

Marine Life Protection Act Initiative



Summary of Potential Impacts of March 2009 Draft MPA Arrays and MPA Proposals on Commercial and Recreational Fisheries

Presentation to the MLPA South Coast Regional Stakeholder Group
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Outline

- **Previous information**
 - Survey methods, evaluation methods, and maps
- **Commercial fisheries**
 - Overview
 - Potential impacts on fishing grounds
 - Potential net economic impacts
- **CPFV fisheries**
 - Overview
 - Potential impacts on fishing grounds
 - Potential net economic impacts
- **Recreational fisheries**
 - Overview
 - Potential impacts on fishing grounds
- **Additional analyses and next steps**



Project Overview

- **Ecotrust contracted by the MLPA Initiative**
 - Supplement existing data
 - Collect data on commercial and recreational fishing (use and values) to characterize the spatial extent and relative importance
 - Evaluate the maximum potential economic impact (gross and net) of draft marine protected area (MPA) proposals
 - Focus is on the fisheries, and not on regional multipliers of economic impact



Data Collection Process

- **Data collection components involve:**
 - Outreach through informational one-on-one and group meetings and working with port liaisons
 - Survey design
 - Data collection – Open OceanMap (desktop and on-line)
 - Quality assurance and control
 - Analysis
 - Presentation of results



Use of Survey Information

- Planning: Data is to be used to inform the MPA design process through use of regional and port level maps and summary statistics
- Evaluation: Use the survey data and maps to:
 - Evaluate the maximum potential impacts of MPA proposals on the commercial, commercial passenger fishing vessel (CPFV) and recreational fishing grounds
 - Evaluate maximum potential economic impact on commercial and CPFV fisheries
 - Additional analyses (e.g. existing closures, individual impacts, etc.)



Products Submitted

- ~400 maps characterizing the spatial extent and value of commercial, CPFV, and recreational (dive, kayak, sport boat) fishing grounds
- Survey methods and summary statistics for South Coast Study Region Fishery Uses and Values Project
- Methods used to evaluate draft MPA proposals' potential commercial and recreational fishery impacts (science advisory team approved)
- Summary of potential impacts of the March 2009 draft MPA arrays/proposals on commercial and recreational fisheries in the MLPA South Coast Study Region



Commercial Overview

- **Data and Analyses**

- Data collected from stratified, representative sample of 254 commercial fishermen
- Focused on 15 fisheries
- Results reported at study region and port level (Santa Barbara, Ventura, Port Hueneme, San Pedro, Dana Point, Oceanside and San Diego)

- **Results**

- Percentage total area of fishing grounds affected
- Percentage total value of fishing grounds affected
- Potential annual economic impact (both as a dollar value and a percentage)



Potential Impact on Commercial Fisheries

- Assessed for total fishing grounds and total value of fishing grounds (see Tables A.1 and A.2)
- Example: Percentage Area of Total Commercial Fishing Grounds for Santa Barbara

Fishery	Ext. A	Ext. B	Ext. C	Lapis A	Lapis B	Opal A	Opal B	Topaz A	Topaz B
Ca. Halibut (H & L)	5.7%	12.4%	34.4%	13.1%	25.2%	15.8%	30.1%	29.5%	17.8%
Ca. Halibut (Trawl)	1.8%	3.0%	8.6%	1.9%	7.5%	2.6%	7.7%	6.1%	4.9%
Coastal Pelagics	—	—	—	—	—	—	—	—	—
Live Bait	—	—	—	—	—	—	—	—	—
Lobster	7.1%	12.1%	30.0%	11.7%	20.7%	11.8%	26.5%	25.3%	14.1%
N. Fishery (H & L)	11.5%	13.0%	27.8%	13.1%	19.2%	13.3%	25.9%	24.7%	15.2%
N. Fishery (Trap)	6.0%	15.4%	42.0%	14.0%	16.9%	14.5%	34.9%	30.8%	14.2%
Rock Crab	5.8%	6.8%	23.2%	6.7%	15.7%	6.8%	21.1%	18.3%	10.4%
Sablefish	—	—	—	—	—	—	—	—	—
Sea Cucumber (Diving)	11.8%	14.9%	33.4%	13.7%	21.8%	14.0%	32.6%	30.2%	16.8%
Sea Cucumber (Trawl)	1.0%	1.1%	8.1%	0.9%	6.9%	1.0%	7.6%	6.4%	2.3%
Spot Prawn	2.5%	2.3%	8.8%	2.3%	8.7%	2.4%	10.7%	8.7%	12.5%
Squid	—	—	—	—	—	—	—	—	—
Swordfish	—	—	—	—	—	—	—	—	—
Thornyhead	—	—	—	—	—	—	—	—	—
Urchin	10.5%	11.6%	32.2%	11.9%	22.1%	13.2%	25.8%	25.7%	14.0%



