

To: MLPA North Central Coast Regional Stakeholder Group

From: California Department of Fish

Re: Supplement to *Evaluation of the Potential Impacts Draft Marine Protected Area Proposals May Pose for Abalone Management and Abalone Recreational Fishery*

Date: March 03, 2008

Due to comments received from members of the north central coast regional stakeholder group, the following tables and graphs are provided to supplement and update the current *Evaluation of the Potential Impacts Draft Marine Protected Area Proposals May Pose for Abalone Management and Abalone Recreational Fishery* (dated February 15, 2008).

Table 1 provides the estimated annual landings of abalone for each report card landing site in the north central coast study region from 2002- 2005 and provides a five-year average. It is important to note that part-way through the abalone fishing season in 2004, lands at Stornetta Ranch that were previously closed to public access became available to the public. The nearest report card landing site to the areas of Stornetta Ranch that opened to the public is the Point Arena Lighthouse site; abalone caught in the Stornetta area are reported to that report card site. Since the Stornetta Ranch area opened to the public part way through the 2004 abalone season, an average of the annual landings for 2002-2003 and for 2005-2006 are provided separately in Table 2 to reflect differential catch before and after the public gained access to Stornetta Ranch. These data are used in all subsequent evaluations in this update.

Since we do not know at what level or when effort will stabilize at the Point Arena Lighthouse site, we provide analysis of the maximum potential impacts (assuming effort does not shift to other areas) draft MPA proposals may have on abalone harvest relative to a range of the annual average from 2002-2003 (prior to public access at Stornetta Ranch) and 2005-2006 (subsequent to public access at Stornetta Ranch) for that site in figures 1-5. For all other sites, we provide this analysis as figures 1-5, revised based on the average estimated annual landings from 2002-2006. Additionally, Figure 6 provides the maximum potential impact each draft MPA proposal (from December 2007) may have on the recreational abalone fishery. The analysis provided in Figure 6 uses the average annual landings from 2002-2006 for all sites except for data based on; 1) an average for 2005-2006 of the Point Arena Lighthouse data (solid bars) and 2) an average for 2002-2003 of the Point Arena Lighthouse data (hatched bars) as reflections of catch prior to, and subsequent to, public gaining access at Stornetta Ranch.

For reference to the original evaluation (Feb 15, 2008), Figure 7 provides the approximate locations and estimated landings for each abalone report card landing site based only on 2005 data. This figure was created from the data presented in Map 13 of the *Regional Profile of the North Central Coast Study Region* (Alder Creek/Point Arena to Pigeon Point, California), October 8, 2007.

Table 1. Abalone report card landing sites and associated 2005 reported landings.

Ref#	Report Card Site	Estimated Annual Landings (number of abalone)					Annual Average
		2002	2003	2004	2005	2006	
1	Point Arena Lighthouse	1,673	1,574	4,223	15,602	18,511	8,317*
2	Arena Cove	12,628	11,917	10,946	7,364	9,786	10,528
3	Moat Creek	6,153	7,716	7,522	5,520	7,094	6,801
4	Schooner Gulch	587	730	559	803	388	613
5	Saunders Landing	912	1,137	1,769	1,338	906	1,212
6	Anchor Bay	5,446	6,470	5,593	4,759	4,945	5,443
7	Gualala Point	1,181	1,311	970	817	958	1,047
8	Sea Ranch	14,466	13,710	13,115	10,941	10,822	12,611
9	Black Point	360	293	171	310		284
10	Stewarts Point	2,418	2,458	2,077	1,155	1,760	1,974
11	Rocky Point	376	561	285	760	311	459
12	Horseshoe Cove	2,418	2,011	1,860	1,479	1,346	1,823
13	Fisk Mill Cove	7,043	7,369	8,127	8,125	8,259	7,785
14	Salt Point	11,763	11,738	11,414	8,533	9,113	10,512
15	Ocean Cove	5,777	6,664	5,855	5,280	7,378	6,191
16	Stillwater Cove	3,643	4,325	2,956	4,872	3,495	3,858
17	Timber Cove	8,713	9,221	7,990	8,209	9,165	8,660
18	Fort Ross & Reef Camp	36,546	37,429	37,186	32,767	43,002	37,386
19	Jenner	1,882	2,344	2,580	2,746	2,201	2,351
20	Salmon Creek	60	10	1,803	803	2,485	1,032
21	Bodega Head	1,099	1,524	1,016	1,633	1,139	1,282
22	Tomales Point	2,873	3,719	2,191	2,211	1,579	2,515
23	Robinson Point	789	1,311	1,164	605	1,061	986
24	Point Reyes	622	968	639	465	181	575
NCCSR total		129,428	136,510	132,011	127,097	145,885	134,186

