

| | | | |
|-----|--------------|------|-----|
| 事業名 | 河川事業(河川改良事業) | 地区名等 | 奥内川 |
|-----|--------------|------|-----|

[費用対効果の算定内容]

1. 費用対効果の算定根拠

算定については、『治水経済調査マニュアル(案)』(平成17年4月 国土交通省河川局)に基づき行った。
 本マニュアルにおいては、経済評価するうえで洪水氾濫被害の防止効果を便益(B)とし、事業着手時点から完成に至るまでの総建設費と、評価対象期間内における維持管理費を費用(C)として、それぞれ現在価値化したものを評価することとしている。

2. 事業全体の投資効率性

1) 河川改良に要する費用

総費用(C) = 990 百万円

総費用算出根拠

建設費及び維持管理費を年度別に設定し、現在価値化した

| | 総建設費 | 維持管理費 |
|-------|------|-------|
| 事業費 | 580 | - |
| 現在価値化 | 880 | 110 |

単位: 百万円

2) 河川改良による便益

総便益(B) = 1,847 百万円

総便益算出根拠

想定氾濫区域における家屋・家庭用品・農作物・公共土木施設等の洪水氾濫被害が河川改良によって軽減される額を算定し、現在価値化した

| 世帯数 (戸) | 農漁家数 (戸) | 水田面積 (ha) | 畑面積 (ha) | 事業所数 | 年平均被害軽減額 (千円) | 評価対象期間内被害軽減額 (百万円) |
|------------|-------------|--------------|-------------|------|------------------|-----------------------|
| 74 | | | 4 | | 56,959 | 1,847 |

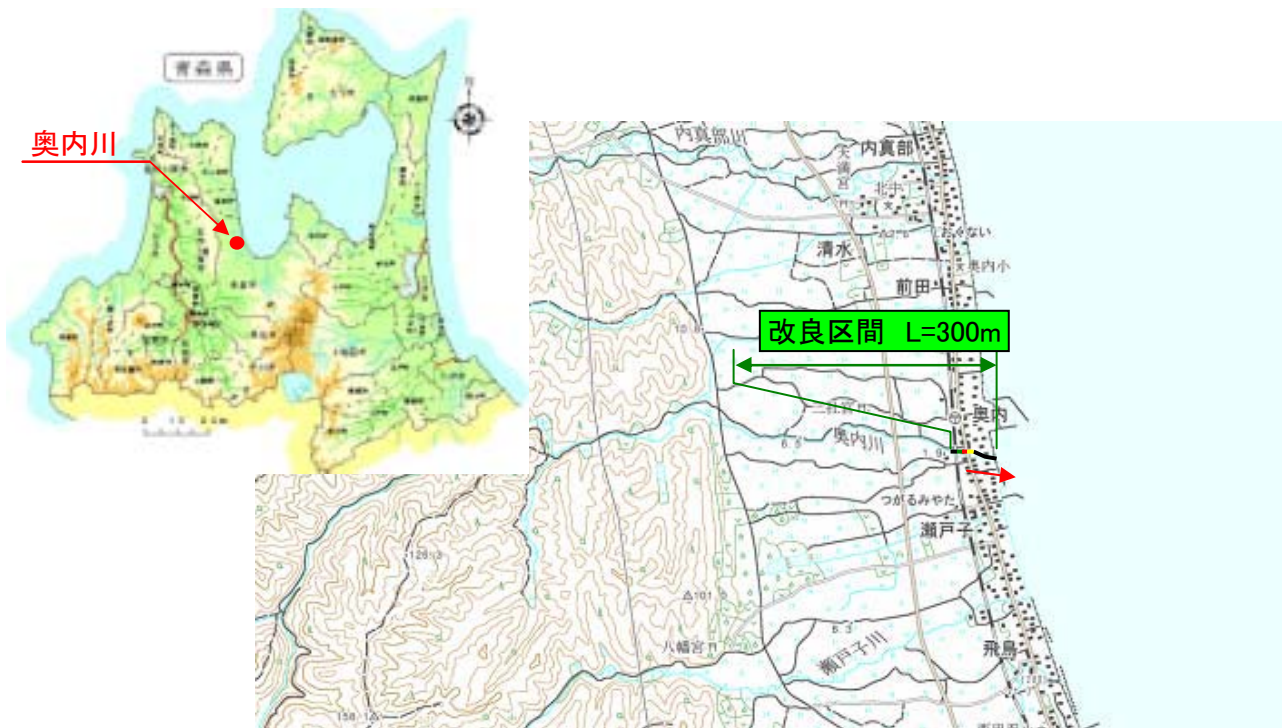
[費用対効果分析の算定結果]

