------|-------|--------|--------|------|------|------|-----|
| 10% Exceedance                              | 625  | 131 | 1,818 | 1,836 | -13   | -515  | 495    | -1,578 | -177 | -864 | -346 | 325 |
| 20% Exceedance                              | 126  | 74  | 914   | 148   | 148   | 1,878 | -1,126 | 216    | 720  | -975 | -280 | 156 |
| 30% Exceedance                              | 0    | 53  | 699   | 1,026 | 237   | 1,696 | -519   | 346    | 397  | -303 | -240 | 168 |
| 40% Exceedance                              | -156 | 69  | -54   | 2,237 | 841   | 1,373 | 722    | -1,491 | 382  | -547 | -134 | 313 |
| 50% Exceedance                              | 92   | -84 | 524   | 990   | 2,931 | 2,164 | 241    | -762   | 141  | -633 | -303 | 79  |
| 60% Exceedance                              | 14   | 16  | -2    | -34   | 404   | 2,157 | 297    | -1,018 | 0    | -402 | 0    | 148 |
| 70% Exceedance                              | 38   | 47  | -122  | 68    | 102   | 254   | 382    | -1,050 | 159  | -424 | -403 | 20  |
| 80% Exceedance                              | 1    | -6  | 76    | 241   | 1,669 | 490   | 102    | -575   | 328  | 0    | 0    | 17  |
| 90% Exceedance                              | -203 | 0   | 19    | 161   | -240  | -69   | 83     | -677   | 162  | 0    | 25   | 0   |
| Full Simulation Period Average <sup>a</sup> | 104  | 119 | 360   | 536   | 617   | 909   | 195    | -1,015 | 267  | -376 | -170 | 77  |
| Wet Water Years (29%)                       | 145  | 266 | 1,071 | 723   | 291   | 135   | 136    | -1,459 | 408  | -317 | -189 | 0   |
| Above Normal Water Years (12%)              | 121  | 91  | 156   | 638   | 487   | 2,129 | 1,367  | 184    | 94   | -648 | -415 | 330 |
| Below Normal Water Years (18%)              | 92   | 96  | -94   | 544   | 712   | 1,708 | -10    | -1,694 | 557  | -820 | -23  | 73  |
| Dry Water Years (22%)                       | 105  | 21  | 363   | 58    | 776   | 1,217 | 388    | -822   | 149  | -264 | -311 | 110 |
| Critical Water Years (19%)                  | 43   | 49  | -168  | 731   | 924   | 204   | -483   | -674   | 24   | 0    | 37   | 3   |

<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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.

**Table 4H-2-8-2a. Delta Outflow, Baseline Conditions 2022 SLR15 082824, Monthly Outflow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan     | Feb     | Mar     | Apr    | May    | Jun    | Jul    | Aug   | Sep    |
|---------------------------------------------|-------|--------|--------|---------|---------|---------|--------|--------|--------|--------|-------|--------|
| 10% Exceedance                              | 8,438 | 13,721 | 74,572 | 110,169 | 144,509 | 104,906 | 58,174 | 37,316 | 14,212 | 11,280 | 6,138 | 10,938 |
| 20% Exceedance                              | 8,125 | 7,635  | 39,348 | 74,246  | 94,647  | 69,869  | 45,749 | 25,998 | 9,356  | 10,180 | 5,910 | 10,781 |
| 30% Exceedance                              | 8,125 | 6,855  | 22,567 | 40,991  | 62,534  | 48,327  | 31,591 | 17,405 | 8,498  | 9,328  | 5,771 | 10,625 |
| 40% Exceedance                              | 7,969 | 6,069  | 16,845 | 30,406  | 52,512  | 35,596  | 23,700 | 14,654 | 7,620  | 9,082  | 5,418 | 10,313 |
| 50% Exceedance                              | 5,259 | 5,668  | 11,066 | 23,356  | 32,547  | 25,174  | 19,170 | 12,555 | 7,100  | 8,544  | 4,309 | 3,785  |
| 60% Exceedance                              | 4,347 | 5,320  | 8,025  | 17,656  | 22,147  | 21,061  | 15,510 | 11,353 | 7,100  | 5,645  | 4,000 | 3,199  |
| 70% Exceedance                              | 4,033 | 4,916  | 7,043  | 11,878  | 18,342  | 17,683  | 13,143 | 10,527 | 6,941  | 5,434  | 4,000 | 3,013  |
| 80% Exceedance                              | 4,000 | 4,517  | 5,996  | 9,453   | 13,045  | 14,220  | 11,429 | 9,430  | 6,534  | 5,000  | 3,500 | 3,000  |
| 90% Exceedance                              | 3,706 | 4,500  | 5,121  | 7,497   | 11,119  | 10,299  | 9,944  | 7,716  | 4,006  | 4,000  | 3,000 | 3,000  |
| Full Simulation Period Average <sup>a</sup> | 6,468 | 8,798  | 26,396 | 44,166  | 58,539  | 45,533  | 29,043 | 18,112 | 8,991  | 7,627  | 4,694 | 6,508  |
| Wet Water Years (29%)                       | 8,072 | 15,407 | 58,523 | 96,589  | 121,241 | 89,120  | 54,514 | 30,392 | 13,739 | 9,943  | 5,981 | 11,257 |
| Above Normal Water Years (12%)              | 6,479 | 5,835  | 16,234 | 52,397  | 68,686  | 61,672  | 31,717 | 18,776 | 9,262  | 10,550 | 6,210 | 10,915 |
| Below Normal Water Years (18%)              | 6,446 | 5,797  | 15,672 | 24,653  | 36,679  | 29,838  | 23,350 | 17,867 | 7,378  | 8,625  | 4,145 | 3,538  |
| Dry Water Years (22%)                       | 5,993 | 6,940  | 13,164 | 15,163  | 25,653  | 20,015  | 14,724 | 11,190 | 6,928  | 5,292  | 4,009 | 3,302  |
| Critical Water Years (19%)                  | 4,585 | 5,578  | 9,261  | 11,019  | 15,214  | 13,230  | 10,450 | 7,199  | 5,491  | 4,002  | 3,087 | 3,001  |

**Table 4H-2-8-2b. Delta Outflow, Proposed Project plus Cumulative 2022 SLR15 091324, Monthly Outflow (cfs)**

| Statistic                                   | Oct   | Nov    | Dec    | Jan     | Feb     | Mar     | Apr    | May    | Jun    | Jul    | Aug   | Sep    |
|---------------------------------------------|-------|--------|--------|---------|---------|---------|--------|--------|--------|--------|-------|--------|
| 10% Exceedance                              | 9,063 | 13,771 | 76,434 | 111,855 | 144,520 | 104,556 | 59,766 | 36,988 | 14,224 | 10,599 | 5,724 | 11,277 |
| 20% Exceedance                              | 8,251 | 7,779  | 40,084 | 74,442  | 94,272  | 71,868  | 46,913 | 28,001 | 9,786  | 9,267  | 5,603 | 10,938 |
| 30% Exceedance                              | 8,125 | 6,900  | 23,327 | 41,612  | 62,863  | 50,139  | 33,533 | 20,257 | 8,858  | 9,011  | 5,532 | 10,790 |
| 40% Exceedance                              | 7,813 | 6,038  | 16,859 | 32,522  | 53,468  | 37,197  | 27,458 | 15,362 | 7,902  | 8,772  | 5,284 | 10,625 |
| 50% Exceedance                              | 5,484 | 5,551  | 11,643 | 23,748  | 35,601  | 27,442  | 22,207 | 13,424 | 7,213  | 8,053  | 4,006 | 3,816  |
| 60% Exceedance                              | 4,353 | 5,335  | 8,029  | 17,643  | 22,570  | 23,485  | 18,391 | 12,158 | 7,111  | 5,261  | 4,000 | 3,346  |
| 70% Exceedance                              | 4,079 | 4,946  | 7,020  | 11,886  | 18,501  | 18,173  | 15,674 | 11,211 | 7,100  | 5,010  | 3,605 | 3,031  |
| 80% Exceedance                              | 4,000 | 4,513  | 5,986  | 9,696   | 14,786  | 14,726  | 13,746 | 10,341 | 6,751  | 5,000  | 3,500 | 3,017  |
| 90% Exceedance                              | 3,562 | 4,500  | 5,142  | 7,946   | 10,927  | 10,751  | 11,240 | 8,176  | 4,023  | 4,000  | 3,034 | 3,000  |
| Full Simulation Period Average <sup>a</sup> | 6,569 | 8,883  | 26,645 | 44,628  | 59,070  | 46,599  | 31,309 | 18,831 | 9,232  | 7,285  | 4,520 | 6,582  |
| Wet Water Years (29%)                       | 8,180 | 15,610 | 59,377 | 97,231  | 121,461 | 89,241  | 56,387 | 30,545 | 14,125 | 9,652  | 5,786 | 11,254 |
| Above Normal Water Years (12%)              | 6,612 | 5,911  | 16,223 | 52,935  | 69,129  | 64,218  | 35,610 | 21,058 | 9,350  | 10,010 | 5,751 | 11,298 |
| Below Normal Water Years (18%)              | 6,556 | 5,876  | 15,484 | 25,095  | 37,323  | 31,613  | 25,887 | 18,162 | 7,851  | 7,872  | 4,113 | 3,589  |
| Dry Water Years (22%)                       | 6,102 | 6,920  | 13,478 | 15,113  | 26,276  | 21,517  | 17,615 | 12,175 | 7,067  | 5,031  | 3,716 | 3,390  |
| Critical Water Years (19%)                  | 4,637 | 5,616  | 9,088  | 11,773  | 16,064  | 13,626  | 11,309 | 7,888  | 5,504  | 4,002  | 3,126 | 3,003  |

