

Appendix F

Murre REA Details

INJURY CALCULATION

| Species | Total Estimated Dead | Bird-Year Multiplier | Total Lost Bird-Years |
|------------------------|----------------------|----------------------|-----------------------|
| Laysan Albatross | 2 | 16.50 | 33 |
| Northern Fulmar | 10 | 16.50 | 165 |
| Pink-footed Shearwater | 3 | 12.70 | 38 |
| Buller's Shearwater | 10 | 12.70 | 127 |
| Sooty Shearwater | 27 | 12.70 | 343 |
| Common Murre | 1,600 | 7.18 | 11,488 |
| Pigeon Guillemot | 74 | 7.18 | 531 |
| Cassin's Auklet | 60 | 7.18 | 431 |
| Rhinoceros Auklet | 150 | 7.18 | 1,077 |
| Tufted Puffin | 1 | 7.18 | 7 |
| TOTAL | 1,937 | | 14,240 |

See Appendix C for derivation of bird-year multipliers.

CREDIT CALCULATION (projected restoration benefits)

| Year | Increased Nests | Increased Fledges | Increased Bird-Years | Discounted to 2002 |
|-------------------|---|-----------------------------------|--|---------------------------|
| 2003 | 0 | 0 | 0 | 0 |
| 2004 | 6 | 5 | 18 | 15 |
| 2005 | 9 | 7 | 27 | 22 |
| 2006 | 13 | 10 | 39 | 31 |
| 2007 | 70 | 54 | 211 | 162 |
| 2008 | 98 | 75 | 296 | 220 |
| 2009 | 106 | 81 | 320 | 231 |
| 2010 | 110 | 84 | 332 | 233 |
| 2011 | 115 | 88 | 347 | 236 |
| 2012 | 123 | 94 | 371 | 245 |
| 2013 | 132 | 101 | 397 | 255 |
| 2014 | 141 | 108 | 425 | 265 |
| Continues to 2104 | Continues at 7% annual growth until maximum at 1,800 nests. | Based on 0.7663 fledges per nest. | Based on 3.938 bird-years per fledge (life expectancy of a fledge) | Discounted at 3% per year |
| Total: | | | | 53,744 |

Note: First six years of nest numbers and fledges per nest based on data from Devil's Slide Rock Murre Re-colonization Project (cite xx).

Contribution toward similar project would be $14,240/53,744 = 27\%$.