

ATTACHMENT A

TO ECONOMIC AND FISCAL IMPACT STATEMENT (399) FOR CHANNEL ISLANDS INITIAL STATEMENT OF REASONS

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

Economic Impacts of Alternatives

Each of the Channel Islands Marine Protected Area (MPA) alternatives may have negative short-term impacts on commercial and recreational fishing businesses. The impacts presented do not represent a complete socioeconomic impact analysis, but rather what is generally referred to as “maximum potential direct impact.” This analysis simply sums up the activity that currently takes place within a given alternative and translates these activities into corresponding economic values. Maximum potential loss does not take into account other management strategies/regulations and human behavioral changes, such as moving to other areas or changing fishing gear, that may mitigate, offset, or make matters better or worse. In addition, maximum potential loss does not consider possible future benefits. Comparisons of maximum potential loss to commercial fish landings, income derived from recreational fisheries, and maximum impact to non-consumptive user derived income were computed for each alternative (see Tables 1, 2 and 3), as well as expansions of the direct impacts of commercial fish landings to local economies (see Table 4). It is important to note that non-consumptive users are considered beneficiaries of MPAs and thus impact to non-consumptive income is positive.

These calculations represent the loss and value in the State water phase of each alternative. Full comparisons of maximum potential losses and values for both State and federal phases have also been computed, but are small (less than 10 percent) compared to the initial phase regulations.

The potential impacts of the Department’s recommended preferred alternative are detailed here and compared to the other alternatives. The maximum potential loss to commercial fish landings would vary between 2.8 percent and 16.5 percent of annual ex-vessel value generated in Sanctuary waters in the Department preferred alternative (see Table 1). This reflects a combined maximum potential annual ex-vessel loss of \$3,307,652 (1999 baseline) to commercial fisheries (see Table 1). This loss can be expanded to include losses in total income including processors, fish buyers and other related business. This maximum potential loss in income from commercial activities to all counties is estimated at \$10,123,680 (1999 baseline) per year (see Table 4). The maximum potential loss to income derived from recreational fishing varies between 11.6 percent and 24.6 percent annually in the Department preferred alternative (see Table 2). This represents a maximum potential loss in income of \$3,284,059 (1999 baseline) generated by recreational fishing annually (Table 2).

Maximum potential impact to income derived from non-consumptive activities (diving, whale watching, kayaking, sightseeing, and sailing) ranges between 10.8 percent and 29.1 percent annually in the Department preferred alternative (see Table 3). This represents a maximum potential annual income of \$954,601 (1999 baseline) generated by non-consumptive activities annually (see Table 3). In the long term, the potential negative impacts are expected to be balanced by the positive impacts of sustainable fisheries, non-consumptive benefits, and ecosystem function in the reserve areas. In addition potential benefits may be realized through adult fish spillover to areas adjacent marine reserves and larval transport to distant fished sites.

Impacts on Jobs

Each alternative has potential impacts on the creation and elimination of jobs related to commercial and recreational fishing and non-consumptive activities. As with economic impacts, the impacts listed here are a Step 1 or “maximum potential loss” analysis. This analysis simply sums up the activity that currently takes place within a given alternative and translates these activities into corresponding economic values. Maximum potential loss does not take into account other management strategies/regulations and human behavioral changes that may mitigate, offset, or make matters better or worse. In addition, maximum potential loss does not consider possible future benefits.

The maximum potential numbers of jobs lost relating to commercial and recreational fishing activities is estimated to be 355 and the existing jobs supported by non-consumptive is estimated to be 19 under the preferred alternative (see Table 5). This represents the potential elimination of jobs in the initial State water phase. The range in job losses for the other alternatives is from 190 (Alternative 1) to 475 (Alternative 5). The range of jobs supported by non-consumptive activities for the other alternatives is 8 (Alternative 3) to 24 (Alternative 5).