Potential Net Economic Impacts (Commercial)

\$ Reduction in Profit Under MPA Proposals

Port	Ext. A	Ext. B	Ext. C	Lapis A	Lapis B	Opal A	Opal B	Topaz A	Topaz B
Santa Barbara	\$356,202	\$396,749	\$937,629	\$382,130	\$655,037	\$396,292	\$822,907	\$799,678	\$437,639
Ventura	\$147,393	\$356,080	\$761,440	\$224,731	\$498,379	\$197,262	\$603,485	\$642,729	\$239,263
Port Hueneme	\$508,407	\$847,584	\$1,730,187	\$633,820	\$1,207,952	\$627,632	\$1,367,295	\$1,398,006	\$685,802
San Pedro	\$654,123	\$1,083,588	\$2,868,642	\$904,255	\$2,048,895	\$941,633	\$2,212,678	\$2,282,786	\$923,803
Dana Point	\$65,067	\$170,066	\$502,815	\$148,397	\$360,711	\$162,590	\$448,679	\$335,083	\$169,373
Oceanside	\$68,847	\$96,888	\$287,830	\$108,512	\$292,460	\$82,633	\$200,170	\$122,966	\$115,227
San Diego	\$94,393	\$107,458	\$1,030,237	\$95,728	\$568,651	\$95,636	\$854,223	\$595,707	\$120,985
Study Region	\$1,894,432	\$3,058,414	\$8,118,779	\$2,497,573	\$5,632,084	\$2,503,677	\$6,509,436	\$6,176,954	\$2,692,091

