

様式3-様式4

費用集計表
(森林整備事業)

事業名： 水源林造成事業
 施行箇所： 熊野川広域流域 50年経過契約地

(単位:千円)

| 年度 | 事業費 | | | | 年度 | 事業費 | | | |
|-------|-----------|----------|-------|-----------|-------|-----|------------|-------|------------|
| | 事業費 | 割引率 | デフレター | 現在価値額 | | 事業費 | 割引率 | デフレター | 現在価値額 |
| S 4 1 | | × 7.3910 | | | H 3 9 | 0 | × 0.6756 | | 0 |
| S 4 2 | 1,231,395 | × 7.1067 | | 8,751,155 | H 4 0 | 0 | × 0.6496 | | 0 |
| S 4 3 | 295,700 | × 6.8333 | | 2,020,607 | H 4 1 | 0 | × 0.6246 | | 0 |
| S 4 4 | 237,024 | × 6.5705 | | 1,557,366 | H 4 2 | 0 | × 0.6006 | | 0 |
| S 4 5 | 175,676 | × 6.3178 | | 1,109,886 | H 4 3 | 0 | × 0.5775 | | 0 |
| S 4 6 | 130,330 | × 6.0748 | | 791,729 | H 4 4 | 0 | × 0.5553 | | 0 |
| S 4 7 | 120,478 | × 5.8412 | | 703,736 | H 4 5 | 0 | × 0.5339 | | 0 |
| S 4 8 | 0 | × 5.6165 | | 0 | H 4 6 | 0 | × 0.5134 | | 0 |
| S 4 9 | 50,704 | × 5.4005 | | 273,827 | H 4 7 | 0 | × 0.4936 | | 0 |
| S 5 0 | 0 | × 5.1928 | | 0 | H 4 8 | 0 | × 0.4746 | | 0 |
| S 5 1 | 46,577 | × 4.9931 | | 232,564 | H 4 9 | 0 | × 0.4564 | | 0 |
| S 5 2 | 4,135 | × 4.8010 | | 19,852 | H 5 0 | 0 | × 0.4388 | | 0 |
| S 5 3 | 142,788 | × 4.6164 | | 659,167 | H 5 1 | 0 | × 0.4220 | | 0 |
| S 5 4 | 0 | × 4.4388 | | 0 | H 5 2 | 0 | × 0.4057 | | 0 |
| S 5 5 | 212,537 | × 4.2681 | | 907,129 | H 5 3 | 0 | × 0.3901 | | 0 |
| S 5 6 | 0 | × 4.1039 | | 0 | H 5 4 | 0 | × 0.3751 | | 0 |
| S 5 7 | 24,890 | × 3.9461 | | 98,218 | H 5 5 | 0 | × 0.3607 | | 0 |
| S 5 8 | 0 | × 3.7943 | | 0 | H 5 6 | 0 | × 0.3468 | | 0 |
| S 5 9 | 54,260 | × 3.6484 | | 197,962 | H 5 7 | 0 | × 0.3335 | | 0 |
| S 6 0 | 0 | × 3.5081 | | 0 | H 5 8 | 0 | × 0.3207 | | 0 |
| S 6 1 | 109,947 | × 3.3731 | | 370,862 | | | | | |
| S 6 2 | 81,390 | × 3.2434 | | 263,980 | | | | | |
| S 6 3 | 0 | × 3.1187 | | 0 | | | | | |
| H 1 | 0 | × 2.9987 | | 0 | | | | | |
| H 2 | 0 | × 2.8834 | | 0 | | | | | |
| H 3 | 0 | × 2.7725 | | 0 | | | | | |
| H 4 | 151,711 | × 2.6658 | | 404,431 | | | | | |
| H 5 | 0 | × 2.5633 | | 0 | | | | | |
| H 6 | 0 | × 2.4647 | | 0 | | | | | |
| H 7 | 0 | × 2.3699 | | 0 | | | | | |
| H 8 | 0 | × 2.2788 | | 0 | | | | | |
| H 9 | 0 | × 2.1911 | | 0 | | | | | |
| H 1 0 | 0 | × 2.1068 | | 0 | | | | | |
| H 1 1 | 0 | × 2.0258 | | 0 | | | | | |
| H 1 2 | 0 | × 1.9479 | | 0 | | | | | |
| H 1 3 | 0 | × 1.8730 | | 0 | | | | | |
| H 1 4 | 0 | × 1.8009 | | 0 | | | | | |
| H 1 5 | 0 | × 1.7317 | | 0 | | | | | |
| H 1 6 | 0 | × 1.6651 | | 0 | | | | | |
| H 1 7 | 0 | × 1.6010 | | 0 | | | | | |
| H 1 8 | 0 | × 1.5395 | | 0 | | | | | |
| H 1 9 | 0 | × 1.4802 | | 0 | | | | | |
| H 2 0 | 0 | × 1.4233 | | 0 | | | | | |
| H 2 1 | 0 | × 1.3686 | | 0 | | | | | |
| H 2 2 | 0 | × 1.3159 | | 0 | | | | | |
| H 2 3 | 0 | × 1.2653 | | 0 | | | | | |
| H 2 4 | 0 | × 1.2167 | | 0 | | | | | |
| H 2 5 | 0 | × 1.1699 | | 0 | | | | | |
| H 2 6 | 0 | × 1.1249 | | 0 | | | | | |
| H 2 7 | 0 | × 1.0816 | | 0 | | | | | |
| H 2 8 | 0 | × 1.0400 | | 0 | | | | | |
| H 2 9 | 0 | × 1.0000 | | 0 | | | | | |
| H 3 0 | 0 | × 0.9615 | | 0 | | | | | |
| H 3 1 | 0 | × 0.9246 | | 0 | | | | | |
| H 3 2 | 0 | × 0.8890 | | 0 | | | | | |
| H 3 3 | 0 | × 0.8548 | | 0 | | | | | |
| H 3 4 | 170,106 | × 0.8219 | | 139,810 | | | | | |
| H 3 5 | 0 | × 0.7903 | | 0 | | | | | |
| H 3 6 | 0 | × 0.7599 | | 0 | | | | | |
| H 3 7 | 0 | × 0.7307 | | 0 | | | | | |
| H 3 8 | 0 | × 0.7026 | | 0 | | | | | |
| | | | | | 合 計 | | | | 18,502,281 |
| | | | | | C = | | 18,502,281 | | 千円 |

$$B = \sum_{t=1}^{T-1} \frac{t}{T \times (1+i)^t} + \sum_{t=T}^Y \frac{1}{(1+i)^t} \times \frac{(f1-f2) \times \alpha \times A \times U}{360}$$

- U: 治水ダムの単位雨量流出量当たりの年間減価償却費(円/㎡/sec) 4,330,000
 出典:「ダム年鑑2017」
- f1: 事業実施前の流出係数 浸透能大 急 要整備森林(疎林) 0.55
 出典:「治山設計」(山口伊佐夫著,1979)
- f2: 事業実施後、T年経過後の流出係数 浸透能大 急 整備済森林 0.45
 出典:「治山設計」(山口伊佐夫著,1979)
- T: 事業実施後、流出係数が安定するのに必要な年数 10
- α: 100年確率時雨量(mm/h) 80.90
 出典:気象統計情報(気象庁)
- A: 事業対象区域面積(ha) 509.36 ~ 509.36
- 360: 単位合わせのための調整値
- Y: 評価期間 80
- t: 経過年数(治山事業の便益の算出に当たっては、各年度の事業費の累計を用いている。
 ※社会的割引率を考慮するために用いる(1+i)^t(年数)とは異なる。)
- i: 社会的割引率(0.04)