$$B/C(\text{再評価時点}) = 1,847 \text{ 百万円} \div 990 \text{ 百万円} = 1.87$$

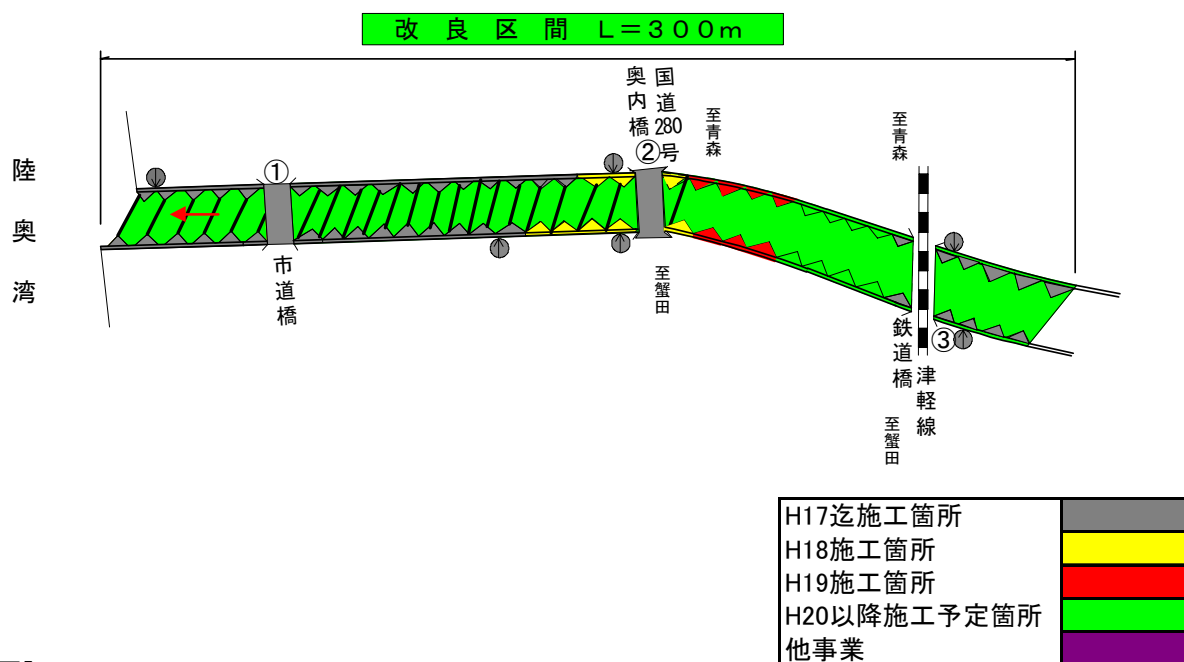
| 年次 | (S) (H) | t | 便 益 | | | | 残存価値 ② | 計 ①+② | 費 用 | | | | 費用便益 比B/C | | |
|-------------------------|------------|------|-------|-------------|-------|-----------|-----------|----------|------|------|--------|------|--------------|-----|--|
| | | | 便益① | | | 現在価値 ② | | | 建設費① | | 維持管理費② | | | ③+④ | |
| | | | 便益 | 現在価値 換算率 | 現在価値 | | | | 費用 | 現在価値 | 費用 | 現在価値 | | | |
| 整備期間 (24年) | 60 | -21 | 0.0 | 0.898 | 0 | | | 22.1 | 52.0 | 0.1 | 0.0 | 22.2 | 52.0 | | |
| | 61 | -20 | 2.4 | 0.913 | 3 | | | 22.1 | 50.0 | 0.2 | 1.0 | 22.3 | 51.0 | | |
| | 62 | -19 | 4.8 | 0.915 | 5 | | | 22.1 | 48.0 | 0.4 | 1.0 | 22.5 | 49.0 | | |
| | 63 | -18 | 7.1 | 0.922 | 8 | | | 22.1 | 47.0 | 0.5 | 1.0 | 22.6 | 48.0 | | |
| | 1 | -17 | 9.5 | 0.944 | 10 | | | 22.1 | 45.0 | 0.6 | 1.0 | 22.7 | 46.0 | | |
| | 2 | -16 | 11.9 | 0.967 | 12 | | | 22.1 | 43.0 | 0.7 | 1.0 | 22.8 | 44.0 | | |
| | 3 | -15 | 14.3 | 0.995 | 14 | | | 22.1 | 41.0 | 0.8 | 2.0 | 22.9 | 43.0 | | |
| | 4 | -14 | 16.6 | 1.012 | 16.4 | | | 22.1 | 40.0 | 1.0 | 2.0 | 23.1 | 42.0 | | |
| | 5 | -13 | 19.0 | 1.017 | 18.7 | | | 22.1 | 38.0 | 1.1 | 2.0 | 23.2 | 40.0 | | |
| | 6 | -12 | 21.4 | 1.017 | 21.0 | | | 22.1 | 37.0 | 1.2 | 2.0 | 23.3 | 39.0 | | |
| | 7 | -11 | 23.8 | 1.013 | 23.5 | | | 22.1 | 35.0 | 1.3 | 2.0 | 23.4 | 37.0 | | |
| | 8 | -10 | 26.1 | 1.006 | 26.0 | | | 22.1 | 34.0 | 1.5 | 2.0 | 23.6 | 36.0 | | |
| | 9 | -9 | 28.5 | 1.011 | 28.2 | | | 22.1 | 33.0 | 1.6 | 2.0 | 23.7 | 35.0 | | |