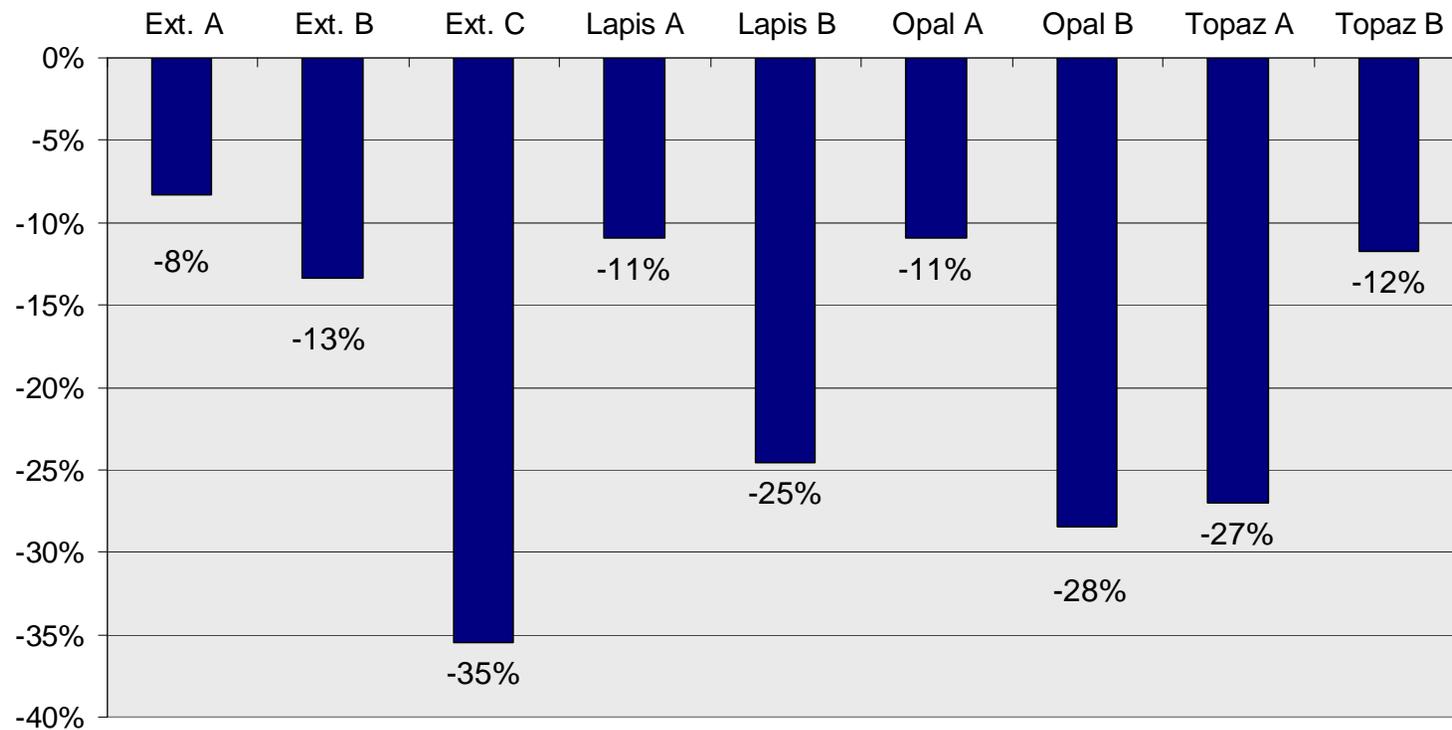
% Reduction in Profit Under MPA Proposals

Port	Ext. A	Ext. B	Ext. C	Lapis A	Lapis B	Opal A	Opal B	Topaz A	Topaz B
Santa Barbara	10.5%	11.7%	27.6%	11.2%	19.3%	11.7%	24.2%	23.5%	12.9%
Ventura	6.6%	15.9%	34.1%	10.1%	22.3%	8.8%	27.0%	28.8%	10.7%
Port Hueneme	10.1%	16.8%	34.2%	12.5%	23.9%	12.4%	27.1%	27.7%	13.6%
San Pedro	7.1%	11.8%	31.3%	9.9%	22.4%	10.3%	24.2%	24.9%	10.1%
Dana Point	7.0%	18.2%	53.8%	15.9%	38.6%	17.4%	48.0%	35.9%	18.1%
Oceanside	13.6%	19.2%	56.9%	21.5%	57.9%	16.3%	39.6%	24.3%	22.8%
San Diego	5.8%	6.6%	63.2%	5.9%	34.9%	5.9%	52.4%	36.5%	7.4%
Study Region	8.3%	13.4%	35.4%	10.9%	24.6%	10.9%	28.4%	27.0%	11.8%