**Table 4H-2-8-2c. Delta Outflow, Proposed Project plus Cumulative 2022 SLR15 091324 minus Baseline Conditions 2022 SLR15 082824, Monthly Outflow (cfs)**

| Statistic                                   | Oct  | Nov  | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun | Jul  | Aug  | Sep |
|---------------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-----|------|------|-----|
| 10% Exceedance                              | 625  | 50   | 1,863 | 1,686 | 11    | -350  | 1,592 | -328  | 12  | -680 | -414 | 340 |
| 20% Exceedance                              | 126  | 144  | 736   | 196   | -375  | 1,998 | 1,164 | 2,003 | 430 | -913 | -307 | 156 |
| 30% Exceedance                              | 0    | 46   | 760   | 621   | 329   | 1,813 | 1,942 | 2,852 | 359 | -316 | -240 | 165 |
| 40% Exceedance                              | -156 | -30  | 13    | 2,116 | 956   | 1,601 | 3,757 | 708   | 283 | -311 | -134 | 313 |
| 50% Exceedance                              | 225  | -117 | 576   | 392   | 3,054 | 2,268 | 3,038 | 870   | 113 | -491 | -303 | 31  |
| 60% Exceedance                              | 6    | 15   | 4     | -12   | 423   | 2,425 | 2,881 | 805   | 11  | -384 | 0    | 147 |
| 70% Exceedance                              | 46   | 30   | -23   | 8     | 159   | 490   | 2,531 | 684   | 159 | -424 | -395 | 18  |
| 80% Exceedance                              | 0    | -3   | -10   | 243   | 1,741 | 507   | 2,316 | 911   | 217 | 0    | 0    | 17  |
| 90% Exceedance                              | -143 | 0    | 21    | 449   | -192  | 452   | 1,296 | 460   | 16  | 0    | 34   | 0   |
| Full Simulation Period Average <sup>a</sup> | 101  | 85   | 249   | 462   | 531   | 1,066 | 2,266 | 719   | 240 | -342 | -175 | 74  |
| Wet Water Years (29%)                       | 108  | 203  | 854   | 642   | 220   | 121   | 1,873 | 153   | 386 | -291 | -195 | -2  |
| Above Normal Water Years (12%)              | 133  | 76   | -11   | 538   | 443   | 2,546 | 3,893 | 2,282 | 88  | -540 | -459 | 383 |
| Below Normal Water Years (18%)              | 110  | 79   | -189  | 442   | 644   | 1,774 | 2,537 | 295   | 473 | -753 | -32  | 51  |
| Dry Water Years (22%)                       | 109  | -20  | 314   | -51   | 623   | 1,502 | 2,891 | 985   | 138 | -260 | -293 | 88  |
| Critical Water Years (19%)                  | 52   | 38   | -173  | 754   | 850   | 396   | 859   | 689   | 13  | 0    | 39   | 3   |

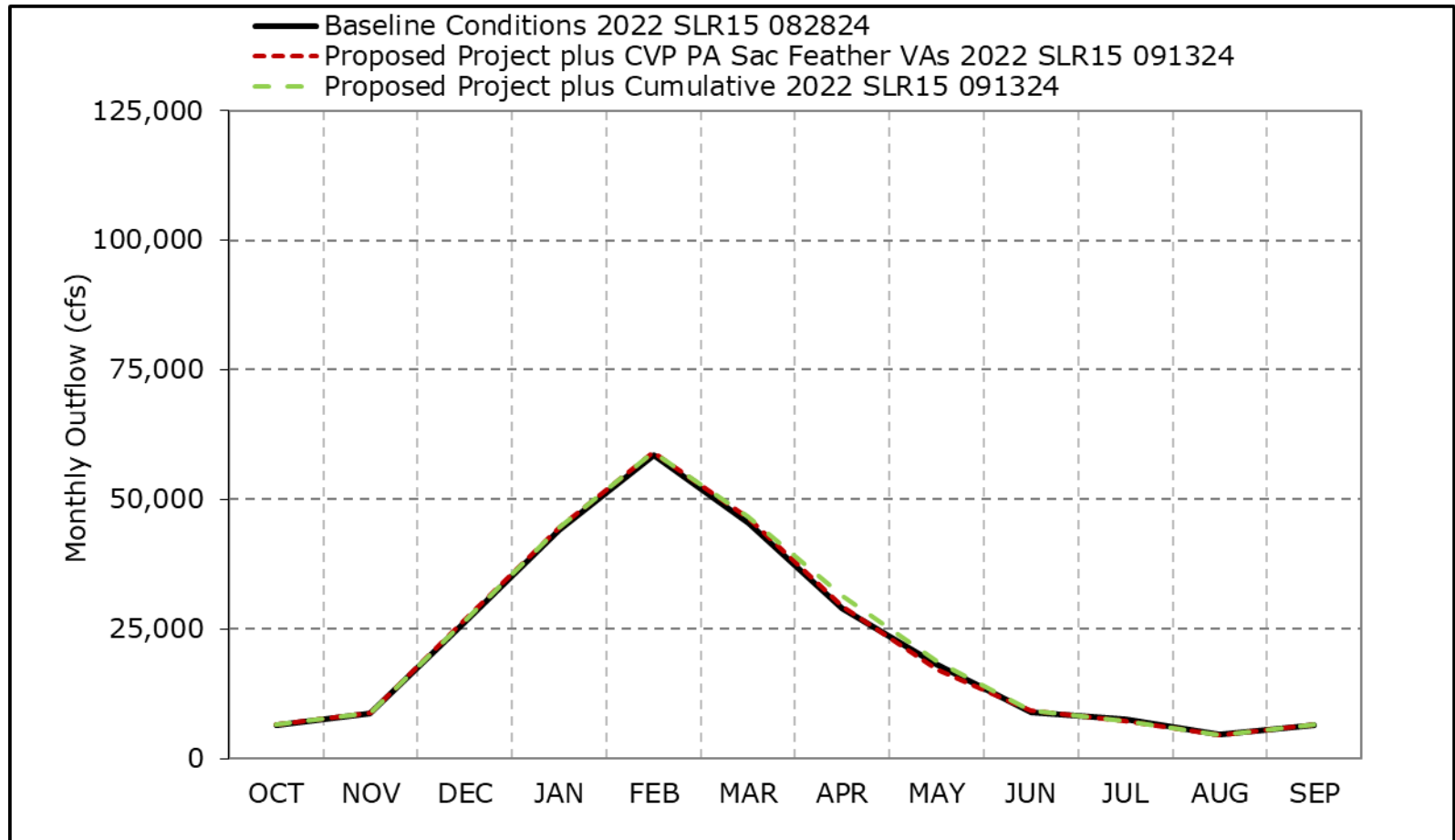
<sup>a</sup> Based on the 100-year simulation period.

\* All scenarios are simulated at 2022 Median climate condition and 15 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 4H-2-8a. Delta Outflow, Long-Term Average Outflow**

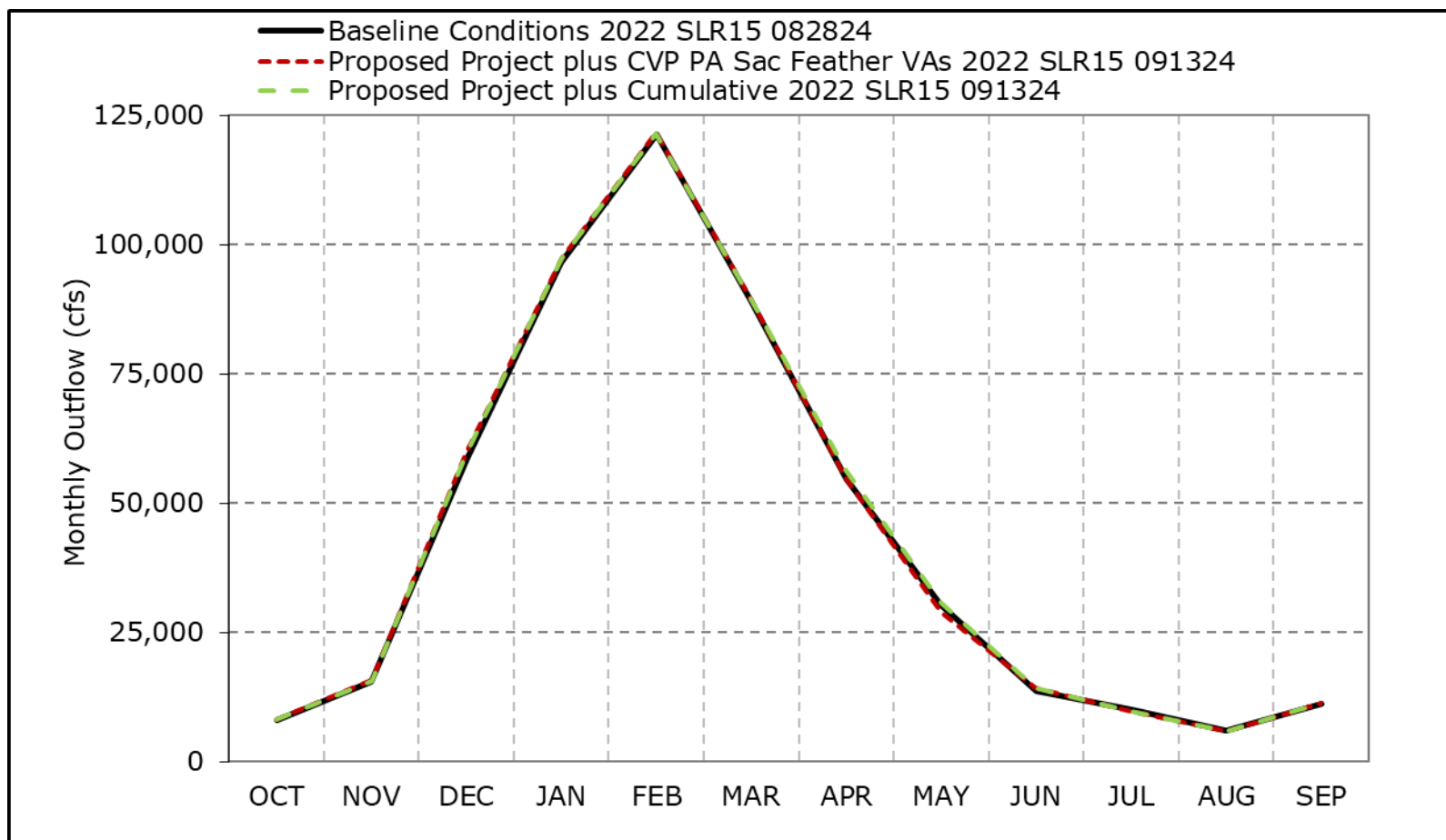


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8b. Delta Outflow, Wet Year Average Outflow**