Exhibits

Table 1: MAXIMUM POTENTIAL LOSS IN ANNUAL EX-VESSEL VALUE TO COMMERCIAL FISHERIES BY SPECIES GROUP (1996-1999 AVERAGE VALUES) FOR THE STATE WATERS PHASE

Table 2: MAXIMUM POTENTIAL LOSS IN ANNUAL INCOME GENERATED BY CONSUMPTIVE RECREATIONAL ACTIVITIES FOR THE STATE WATERS PHASE

Table 3: MAXIMUM POTENTIAL IMPACT IN ANNUAL INCOME GENERATED BY NON-CONSUMPTIVE ACTIVITIES FOR THE STATE WATERS PHASE

Table 4: MAXIMUM POTENTIAL LOSS IN ANNUAL INCOME GENERATED BY COMMERCIAL FISHERIES BY COUNTY FOR THE STATE WATERS PHASE

Table 5: MAXIMUM POTENTIAL NUMBERS OF JOBS ELIMINATED OR SUPPORTED BY JOB SOURCE FOR THE STATE WATERS PHASE

TABLE 1: MAXIMUM POTENTIAL LOSS IN ANNUAL EX-VESSEL VALUE TO COMMERCIAL FISHERIES BY SPECIES GROUP¹ (1996-1999 AVERAGE VALUES) FOR THE STATE WATERS PHASE. (all dollar values are indexed to 1999 prices)

Species Group	Preferred Alternative		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5	
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
Squid	\$1,660,718	12.73	\$661,722	5.07	\$712,953	5.46	\$695,876	5.33	\$1,716,217	13.15	\$2,079,098	15.94
Kelp	\$332,794	5.55	\$265,568	4.43	\$332,794	5.55	\$298,241	4.98	\$467,886	7.81	\$730,650	12.20
Urchins	\$830,464	15.77	\$735,214	13.96	\$704,761	13.39	\$753,956	14.32	\$1,068,453	20.29	\$1,338,737	25.43
Spiny Lobster	\$149,133	16.17	\$81,627	8.85	\$83,425	9.05	\$97,403	10.56	\$150,333	16.30	\$202,201	21.93
Prawn	\$58,615	8.34	\$94,170	13.39	\$63,271	9.00	\$94,170	13.39	\$104,858	14.91	\$63,271	9.00
Rockfish	\$87,985	16.02	\$72,964	13.28	\$60,731	11.06	\$88,222	16.06	\$116,040	21.12	\$144,957	26.39
Crab	\$50,139	14.59	\$26,331	7.66	\$26,943	7.84	\$26,278	7.65	\$48,483	14.11	\$54,416	15.84
Tuna	\$8,544	2.80	\$5,007	1.64	\$5,467	1.79	\$5,812	1.90	\$7,886	2.58	\$9,495	3.11
Wetfish	\$28,511	9.46	\$9,994	3.31	\$12,573	4.17	\$10,078	3.34	\$20,675	6.86	\$32,924	10.92
CA Sheephead	\$38,622	16.37	\$24,024	10.18	\$44,262	18.76	\$26,174	11.09	\$48,562	20.58	\$63,098	26.74
Flatfishes	\$22,652	12.32	\$9,562	5.20	\$20,152	10.96	\$9,562	5.20	\$20,546	11.17	\$28,421	15.46
Sea Cucumber	\$27,731	16.54	\$21,406	12.76	\$28,667	17.09	\$23,361	13.93	\$32,909	19.62	\$43,477	25.93
Sculpin & Bass	\$6,865	11.38	\$4,435	7.35	\$6,004	9.95	\$4,571	7.58	\$7,248	12.01	\$8,611	14.27
Shark	\$4,879	14.04	\$3,058	8.80	\$1,773	5.10	\$2,906	8.36	\$5,321	15.31	\$6,351	18.28
Total	\$3,307,652	11.77	\$2,015,082	7.17	\$2,103,776	7.48	\$2,136,610	7.60	\$3,815,416	13.57	\$4,805,706	17.10

¹ Species groups used are as defined in Leeworthy and Wiley, 2002.