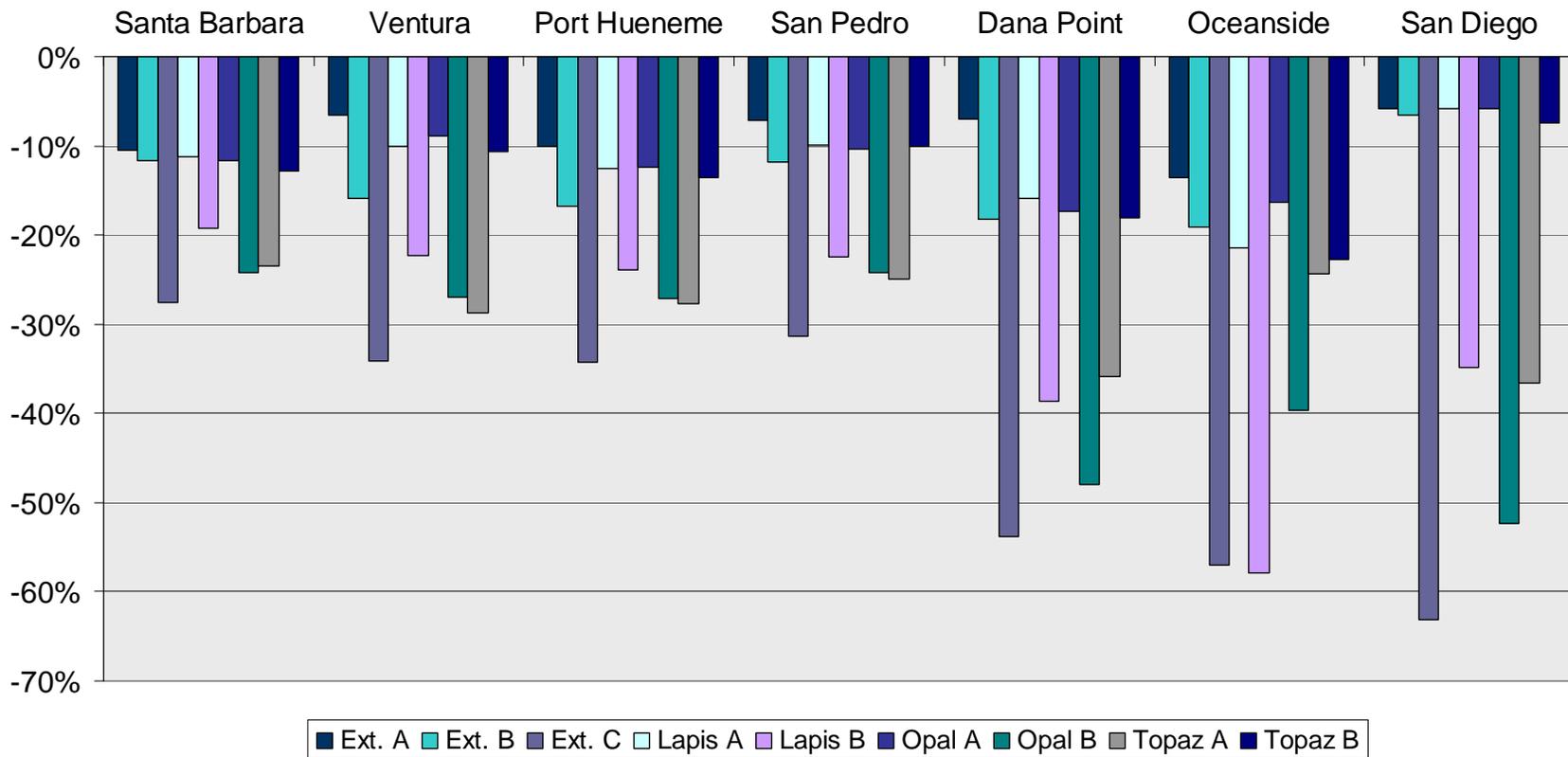
Potential Net Economic Impacts (Commercial)

Estimated Annual Net Economic Impact by Proposal
(% Reduction in Profit)



Potential Net Economic Impacts (Commercial)

Estimated Annual Net Economic Impact by Port
(% Reduction in Profit)





CPFV Overview

- **Data and Analyses**

- Data collected from stratified, solicited sample of 119 CPFV fishermen
- Focused on 10 species
- Results reported at study region and port level (Santa Barbara, Port Hueneme/Channel Islands Harbor, Santa Monica, San Pedro/Long Beach, Newport Beach, Dana Point, Oceanside and San Diego)