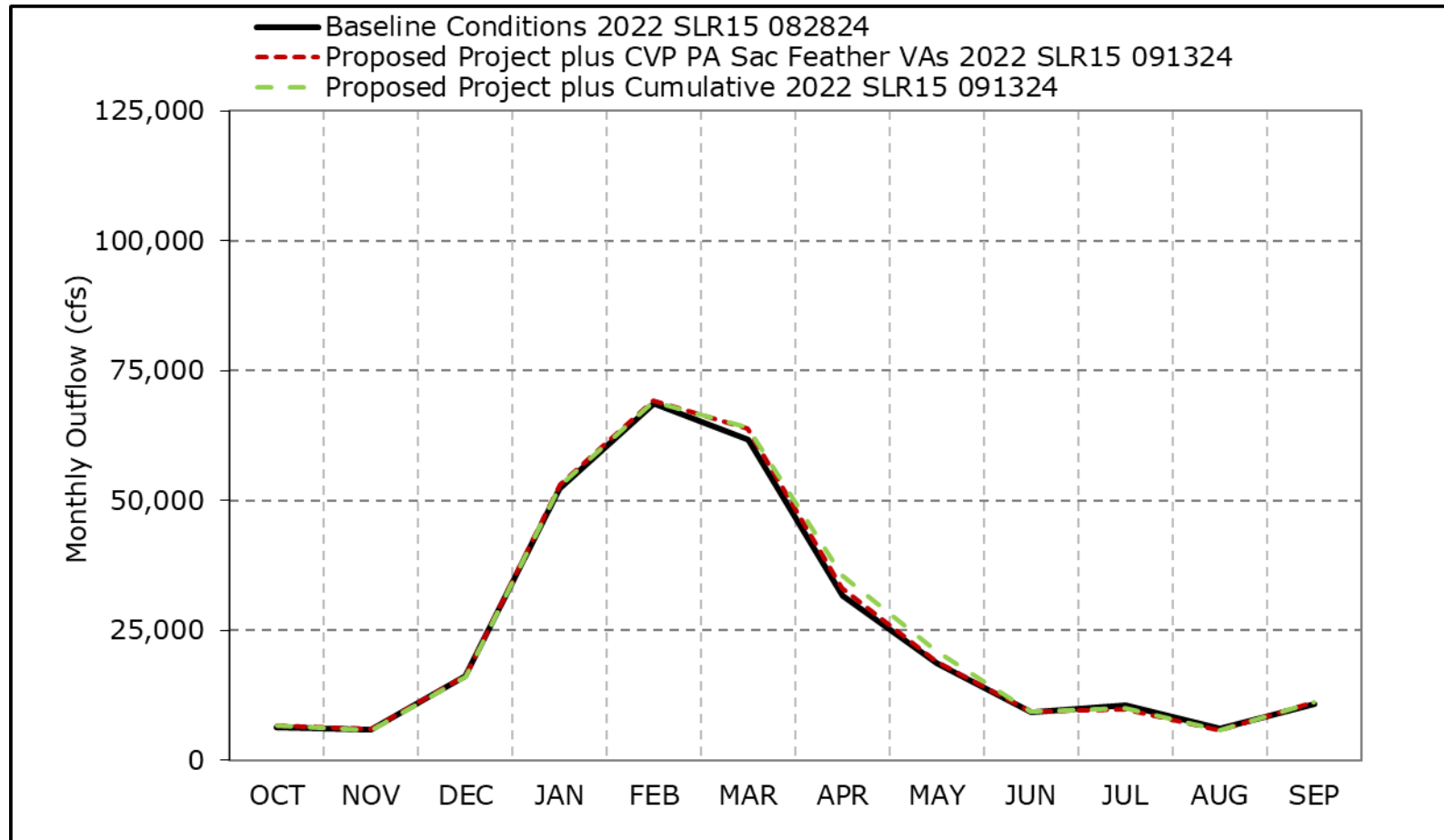


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8c. Delta Outflow, Above Normal Year Average Outflow**

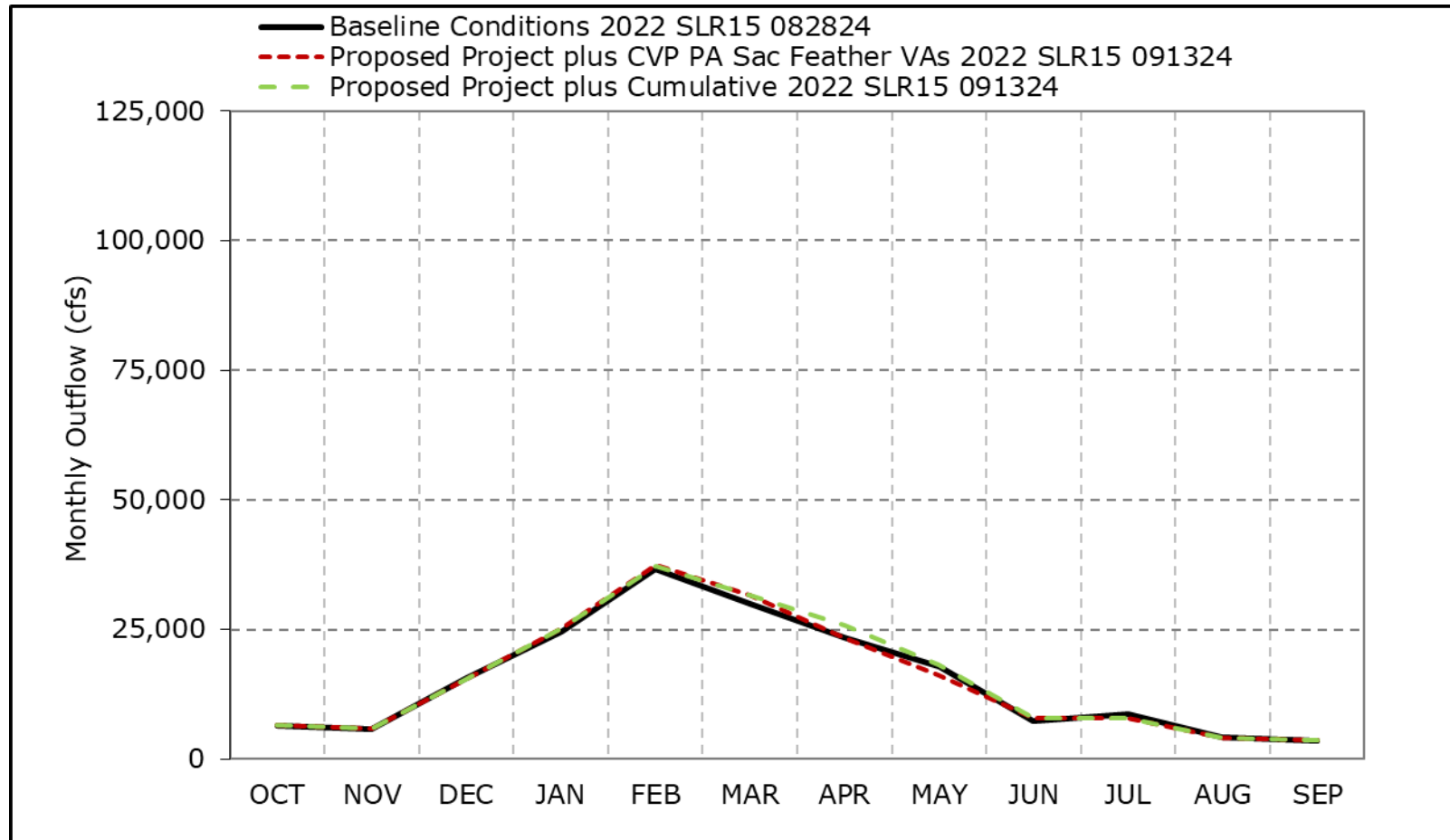


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8d. Delta Outflow, Below Normal Year Average Outflow**



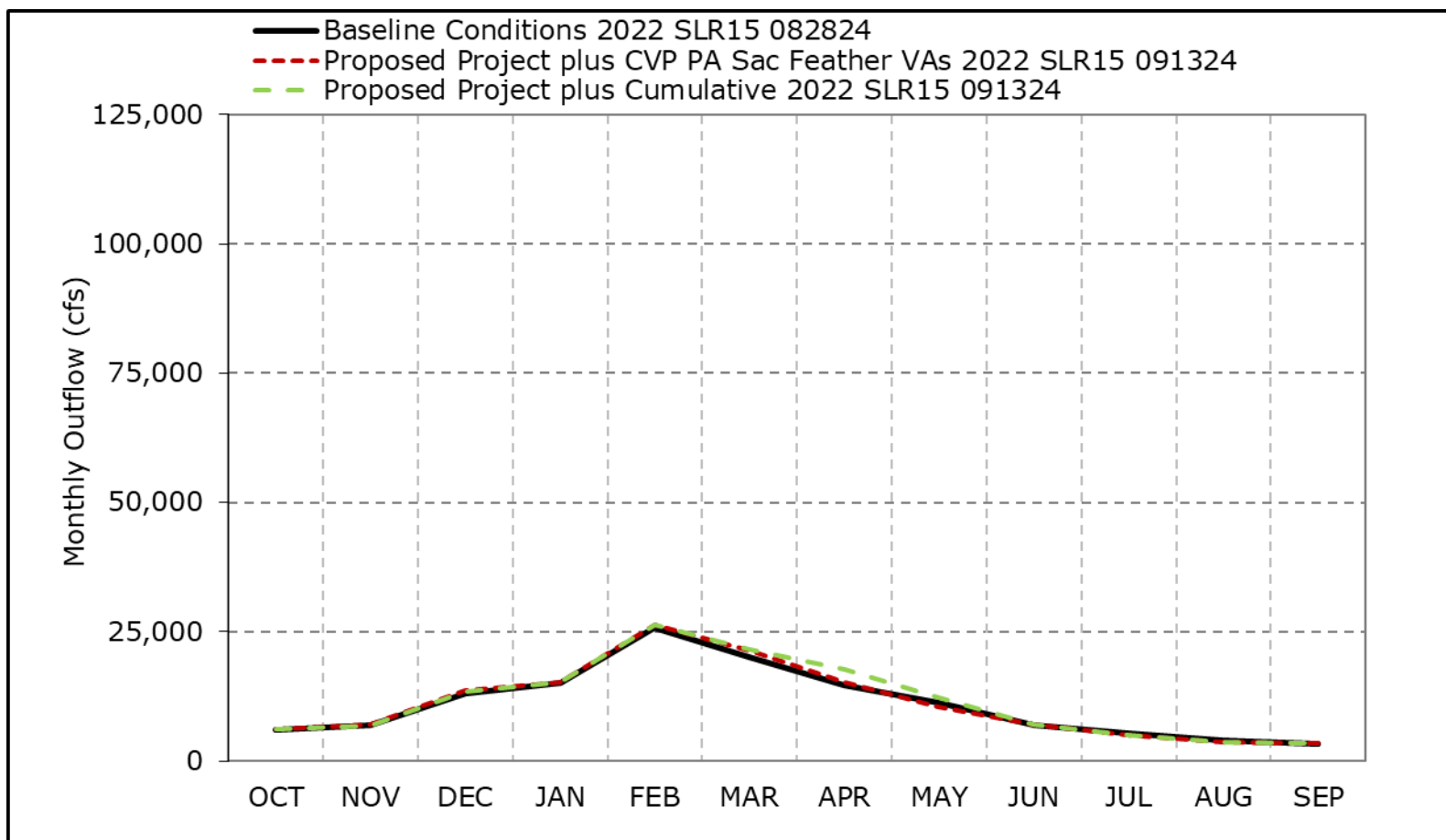
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.