| | 10 | -8 | 30.9 | 1.011 | 30.6 | | | 22.1 | 31.0 | 1.7 | 2.0 | 23.8 | 33.0 | | |
| | 11 | -7 | 33.3 | 0.997 | 33.4 | | | 22.1 | 30.0 | 1.8 | 2.0 | 23.9 | 32.0 | | |
| | 12 | -6 | 35.6 | 0.980 | 36.3 | | | 22.1 | 29.0 | 1.9 | 3.0 | 24.0 | 32.0 | | |
| | 13 | -5 | 38.0 | 0.967 | 39.3 | | | 22.1 | 28.0 | 2.1 | 3.0 | 24.2 | 31.0 | | |
| | 14 | -4 | 40.4 | 0.953 | 42.4 | | | 22.1 | 27.0 | 2.2 | 3.0 | 24.3 | 30.0 | | |
| | 15 | -3 | 42.8 | 0.938 | 45.6 | | | 22.1 | 26.0 | 2.3 | 3.0 | 24.4 | 29.0 | | |
| | 16 | -2 | 45.1 | 0.927 | 48.7 | | | 22.1 | 25.0 | 2.4 | 3.0 | 24.5 | 28.0 | | |
| 17 | -1 | 47.5 | 0.925 | 51.4 | | | 30.0 | 32.0 | 2.5 | 3.0 | 32.5 | 35.0 | | | |
| 18 | 0 | 49.9 | 0.962 | 51.9 | | | 55.0 | 57.0 | 2.7 | 3.0 | 57.7 | 60.0 | | | |
| 19 | 1 | 52.3 | 1.000 | 52.3 | | | 30.0 | 30.0 | 2.8 | 3.0 | 32.8 | 33.0 | | | |
| 20 | 2 | 54.6 | 1.040 | 52.5 | | | 23.0 | 22.0 | 2.9 | 3.0 | 25.9 | 25.0 | | | |
| 施設完成後の 評価期間 (50年) | 21 | 3 | 57.0 | 1.082 | 52.7 | | | | | 2.9 | 2.7 | 2.9 | 2.7 | | |
| | 22 | 4 | 57.0 | 1.125 | 50.7 | | | | | 2.9 | 2.6 | 2.9 | 2.6 | | |
| | 23 | 5 | 57.0 | 1.170 | 48.7 | | | | | 2.9 | 2.5 | 2.9 | 2.5 | | |
| | 24 | 6 | 57.0 | 1.217 | 46.8 | | | | | 2.9 | 2.4 | 2.9 | 2.4 | | |
| | 25 | 7 | 57.0 | 1.265 | 45.0 | | | | | 2.9 | 2.3 | 2.9 | 2.3 | | |
| | 26 | 8 | 57.0 | 1.316 | 43.3 | | | | | 2.9 | 2.2 | 2.9 | 2.2 | | |
| | 27 | 9 | 57.0 | 1.369 | 41.6 | | | | | 2.9 | 2.1 | 2.9 | 2.1 | | |
| | 28 | 10 | 57.0 | 1.423 | 40.0 | | | | | 2.9 | 2.0 | 2.9 | 2.0 | | |
| | 29 | 11 | 57.0 | 1.480 | 38.5 | | | | | 2.9 | 2.0 | 2.9 | 2.0 | | |