事業効果面積: 経過年ごとに発生する事業対象区域面積に対して、それぞれ流出係数等の安定する期間(t/T)を考慮して面積に換算して年度毎に累計した面積

| 年度 | 社会的割引率 | 事業対象区域面積 ha | 事業効果面積 ha | 効果額 千円 | 現在価値化 千円 |
|-----|--------|-------------|-----------|--------|----------|
| S41 | 7.3910 | | | | |
| S42 | 7.1067 | 509.36 | 50.94 | 4,956 | 35,221 |
| S43 | 6.8333 | 509.36 | 101.87 | 9,913 | 67,739 |
| S44 | 6.5705 | 509.36 | 152.81 | 14,869 | 97,697 |
| S45 | 6.3178 | 509.36 | 203.74 | 19,825 | 125,250 |
| S46 | 6.0748 | 509.36 | 254.68 | 24,782 | 150,546 |
| S47 | 5.8412 | 509.36 | 305.62 | 29,738 | 173,706 |
| S48 | 5.6165 | 509.36 | 356.55 | 34,694 | 194,859 |
| S49 | 5.4005 | 509.36 | 407.49 | 39,651 | 214,135 |
| S50 | 5.1928 | 509.36 | 458.42 | 44,607 | 231,635 |
| S51 | 4.9931 | 509.36 | 509.36 | 49,563 | 247,473 |
| S52 | 4.8010 | 509.36 | 509.36 | 49,563 | 237,952 |
| S53 | 4.6164 | 509.36 | 509.36 | 49,563 | 228,803 |
| S54 | 4.4388 | 509.36 | 509.36 | 49,563 | 220,000 |
| S55 | 4.2681 | 509.36 | 509.36 | 49,563 | 211,540 |
| S56 | 4.1039 | 509.36 | 509.36 | 49,563 | 203,402 |
| S57 | 3.9461 | 509.36 | 509.36 | 49,563 | 195,581 |
| S58 | 3.7943 | 509.36 | 509.36 | 49,563 | 188,057 |
| S59 | 3.6484 | 509.36 | 509.36 | 49,563 | 180,826 |
| S60 | 3.5081 | 509.36 | 509.36 | 49,563 | 173,872 |
| S61 | 3.3731 | 509.36 | 509.36 | 49,563 | 167,181 |
| S62 | 3.2434 | 509.36 | 509.36 | 49,563 | 160,753 |
| S63 | 3.1187 | 509.36 | 509.36 | 49,563 | 154,572 |
| H1 | 2.9987 | 509.36 | 509.36 | 49,563 | 148,625 |
| H2 | 2.8834 | 509.36 | 509.36 | 49,563 | 142,910 |
| H3 | 2.7725 | 509.36 | 509.36 | 49,563 | 137,413 |
| H4 | 2.6658 | 509.36 | 509.36 | 49,563 | 132,125 |
| H5 | 2.5633 | 509.36 | 509.36 | 49,563 | 127,045 |
| H6 | 2.4647 | 509.36 | 509.36 | 49,563 | 122,158 |
| H7 | 2.3699 | 509.36 | 509.36 | 49,563 | 117,459 |
| H8 | 2.2788 | 509.36 | 509.36 | 49,563 | 112,944 |
| H9 | 2.1911 | 509.36 | 509.36 | 49,563 | 108,597 |
| H10 | 2.1068 | 509.36 | 509.36 | 49,563 | 104,419 |
| H11 | 2.0258 | 509.36 | 509.36 | 49,563 | 100,405 |
| H12 | 1.9479 | 509.36 | 509.36 | 49,563 | 96,544 |
| H13 | 1.8730 | 509.36 | 509.36 | 49,563 | 92,831 |
| H14 | 1.8009 | 509.36 | 509.36 | 49,563 | 89,258 |
| H15 | 1.7317 | 509.36 | 509.36 | 49,563 | 85,828 |
| H16 | 1.6651 | 509.36 | 509.36 | 49,563 | 82,527 |
| H17 | 1.6010 | 509.36 | 509.36 | 49,563 | 79,350 |
| H18 | 1.5395 | 509.36 | 509.36 | 49,563 | 76,302 |
| H19 | 1.4802 | 509.36 | 509.36 | 49,563 | 73,363 |
| H20 | 1.4233 | 509.36 | 509.36 | 49,563 | 70,543 |
| H21 | 1.3686 | 509.36 | 509.36 | 49,563 | 67,832 |
| H22 | 1.3159 | 509.36 | 509.36 | 49,563 | 65,220 |
| H23 | 1.2653 | 509.36 | 509.36 | 49,563 | 62,712 |
| H24 | 1.2167 | 509.36 | 509.36 | 49,563 | 60,303 |
| H25 | 1.1699 | 509.36 | 509.36 | 49,563 | 57,984 |
| H26 | 1.1249 | 509.36 | 509.36 | 49,563 | 55,753 |
| H27 | 1.0816 | 509.36 | 509.36 | 49,563 | 53,607 |
| H28 | 1.0400 | 509.36 | 509.36 | 49,563 | 51,546 |
| H29 | 1.0000 | 509.36 | 509.36 | 49,563 | 49,563 |
| H30 | 0.9615 | 509.36 | 509.36 | 49,563 | 47,655 |
| H31 | 0.9246 | 509.36 | 509.36 | 49,563 | 45,826 |
| H32 | 0.8890 | 509.36 | 509.36 | 49,563 | 44,062 |
| H33 | 0.8548 | 509.36 | 509.36 | 49,563 | 42,366 |

| | | | | | |
|-----|--------|--------|--------|--------|-----------|
| H34 | 0.8219 | 509.36 | 509.36 | 49,563 | 40,736 |
| H35 | 0.7903 | 509.36 | 509.36 | 49,563 | 39,170 |
| H36 | 0.7599 | 509.36 | 509.36 | 49,563 | 37,663 |
| H37 | 0.7307 | 509.36 | 509.36 | 49,563 | 36,216 |
| H38 | 0.7026 | 509.36 | 509.36 | 49,563 | 34,823 |
| H39 | 0.6756 | 509.36 | 509.36 | 49,563 | 33,485 |
| H40 | 0.6496 | 509.36 | 509.36 | 49,563 | 32,196 |
| H41 | 0.6246 | 509.36 | 509.36 | 49,563 | 30,957 |
| H42 | 0.6006 | 509.36 | 509.36 | 49,563 | 29,768 |
| H43 | 0.5775 | 509.36 | 509.36 | 49,563 | 28,623 |
| H44 | 0.5553 | 509.36 | 509.36 | 49,563 | 27,522 |
| H45 | 0.5339 | 509.36 | 509.36 | 49,563 | 26,462 |
| H46 | 0.5134 | 509.36 | 509.36 | 49,563 | 25,446 |
| H47 | 0.4936 | 509.36 | 509.36 | 49,563 | 24,464 |
| H48 | 0.4746 | 509.36 | 509.36 | 49,563 | 23,523 |
| H49 | 0.4564 | 509.36 | 509.36 | 49,563 | 22,621 |
| H50 | 0.4388 | 509.36 | 509.36 | 49,563 | 21,748 |
| H51 | 0.4220 | 509.36 | 509.36 | 49,563 | 20,916 |
| H52 | 0.4057 | 509.36 | 509.36 | 49,563 | 20,108 |
| H53 | 0.3901 | 509.36 | 509.36 | 49,563 | 19,335 |
| H54 | 0.3751 | 509.36 | 509.36 | 49,563 | 18,591 |
| H55 | 0.3607 | 509.36 | 509.36 | 49,563 | 17,877 |
| H56 | 0.3468 | 509.36 | 509.36 | 49,563 | 17,188 |
| H57 | 0.3335 | 509.36 | 509.36 | 49,563 | 16,529 |
| H58 | 0.3207 | 509.36 | 509.36 | 49,563 | 15,895 |
| 合計 | | | | | 7,327,737 |

$$B = \sum_{t=1}^{T-1} \frac{t}{T \times (1+i)^t} + \sum_{t=T}^Y \frac{1}{(1+i)^t} \times \frac{(D2-D1) \times A \times P \times U \times 10}{365 \times 86400}$$

- A: 事業対象区域面積 (ha) 509.36 ~ 509.36
- P: 年間平均降雨量 (mm/年) 2,176
出典: 気象統計情報 (気象庁)
- D1: 事業実施前の貯留率 0.51
出典: 「森林の間伐と水収支」(近嵐ら, 1987)
- D2: 事業実施後、T年経過後の貯留率 0.56
出典: 「森林の間伐と水収支」(近嵐ら, 1987)
- T: 事業実施後、流出係数が安定するのに必要な年数 10
- U: 開発流量当りの利水ダム年間減価償却費 (円/m3/S) 1,058,000,000
出典: 「ダム年鑑2017」
- Y: 評価期間 80
- t: 経過年数(治山事業の便益の算出に当たっては、各年度の事業費の累計を用いている。)
※社会的割引率を考慮するために用いる(1+i)^tのt(年数)とは異なる。
- i: 社会的割引率(0.04)
- 10: 単位合わせのための調整値 10
- 365: 1年間の日数 365
- 86400: 1日の秒数 86,400