**Figure 4H-2-8e. Delta Outflow, Dry Year Average Outflow**

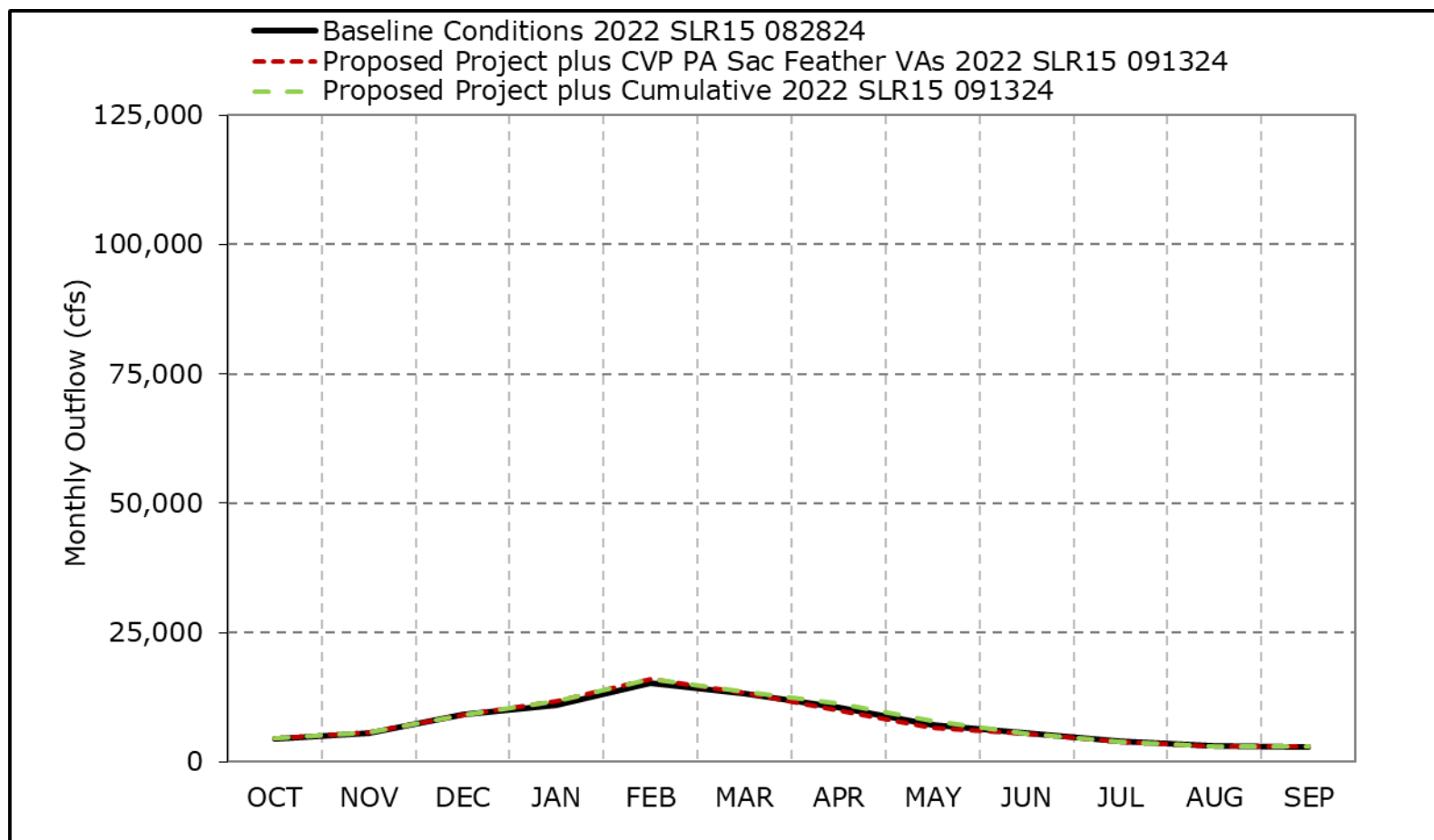


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8f. Delta Outflow, Critical Year Average Outflow**