- **Results**

- Percentage Area of Fishing Grounds Affected
- Percentage Value of Fishing Grounds Affected
- Estimated Annual Net Economic Impact



Potential Impact on CPFV Fisheries

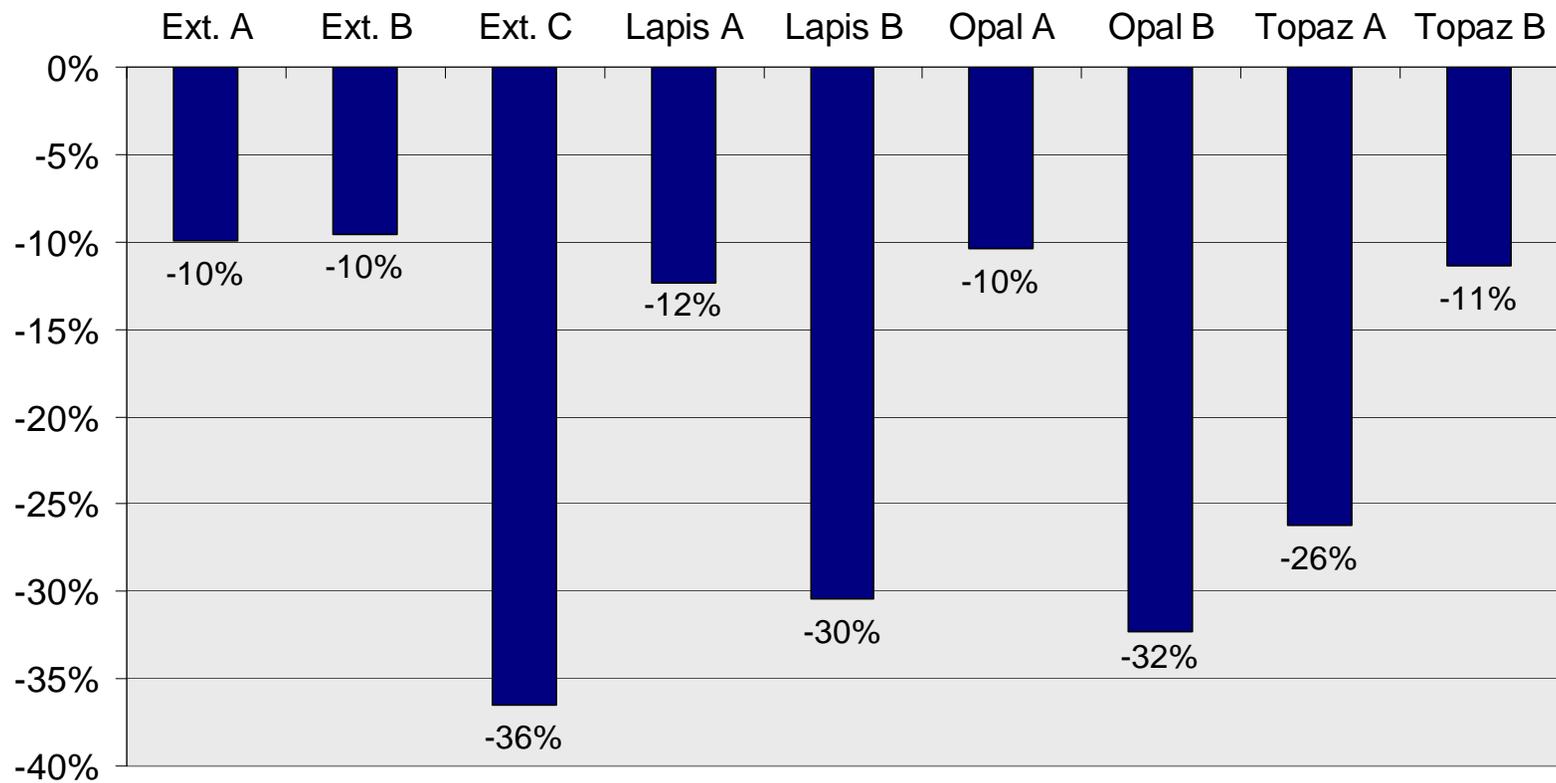
- Assessed for total fishing grounds and total value of fishing grounds (see Tables A.3 and A.4)
- Example: Potential impacts on total value under Lapis A (3 of 8 ports analyzed)