事業効果面積: 経過年ごとに発生する事業対象区域面積に対して、それぞれ流出係数等の安定する期間(t/T)を考慮して面積に換算して年度毎に累計した面積

| 年度 | 社会的割引率 | 事業対象区域面積 ha | 事業効果面積 ha | 効果額 千円 | 現在価値化 千円 |
|-----|--------|-------------|-----------|--------|----------|
| S41 | 7.3910 | | | | |
| S42 | 7.1067 | 509.36 | 50.94 | 1,859 | 13,211 |
| S43 | 6.8333 | 509.36 | 101.87 | 3,718 | 25,406 |
| S44 | 6.5705 | 509.36 | 152.81 | 5,577 | 36,644 |
| S45 | 6.3178 | 509.36 | 203.74 | 7,436 | 46,979 |
| S46 | 6.0748 | 509.36 | 254.68 | 9,295 | 56,465 |
| S47 | 5.8412 | 509.36 | 305.62 | 11,154 | 65,153 |
| S48 | 5.6165 | 509.36 | 356.55 | 13,013 | 73,088 |
| S49 | 5.4005 | 509.36 | 407.49 | 14,872 | 80,316 |
| S50 | 5.1928 | 509.36 | 458.42 | 16,732 | 86,886 |
| S51 | 4.9931 | 509.36 | 509.36 | 18,591 | 92,827 |
| S52 | 4.8010 | 509.36 | 509.36 | 18,591 | 89,255 |
| S53 | 4.6164 | 509.36 | 509.36 | 18,591 | 85,823 |
| S54 | 4.4388 | 509.36 | 509.36 | 18,591 | 82,522 |
| S55 | 4.2681 | 509.36 | 509.36 | 18,591 | 79,348 |
| S56 | 4.1039 | 509.36 | 509.36 | 18,591 | 76,296 |
| S57 | 3.9461 | 509.36 | 509.36 | 18,591 | 73,362 |
| S58 | 3.7943 | 509.36 | 509.36 | 18,591 | 70,540 |
| S59 | 3.6484 | 509.36 | 509.36 | 18,591 | 67,827 |
| S60 | 3.5081 | 509.36 | 509.36 | 18,591 | 65,219 |
| S61 | 3.3731 | 509.36 | 509.36 | 18,591 | 62,709 |
| S62 | 3.2434 | 509.36 | 509.36 | 18,591 | 60,298 |
| S63 | 3.1187 | 509.36 | 509.36 | 18,591 | 57,980 |
| H1 | 2.9987 | 509.36 | 509.36 | 18,591 | 55,749 |
| H2 | 2.8834 | 509.36 | 509.36 | 18,591 | 53,605 |
| H3 | 2.7725 | 509.36 | 509.36 | 18,591 | 51,544 |
| H4 | 2.6658 | 509.36 | 509.36 | 18,591 | 49,560 |
| H5 | 2.5633 | 509.36 | 509.36 | 18,591 | 47,654 |
| H6 | 2.4647 | 509.36 | 509.36 | 18,591 | 45,821 |
| H7 | 2.3699 | 509.36 | 509.36 | 18,591 | 44,059 |
| H8 | 2.2788 | 509.36 | 509.36 | 18,591 | 42,365 |
| H9 | 2.1911 | 509.36 | 509.36 | 18,591 | 40,735 |
| H10 | 2.1068 | 509.36 | 509.36 | 18,591 | 39,168 |
| H11 | 2.0258 | 509.36 | 509.36 | 18,591 | 37,662 |
| H12 | 1.9479 | 509.36 | 509.36 | 18,591 | 36,213 |
| H13 | 1.8730 | 509.36 | 509.36 | 18,591 | 34,821 |
| H14 | 1.8009 | 509.36 | 509.36 | 18,591 | 33,481 |
| H15 | 1.7317 | 509.36 | 509.36 | 18,591 | 32,194 |
| H16 | 1.6651 | 509.36 | 509.36 | 18,591 | 30,956 |
| H17 | 1.6010 | 509.36 | 509.36 | 18,591 | 29,764 |
| H18 | 1.5395 | 509.36 | 509.36 | 18,591 | 28,621 |
| H19 | 1.4802 | 509.36 | 509.36 | 18,591 | 27,518 |
| H20 | 1.4233 | 509.36 | 509.36 | 18,591 | 26,461 |
| H21 | 1.3686 | 509.36 | 509.36 | 18,591 | 25,444 |
| H22 | 1.3159 | 509.36 | 509.36 | 18,591 | 24,464 |
| H23 | 1.2653 | 509.36 | 509.36 | 18,591 | 23,523 |
| H24 | 1.2167 | 509.36 | 509.36 | 18,591 | 22,620 |
| H25 | 1.1699 | 509.36 | 509.36 | 18,591 | 21,750 |
| H26 | 1.1249 | 509.36 | 509.36 | 18,591 | 20,913 |
| H27 | 1.0816 | 509.36 | 509.36 | 18,591 | 20,108 |
| H28 | 1.0400 | 509.36 | 509.36 | 18,591 | 19,335 |
| H29 | 1.0000 | 509.36 | 509.36 | 18,591 | 18,591 |

| | | | | | |
|-----|--------|--------|--------|--------|-----------|
| H30 | 0.9615 | 509.36 | 509.36 | 18,591 | 17,875 |
| H31 | 0.9246 | 509.36 | 509.36 | 18,591 | 17,189 |
| H32 | 0.8890 | 509.36 | 509.36 | 18,591 | 16,527 |
| H33 | 0.8548 | 509.36 | 509.36 | 18,591 | 15,892 |
| H34 | 0.8219 | 509.36 | 509.36 | 18,591 | 15,280 |
| H35 | 0.7903 | 509.36 | 509.36 | 18,591 | 14,692 |
| H36 | 0.7599 | 509.36 | 509.36 | 18,591 | 14,127 |
| H37 | 0.7307 | 509.36 | 509.36 | 18,591 | 13,584 |
| H38 | 0.7026 | 509.36 | 509.36 | 18,591 | 13,062 |
| H39 | 0.6756 | 509.36 | 509.36 | 18,591 | 12,560 |
| H40 | 0.6496 | 509.36 | 509.36 | 18,591 | 12,077 |
| H41 | 0.6246 | 509.36 | 509.36 | 18,591 | 11,612 |
| H42 | 0.6006 | 509.36 | 509.36 | 18,591 | 11,166 |
| H43 | 0.5775 | 509.36 | 509.36 | 18,591 | 10,736 |
| H44 | 0.5553 | 509.36 | 509.36 | 18,591 | 10,324 |
| H45 | 0.5339 | 509.36 | 509.36 | 18,591 | 9,926 |
| H46 | 0.5134 | 509.36 | 509.36 | 18,591 | 9,545 |
| H47 | 0.4936 | 509.36 | 509.36 | 18,591 | 9,177 |
| H48 | 0.4746 | 509.36 | 509.36 | 18,591 | 8,823 |
| H49 | 0.4564 | 509.36 | 509.36 | 18,591 | 8,485 |
| H50 | 0.4388 | 509.36 | 509.36 | 18,591 | 8,158 |
| H51 | 0.4220 | 509.36 | 509.36 | 18,591 | 7,845 |
| H52 | 0.4057 | 509.36 | 509.36 | 18,591 | 7,542 |
| H53 | 0.3901 | 509.36 | 509.36 | 18,591 | 7,252 |
| H54 | 0.3751 | 509.36 | 509.36 | 18,591 | 6,973 |
| H55 | 0.3607 | 509.36 | 509.36 | 18,591 | 6,706 |
| H56 | 0.3468 | 509.36 | 509.36 | 18,591 | 6,447 |
| H57 | 0.3335 | 509.36 | 509.36 | 18,591 | 6,200 |
| H58 | 0.3207 | 509.36 | 509.36 | 18,591 | 5,962 |
| 合計 | | | | | 2,748,597 |

$$B = \sum_{t=1}^{T-1} \frac{t}{T \times (1+i)^t} + \sum_{t=T}^Y \frac{1}{(1+i)^t} \times (D2-D1) \times A \times P \times u \times 10$$

$$u = \frac{U_x \times Q_x + U_y \times Q_y}{Q_x + Q_y}$$

- Qx: 全貯留量のうち生活用水使用相当量 15.70 億立方
- Qy: 全貯留量 - Qx 126.73 億立方
- A: 事業対象区域面積 (ha) 509.36 ~ 509.36
- P: 年間平均降雨量 (mm/年) 2,176
出典: 気象統計情報 (気象庁)
- T: 事業実施後、貯留率が安定するのに必要な年数 10
- D1: 事業実施前の貯留率 0.51
出典: 「森林の間伐と水収支」(近嵐ら、1987)
- D2: 事業実施後、T年経過後の貯留率 0.56
出典: 「森林の間伐と水収支」(近嵐ら、1987)
- Ux: 単位当たりの上水道供給単価 (円/m3) 175.67
出典: 「地方公営企業年鑑 (平成27年度版)」(総務省) 等
- Uy: 単位当たりの雨水浄化費 (円/m3) 68.60
出典: 「地球環境・人間生活にかかる農業及び森林の多面的な機能の評価に関する調査研究報告書」(三菱総合研究所、H13.11)「雨水利用ハンドブック」
- u: 単位当たりの水質浄化費 (Ux と Uy を用いて Qx と Qy で比例按分して算出) 80.40
- t: 経過年数 (治山事業の便益の算出に当たっては、各年度の事業費の累計を用いている。
※社会的割引率を考慮するために用いる (1+i)^t (年数) とは異なる。)
- i: 社会的割引率 (0.04)
- Y: 評価期間 80
- 10: 単位合わせのための調整値