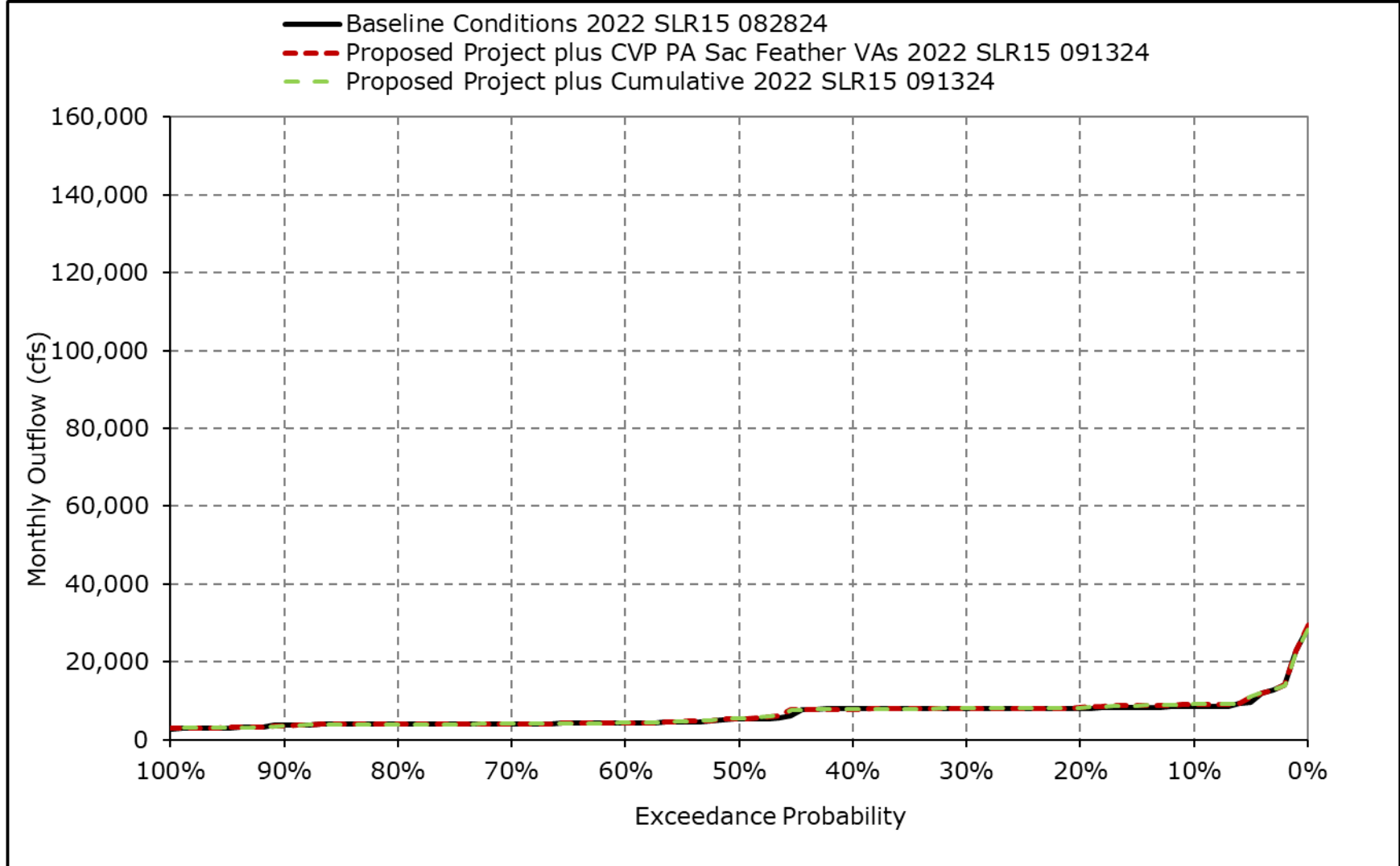


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

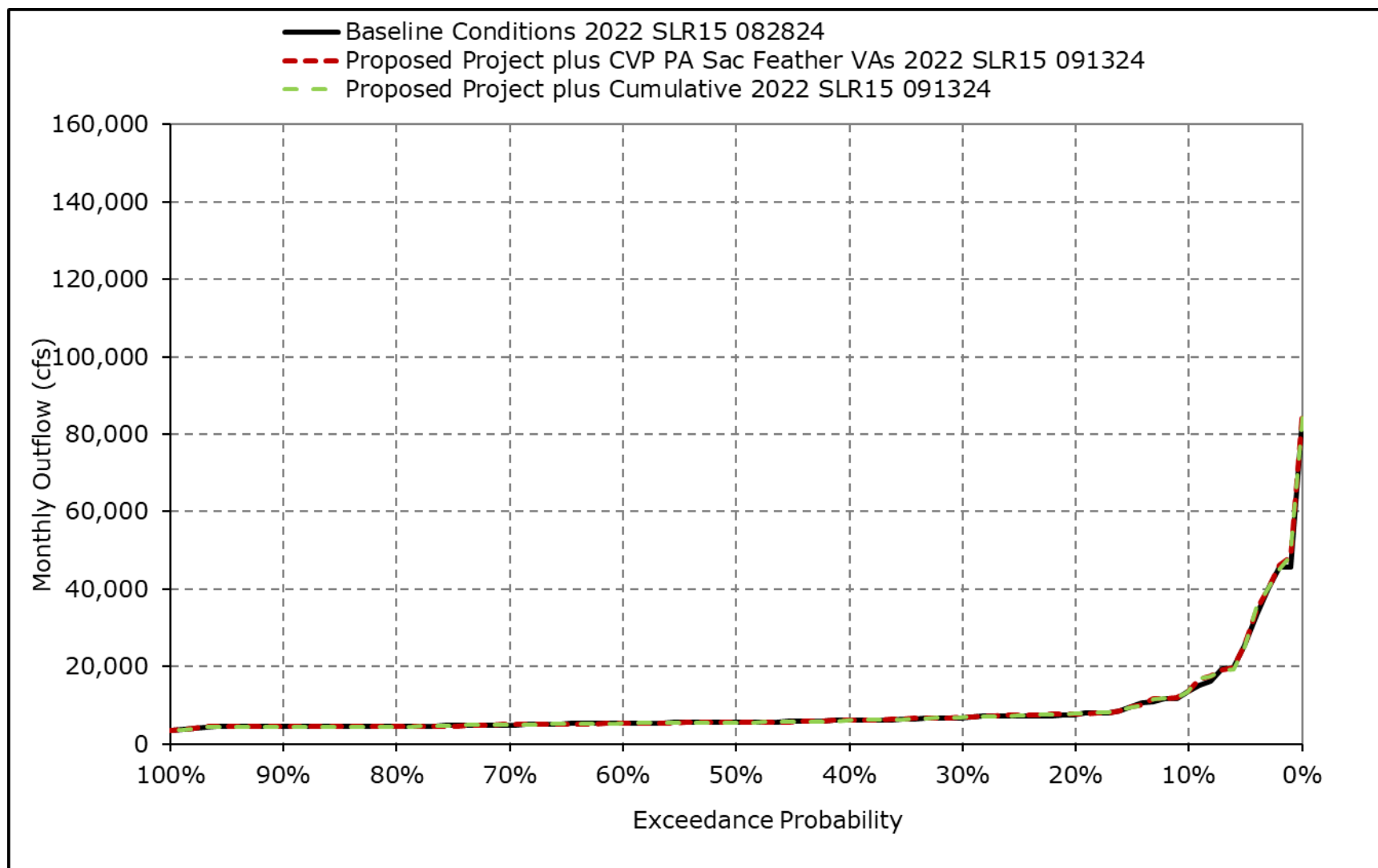
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8g. Delta Outflow, October**



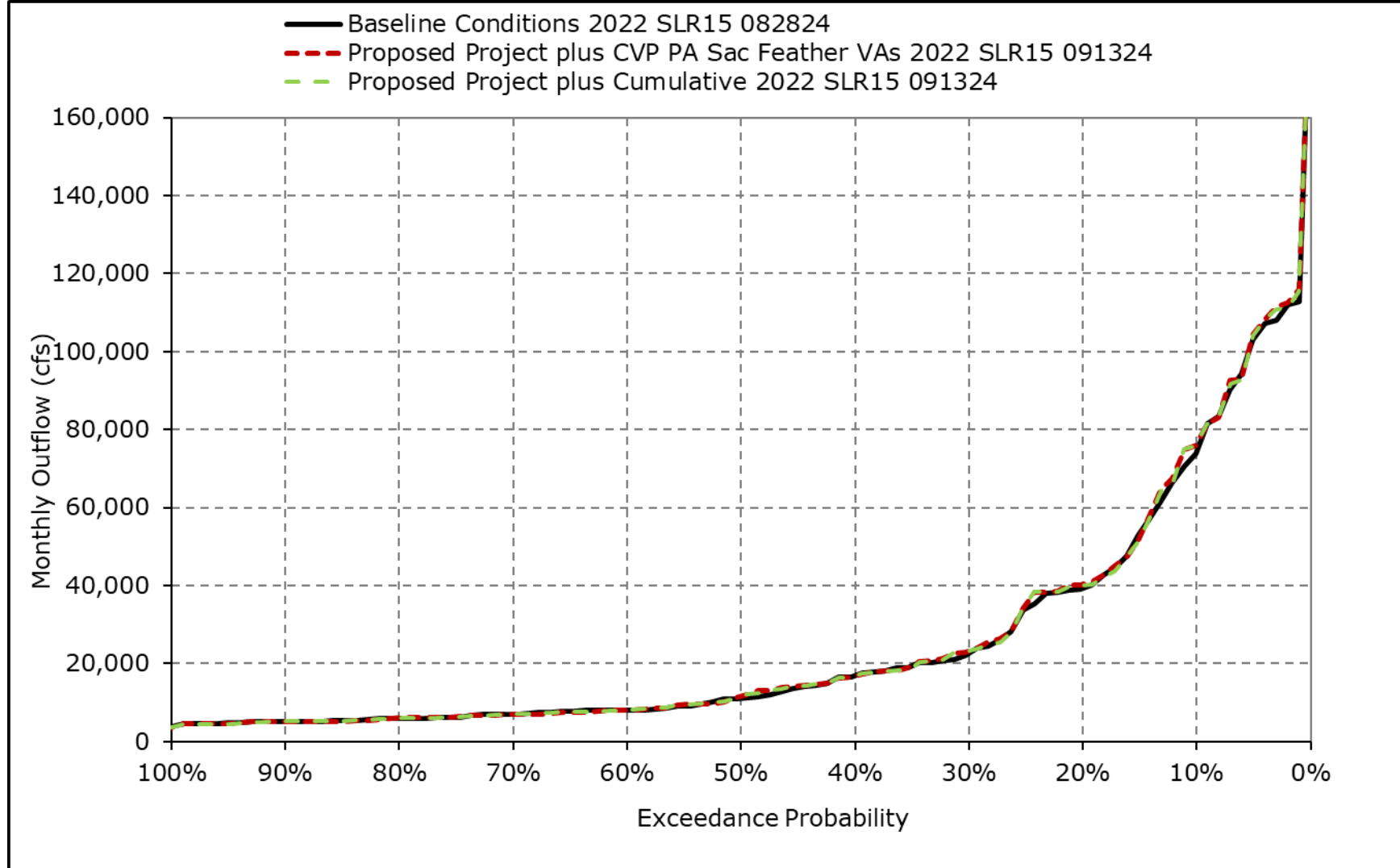
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8h. Delta Outflow, November**



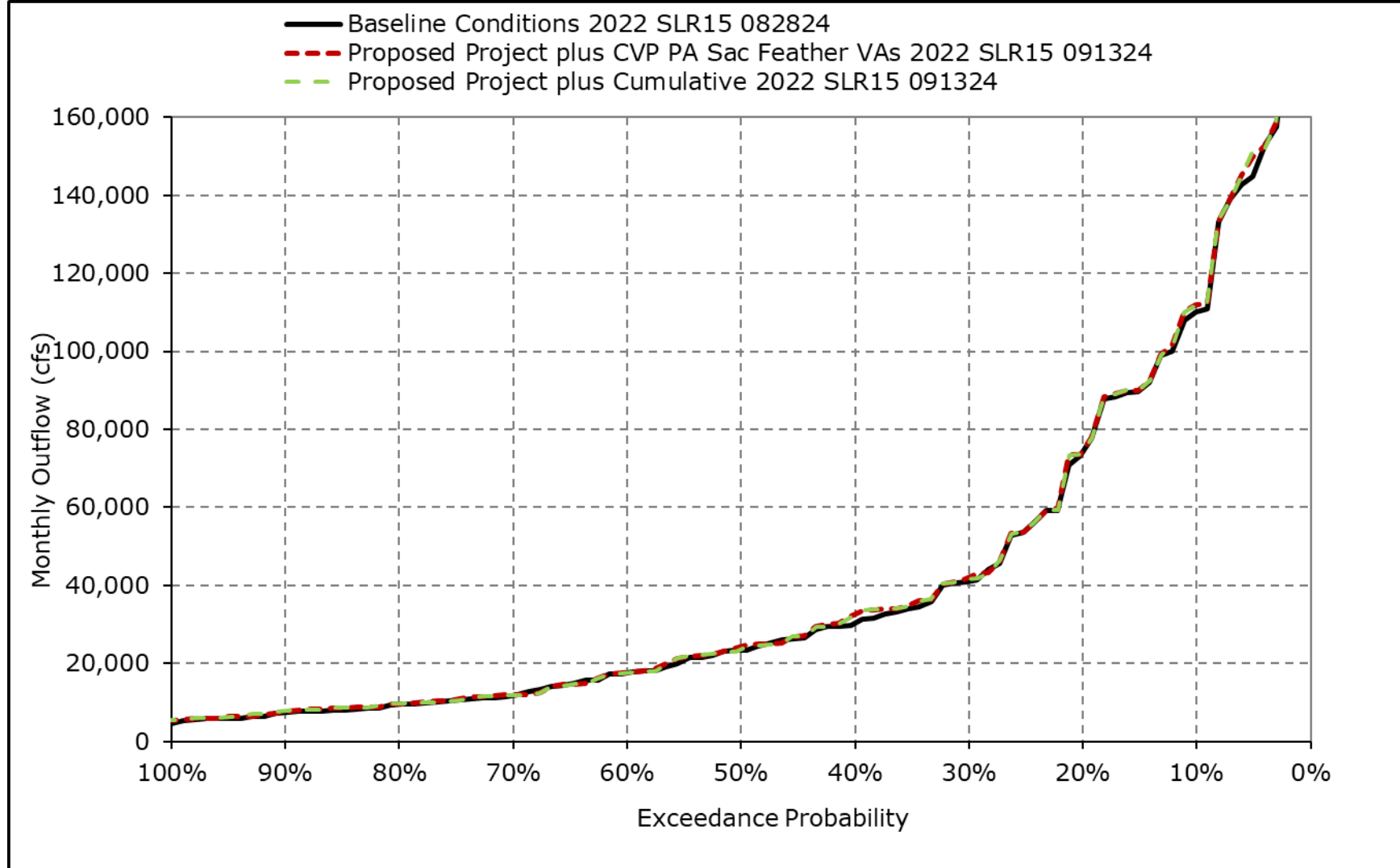
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8i. Delta Outflow, December**