Fishery	Santa Barbara	Port Hueneme / Channel Islands	Santa Monica
Barracuda	2.7%	8.5%	5.0%
Ca. Halibut	6.8%	16.5%	5.3%
Calico Bass	2.7%	9.3%	4.1%
Lingcod	6.4%	12.9%	1.9%
Rockfish	5.0%	13.9%	3.3%
Ca. Scorpionfish	3.7%	9.9%	0.4%
Ca. Sheephead	6.6%	11.6%	2.5%
Sand Bass	2.1%	1.4%	1.5%
Whitefish	9.1%	10.2%	2.6%
White Seabass	5.1%	11.5%	5.0%



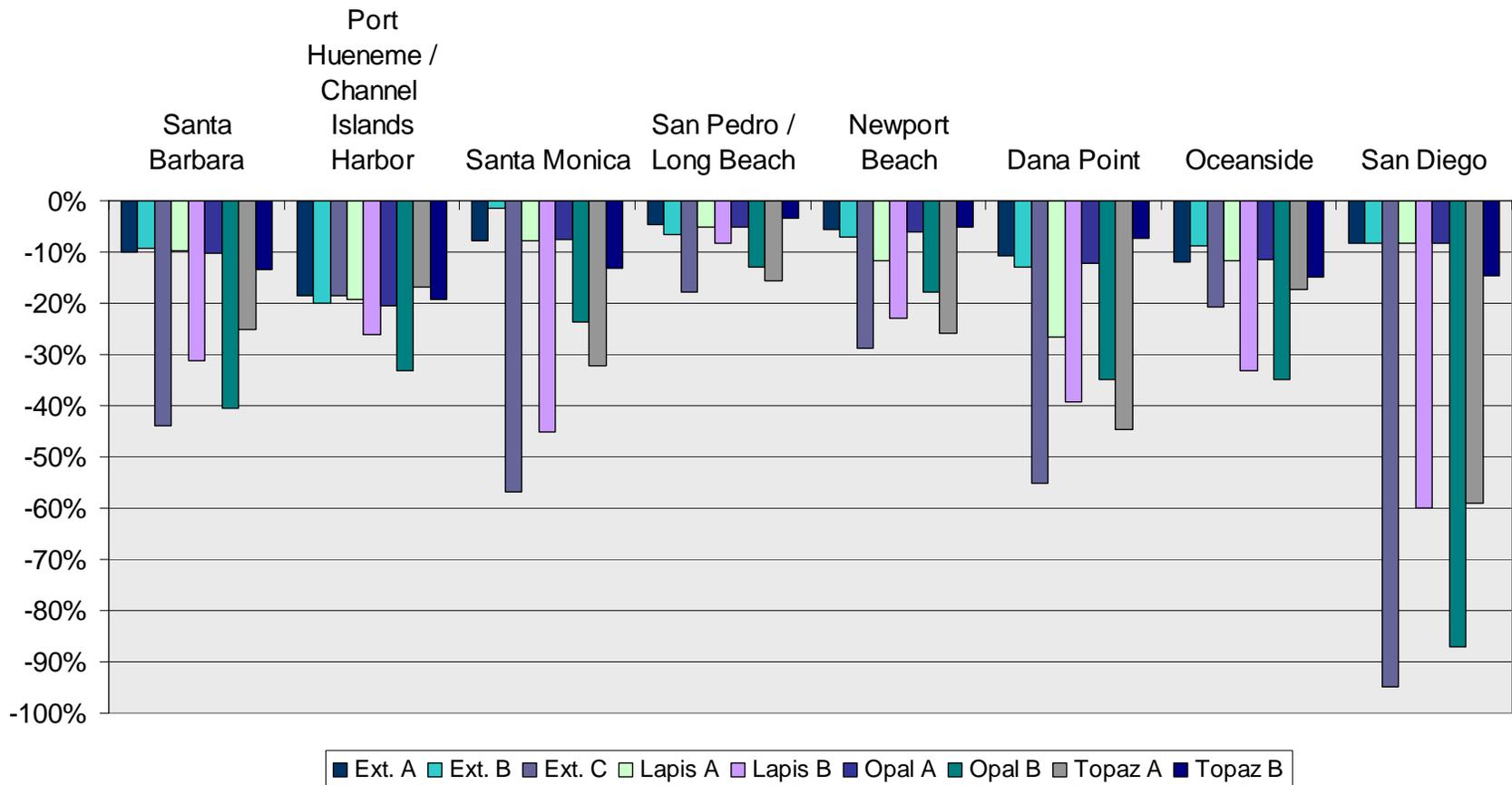
Potential Economic Impacts (CPFV)