事業効果面積: 経過年ごとに発生する事業対象区域面積に対して、それぞれ流出係数等の安定する期間 (t/T) を考慮して面積に換算して年度毎に累計した面積

| 年度 | 社会的割引率 | 事業対象区域面積 ha | 事業効果面積 ha | 効果額 千円 | 現在価値化 千円 |
|-----|--------|-------------|-----------|--------|----------|
| S41 | 7.3910 | | | | |
| S42 | 7.1067 | 509.36 | 50.94 | 4,455 | 31,660 |
| S43 | 6.8333 | 509.36 | 101.87 | 8,911 | 60,892 |
| S44 | 6.5705 | 509.36 | 152.81 | 13,366 | 87,821 |
| S45 | 6.3178 | 509.36 | 203.74 | 17,821 | 112,590 |
| S46 | 6.0748 | 509.36 | 254.68 | 22,277 | 135,328 |
| S47 | 5.8412 | 509.36 | 305.62 | 26,732 | 156,147 |
| S48 | 5.6165 | 509.36 | 356.55 | 31,187 | 175,162 |
| S49 | 5.4005 | 509.36 | 407.49 | 35,643 | 192,490 |
| S50 | 5.1928 | 509.36 | 458.42 | 40,098 | 208,221 |
| S51 | 4.9931 | 509.36 | 509.36 | 44,553 | 222,458 |
| S52 | 4.8010 | 509.36 | 509.36 | 44,553 | 213,899 |
| S53 | 4.6164 | 509.36 | 509.36 | 44,553 | 205,674 |
| S54 | 4.4388 | 509.36 | 509.36 | 44,553 | 197,762 |
| S55 | 4.2681 | 509.36 | 509.36 | 44,553 | 190,157 |
| S56 | 4.1039 | 509.36 | 509.36 | 44,553 | 182,841 |
| S57 | 3.9461 | 509.36 | 509.36 | 44,553 | 175,811 |
| S58 | 3.7943 | 509.36 | 509.36 | 44,553 | 169,047 |
| S59 | 3.6484 | 509.36 | 509.36 | 44,553 | 162,547 |
| S60 | 3.5081 | 509.36 | 509.36 | 44,553 | 156,296 |
| S61 | 3.3731 | 509.36 | 509.36 | 44,553 | 150,282 |
| S62 | 3.2434 | 509.36 | 509.36 | 44,553 | 144,503 |
| S63 | 3.1187 | 509.36 | 509.36 | 44,553 | 138,947 |
| H1 | 2.9987 | 509.36 | 509.36 | 44,553 | 133,601 |
| H2 | 2.8834 | 509.36 | 509.36 | 44,553 | 128,464 |
| H3 | 2.7725 | 509.36 | 509.36 | 44,553 | 123,523 |
| H4 | 2.6658 | 509.36 | 509.36 | 44,553 | 118,769 |
| H5 | 2.5633 | 509.36 | 509.36 | 44,553 | 114,203 |
| H6 | 2.4647 | 509.36 | 509.36 | 44,553 | 109,810 |
| H7 | 2.3699 | 509.36 | 509.36 | 44,553 | 105,586 |
| H8 | 2.2788 | 509.36 | 509.36 | 44,553 | 101,527 |
| H9 | 2.1911 | 509.36 | 509.36 | 44,553 | 97,620 |
| H10 | 2.1068 | 509.36 | 509.36 | 44,553 | 93,864 |
| H11 | 2.0258 | 509.36 | 509.36 | 44,553 | 90,255 |
| H12 | 1.9479 | 509.36 | 509.36 | 44,553 | 86,785 |
| H13 | 1.8730 | 509.36 | 509.36 | 44,553 | 83,448 |
| H14 | 1.8009 | 509.36 | 509.36 | 44,553 | 80,235 |
| H15 | 1.7317 | 509.36 | 509.36 | 44,553 | 77,152 |
| H16 | 1.6651 | 509.36 | 509.36 | 44,553 | 74,185 |
| H17 | 1.6010 | 509.36 | 509.36 | 44,553 | 71,329 |
| H18 | 1.5395 | 509.36 | 509.36 | 44,553 | 68,589 |
| H19 | 1.4802 | 509.36 | 509.36 | 44,553 | 65,947 |
| H20 | 1.4233 | 509.36 | 509.36 | 44,553 | 63,412 |
| H21 | 1.3686 | 509.36 | 509.36 | 44,553 | 60,975 |

| | | | | | |
|-----|--------|--------|--------|--------|-----------|
| H22 | 1.3159 | 509.36 | 509.36 | 44,553 | 58,627 |
| H23 | 1.2653 | 509.36 | 509.36 | 44,553 | 56,373 |
| H24 | 1.2167 | 509.36 | 509.36 | 44,553 | 54,208 |
| H25 | 1.1699 | 509.36 | 509.36 | 44,553 | 52,123 |
| H26 | 1.1249 | 509.36 | 509.36 | 44,553 | 50,118 |
| H27 | 1.0816 | 509.36 | 509.36 | 44,553 | 48,189 |
| H28 | 1.0400 | 509.36 | 509.36 | 44,553 | 46,335 |
| H29 | 1.0000 | 509.36 | 509.36 | 44,553 | 44,553 |
| H30 | 0.9615 | 509.36 | 509.36 | 44,553 | 42,838 |
| H31 | 0.9246 | 509.36 | 509.36 | 44,553 | 41,194 |
| H32 | 0.8890 | 509.36 | 509.36 | 44,553 | 39,608 |
| H33 | 0.8548 | 509.36 | 509.36 | 44,553 | 38,084 |
| H34 | 0.8219 | 509.36 | 509.36 | 44,553 | 36,618 |
| H35 | 0.7903 | 509.36 | 509.36 | 44,553 | 35,210 |
| H36 | 0.7599 | 509.36 | 509.36 | 44,553 | 33,856 |
| H37 | 0.7307 | 509.36 | 509.36 | 44,553 | 32,555 |
| H38 | 0.7026 | 509.36 | 509.36 | 44,553 | 31,303 |
| H39 | 0.6756 | 509.36 | 509.36 | 44,553 | 30,100 |
| H40 | 0.6496 | 509.36 | 509.36 | 44,553 | 28,942 |
| H41 | 0.6246 | 509.36 | 509.36 | 44,553 | 27,828 |
| H42 | 0.6006 | 509.36 | 509.36 | 44,553 | 26,759 |
| H43 | 0.5775 | 509.36 | 509.36 | 44,553 | 25,729 |
| H44 | 0.5553 | 509.36 | 509.36 | 44,553 | 24,740 |
| H45 | 0.5339 | 509.36 | 509.36 | 44,553 | 23,787 |
| H46 | 0.5134 | 509.36 | 509.36 | 44,553 | 22,874 |
| H47 | 0.4936 | 509.36 | 509.36 | 44,553 | 21,991 |
| H48 | 0.4746 | 509.36 | 509.36 | 44,553 | 21,145 |
| H49 | 0.4564 | 509.36 | 509.36 | 44,553 | 20,334 |
| H50 | 0.4388 | 509.36 | 509.36 | 44,553 | 19,550 |
| H51 | 0.4220 | 509.36 | 509.36 | 44,553 | 18,801 |
| H52 | 0.4057 | 509.36 | 509.36 | 44,553 | 18,075 |
| H53 | 0.3901 | 509.36 | 509.36 | 44,553 | 17,380 |
| H54 | 0.3751 | 509.36 | 509.36 | 44,553 | 16,712 |
| H55 | 0.3607 | 509.36 | 509.36 | 44,553 | 16,070 |
| H56 | 0.3468 | 509.36 | 509.36 | 44,553 | 15,451 |
| H57 | 0.3335 | 509.36 | 509.36 | 44,553 | 14,858 |
| H58 | 0.3207 | 509.36 | 509.36 | 44,553 | 14,288 |
| 合計 | | | | | 6,587,020 |