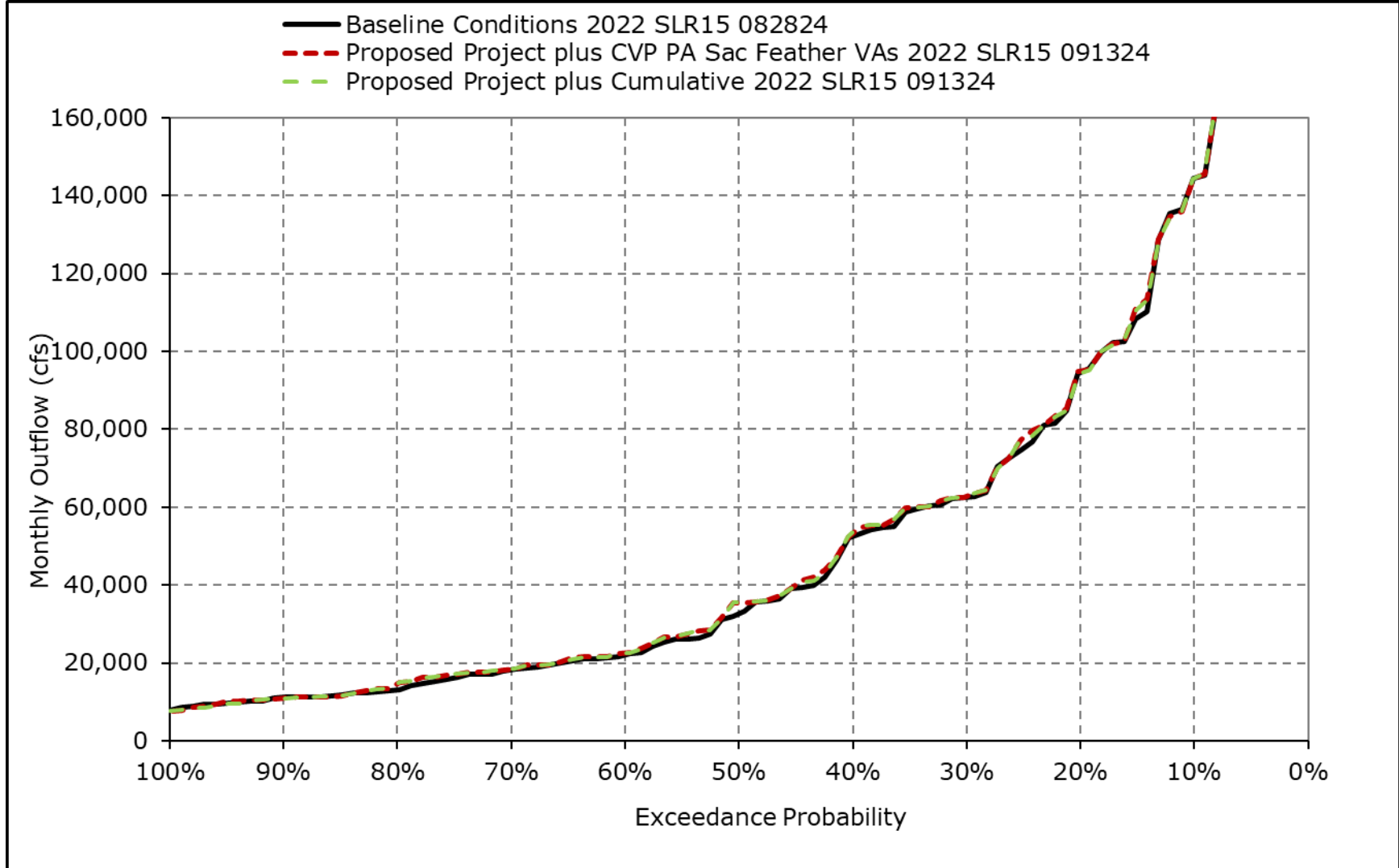
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8j. Delta Outflow, January**



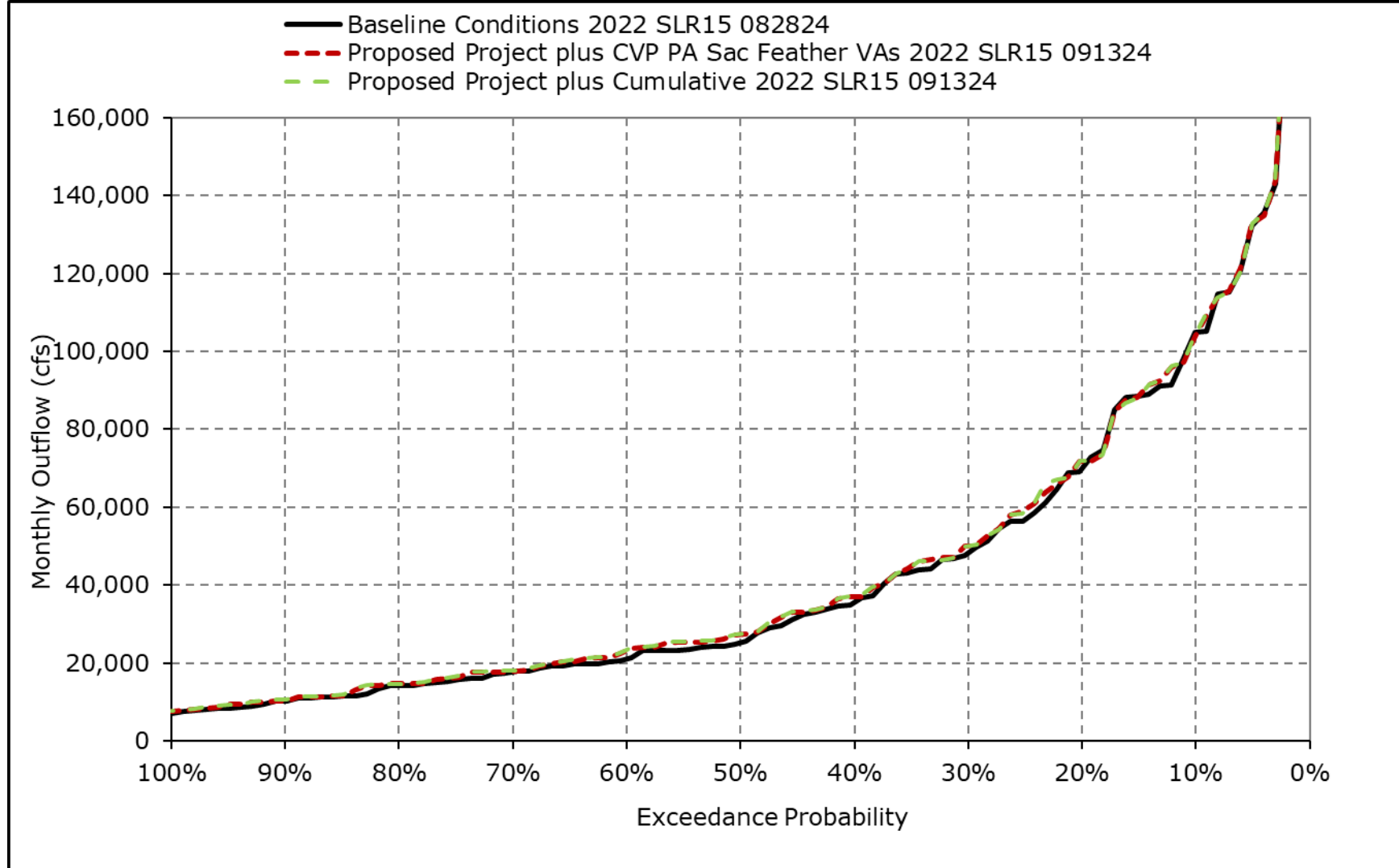
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8k. Delta Outflow, February**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

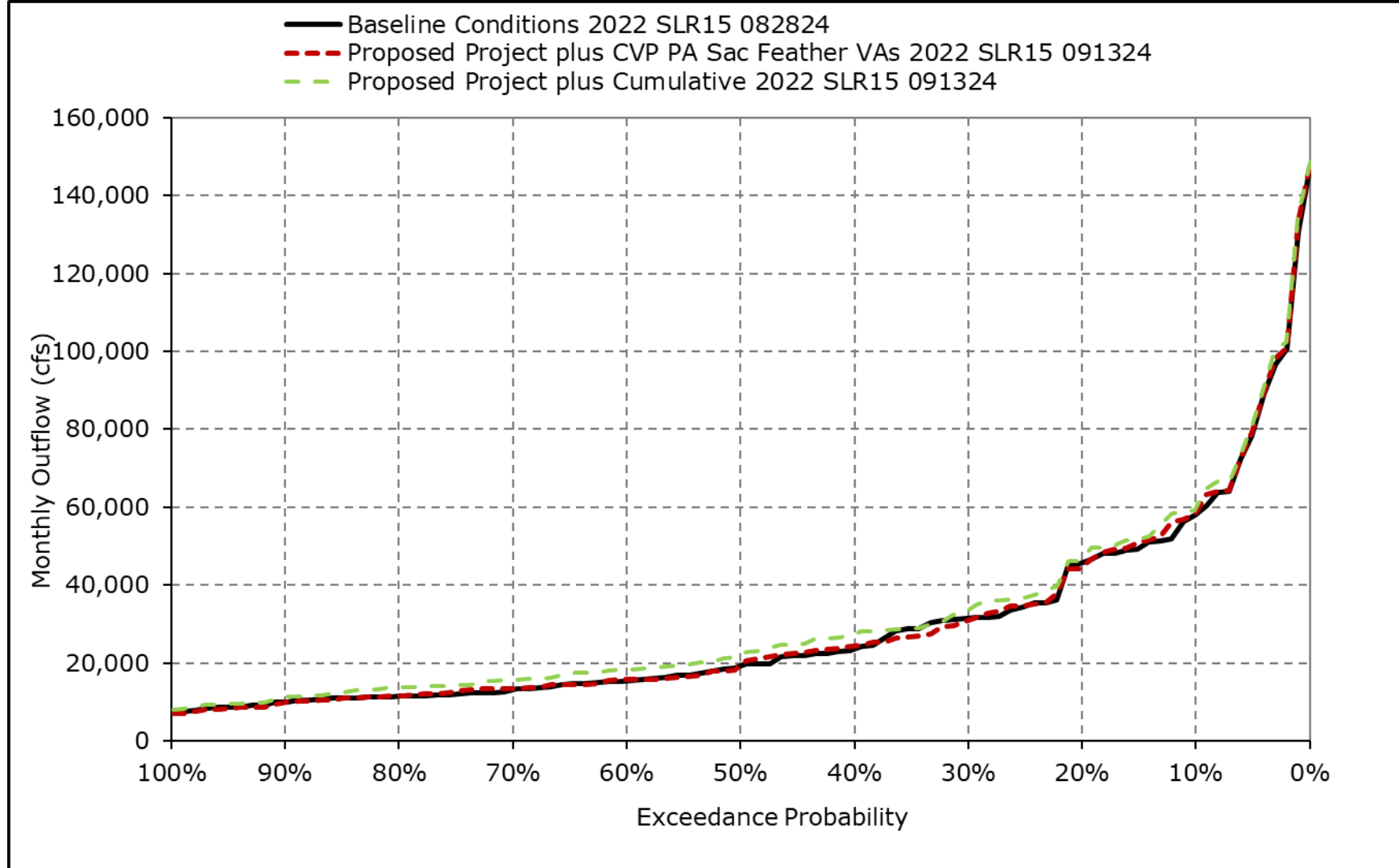
**Figure 4H-2-8I. Delta Outflow, March**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