*The Point Arena Lighthouse report card landing site includes data from Stornetta Ranch which opened to public access in 2004, due to the recent instability of effort at this site an average from 2002-2003 and 2005-2006 are reported below in Table 2 to reflect differential catch before and after the public gained access to Stornetta Ranch; data from 2004 are excluded because the area opened part way through the abalone season.

Table 2. Estimated average annual catch reported at the Point Arena Lighthouse site before and after public gained access to Stornetta Ranch in 2004 (mid-season)

Report Card Site	Average catch 2002-2003	Average catch 2005-2006
Point Arena Lighthouse	1,624	17,056

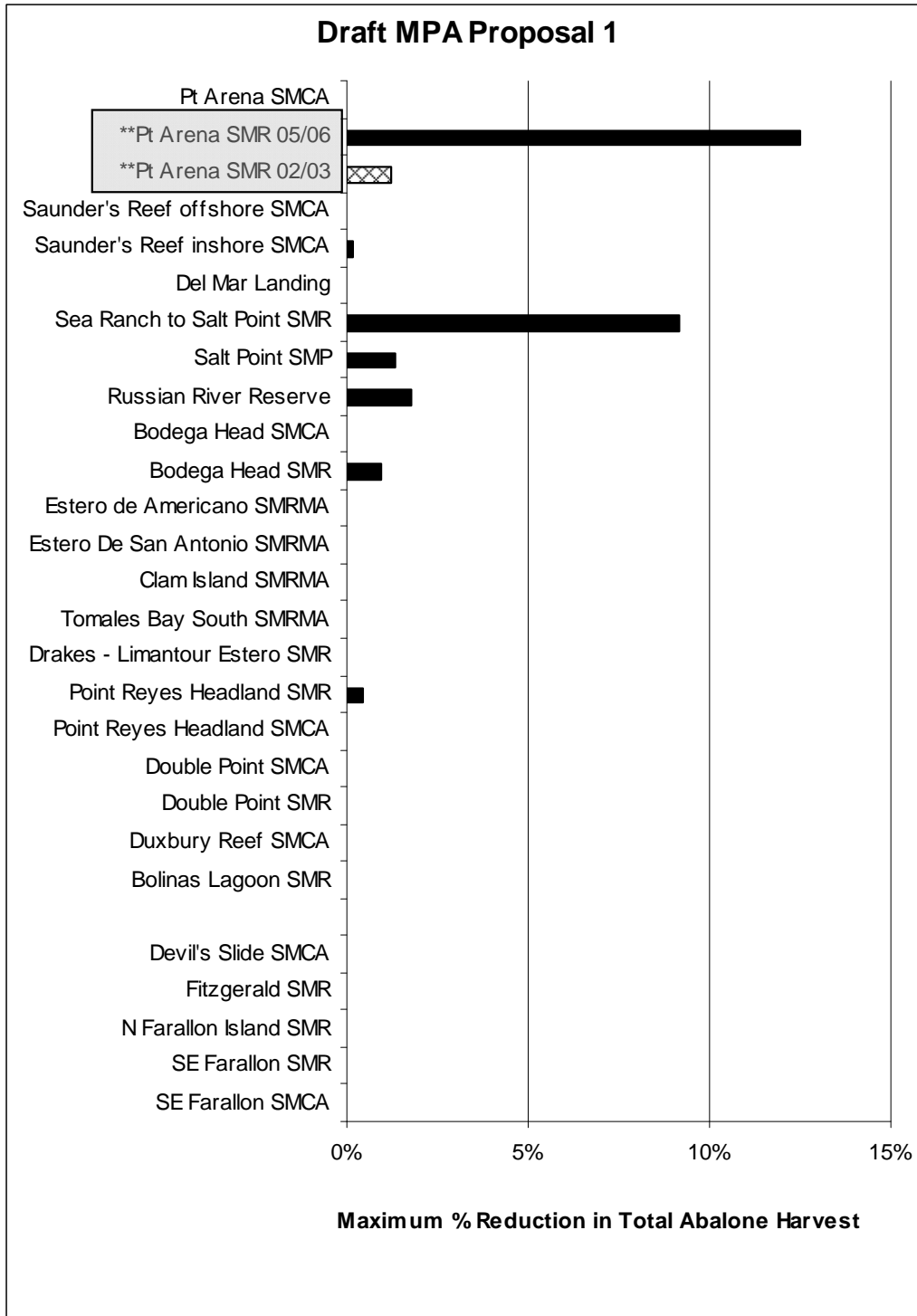


Figure 1. Draft MPA Proposal 1. Maximum potential reductions in total abalone harvest by each proposed MPA, using an average for 2002- 2006; Point Arena SMR impacts represent data from an average for 2002-2003 (hatched) and 2005-2006 (solid bars) to reflect differential catch before and after the public gained access to Stornetta Ranch, assuming no displacement of effort.