| | | | | | |
|-----|--------|--------|--------|--------|-----------|
| H38 | 0.7026 | 509.36 | 509.36 | 53,340 | 37,477 |
| H39 | 0.6756 | 509.36 | 509.36 | 53,340 | 36,037 |
| H40 | 0.6496 | 509.36 | 509.36 | 53,340 | 34,650 |
| H41 | 0.6246 | 509.36 | 509.36 | 53,340 | 33,316 |
| H42 | 0.6006 | 509.36 | 509.36 | 53,340 | 32,036 |
| H43 | 0.5775 | 509.36 | 509.36 | 53,340 | 30,804 |
| H44 | 0.5553 | 509.36 | 509.36 | 53,340 | 29,620 |
| H45 | 0.5339 | 509.36 | 509.36 | 53,340 | 28,478 |
| H46 | 0.5134 | 509.36 | 509.36 | 53,340 | 27,385 |
| H47 | 0.4936 | 509.36 | 509.36 | 53,340 | 26,329 |
| H48 | 0.4746 | 509.36 | 509.36 | 53,340 | 25,315 |
| H49 | 0.4564 | 509.36 | 509.36 | 53,340 | 24,344 |
| H50 | 0.4388 | 509.36 | 509.36 | 53,340 | 23,406 |
| H51 | 0.4220 | 509.36 | 509.36 | 53,340 | 22,509 |
| H52 | 0.4057 | 509.36 | 509.36 | 53,340 | 21,640 |
| H53 | 0.3901 | 509.36 | 509.36 | 53,340 | 20,808 |
| H54 | 0.3751 | 509.36 | 509.36 | 53,340 | 20,008 |
| H55 | 0.3607 | 509.36 | 509.36 | 53,340 | 19,240 |
| H56 | 0.3468 | 509.36 | 509.36 | 53,340 | 18,498 |
| H57 | 0.3335 | 509.36 | 509.36 | 53,340 | 17,789 |
| H58 | 0.3207 | 509.36 | 509.36 | 53,340 | 17,106 |
| 合計 | | | | | 7,886,144 |

$$B = \sum_{t=11}^Y \frac{V \times U}{(1+i)^t}$$

$$V = 0.01 \times A \times R \times N \times H \times 10,000$$

- U: 1m3の土砂を保全するために要する単位当たりの砂防ダム建設コスト(円/m3) 5,600
出典:「砂防便覧」平成20年版
- V: 崩壊見込み量(m3/年) 0.00 ~ 216.37
- A: 事業対象区域面積(ha) 509.36 ~ 509.36
- R: 流域内崩壊率 0.0029
出典:「治山全体調査」S42からS46
- N: 雨量比=50年確率日雨量/既往最大日雨量 0.8370
出典:気象統計情報(気象庁)
- L: 事業対象区域の周囲(m)(治山事業のみ算定対象)
周囲面積 L×H/10,000 (ha)
- H: 平均崩壊深(m) 1.8
出典:都道府県等への聞き取り
- Y: 評価期間 80
- i: 社会的割引率(0.04)
- 10,000: 単位合わせのための調整値

| 年度 | 社会的割引率 | 事業対象区域面積 ha | 崩壊見込み量 m/年 | 効果額 千円 | 現在価値化 千円 |
|-----|--------|-------------|------------|--------|----------|
| S41 | 7.3910 | | | | |
| S42 | 7.1067 | 509.36 | 0.00 | 0 | 0 |
| S43 | 6.8333 | 509.36 | 0.00 | 0 | 0 |
| S44 | 6.5705 | 509.36 | 0.00 | 0 | 0 |
| S45 | 6.3178 | 509.36 | 0.00 | 0 | 0 |
| S46 | 6.0748 | 509.36 | 0.00 | 0 | 0 |
| S47 | 5.8412 | 509.36 | 0.00 | 0 | 0 |
| S48 | 5.6165 | 509.36 | 0.00 | 0 | 0 |
| S49 | 5.4005 | 509.36 | 0.00 | 0 | 0 |
| S50 | 5.1928 | 509.36 | 0.00 | 0 | 0 |
| S51 | 4.9931 | 509.36 | 0.00 | 0 | 0 |
| S52 | 4.8010 | 509.36 | 216.37 | 1,212 | 5,819 |
| S53 | 4.6164 | 509.36 | 216.37 | 1,212 | 5,595 |
| S54 | 4.4388 | 509.36 | 216.37 | 1,212 | 5,380 |
| S55 | 4.2681 | 509.36 | 216.37 | 1,212 | 5,173 |
| S56 | 4.1039 | 509.36 | 216.37 | 1,212 | 4,974 |
| S57 | 3.9461 | 509.36 | 216.37 | 1,212 | 4,783 |
| S58 | 3.7943 | 509.36 | 216.37 | 1,212 | 4,599 |
| S59 | 3.6484 | 509.36 | 216.37 | 1,212 | 4,422 |
| S60 | 3.5081 | 509.36 | 216.37 | 1,212 | 4,252 |
| S61 | 3.3731 | 509.36 | 216.37 | 1,212 | 4,088 |
| S62 | 3.2434 | 509.36 | 216.37 | 1,212 | 3,931 |
| S63 | 3.1187 | 509.36 | 216.37 | 1,212 | 3,780 |
| H1 | 2.9987 | 509.36 | 216.37 | 1,212 | 3,634 |
| H2 | 2.8834 | 509.36 | 216.37 | 1,212 | 3,495 |
| H3 | 2.7725 | 509.36 | 216.37 | 1,212 | 3,360 |
| H4 | 2.6658 | 509.36 | 216.37 | 1,212 | 3,231 |
| H5 | 2.5633 | 509.36 | 216.37 | 1,212 | 3,107 |
| H6 | 2.4647 | 509.36 | 216.37 | 1,212 | 2,987 |
| H7 | 2.3699 | 509.36 | 216.37 | 1,212 | 2,872 |
| H8 | 2.2788 | 509.36 | 216.37 | 1,212 | 2,762 |
| H9 | 2.1911 | 509.36 | 216.37 | 1,212 | 2,656 |
| H10 | 2.1068 | 509.36 | 216.37 | 1,212 | 2,553 |
| H11 | 2.0258 | 509.36 | 216.37 | 1,212 | 2,455 |
| H12 | 1.9479 | 509.36 | 216.37 | 1,212 | 2,361 |
| H13 | 1.8730 | 509.36 | 216.37 | 1,212 | 2,270 |
| H14 | 1.8009 | 509.36 | 216.37 | 1,212 | 2,183 |
| H15 | 1.7317 | 509.36 | 216.37 | 1,212 | 2,099 |
| H16 | 1.6651 | 509.36 | 216.37 | 1,212 | 2,018 |
| H17 | 1.6010 | 509.36 | 216.37 | 1,212 | 1,940 |
| H18 | 1.5395 | 509.36 | 216.37 | 1,212 | 1,866 |
| H19 | 1.4802 | 509.36 | 216.37 | 1,212 | 1,794 |
| H20 | 1.4233 | 509.36 | 216.37 | 1,212 | 1,725 |
| H21 | 1.3686 | 509.36 | 216.37 | 1,212 | 1,659 |
| H22 | 1.3159 | 509.36 | 216.37 | 1,212 | 1,595 |
| H23 | 1.2653 | 509.36 | 216.37 | 1,212 | 1,534 |
| H24 | 1.2167 | 509.36 | 216.37 | 1,212 | 1,475 |
| H25 | 1.1699 | 509.36 | 216.37 | 1,212 | 1,418 |
| H26 | 1.1249 | 509.36 | 216.37 | 1,212 | 1,363 |
| H27 | 1.0816 | 509.36 | 216.37 | 1,212 | 1,311 |
| H28 | 1.0400 | 509.36 | 216.37 | 1,212 | 1,260 |
| H29 | 1.0000 | 509.36 | 216.37 | 1,212 | 1,212 |
| H30 | 0.9615 | 509.36 | 216.37 | 1,212 | 1,165 |
| H31 | 0.9246 | 509.36 | 216.37 | 1,212 | 1,121 |