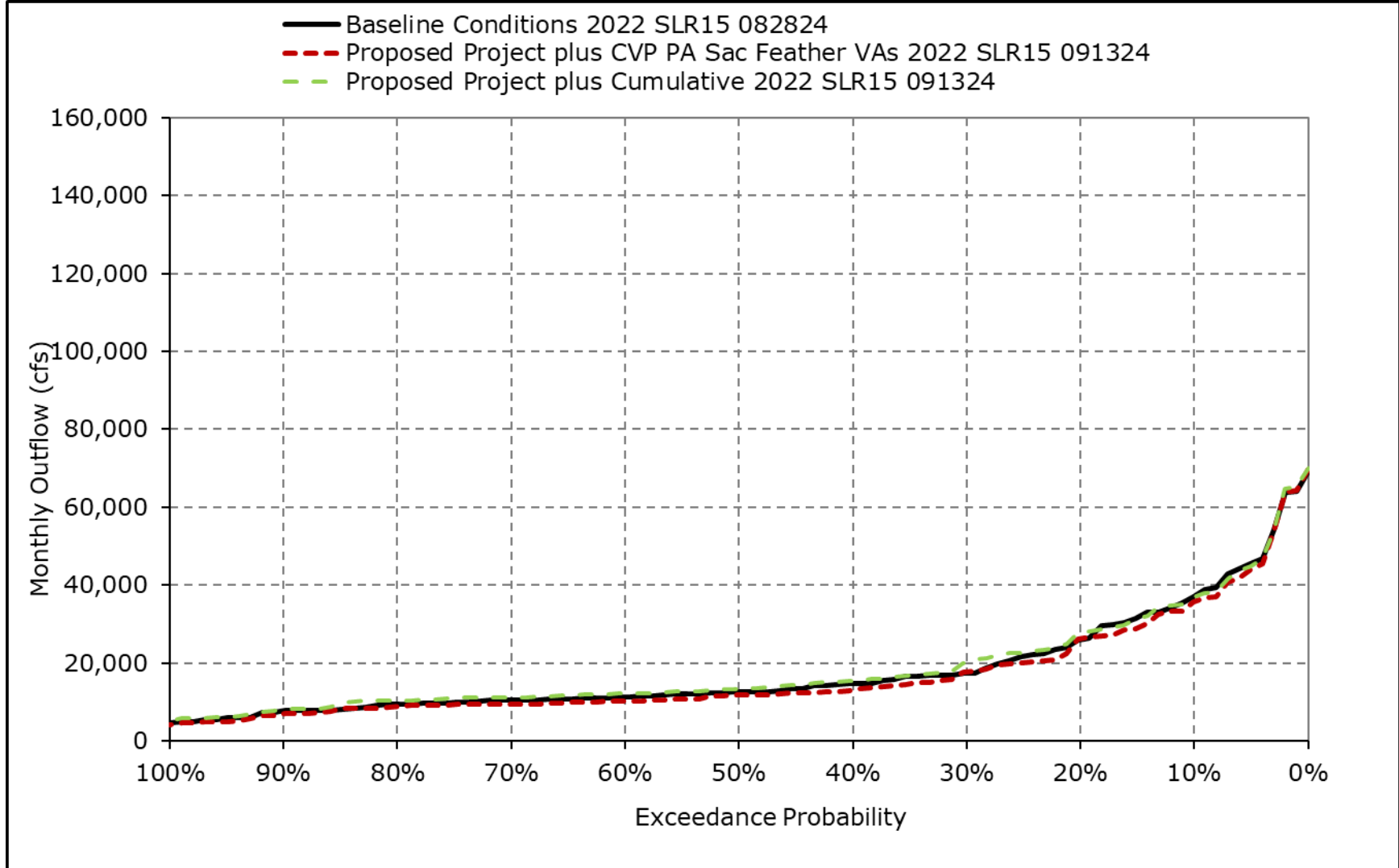


**Figure 4H-2-8m. Delta Outflow, April**



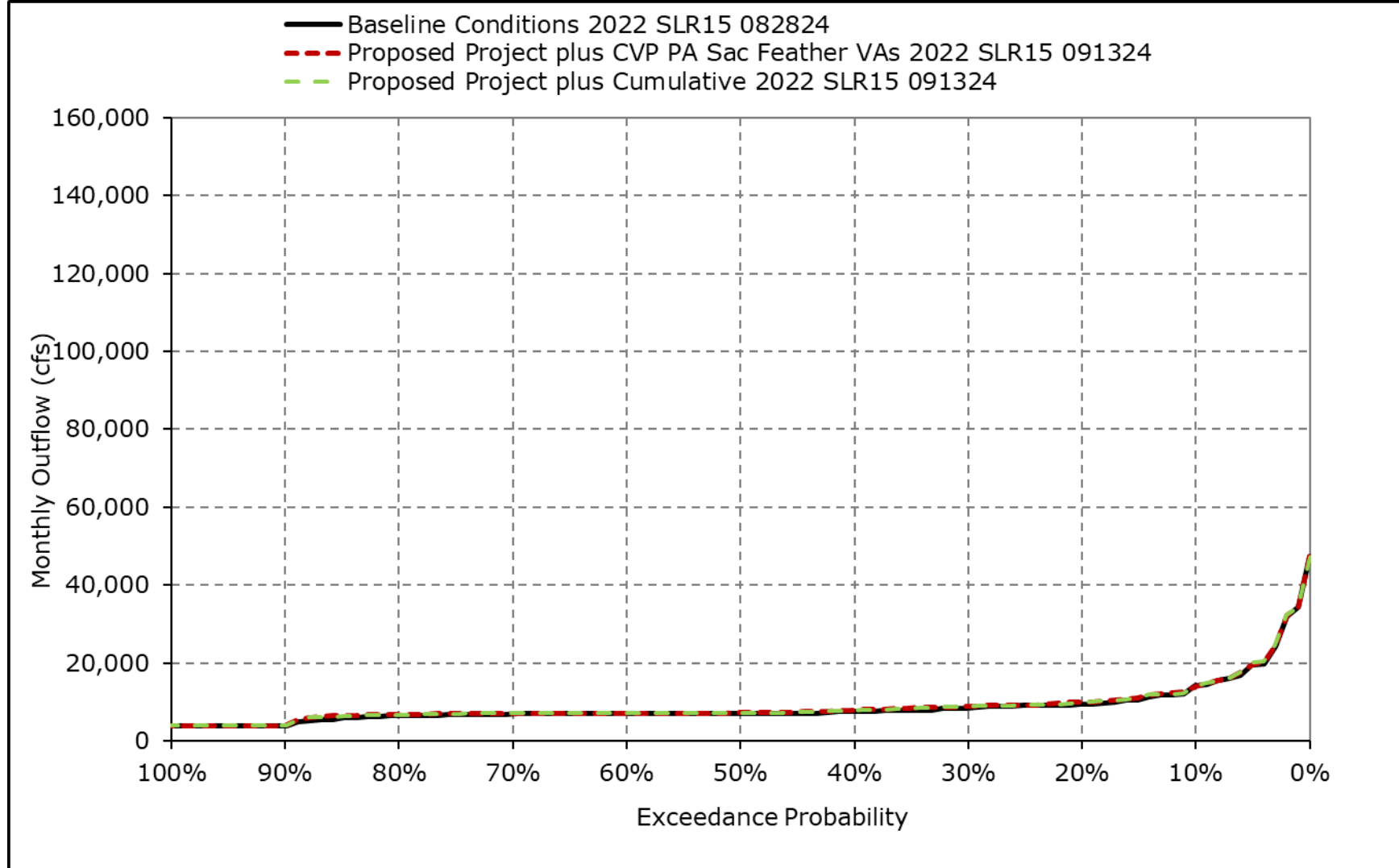
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8n. Delta Outflow, May**