TABLE 2: MAXIMUM POTENTIAL LOSS IN ANNUAL INCOME GENERATED BY CONSUMPTIVE RECREATIONAL ACTIVITIES FOR THE STATE WATERS PHASE. (dollar values are baseline 1999)

Activity Type	Preferred Alternative		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5	
	Income	%	Income	%	Income	%	Income	%	Income	%	Income	%
Charter/Party Boat Fishing	\$1,915,274	11.55	\$1,344,968	8.11	\$1,745,881	10.53	\$1,390,486	8.39	\$2,168,875	13.08	\$2,487,182	15.00
Charter/Party Boat Diving	\$458,094	18.06	\$185,887	7.33	\$492,244	19.41	\$201,313	7.94	\$475,823	18.76	\$656,576	25.89
Private Boat Fishing	\$616,055	14.09	\$332,452	7.60	\$580,097	13.26	\$349,440	7.99	\$681,994	15.59	\$788,874	18.04
Private Boat Diving	\$294,636	24.63	\$56,572	4.73	\$279,006	23.33	\$60,677	5.07	\$297,016	24.83	\$373,787	31.25
Total	\$3,284,059	13.30	\$1,919,879	7.70	\$3,097,229	12.60	\$2,001,916	8.10	\$3,623,708	14.60	\$4,306,419	17.40

TABLE 3: MAXIMUM POTENTIAL IMPACT¹ IN ANNUAL INCOME GENERATED BY NON-CONSUMPTIVE ACTIVITIES FOR THE STATE WATERS PHASE.
(dollar values are baseline 1999)

Activity Type	Preferred Alternative		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5	
	Income	%	Income	%	Income	%	Income	%	Income	%	Income	%
Whale Watching	\$533,824	14.6	\$181,453	5.0	\$574,941	15.8	\$155,610	4.3	\$602,149	16.5	\$690,701	18.9
Non-Consumptive Diving	\$292,754	18.6	\$128,978	8.2	\$269,708	17.1	\$134,178	8.5	\$322,101	20.5	\$374,930	23.8
Sailing	\$62,438	10.9	\$28,196	4.9	\$68,953	12.1	\$33,224	5.8	\$73,706	12.9	\$86,615	15.2
Kayaking / Island Sightseeing	\$65,585	29.0	\$23,301	10.3	\$23,332	10.3	\$25,032	11.1	\$31,676	14.0	\$70,676	31.2
Total	\$954,601	15.8	\$361,928	6.0	\$936,934	15.6	\$348,044	5.8	\$1,029,632	17.1	\$1,222,922	20.3

¹Non-consumptive users are considered beneficiaries of MPAs. Therefore impact, in this case, is positive.

TABLE 4: MAXIMUM POTENTIAL LOSS IN ANNUAL INCOME GENERATED BY COMMERCIAL FISHERIES BY COUNTY¹ FOR THE STATE WATERS PHASE. (dollar values are baseline 1999)

County	Preferred Alternative	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
	Income	Income	Income	Income	Income	Income
Monterey	\$1,207,845	\$481,271	\$518,533	\$506,111	\$1,248,202	\$1,512,132
San Luis Obispo	\$17,914	\$14,383	\$12,168	\$17,315	\$23,310	\$29,095
Santa Barbara	\$2,085,917	\$1,679,016	\$1,625,984	\$1,759,866	\$2,557,664	\$3,203,964
Ventura	\$5,102,153	\$2,279,347	\$2,418,613	\$2,386,413	\$5,377,737	\$6,452,097
Los Angeles	\$1,174,655	\$481,003	\$522,535	\$507,237	\$1,210,094	\$1,472,076
Orange	\$23	\$12	\$13	\$13	\$22	\$27
San Diego	\$535,173	\$427,929	\$533,544	\$479,688	\$751,107	\$1,168,775
All Affected Counties	\$10,123,680	\$5,362,962	\$5,631,389	\$5,656,664	\$11,168,136	\$13,838,166

¹Counties listed are those where fish are landed and/or processed.

TABLE 5: MAXIMUM POTENTIAL NUMBERS OF JOBS¹ ELIMINATED OR SUPPORTED BY JOB SOURCE FOR THE STATE WATERS PHASE

	Preferred Alternative	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Source	Jobs	Jobs	Jobs	Jobs	Jobs	Jobs
Commercial Industry jobs eliminated	296	156	161	164	324	397
Consumptive Recreational Industry jobs eliminated	59	34	56	36	65	78
Non-Consumptive jobs ²	19	8	18	8	19	24

¹ Jobs are listed in total employment (direct and indirect).

² Non-Consumptive Jobs are the current jobs supported by existing activities. These jobs would be expected to increase over time by some unknown factor based on expected improvements in site quality.