| | | | | | |
|-----|--------|--------|--------|-------|---------|
| H32 | 0.8890 | 509.36 | 216.37 | 1,212 | 1,077 |
| H33 | 0.8548 | 509.36 | 216.37 | 1,212 | 1,036 |
| H34 | 0.8219 | 509.36 | 216.37 | 1,212 | 996 |
| H35 | 0.7903 | 509.36 | 216.37 | 1,212 | 958 |
| H36 | 0.7599 | 509.36 | 216.37 | 1,212 | 921 |
| H37 | 0.7307 | 509.36 | 216.37 | 1,212 | 886 |
| H38 | 0.7026 | 509.36 | 216.37 | 1,212 | 852 |
| H39 | 0.6756 | 509.36 | 216.37 | 1,212 | 819 |
| H40 | 0.6496 | 509.36 | 216.37 | 1,212 | 787 |
| H41 | 0.6246 | 509.36 | 216.37 | 1,212 | 757 |
| H42 | 0.6006 | 509.36 | 216.37 | 1,212 | 728 |
| H43 | 0.5775 | 509.36 | 216.37 | 1,212 | 700 |
| H44 | 0.5553 | 509.36 | 216.37 | 1,212 | 673 |
| H45 | 0.5339 | 509.36 | 216.37 | 1,212 | 647 |
| H46 | 0.5134 | 509.36 | 216.37 | 1,212 | 622 |
| H47 | 0.4936 | 509.36 | 216.37 | 1,212 | 598 |
| H48 | 0.4746 | 509.36 | 216.37 | 1,212 | 575 |
| H49 | 0.4564 | 509.36 | 216.37 | 1,212 | 553 |
| H50 | 0.4388 | 509.36 | 216.37 | 1,212 | 532 |
| H51 | 0.4220 | 509.36 | 216.37 | 1,212 | 511 |
| H52 | 0.4057 | 509.36 | 216.37 | 1,212 | 492 |
| H53 | 0.3901 | 509.36 | 216.37 | 1,212 | 473 |
| H54 | 0.3751 | 509.36 | 216.37 | 1,212 | 455 |
| H55 | 0.3607 | 509.36 | 216.37 | 1,212 | 437 |
| H56 | 0.3468 | 509.36 | 216.37 | 1,212 | 420 |
| H57 | 0.3335 | 509.36 | 216.37 | 1,212 | 404 |
| H58 | 0.3207 | 509.36 | 216.37 | 1,212 | 389 |
| 合計 | | | | | 141,575 |

$$B = \sum_{t=1}^Y \frac{G2 - G1}{Y \times (1+i)^t} \times D \times BEF \times (1+R) \times 0.5 \times \frac{44}{12} \times U$$

| | | | | |
|--------|--|--|--------------------------------------|------------------------------|
| U: | 二酸化炭素に関する原単位 (円/CO2-ton) 出典: 東京都層量削減義務による排出量取引制度における仲値(アーガス・メディア・リミテッド(Argus Media Limited)による平成27年10月23日査定価格) | | 5,500 | |
| G1: | 事業を実施しない場合の当該森林の事業着手年から評価最終年(伐期)までの見込み成長量(m3)又は見込み蓄積量増加分(m3) (事業を実施する場合の評価最終年の当該森林の見込蓄積量の1/2を想定) | スギ ヒノキ マツ 広葉樹 0 0 | 56,498 23,801 847 12,446 | |
| G2: | 事業を実施する場合の当該森林の事業着手年から評価最終年(伐期)までの見込み成長量(m3)又は見込み蓄積量増加分(m3) 出典: 人工林分密度管理図((一社)日本森林技術協会)、 森林整備センター収穫予測表((国研)森林研究・整備機構)等 | スギ ヒノキ マツ 広葉樹 0 0 | 112,995 47,602 1,694 24,891 | |
| Y: | 評価期間 | | 80 | |
| D: | 容積密度 (t/m3) 出典: 「日本国温室効果ガスインベントリ報告書」(2017年4月) 温室効果ガスインベントリオフィス(GIO)編 | スギ ヒノキ マツ 広葉樹 0 0 | 0.314 0.407 0.451 0.639 | |
| BEF: | バイオマス拡大係数(地上部バイオマス量/幹バイオマス量) 出典: 「日本国温室効果ガスインベントリ報告書」(2017年4月) 温室効果ガスインベントリオフィス(GIO)編 | 樹齢20年越 樹齢20年越 樹齢20年越 樹齢20年越 樹齢20年越 樹齢20年越 | スギ ヒノキ マツ 広葉樹 0 0 | 1.23 1.24 1.23 1.31 |
| R: | 地上部に対する地下部の比率(地下部バイオマス量/地上部バイオマス量) 出典: 「日本国温室効果ガスインベントリ報告書」(2017年4月) 温室効果ガスインベントリオフィス(GIO)編 | スギ ヒノキ マツ 広葉樹 0 0 | 0.25 0.26 0.26 0.26 | |
| i: | 社会的割引率(0.04) | | | |
| 0.5: | 植物中の炭素含有率 | | | |
| 44/12: | 炭素から二酸化炭素への換算係数 | | | |

事業効果蓄積 事業効果蓄積(表中表頭部)の算出は、増加した蓄積を評価期間で割って平均化している。

| 年度 | 社会的割引率 | スギ | | ヒノキ | | マツ | | 広葉樹 | | 事業効果蓄積 m ³ | 効果額 千円 | 事業効果蓄積 m ³ | 効果額 千円 |
|-----|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| | | 事業効果蓄積 m ³ | 効果額 千円 | 事業効果蓄積 m ³ | 効果額 千円 | 事業効果蓄積 m ³ | 効果額 千円 | 事業効果蓄積 m ³ | 効果額 千円 | | | | |
| S41 | 7.3910 | | | | | | | | | | | | |
| S42 | 7.1067 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S43 | 6.8333 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S44 | 6.5705 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S45 | 6.3178 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S46 | 6.0748 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S47 | 5.8412 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S48 | 5.6165 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S49 | 5.4005 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S50 | 5.1928 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S51 | 4.9931 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S52 | 4.8010 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S53 | 4.6164 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S54 | 4.4388 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S55 | 4.2681 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S56 | 4.1039 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S57 | 3.9461 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S58 | 3.7943 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S59 | 3.6484 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S60 | 3.5081 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S61 | 3.3731 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S62 | 3.2434 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| S63 | 3.1187 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H1 | 2.9987 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H2 | 2.8834 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H3 | 2.7725 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H4 | 2.6658 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H5 | 2.5633 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H6 | 2.4647 | 706.22 | 3,439 | 297.51 | 1,907 | 10.59 | 75 | 155.57 | 1,649 | | | | |

| | | | | | | | | | | | | | |
|-----|--------|--------|-------|--------|-------|-------|----|--------|-------|--|--|--|--|
| H7 | 2.3699 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H8 | 2.2788 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H9 | 2.1911 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H10 | 2.1068 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H11 | 2.0258 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H12 | 1.9479 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H13 | 1.8730 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H14 | 1.8009 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H15 | 1.7317 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H16 | 1.6651 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H17 | 1.6010 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H18 | 1.5395 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H19 | 1.4802 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H20 | 1.4233 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H21 | 1.3686 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H22 | 1.3159 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H23 | 1.2653 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H24 | 1.2167 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H25 | 1.1699 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H26 | 1.1249 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H27 | 1.0816 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H28 | 1.0400 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H29 | 1.0000 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H30 | 0.9615 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H31 | 0.9246 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H32 | 0.8890 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H33 | 0.8548 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H34 | 0.8219 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H35 | 0.7903 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H36 | 0.7599 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H37 | 0.7307 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H38 | 0.7026 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H39 | 0.6756 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H40 | 0.6496 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H41 | 0.6246 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H42 | 0.6006 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H43 | 0.5775 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H44 | 0.5553 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H45 | 0.5339 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H46 | 0.5134 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H47 | 0.4936 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H48 | 0.4746 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H49 | 0.4564 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H50 | 0.4388 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H51 | 0.4220 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H52 | 0.4057 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H53 | 0.3901 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H54 | 0.3751 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H55 | 0.3607 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H56 | 0.3468 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H57 | 0.3335 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| H58 | 0.3207 | 706.22 | 3.439 | 297.51 | 1.907 | 10.59 | 75 | 155.57 | 1,649 | | | | |
| 合計 | | | | | | | | | | | | | |

