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Marine Life Protection Act Initiative




Marine Birds and Marine Mammals Evaluations for the Round 3 NCRSG MPA Proposal in the MLPA North Coast Study Region

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Bird and Mammal Evaluation



**Seabirds and marine mammals play significant
roles in the health of marine systems**



Notes about Round 3 Analyses

- Compares Round 3 MLPA North Coast Regional Stakeholder Group (NCRSG) Marine Protected Area (MPA) Proposal and Proposal 0
- Includes two evaluations:
 - Standard evaluation (NCP) includes all recreational take proposed in each MPA, including that intended only to accommodate tribal uses but open to all recreational users
 - Supplemental evaluation (SUP) does not include proposed recreational take intended only to accommodate tribal uses
- Marine bird analyses include state marine reserves (SMRs), special closures and some state marine conservation areas (SMCAs)
- Marine mammal analyses consider only SMRs and special closures, so no supplemental evaluation



Round 3 Summary: Marine Birds



- NCP – Standard Evaluation

Includes special closures which provide benefits for breeding and roosting seabirds.

Key special closures: Castle Rock, Steamboat Rock, Rockport Rocks and Vizcaino Rock

Lacking protection at Flatiron Rock

- SUP – Supplemental evaluation

Removed recreational uses intended to accommodate tribes which adds Pyramid Point SMCA. Added benefits include:

Increased nearshore and neritic hotspot foraging for 3 species or species groups (Marbled Murrelet, Cormorants, and Divers)





Round 3 Summary: Pinnipeds



- Sugarloaf Island and Southwest Seal Rock special closures significant for Steller sea lions
- Very few proposed SMRs would benefit marine mammals
- Captured only 1 of 4 harbor seal breeding hot spots at Castle Rock Special Closure
- Harbor seal haulouts and pinniped foraging areas received very few benefits



Round 3 Summary: Cetaceans

- Very few proposed SMRs would benefit marine mammals
- Provide no benefits to foraging areas of summering gray whales or harbor porpoise





Round 3 Summary: Special Closures

NCRSG Special Closures Recommendation

Marine Birds

- Significant for nesting seabirds
- Seasonal closures are between March 1 and August 31, important breeding time

Marine Mammals

- Significant for breeding Steller sea lions
- Few benefits for breeding harbor seals
- Few benefits to foraging marine mammals



Summary Table: Marine Birds

Analysis	P0	NCP	SUP	Special Closures
Seabird Breeding Colonies		++	++	+++
Seabird Roost Sites				++
Seabird Breeding Hot Spots		++	++	+++
Nearshore Foraging - Seabird		.	+	
Seabird Neritic Foraging		.	+	
Waterfowl		-	-	
Shorebirds		-	-	
Estuarine and Coastal Habitats		-	-	

'+++', '++', '+' = very positive to positive benefit '.' = limited benefit '-' = low benefit
 blank space = no benefit



Summary Table: Marine Mammals

Analysis	P0	NCP	Special Closures
Pinniped Hot Spots Overall			+
Steller Sea Lion Hot Spots			+++
Harbor Seal Hot Spots			-
Pinniped Haulout Overall			+
Steller Sea Lion Haulout			+++
Harbor Seal Haulout			-
California Sea Lion Haulout			-
Marine Mammal Foraging Protection			
Pinniped foraging			
Gray Whale Foraging			
Harbor Porpoise Foraging			

'+++', '++', '+' = very positive to positive benefit '.' = limited benefit '-' = low benefit
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Marine Bird and Mammal Evaluation



Looking Ahead...



Additional Information

The following slides contain further information on the marine bird and marine mammal evaluations for Round 3, but will not be presented today.



