Appendix H

Wetland Birds REA Details

INJURY CALCULATION

Species	Total Estimated Dead	Bird-Year Multiplier	Total Lost Bird-Years
Great Egret	2	2.60	5
Gr. White-fronted Goose	2	2.60	5
Canada Goose	4	2.60	10
White-winged Scoter	16	2.60	42
Surf Scoter	27	2.60	70
American Coot	2	2.60	5
Red-necked Phalarope	3	2.60	8
Red Phalarope	5	2.60	13
Ring-billed Gull	9	4.44	40
California Gull	7	4.44	31
Sabine's Gull	10	4.44	44
gull, sp. (small)	5	4.44	22
Caspian Tern	3	2.60	8
Common Tern	1	2.60	3
unknown	21	2.60	55
TOTAL	**117**		**361**

See Appendix B for derivation of bird-year multipliers.
Total lost bird-days = 361 bird-years x 365 days = **131,853**

CREDIT CALCULATION (projected restoration benefits *per acre*)

Year	Increased Bird-User Days/Year	Discounted to 1998	Year	Increased Bird-User Days/Year	Discounted to 1998
2003	0	0	2012	782	517
2004	87	73	2013	869	558
2005	174	141	2014	956	595
2006	261	206	2015	1,042	631
2007	347	266	2016	1,129	663
2008	434	323	2017	1,216	694
2009	521	377	2018	1,241	687
2010	608	427	2019	1,241	667
2011	695	473	2020	1,241	648
Continued on next three columns			Continues to 2104	Based on year-round average of 3.4 birds per acre per day	Discounted at 3% per year
				Total:	**27,677**

Note: Average of 3.4 birds per acre derived from a conservative estimate using DFG waterfowl surveys in Humboldt Bay. Note that winter density is much greater than summer density. This estimate reflects a year-round average. Gradual phase-in is meant to reflect gradual increases in populations, as well as the gradual improvement in the restored habitat.

Number of acres needed for project would be 131,853/27,677 = **4.8 acres**.