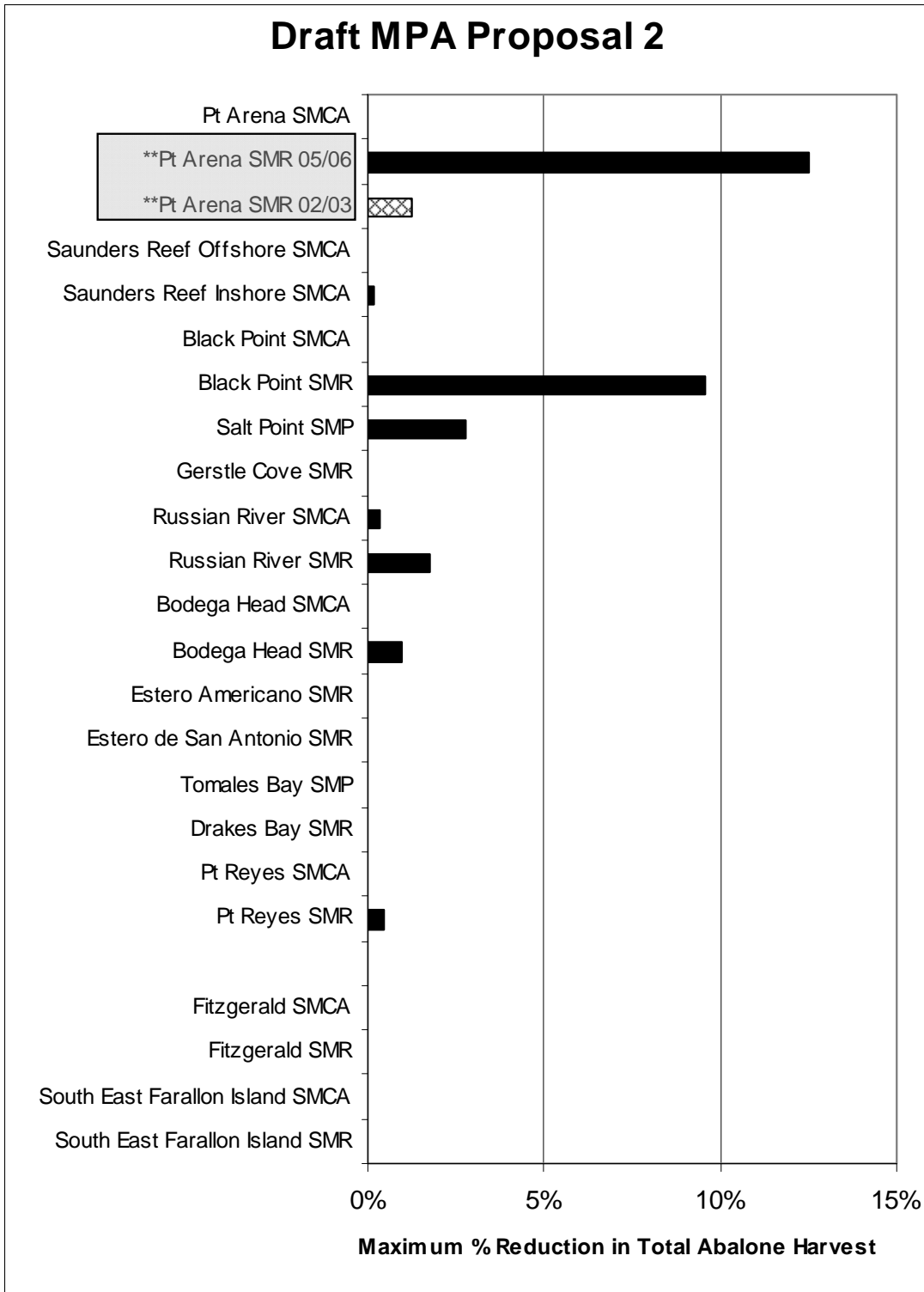


Figure 2. Draft MPA Proposal 2. Maximum potential reductions in total abalone harvest by each proposed MPA, using an average for 2002- 2006; Point Arena SMR impacts represent data from an average for 2002-2003 (hatched) and 2005-2006 (solid bars) to reflect differential catch before and after the public gained access to Stornetta Ranch, assuming no displacement of effort.