Methods Overview

Analyses quantify MLPA North Coast Study Region marine bird and marine mammal populations likely to benefit from marine protected areas (MPAs) for three use categories:

1. Breeding
2. Resting
3. Foraging



Marine Bird and Mammal Analyses

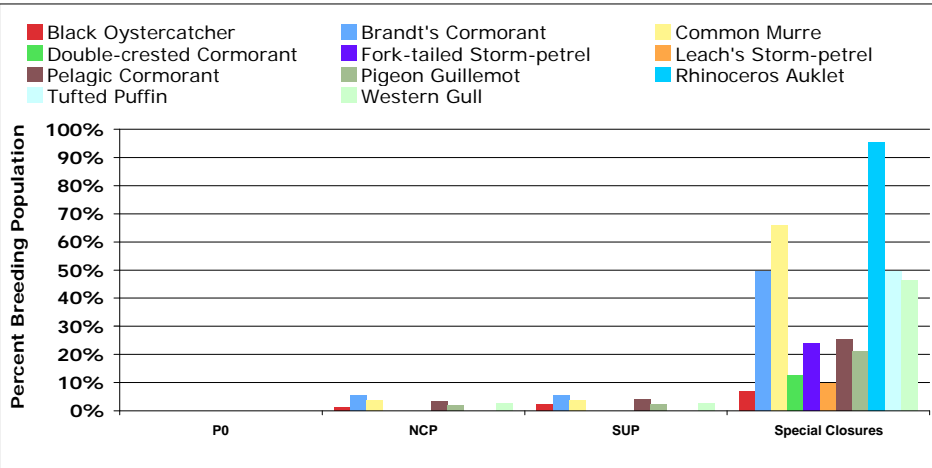
Analysis 1: Protection at Breeding Sites

Investigated:

- Percent (%) of marine bird breeding populations protected in bioregion
- Number of pinniped rookery sites protected
- Protection of important marine bird breeding hot spots
- Protection of important pinniped population hot spots



Percent of Bird Breeding Population



P0 = Proposal 0 (existing MPAs) NCP = NCRSG MPA Proposal
SUP = NCRSG MPA Proposal - Supplemental Evaluation
Special Closures = NCRSG Special Closures Recommendation



Marine Bird Breeding Hot Spots

Breeding Hot Spots	Proposal 0	NCP	SUP	Special Closures
Castle Rock				Castle Rock Special Closure
False Klamath Rock				False Klamath Rock Seasonal Special Closure
Green Rock				
Flatiron Rock				
False Cape Rocks				
Steamboat Rock		South Cape Mendocino SMR	South Cape Mendocino SMR	Steamboat Rock Seasonal Special Closure
Rockport Rocks				Rockport Rocks Seasonal Special Closure
Cape Vizcaino				Vizcaino Rock Seasonal Special Closure



Marine Mammal Rookeries

	Name	Steller Sea		Total Pinniped Rookeries
		Lion Rookeries	Harbor Seal Rookeries	
Proposal 0		0	0	0
NCP	Ten Mile SMR	0	2	3
	Point Cabrillo SMR		1	
Special Closures	Southwest Seal Rock Special Closure	1	0	5
	Castle Rock Special Closure	0	1	
	Sugarloaf Island Special Closure	1	0	
	Rockport Rocks Seasonal Special Closure	0	1	
	Vizcaino Rock Seasonal Special Closure	0	1	
	Total Available in Study Region		2	

Note: Mammal analyses considered only SMRs and special closures, so NCP and SUP would be the same



Marine Mammal Hot Spots

Population Hot Spots	Proposal 0	NCP	Special Closures
Southwest Seal Rock*			Southwest Seal Rock Special Closure
Sugarloaf Island*			Sugarloaf Island Special Closure
Vicinity of Castle Rock, Crescent City			Castle Rock Special Closure
South Bay, Humboldt Bay		South Humboldt Bay SMRMA	
Arcata Bay, Humboldt Bay			
Mouth of the Eel			