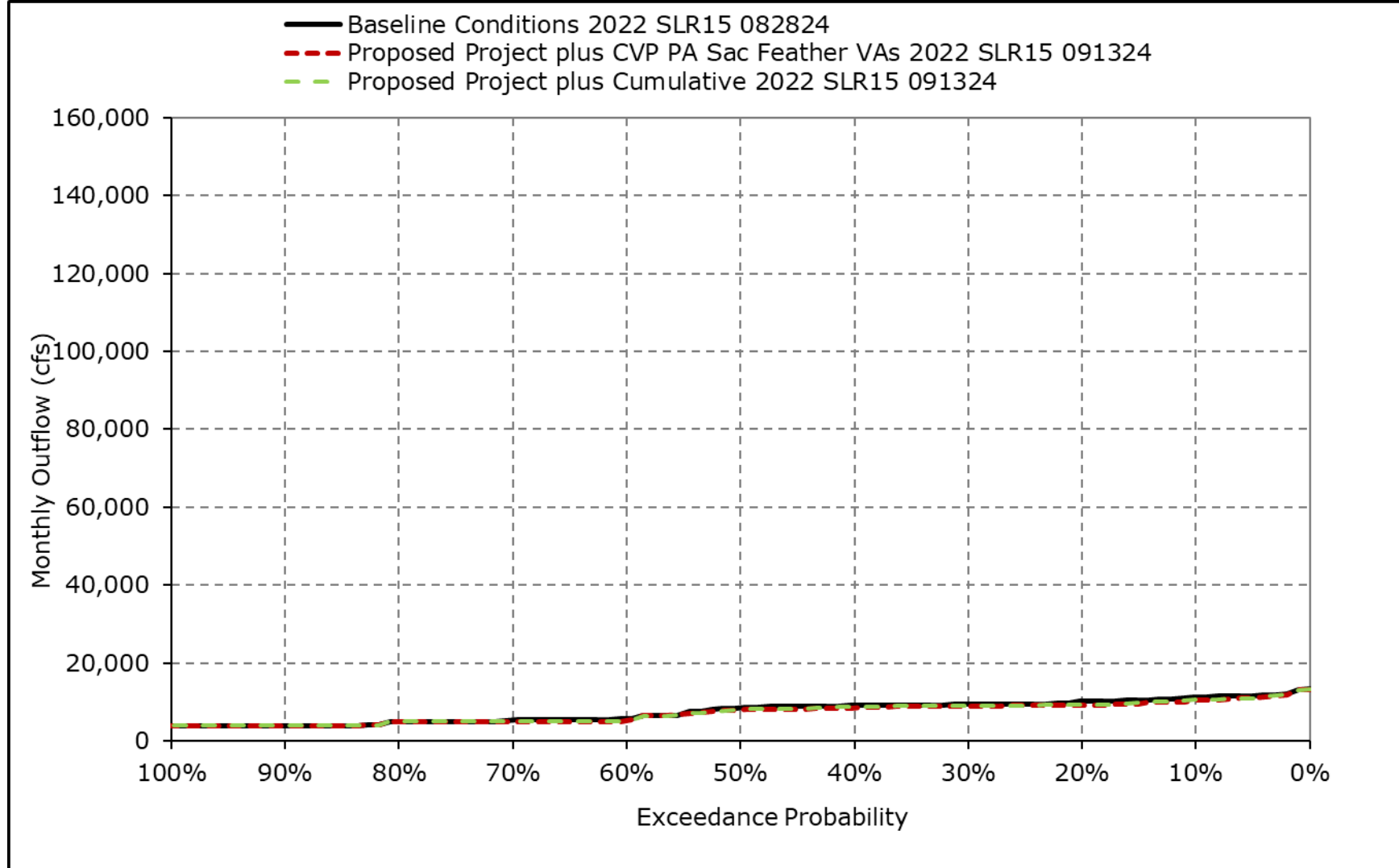
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8o. Delta Outflow, June**



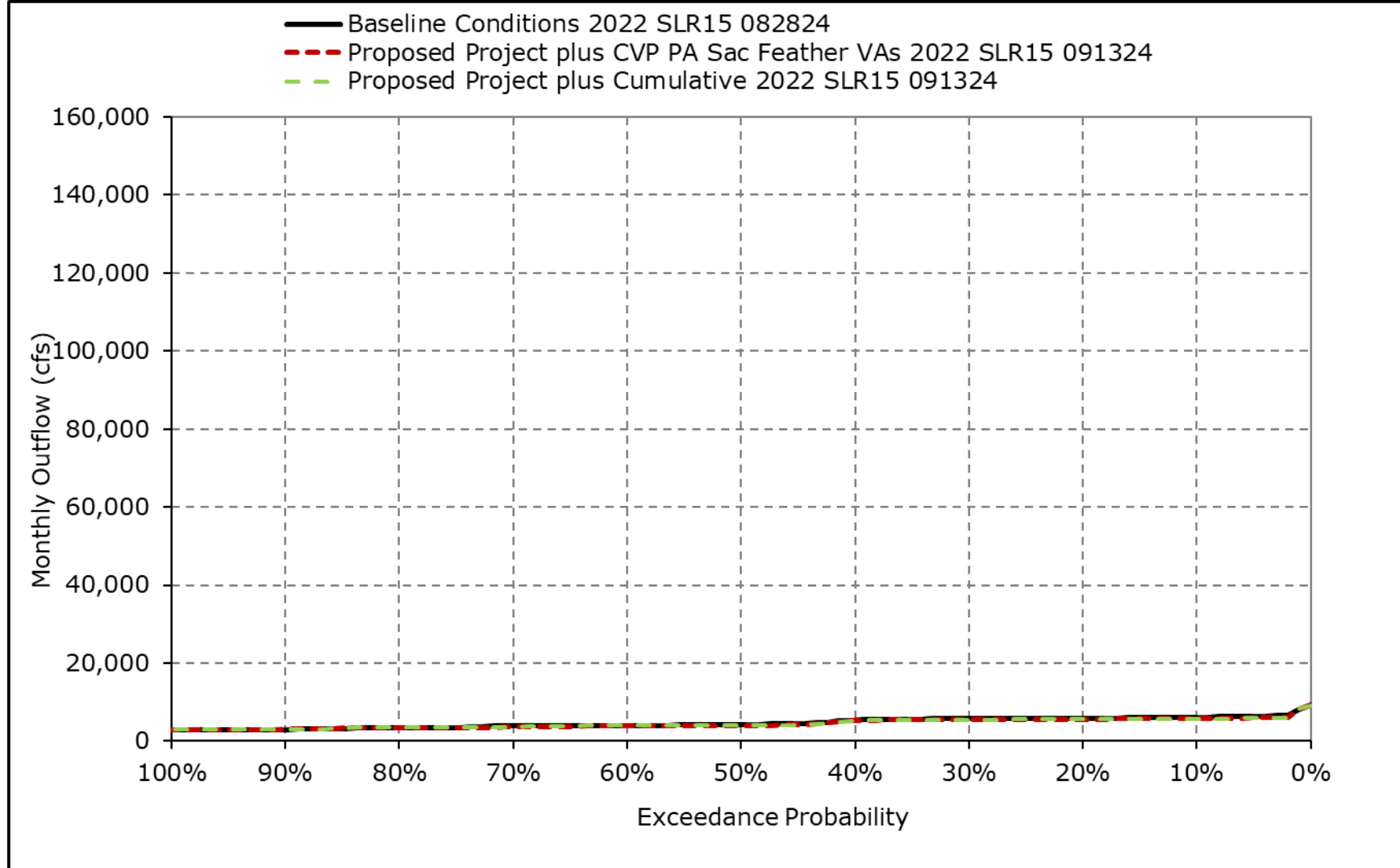
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8p. Delta Outflow, July**



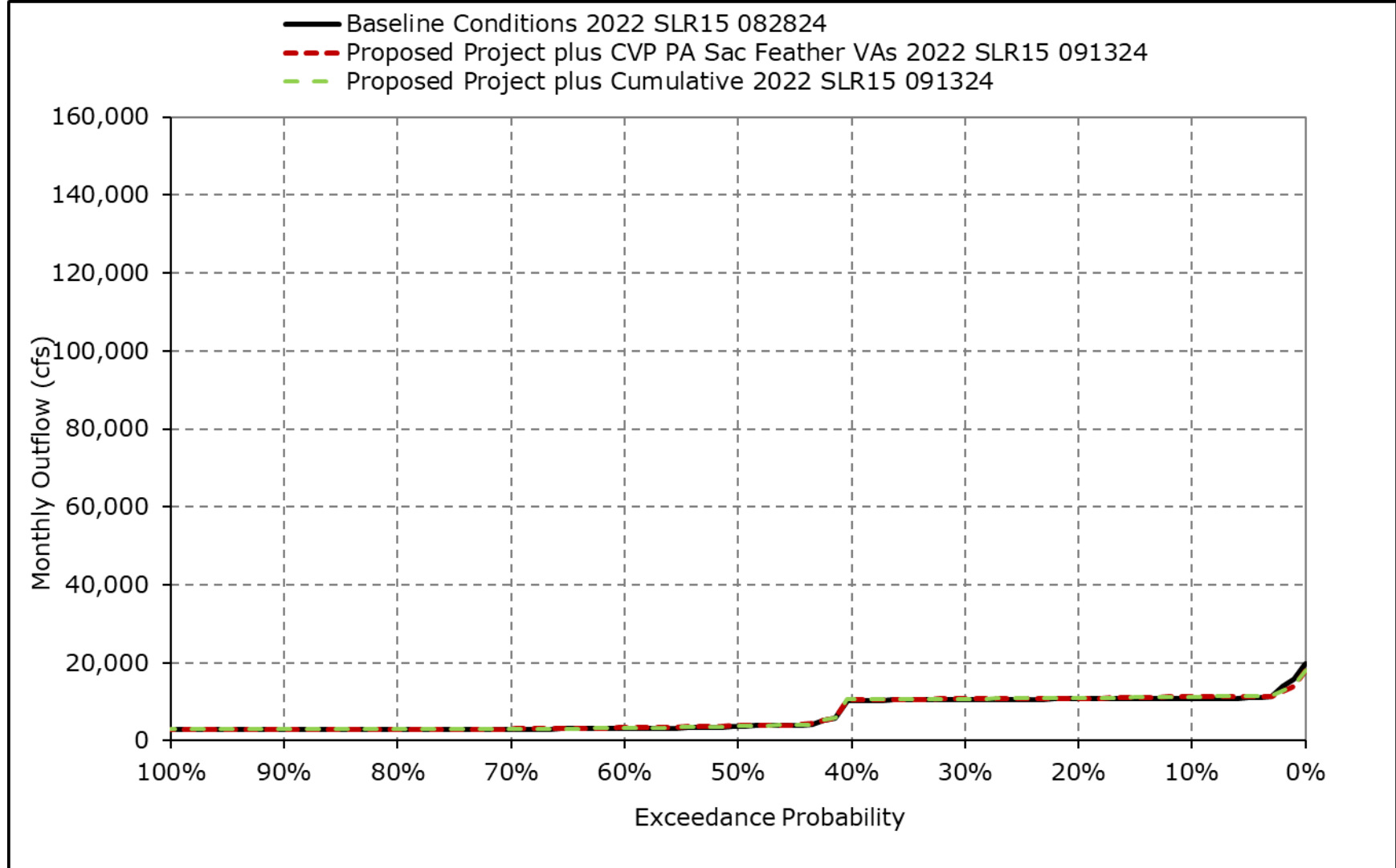
\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8q. Delta Outflow, August**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

**Figure 4H-2-8r. Delta Outflow, September**



\*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.