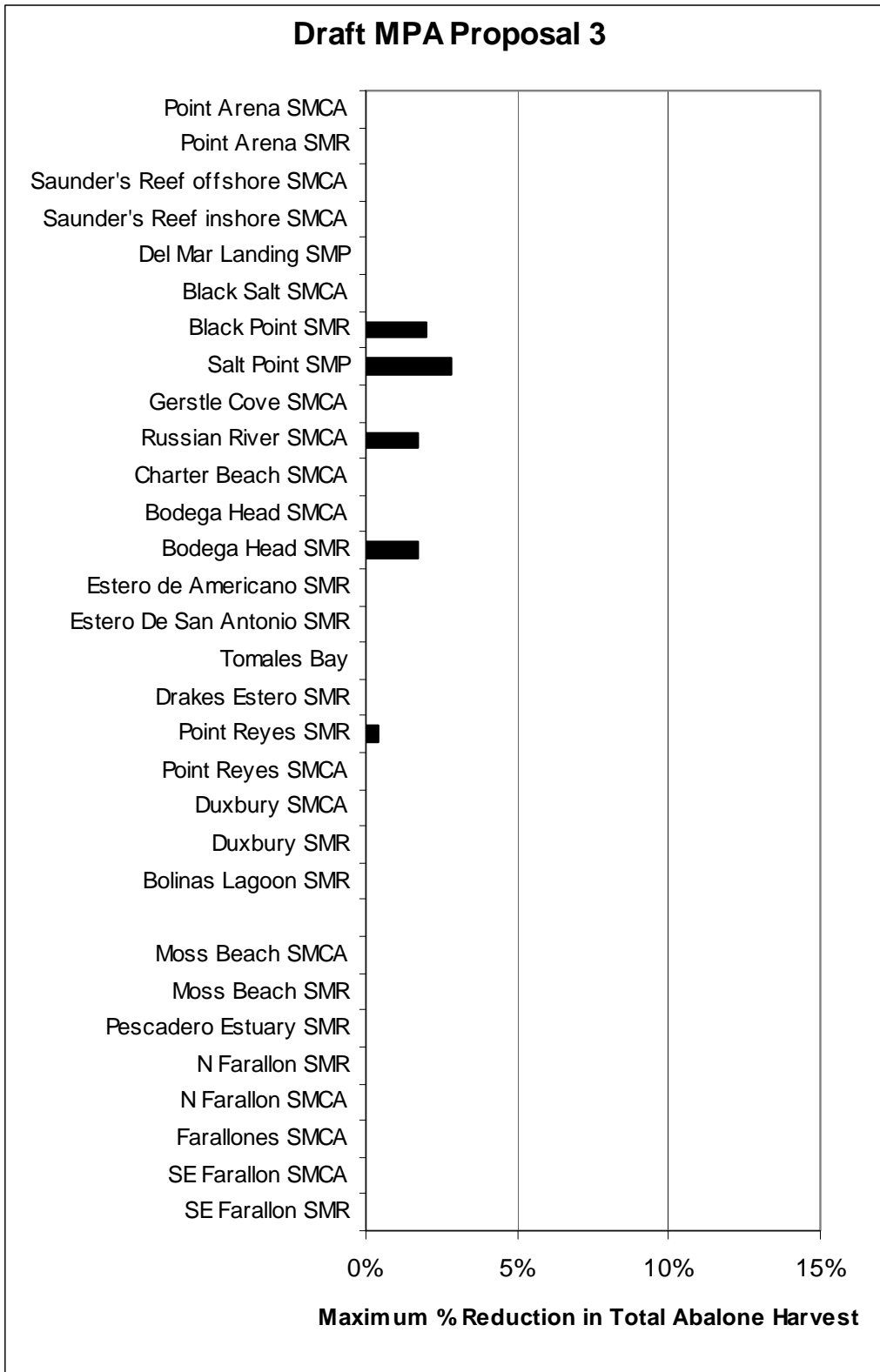


Figure 3. Draft MPA Proposal 3. Maximum potential reductions in total abalone harvest by each proposed MPA, using an average for 2002- 2006; Point Arena SMR does not pose potential impacts to the recreational abalone fishery in this proposal.