* Steller Sea Lion Rookery



Marine Bird and Mammal Analyses

Analysis 2: Protection at Roosting and Haulout Sites

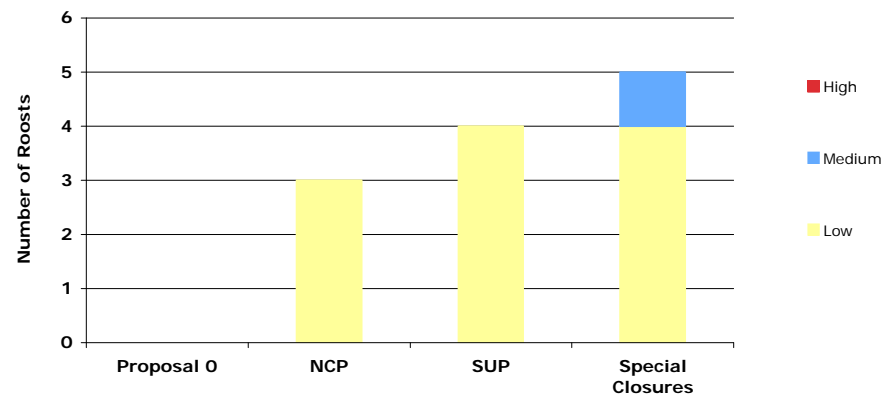
Investigated:

- Number and size of Brown Pelican roosts
- Percent (%) of study region populations protected for pinnipeds

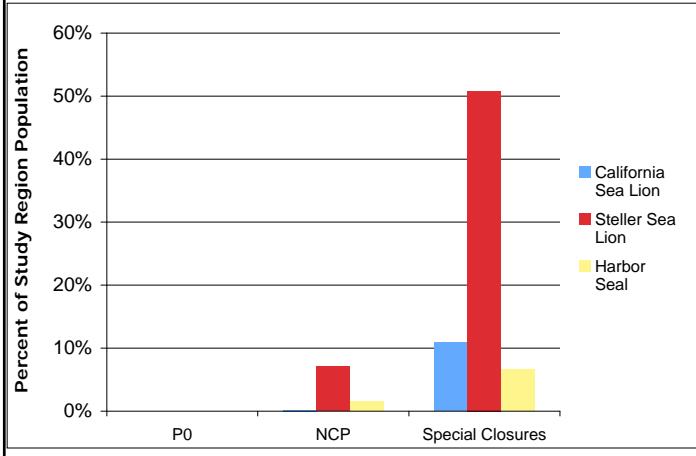




Brown Pelican Roosts



Percent of Haulout Population



Note: Mammal analyses considered only SMRs and special closures, so NCP and SUP would be the same



Marine Bird and Mammal Analyses

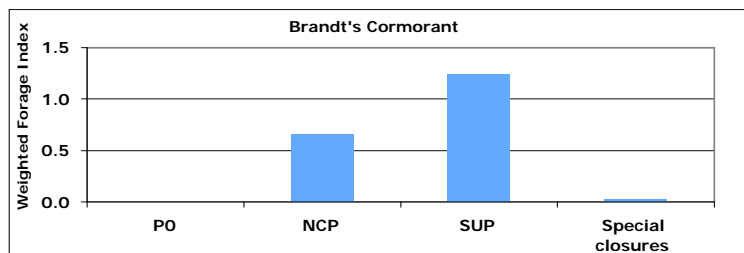
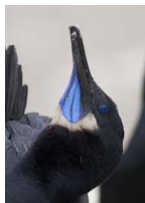
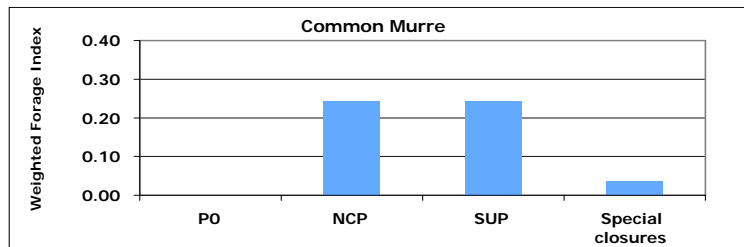
Analysis 3: Protection at Near-colony and At-sea Foraging Sites