| | | 合計 | |
|-----|--------|-------|--------|
| 年度 | 社会的割引率 | 効果額 | 現在価値化 |
| S41 | 7.3910 | | |
| S42 | 7.1067 | 7,070 | 50,244 |
| S43 | 6.8333 | 7,070 | 48,311 |
| S44 | 6.5705 | 7,070 | 46,453 |
| S45 | 6.3178 | 7,070 | 44,667 |
| S46 | 6.0748 | 7,070 | 42,949 |
| S47 | 5.8412 | 7,070 | 41,297 |
| S48 | 5.6165 | 7,070 | 39,709 |
| S49 | 5.4005 | 7,070 | 38,182 |
| S50 | 5.1928 | 7,070 | 36,713 |
| S51 | 4.9931 | 7,070 | 35,301 |
| S52 | 4.8010 | 7,070 | 33,943 |
| S53 | 4.6164 | 7,070 | 32,638 |
| S54 | 4.4388 | 7,070 | 31,382 |
| S55 | 4.2681 | 7,070 | 30,175 |
| S56 | 4.1039 | 7,070 | 29,015 |
| S57 | 3.9461 | 7,070 | 27,899 |
| S58 | 3.7943 | 7,070 | 26,826 |
| S59 | 3.6484 | 7,070 | 25,794 |
| S60 | 3.5081 | 7,070 | 24,802 |
| S61 | 3.3731 | 7,070 | 23,848 |
| S62 | 3.2434 | 7,070 | 22,931 |
| S63 | 3.1187 | 7,070 | 22,049 |
| H1 | 2.9987 | 7,070 | 21,201 |
| H2 | 2.8834 | 7,070 | 20,386 |
| H3 | 2.7725 | 7,070 | 19,602 |
| H4 | 2.6658 | 7,070 | 18,847 |
| H5 | 2.5633 | 7,070 | 18,123 |
| H6 | 2.4647 | 7,070 | 17,425 |
| H7 | 2.3699 | 7,070 | 16,755 |
| H8 | 2.2788 | 7,070 | 16,111 |
| H9 | 2.1911 | 7,070 | 15,491 |
| H10 | 2.1068 | 7,070 | 14,895 |
| H11 | 2.0258 | 7,070 | 14,322 |

| | | | |
|-----|--------|-------|-----------|
| H12 | 1.9479 | 7,070 | 13.772 |
| H13 | 1.8730 | 7,070 | 13.242 |
| H14 | 1.8009 | 7,070 | 12.732 |
| H15 | 1.7317 | 7,070 | 12.243 |
| H16 | 1.6651 | 7,070 | 11.772 |
| H17 | 1.6010 | 7,070 | 11.319 |
| H18 | 1.5395 | 7,070 | 10.884 |
| H19 | 1.4802 | 7,070 | 10.465 |
| H20 | 1.4233 | 7,070 | 10.063 |
| H21 | 1.3686 | 7,070 | 9.676 |
| H22 | 1.3159 | 7,070 | 9.303 |
| H23 | 1.2653 | 7,070 | 8.946 |
| H24 | 1.2167 | 7,070 | 8.602 |
| H25 | 1.1699 | 7,070 | 8.271 |
| H26 | 1.1249 | 7,070 | 7.953 |
| H27 | 1.0816 | 7,070 | 7.647 |
| H28 | 1.0400 | 7,070 | 7.353 |
| H29 | 1.0000 | 7,070 | 7.070 |
| H30 | 0.9615 | 7,070 | 6.798 |
| H31 | 0.9246 | 7,070 | 6.537 |
| H32 | 0.8890 | 7,070 | 6.285 |
| H33 | 0.8548 | 7,070 | 6.043 |
| H34 | 0.8219 | 7,070 | 5.811 |
| H35 | 0.7903 | 7,070 | 5.587 |
| H36 | 0.7599 | 7,070 | 5.372 |
| H37 | 0.7307 | 7,070 | 5.166 |
| H38 | 0.7026 | 7,070 | 4.967 |
| H39 | 0.6756 | 7,070 | 4.776 |
| H40 | 0.6496 | 7,070 | 4.593 |
| H41 | 0.6246 | 7,070 | 4.416 |
| H42 | 0.6006 | 7,070 | 4.246 |
| H43 | 0.5775 | 7,070 | 4.083 |
| H44 | 0.5553 | 7,070 | 3.926 |
| H45 | 0.5339 | 7,070 | 3.775 |
| H46 | 0.5134 | 7,070 | 3.630 |
| H47 | 0.4936 | 7,070 | 3.490 |
| H48 | 0.4746 | 7,070 | 3.355 |
| H49 | 0.4564 | 7,070 | 3.227 |
| H50 | 0.4388 | 7,070 | 3.102 |
| H51 | 0.4220 | 7,070 | 2.984 |
| H52 | 0.4057 | 7,070 | 2.868 |
| H53 | 0.3901 | 7,070 | 2.758 |
| H54 | 0.3751 | 7,070 | 2.652 |
| H55 | 0.3607 | 7,070 | 2.550 |
| H56 | 0.3468 | 7,070 | 2.452 |
| H57 | 0.3335 | 7,070 | 2.358 |
| H58 | 0.3207 | 7,070 | 2.267 |
| 合計 | | | 1,249.673 |

$$B = \sum_{t=1}^{T-1} \frac{t}{T \times (1+i)^t} + \sum_{t=T}^Y \frac{1}{(1+i)^t} \times (C1 - C2) \times A \times 0.3 \times \frac{44}{12} \times U$$

$$C1 = \frac{s \times e1}{30}$$

$$C2 = \frac{s \times e2}{30}$$

- U: 二酸化炭素に関する原単位(円/t-CO2) 5,500
出典: 東京都層量削減義務による排出量取引制度における仲値(アーガス・メディア・リミテッド(Argus Media Limited)による平成27年10月23日査定価格)
- C1: 事業を実施しない場合の年間流出土砂量に含まれる炭素量(t-C/ha) ①事業対象区域 0.57
- C2: 事業を実施した場合の年間流出土砂量に含まれる炭素量(t-C/ha) ①事業対象区域 0.04
- T: 事業実施後、流出係数が安定するのに必要な年数 10
- Y: ①侵食深が30cmに達するまでの年数(To) 又は ①事業対象区域 80
②評価期間内に侵食深が30cmに達しない場合は評価期間
- A: ①事業対象区域面積(ha) 又は 509.36 ~ 509.36
②保全効果区域面積(ha)
- s: 単位面積当たりの土壌平均炭素蓄積量(t-C/ha) 85.36
出典: 「日本国温室効果ガスインベントリ報告書」(2017年4月) 温室効果ガスインベントリオフィス(GIO)編
炭素から二酸化炭素への換算係数
- 44/12: 炭素から二酸化炭素への換算係数
- e1:: 事業を実施しない場合の侵食深(cm/年) ①事業対象区域 0.200
出典: 「治山全体調査の考え方進め方」 「森林の公益的機能に関する文献要約集」 「森林水文」 表 1-1
- e2:: 事業を実施した場合の侵食深(cm/年) ①事業対象区域 0.013
出典: 「治山全体調査の考え方進め方」 「森林の公益的機能に関する文献要約集」 「森林水文」 表 1-2
- t: 経過年数(治山事業の便益の算出に当たっては、各年度の事業費の累計を用いている。) ※社会的割引率を考慮するために用いる(1+i)^tのt(年数)とは異なる。
- i: 社会的割引率(0.04)
- 30: 土壌炭素の測定深度(cm)
- 0.3: 流出土砂排出炭素係数