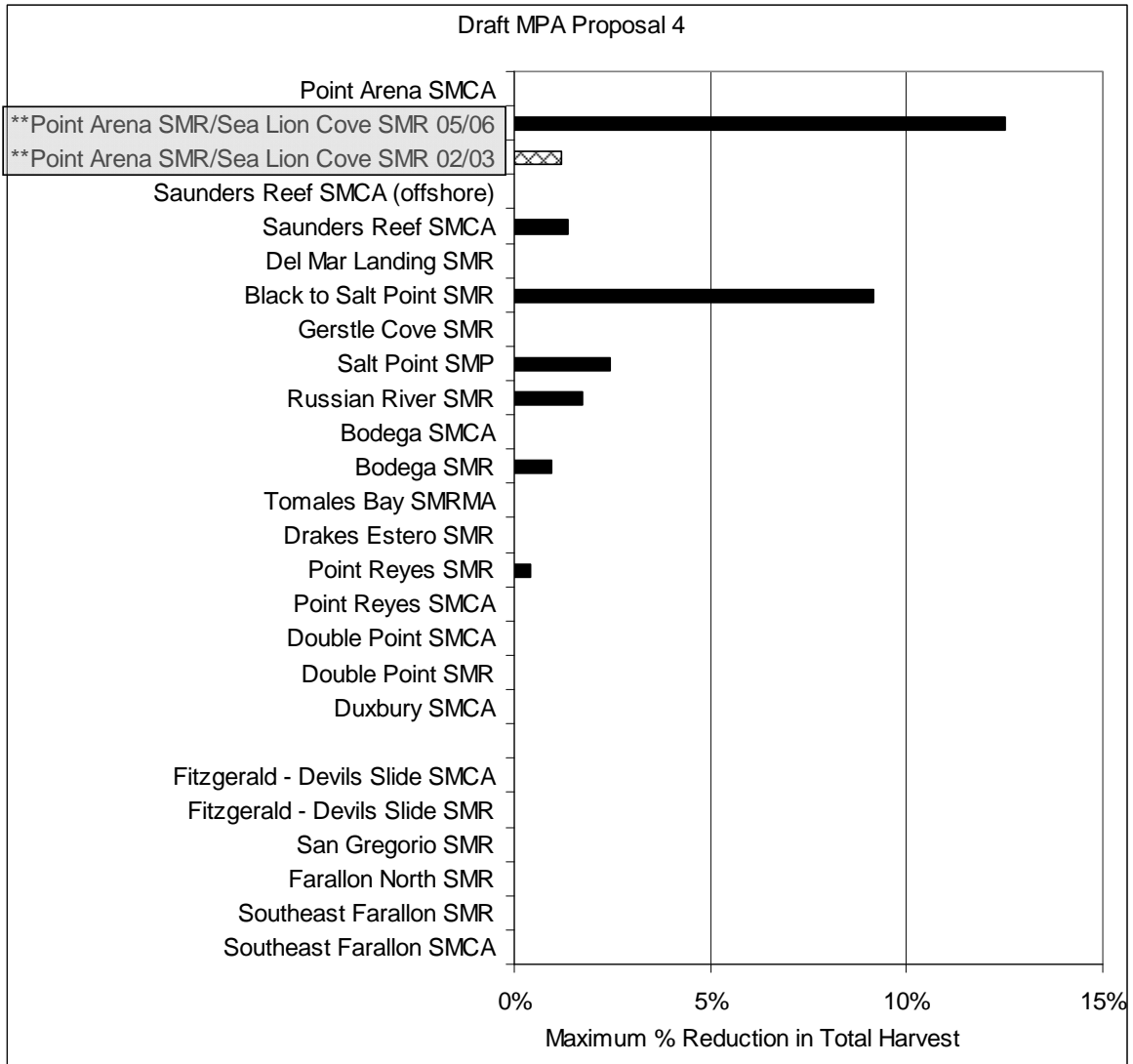


Figure 4. Draft MPA Proposal 4. Maximum potential reductions in total abalone harvest by each proposed MPA, using an average for 2002- 2006; Point Arena and Sea Lion Cove SMRs represent data from an average for 2002-2003 (hatched) and 2005-2006 (solid bars) to reflect differential catch before and after the public gained access to Stornetta Ranch, assuming no displacement of effort.

