## Benefit Calculation, Monetization, and Resiliency Tab

## Attachment A6: Future Economic Benefit

Attach a table displaying each future economic benefit in 2015 dollars for each year of the planning horizon as required by section 6004(a)(4)(A) of the regulations.

WSIP Application Instructions, March 2017

| STATUS: | FINAL | PREPARER: | G DURNIN | PHASE: | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PURPOSE: | BENEFIT CALCULATION, MONETIZATION, AND RESILIENCY A6 | CHECKER: | N CARLSON | DATE: | 2017 AUGUST |
| CAVEAT: |  | QA/QC: |  | REF/FILE \#: | WSIP APPLICATION |
| NOTES: |  |  | PAGE: | 1 | OF |

Table A6-1. Annualized Average Benefit Value Summary by Beneficiary (2015\$; \$1000s)

Annualized Average (2030-2122)
PV - Early Operations Benefits (2026-2029)
Adjusted Annualized Average (2030-2122) ${ }^{\text {a }}$
Total PV Benefit Adjusted (2030-2122) ${ }^{\text {a }}$

| WSIP Public Benefits |  |  |  |  |  |  |  | Non-Proposition 1 Eligible Benefits |  |  |  |  |  | Total Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Ecosystem Improvement |  |  |  |  | Recreation | $\begin{aligned} & \text { Flood } \\ & \text { Control } \end{aligned}$ | Total Non- <br> Prop. 1 <br> Benefits | Water Supply |  |  |  | Hydropower (System) |  |
| Total WSIP Public Benefits | Total Ecosystem Improvement | Anadromous Fish \& Other Aquatic | Incremental <br> Level 4 Refuge | Oroville Coldwater Pool | Yolo Bypass |  |  |  | Total Water Supply | M\&I Water Supply | Agricultural Water Supply | Recaptured Water |  |  |
| \$73,717 | \$62,343 | \$25,637 | \$16,047 | \$11,814 | \$8,845 | \$6,997 | \$4,377 | \$109,207 | \$89,024 | \$46,737 | \$37,443 | \$4,845 | \$20,183 | \$182,925 |
| \$119,700 | \$108,325 | \$48,505 | \$27,644 | \$22,986 | \$9,190 | \$6,997 | \$4,377 | \$177,417 | \$157,234 | \$95,883 | \$51,732 | \$9,619 | \$20,183 | \$297,116 |
| \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
| \$3,461,487 | \$3,145,717 | \$1,616,392 | \$675,417 | \$595,293 | \$258,615 | \$191,604 | \$124,167 | \$5,528,427 | \$4,975,773 | \$3,236,668 | \$1,423,594 | \$315,512 | \$552,653 | \$8,989,914 |
| \$122,033 | \$110,900 | \$56,985 | \$23,811 | \$20,987 | \$9,117 | \$6,755 | \$4,377 | \$194,902 | \$175,418 | \$114,107 | \$50,188 | \$11,123 | \$19,483 | \$316,934 |
| \$44,722 | \$30,564 | \$20,658 | \$0 | \$0 | \$9,905 | \$0 | \$14,158 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$44,722 |
| \$123,609 | \$111,978 | \$57,713 | \$23,811 | \$20,987 | \$9,467 | \$6,755 | \$4,877 | \$194,902 | \$175,418 | \$114,107 | \$50,188 | \$11,123 | \$19,483 | \$318,511 |
| \$3,506,198 | \$3,176,280 | \$1,637,050 | \$675,417 | \$595,293 | \$268,520 | \$191,592 | \$138,325 | \$5,528,380 | \$4,975,727 | \$3,236,668 | \$1,424,238 | \$314,821 | \$552,653 | \$9,034,577 |

Notes:
\&l $=-$ municicipal and industria
$\mathrm{PV}=$ present value
WSIP $=$ Water Storage Investment Program

[^0]\[

$$
\begin{aligned}
& \text { PREPARER: G DURNIN PHASE: } 1 \text { VERSION: } \\
& \text { CHECKER: n CARLSON DATE: } 2017 \text { AUGUST } \\
& \text { QAOC: } \quad \text { REFFLLE \#: WSIP APPLICATION }
\end{aligned}
$$
\]



[^1]|  | Year | $\begin{gathered} \text { PV Factor } \\ (2030) \end{gathered}$ | Total WSIP Public Benefits | Total Ecosystem Improvement | Anadromous Fish \& Other Aquatic | $\begin{array}{\|c\|} \hline \text { Incremental } \\ \text { Level 4 } \\ \text { Refuge } \\ \hline \end{array}$ | Oroville <br> Coldwater Pool | Yolo Bypass | Recreation | Flood Control | Total Non- <br> Prop. 1 <br> Benefits | Total Water Supply | M\&I Water Supply | Agricultural Water Supply | Recaptured Water | Hydropower (System) | Total Benefits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2075 | 0.213 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2076 | 0.205 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2077 | 0.199 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2078 | 0.192 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2079 | 0.185 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2080 | 0.179 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2081 | 0.173 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2082 | 0.167 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2083 | 0.161 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2084 | 0.156 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2085 | 0.151 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2086 | 0.146 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2087 | 0.141 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2088 | 0.136 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2089 | 0.131 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2090 | 0.127 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2091 | 0.123 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2092 | 0.118 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2093 | 0.114 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2094 | 0.111 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2095 | 0.107 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2096 | 0.103 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2097 | 0.100 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2098 | 0.096 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2099 | 0.093 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2100 | 0.090 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2101 | 0.087 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2102 | 0.084 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2103 | 0.081 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2104 | 0.078 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2105 | 0.076 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2106 | 0.073 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2107 | 0.071 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2108 | 0.068 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2109 | 0.066 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2110 | 0.064 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2111 | 0.062 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2112 | 0.060 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2113 | 0.058 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2114 | 0.056 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2115 | 0.054 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2116 | 0.052 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2117 | 0.050 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2118 | 0.048 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2119 | 0.047 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2120 | 0.045 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$21,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
|  | 2121 | 0.044 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |
| End of 100-Year Study Period | 2122 | 0.042 | \$156,824 | \$145,449 | \$86,619 | \$24,634 | \$24,976 | \$9,220 | \$6,997 | \$4,377 | \$271,704 | \$251,521 | \$177,793 | \$56,995 | \$16,733 | \$20,183 | \$428,527 |

End of 100 -Year Study Period M\&I $=-$ municipal and industrial
WSIP $=$ Waters Storage Investment Program

```
STATUS: FINAL 
PREPARER: G DURNIN PHASE: 1 VERSION:
NOTES:
CHECER: N NURINON DATE: 2017 AUGUST
```




[^0]:    Status: FINAL
    PuRpose: benefit calculation, monetization, and resillency ag CAVEAT:

[^1]:    PREPARER: G DURNIN PHASE: 1 VERSION:
    Checker: n CARLSON DATE: 2017 AUGUST