Estimated Annual Net Economic Impact by Proposal
(% Reduction in Profit)



Potential Economic Impacts (CPFV)

Estimated Annual Net Economic Impact by Port
(% Reduction in Profit)





Recreational Overview

- **Data and Analyses**
 - Data collected from stratified, solicited sample of 504 recreational fishermen
 - Focused on 17 species
 - Results reported by user group (private boat, kayak, and dive/spear) and by county (Santa Barbara, Ventura, Los Angeles, Orange and San Diego)
- **Results**
 - Percentage Area of Fishing Grounds Affected
 - Percentage Value of Fishing Grounds Affected



Potential Impact on Recreational Fisheries

- Assessed for total fishing grounds and total value of fishing grounds (see Tables A.5-A.22)
- Example: Potential impacts of Ext. A on 2/17 rec. species

County	Sector	Total Area		Total Value	
		Calico Bass	White Seabass	Calico Bass	White Seabass
Santa Barbara	Dive	3.2%	7.7%	3.4%	4.4%
	Kayak	4.6%	—	1.6%	—
	Private Vessel	3.0%	2.2%	4.6%	2.2%
Ventura	Dive	17.3%	12.7%	10.6%	13.0%
	Kayak	14.9%	18.4%	13.9%	13.5%
	Private Vessel	3.4%	7.8%	2.6%	2.6%
Los Angeles	Dive	8.5%	15.2%	11.3%	12.5%
	Kayak	5.4%	9.2%	9.1%	5.8%
	Private Vessel	6.4%	7.2%	5.1%	4.4%
Orange	Dive	5.9%	6.3%	15.2%	7.4%
	Kayak	1.7%	4.6%	3.2%	3.4%
	Private Vessel	2.9%	5.6%	3.7%	4.0%
San Diego	Dive	1.3%	4.7%	0.5%	0.9%
	Kayak	5.2%	5.5%	1.4%	1.7%
	Private Vessel	4.3%	5.5%	1.8%	2.1%