Investigated:

- amount of foraging area
- number of animals protected

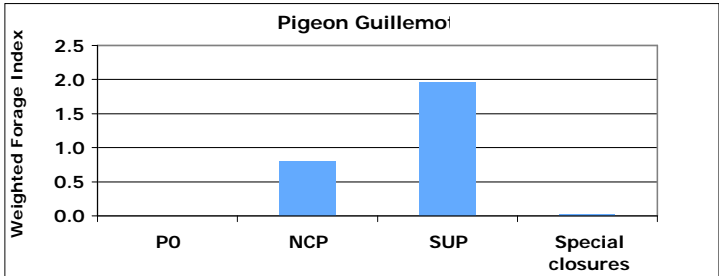
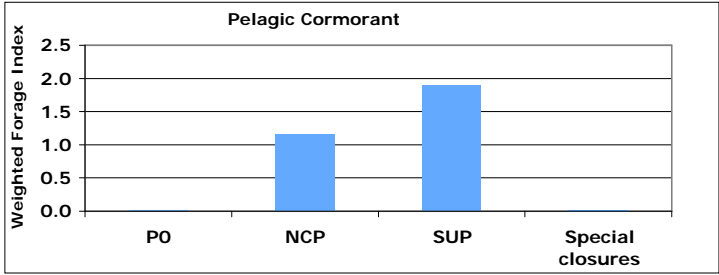