| | 30 | 12 | 57.0 | 1.539 | 37.0 | | | | | 2.9 | 1.9 | 2.9 | 1.9 | | |
| | 31 | 13 | 57.0 | 1.601 | 35.6 | | | | | 2.9 | 1.8 | 2.9 | 1.8 | | |
| | 32 | 14 | 57.0 | 1.665 | 34.2 | | | | | 2.9 | 1.7 | 2.9 | 1.7 | | |
| | 33 | 15 | 57.0 | 1.732 | 32.9 | | | | | 2.9 | 1.7 | 2.9 | 1.7 | | |
| | 34 | 16 | 57.0 | 1.801 | 31.7 | | | | | 2.9 | 1.6 | 2.9 | 1.6 | | |
| | 35 | 17 | 57.0 | 1.873 | 30.4 | | | | | 2.9 | 1.5 | 2.9 | 1.5 | | |
| | 36 | 18 | 57.0 | 1.948 | 29.3 | | | | | 2.9 | 1.5 | 2.9 | 1.5 | | |
| | 37 | 19 | 57.0 | 2.026 | 28.1 | | | | | 2.9 | 1.4 | 2.9 | 1.4 | | |
| | 38 | 20 | 57.0 | 2.107 | 27.1 | | | | | 2.9 | 1.4 | 2.9 | 1.4 | | |
| | 39 | 21 | 57.0 | 2.191 | 26.0 | | | | | 2.9 | 1.3 | 2.9 | 1.3 | | |
| | 40 | 22 | 57.0 | 2.279 | 25.0 | | | | | 2.9 | 1.3 | 2.9 | 1.3 | | |
| | 41 | 23 | 57.0 | 2.370 | 24.1 | | | | | 2.9 | 1.2 | 2.9 | 1.2 | | |
| | 42 | 24 | 57.0 | 2.465 | 23.1 | | | | | 2.9 | 1.2 | 2.9 | 1.2 | | |
| | 43 | 25 | 57.0 | 2.563 | 22.2 | | | | | 2.9 | 1.1 | 2.9 | 1.1 | | |
| | 44 | 26 | 57.0 | 2.666 | 21.4 | | | | | 2.9 | 1.1 | 2.9 | 1.1 | | |
| | 45 | 27 | 57.0 | 2.772 | 20.6 | | | | | 2.9 | 1.0 | 2.9 | 1.0 | | |
| | 46 | 28 | 57.0 | 2.883 | 19.8 | | | | | 2.9 | 1.0 | 2.9 | 1.0 | | |
| | 47 | 29 | 57.0 | 2.999 | 19.0 | | | | | 2.9 | 1.0 | 2.9 | 1.0 | | |
| | 48 | 30 | 57.0 | 3.119 | 18.3 | | | | | 2.9 | 0.9 | 2.9 | 0.9 | | |
| | 49 | 31 | 57.0 | 3.243 | 17.6 | | | | | 2.9 | 0.9 | 2.9 | 0.9 | | |
| | 50 | 32 | 57.0 | 3.373 | 16.9 | | | | | 2.9 | 0.9 | 2.9 | 0.9 | | |
| 51 | 33 | 57.0 | 3.508 | 16.2 | | | | | 2.9 | 0.8 | 2.9 | 0.8 | | | |