| 年度 | 社会的割引率 | 事業対象区域 | | | | 現在価値化千円 | 現在価値化千円 |
|-----|--------|-------------|-----------|--------|---------|---------|---------|
| | | 事業対象区域面積 ha | 効果対象面積 ha | 効果額 千円 | 現在価値化千円 | | |
| S41 | 7.3910 | | | | | | |
| S42 | 7.1067 | 509.36 | 50.94 | 163 | 1,158 | | |
| S43 | 6.8333 | 509.36 | 101.87 | 327 | 2,234 | | |
| S44 | 6.5705 | 509.36 | 152.81 | 490 | 3,220 | | |
| S45 | 6.3178 | 509.36 | 203.74 | 653 | 4,126 | | |
| S46 | 6.0748 | 509.36 | 254.68 | 817 | 4,963 | | |
| S47 | 5.8412 | 509.36 | 305.62 | 980 | 5,724 | | |
| S48 | 5.6165 | 509.36 | 356.55 | 1,143 | 6,420 | | |
| S49 | 5.4005 | 509.36 | 407.49 | 1,307 | 7,058 | | |
| S50 | 5.1928 | 509.36 | 458.42 | 1,470 | 7,633 | | |
| S51 | 4.9931 | 509.36 | 509.36 | 1,634 | 8,159 | | |
| S52 | 4.8010 | 509.36 | 509.36 | 1,634 | 7,845 | | |
| S53 | 4.6164 | 509.36 | 509.36 | 1,634 | 7,543 | | |
| S54 | 4.4388 | 509.36 | 509.36 | 1,634 | 7,253 | | |
| S55 | 4.2681 | 509.36 | 509.36 | 1,634 | 6,974 | | |
| S56 | 4.1039 | 509.36 | 509.36 | 1,634 | 6,706 | | |
| S57 | 3.9461 | 509.36 | 509.36 | 1,634 | 6,448 | | |
| S58 | 3.7943 | 509.36 | 509.36 | 1,634 | 6,200 | | |
| S59 | 3.6484 | 509.36 | 509.36 | 1,634 | 5,961 | | |
| S60 | 3.5081 | 509.36 | 509.36 | 1,634 | 5,732 | | |
| S61 | 3.3731 | 509.36 | 509.36 | 1,634 | 5,512 | | |
| S62 | 3.2434 | 509.36 | 509.36 | 1,634 | 5,300 | | |
| S63 | 3.1187 | 509.36 | 509.36 | 1,634 | 5,096 | | |
| H1 | 2.9987 | 509.36 | 509.36 | 1,634 | 4,900 | | |
| H2 | 2.8834 | 509.36 | 509.36 | 1,634 | 4,711 | | |
| H3 | 2.7725 | 509.36 | 509.36 | 1,634 | 4,530 | | |
| H4 | 2.6658 | 509.36 | 509.36 | 1,634 | 4,356 | | |
| H5 | 2.5633 | 509.36 | 509.36 | 1,634 | 4,188 | | |
| H6 | 2.4647 | 509.36 | 509.36 | 1,634 | 4,027 | | |
| H7 | 2.3699 | 509.36 | 509.36 | 1,634 | 3,872 | | |
| H8 | 2.2788 | 509.36 | 509.36 | 1,634 | 3,724 | | |
| H9 | 2.1911 | 509.36 | 509.36 | 1,634 | 3,580 | | |
| H10 | 2.1068 | 509.36 | 509.36 | 1,634 | 3,443 | | |
| H11 | 2.0258 | 509.36 | 509.36 | 1,634 | 3,310 | | |
| H12 | 1.9479 | 509.36 | 509.36 | 1,634 | 3,183 | | |

| | | | | | | | | |
|-----|--------|--------|--------|-------|---------|--|--|---|
| H13 | 1.8730 | 509.36 | 509.36 | 1.634 | 3,060 | | | |
| H14 | 1.8009 | 509.36 | 509.36 | 1.634 | 2,943 | | | |
| H15 | 1.7317 | 509.36 | 509.36 | 1.634 | 2,830 | | | |
| H16 | 1.6651 | 509.36 | 509.36 | 1.634 | 2,721 | | | |
| H17 | 1.6010 | 509.36 | 509.36 | 1.634 | 2,616 | | | |
| H18 | 1.5395 | 509.36 | 509.36 | 1.634 | 2,516 | | | |
| H19 | 1.4802 | 509.36 | 509.36 | 1.634 | 2,419 | | | |
| H20 | 1.4233 | 509.36 | 509.36 | 1.634 | 2,326 | | | |
| H21 | 1.3686 | 509.36 | 509.36 | 1.634 | 2,236 | | | |
| H22 | 1.3159 | 509.36 | 509.36 | 1.634 | 2,150 | | | |
| H23 | 1.2653 | 509.36 | 509.36 | 1.634 | 2,068 | | | |
| H24 | 1.2167 | 509.36 | 509.36 | 1.634 | 1,988 | | | |
| H25 | 1.1699 | 509.36 | 509.36 | 1.634 | 1,912 | | | |
| H26 | 1.1249 | 509.36 | 509.36 | 1.634 | 1,838 | | | |
| H27 | 1.0816 | 509.36 | 509.36 | 1.634 | 1,767 | | | |
| H28 | 1.0400 | 509.36 | 509.36 | 1.634 | 1,699 | | | |
| H29 | 1.0000 | 509.36 | 509.36 | 1.634 | 1,634 | | | |
| H30 | 0.9615 | 509.36 | 509.36 | 1.634 | 1,571 | | | |
| H31 | 0.9246 | 509.36 | 509.36 | 1.634 | 1,511 | | | |
| H32 | 0.8890 | 509.36 | 509.36 | 1.634 | 1,453 | | | |
| H33 | 0.8548 | 509.36 | 509.36 | 1.634 | 1,397 | | | |
| H34 | 0.8219 | 509.36 | 509.36 | 1.634 | 1,343 | | | |
| H35 | 0.7903 | 509.36 | 509.36 | 1.634 | 1,291 | | | |
| H36 | 0.7599 | 509.36 | 509.36 | 1.634 | 1,242 | | | |
| H37 | 0.7307 | 509.36 | 509.36 | 1.634 | 1,194 | | | |
| H38 | 0.7026 | 509.36 | 509.36 | 1.634 | 1,148 | | | |
| H39 | 0.6756 | 509.36 | 509.36 | 1.634 | 1,104 | | | |
| H40 | 0.6496 | 509.36 | 509.36 | 1.634 | 1,061 | | | |
| H41 | 0.6246 | 509.36 | 509.36 | 1.634 | 1,021 | | | |
| H42 | 0.6006 | 509.36 | 509.36 | 1.634 | 981 | | | |
| H43 | 0.5775 | 509.36 | 509.36 | 1.634 | 944 | | | |
| H44 | 0.5553 | 509.36 | 509.36 | 1.634 | 907 | | | |
| H45 | 0.5339 | 509.36 | 509.36 | 1.634 | 872 | | | |
| H46 | 0.5134 | 509.36 | 509.36 | 1.634 | 839 | | | |
| H47 | 0.4936 | 509.36 | 509.36 | 1.634 | 807 | | | |
| H48 | 0.4746 | 509.36 | 509.36 | 1.634 | 775 | | | |
| H49 | 0.4564 | 509.36 | 509.36 | 1.634 | 746 | | | |
| H50 | 0.4388 | 509.36 | 509.36 | 1.634 | 717 | | | |
| H51 | 0.4220 | 509.36 | 509.36 | 1.634 | 690 | | | |
| H52 | 0.4057 | 509.36 | 509.36 | 1.634 | 663 | | | |
| H53 | 0.3901 | 509.36 | 509.36 | 1.634 | 637 | | | |
| H54 | 0.3751 | 509.36 | 509.36 | 1.634 | 613 | | | |
| H55 | 0.3607 | 509.36 | 509.36 | 1.634 | 589 | | | |
| H56 | 0.3468 | 509.36 | 509.36 | 1.634 | 567 | | | |
| H57 | 0.3335 | 509.36 | 509.36 | 1.634 | 545 | | | |
| H58 | 0.3207 | 509.36 | 509.36 | 1.634 | 524 | | | |
| 合計 | | | | | 241,564 | | | 0 |

$$B = \sum_{t=1}^Y \frac{V_t \times @}{(1+i)^t}$$

- Y: 評価期間 80
- Vt主: 人工林 主伐量 t年後における伐採材積(m3) スギ 0.00 ~ 90,396.25
 出典:人工林林分密度管理図((一社)日本森林技術協会)、ヒノキ 0.00 ~ 35,701.75
 森林整備センター収穫予測表((国研)森林研究・整備機構)等 マツ 0.00 ~ 1,228.15
 広葉樹 0.00 ~ 24,891.12
 0
 0
- @: 人工林 主伐材 木材市場価格(円/m3) スギ 2,407
 出典:「山林素地及び山元立木価格調((一財)日本不動産研究所)」(平成29年3月末現在) ヒノキ 6,039
 マツ 1,773
 広葉樹 1,658
 0
 0
- i: 社会的割引率(0.04)

| | | スギ | | ヒノキ | | マツ | | 広葉樹 | | | |
|-----|--------|-----------------------|---------|-----------------------|---------|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| 年度 | 社会的割引率 | 事業効果材積 m ³ | 効果額 千円 | 事業効果材積 m ³ | 効果額 千円 | 事業効果材積 m ³ | 効果額 千円 | 事業効果材積 m ³ | 効果額 千円 | 事業効果材積 m ³ | 効果額 千円 |
| H58 | 0.3207 | 90,396.25 | 217,584 | 35,701.75 | 215,603 | 1,228.15 | 2,178 | 24,891.12 | 41,269 | | |

| | | 合計 | | | |
|-----|--------|-----------------------|--------|---------|---------|
| 年度 | 社会的割引率 | 事業効果材積 m ³ | 効果額 千円 | 効果額 千円 | 現在価値化千円 |
| H58 | 0.3207 | | | 476,634 | 152,857 |
| 合計 | | | | | 152,857 |