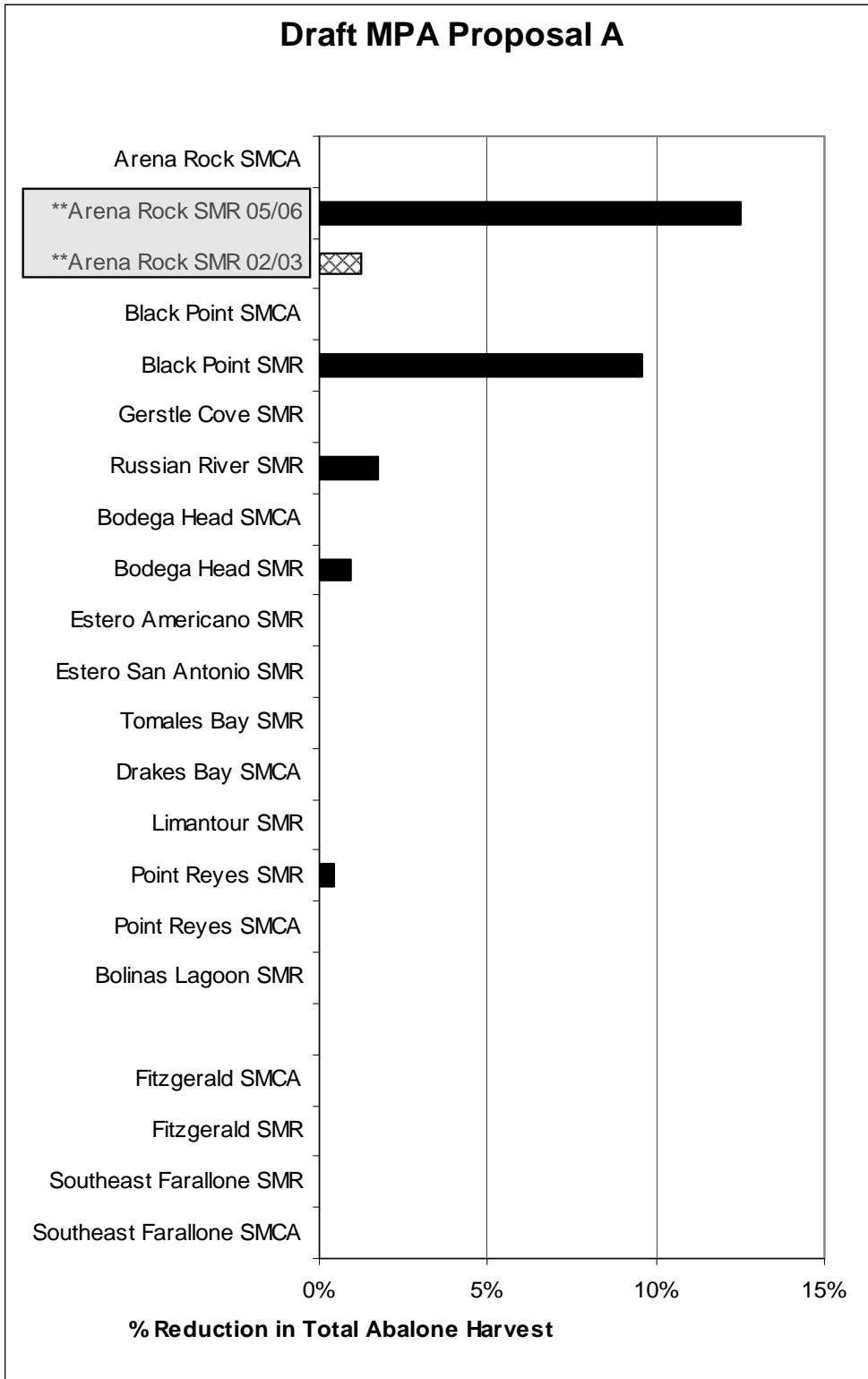


Figure 5. Draft MPA Proposal XA. Maximum potential reductions in total abalone harvest by each proposed MPA, using an average for 2002-2006; Arena Rock SMR impacts represent data from an average for 2002-2003 (hatched) and 2005-2006 (solid bars) to reflect differential catch before and after the public gained access to Stornetta Ranch, assuming no displacement of effort.

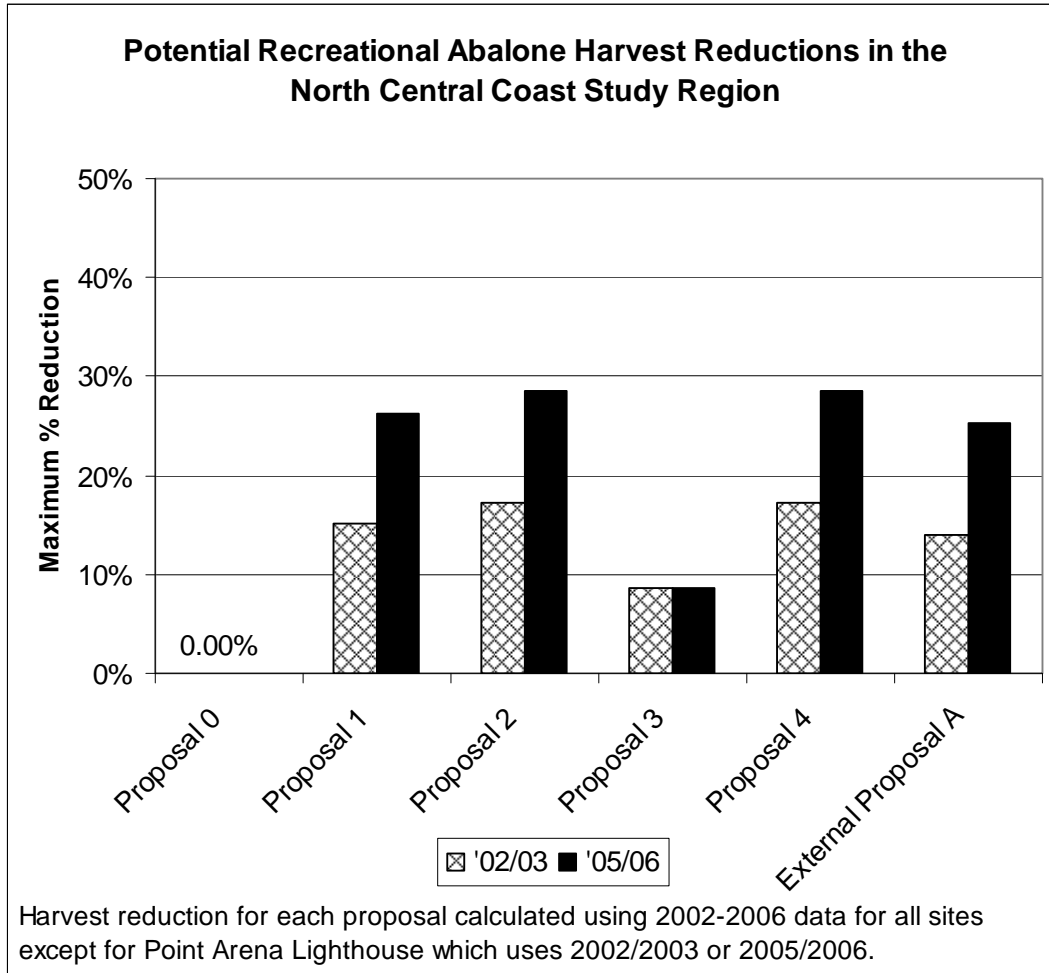


Figure 6. Maximum potential impact to abalone harvest for MPA proposals in the North Central Coast Study Region. Proposal 0 represents the “no change alternative”, or currently established marine protected areas in the state. Estimates for each proposal were calculated using average harvest from 2002-2006 for all sites, except that Point Arena Lighthouse uses average harvest from 2002-2003 and 2005-2006, to reflect catches before and after public access to Stornetta Ranch was gained.