| 52 | 34 | 57.0 | 3.648 | 15.6 | | | | | 2.9 | 0.8 | 2.9 | 0.8 | | | |
| 53 | 35 | 57.0 | 3.794 | 15.0 | | | | | 2.9 | 0.8 | 2.9 | 0.8 | | | |
| 54 | 36 | 57.0 | 3.946 | 14.4 | | | | | 2.9 | 0.7 | 2.9 | 0.7 | | | |
| 55 | 37 | 57.0 | 4.104 | 13.9 | | | | | 2.9 | 0.7 | 2.9 | 0.7 | | | |
| 56 | 38 | 57.0 | 4.268 | 13.4 | | | | | 2.9 | 0.7 | 2.9 | 0.7 | | | |
| 57 | 39 | 57.0 | 4.439 | 12.8 | | | | | 2.9 | 0.7 | 2.9 | 0.7 | | | |
| 58 | 40 | 57.0 | 4.616 | 12.3 | | | | | 2.9 | 0.6 | 2.9 | 0.6 | | | |
| 59 | 41 | 57.0 | 4.801 | 11.9 | | | | | 2.9 | 0.6 | 2.9 | 0.6 | | | |
| 60 | 42 | 57.0 | 4.993 | 11.4 | | | | | 2.9 | 0.6 | 2.9 | 0.6 | | | |
| 61 | 43 | 57.0 | 5.193 | 11.0 | | | | | 2.9 | 0.6 | 2.9 | 0.6 | | | |
| 62 | 44 | 57.0 | 5.400 | 10.6 | | | | | 2.9 | 0.5 | 2.9 | 0.5 | | | |
| 63 | 45 | 57.0 | 5.617 | 10.1 | | | | | 2.9 | 0.5 | 2.9 | 0.5 | | | |
| 64 | 46 | 57.0 | 5.841 | 9.8 | | | | | 2.9 | 0.5 | 2.9 | 0.5 | | | |
| 65 | 47 | 57.0 | 6.075 | 9.4 | | | | | 2.9 | 0.5 | 2.9 | 0.5 | | | |
| 66 | 48 | 57.0 | 6.318 | 9.0 | | | | | 2.9 | 0.5 | 2.9 | 0.5 | | | |
| 67 | 49 | 57.0 | 6.571 | 8.7 | | | | | 2.9 | 0.4 | 2.9 | 0.4 | | | |
| 68 | 50 | 57.0 | 6.833 | 8.3 | | | | | 2.9 | 0.4 | 2.9 | 0.4 | | | |
| 69 | 51 | 57.0 | 7.107 | 8.0 | | | | | 2.9 | 0.4 | 2.9 | 0.4 | | | |
| 70 | 52 | 57.0 | 7.391 | 7.7 | | | | | 2.9 | 0.4 | 2.9 | 0.4 | | | |
| 合計 | | | | | 1.847 | | 1.847 | 580 | 880 | | 110 | 990 | 1.866 | | |

単位:百万円

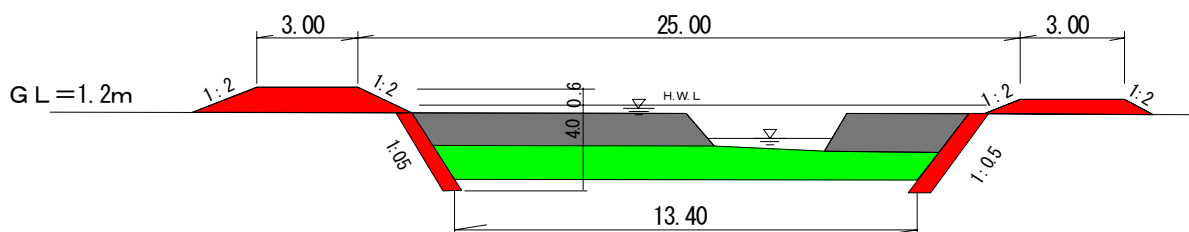
[全体計画図]
 (1) 事業実施箇所位置図



(2) 全体計画平面図



[構造図]
 ○標準横断面図



奥内川航空写真



現況写真(国道280号奥内橋より下流)



現況写真(国道280号奥内橋より上流)