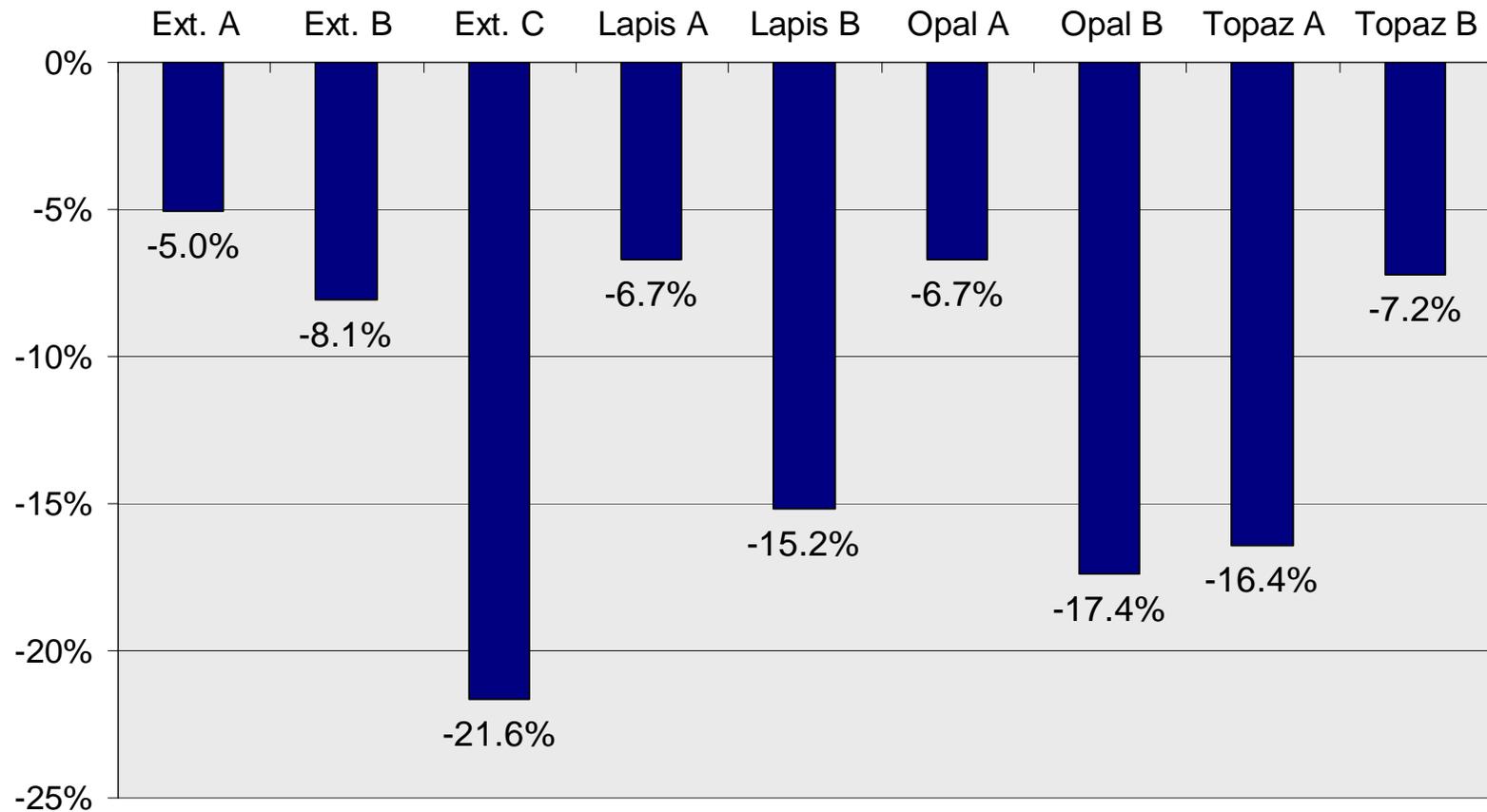
Additional Analyses and Next Steps

- All results for the first round to be finalized by the MLPA Blue Ribbon Task Force meeting and made available
 - Summary report (including comments and suggestions provided by regional stakeholder group members)
 - Results summarized per MPA (Excel spreadsheet)
 - The above are to be used in combination with the maps, data collection methods, and evaluation methods already provided
- Analyses for subsequent iterations
 - Consideration of existing closures
 - Individual impacts
- Next steps
 - Second round of analysis for MLPA South Coast Study Region



Potential Gross Economic Impacts (Commercial)

Estimated Annual Gross Economic Impact by Proposal
(% Reduction in Ex-vessel Revenues)



Comparison of Potential Economic Impacts (Commercial)