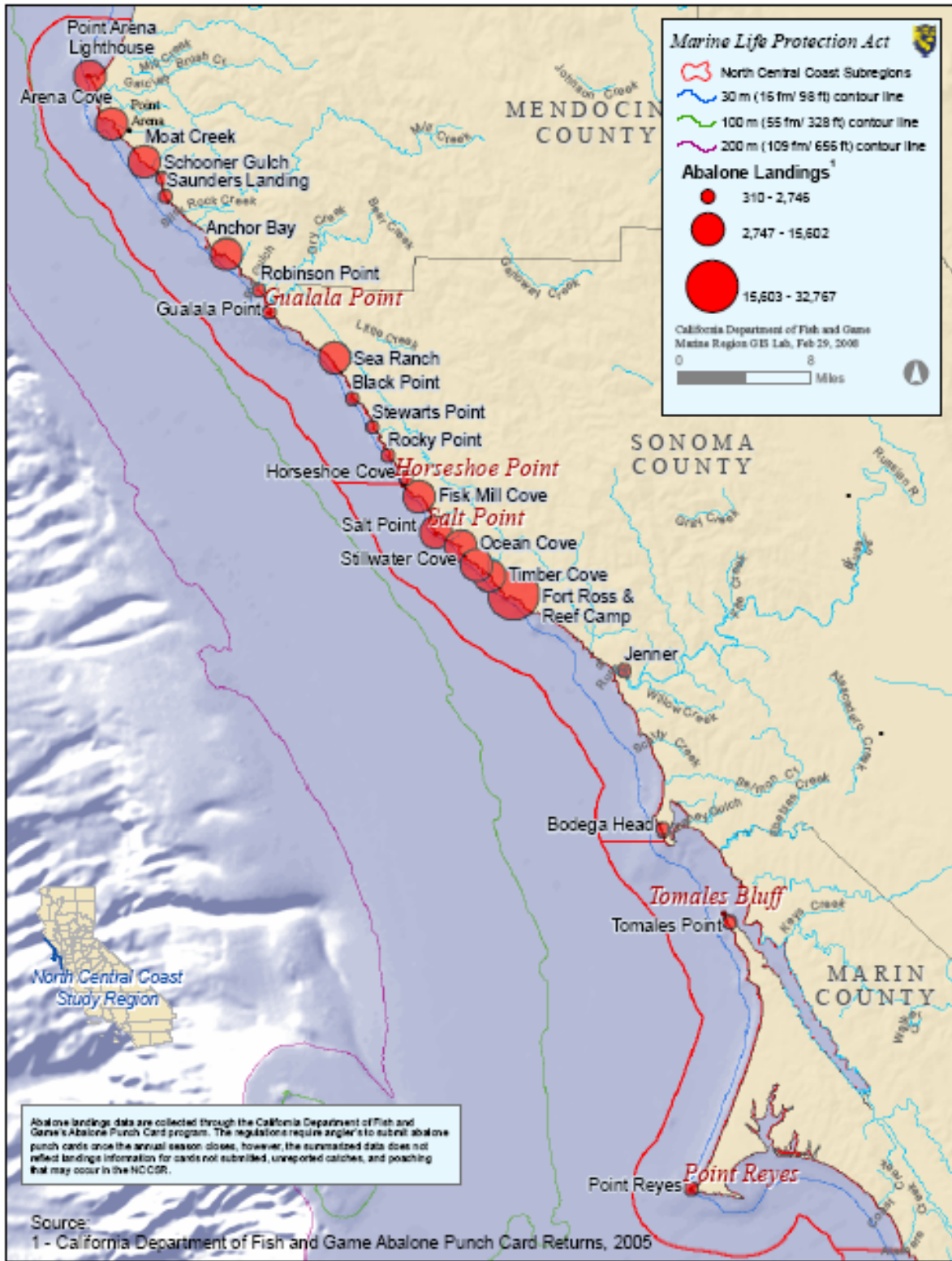


Figure 7. Approximate location of abalone report card landing sites showing estimated landings for 2005, created from Map 13 of the *Regional Profile of the North Central Coast Study Region* (October 8, 2008).