Near-colony Foraging Areas

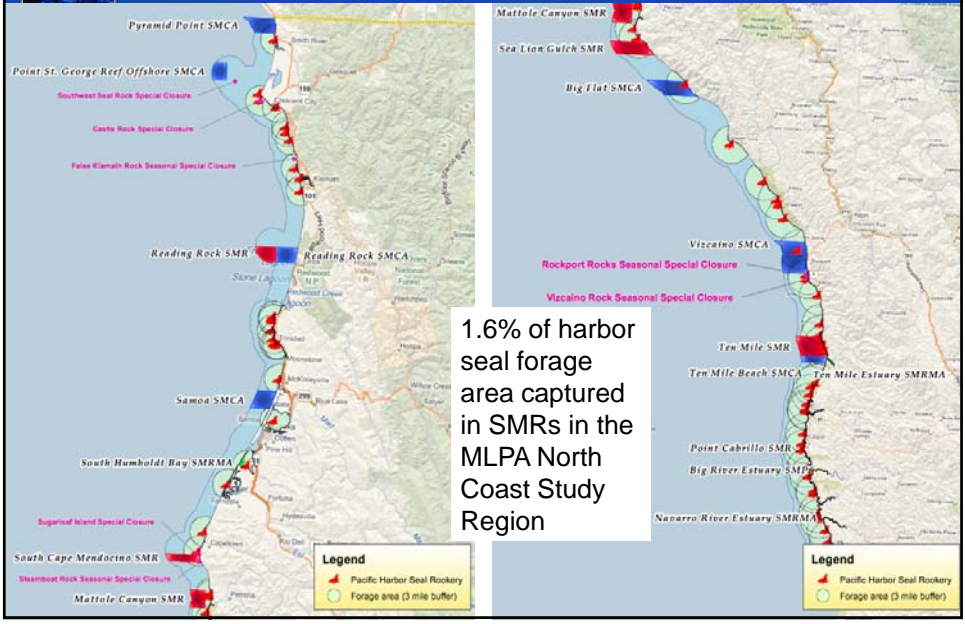




Near-colony Foraging Areas



Harbor Seal Near-colony Foraging





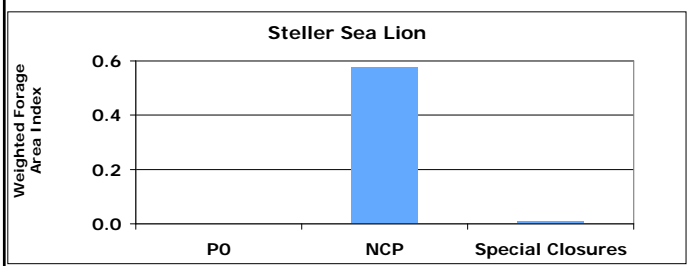
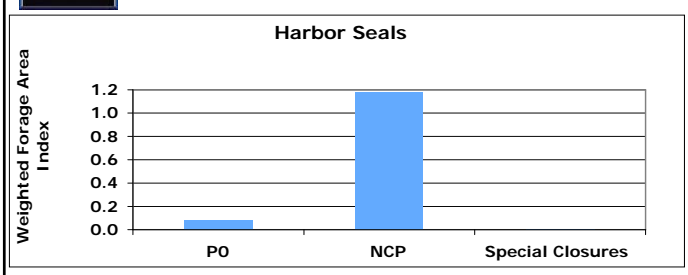
Steller Sea Lion Near-colony Foraging



10% of Steller sea lion forage area captured in SMRs in the study region



Near-colony Foraging Areas



Note: Mammal analyses considered only SMRs and special closures, so NCP and SUP would be the same



Neritic Foraging Analysis

Birds

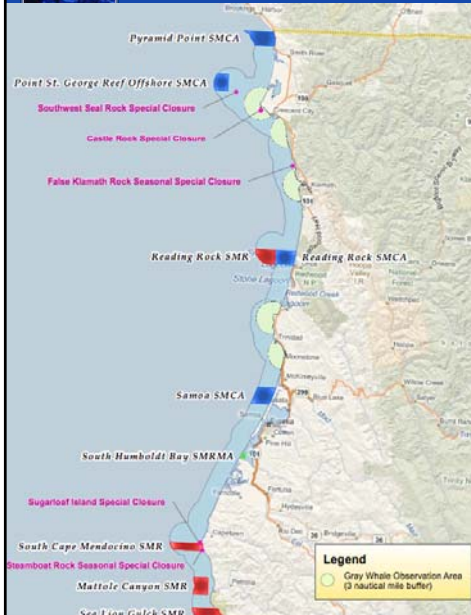
Name	Species Diversity	Area (sq. mi)	Grebes and Scoters	Guillemots and Pelagic	Marbled Murrelets	All Other Seabirds
			Average Number of Animals Sighted			
Proposal 0	-	-	-	-	-	-
NCP	14	13.85	-	-	-	1129.02
SUP	17	22.12	287.47	88.51	197.67	1129.02
Special closures	16	0.23	-	0.88	-	3.91

Mammals

Name	Area (sq. mi)	All Pinnipeds	Harbor Porpoise	Gray Whale
		Average Number of Animals Sighted		
Proposal 0	-	-	-	-
NCP	5.28	55.1	-	-
Special closures	0.23	2.2	-	0.1



Neritic Foraging: Gray Whales



Gray Whale Foraging Index (based on shore surveys)



	MPA or Special Closure Name	Whales Weighted Forage Area
Proposal 0	None	0.00
NCP	None	0.00
Special Closures	Castle Rock Special Closure	0.01



Marine Bird and Mammal Analyses

Analysis 4: Protection of Waterfowl and Shorebirds and their Habitats

Investigated shorebird protection in Humboldt Bay, number and quality of estuaries protected and percent of available shorebird and waterfowl habitat protected



Estuarine and Coastal Habitat

- Shorebird analysis: no major benefits in Humboldt Bay
- Waterfowl analysis: no added benefits over P0
- Estuarine habitats are captured in state marine parks (SMPs) or state marine recreational management areas (SMRMAs) that allow waterfowl hunting:
 - South Humboldt Bay SMRMA
 - Ten Mile Estuary SMRMA
 - Big River Estuary SMP
 - Navarro River Estuary SMRMA