




Marine Life Protection Act



**Overview of California Department of Fish and Game
Feasibility Criteria for MPA Proposals, Evaluation of Existing
NCSR MPAs, and Evaluation of Round 1 Arrays**

North Coast Study Region
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Overview of Department Role

The MLPA Initiative *Memorandum of Understanding (MOU)* explains the Department's role:

- The Department *will not*
 - Create it's own alternative
 - Recommend a preferred alternative
 - Support any individual stakeholder proposal



Overview of Department Role, cont.

- The Department *will*
 - Provide comments to the California Fish and Game Commission on MPA proposals;
 - Provide a Statement of Feasibility Criteria; and
 - Give advice on feasibility aspects of MPA proposals
- The Department provides its advice
 - During work group sessions
 - Through a formal evaluation of each submitted MPA proposal



Categories of Department Advice

- Department advice and feedback will cover:
 1. **Feasibility of MPAs:** enforceability, MPA design, boundaries, take regulations
 2. **Stated goals and objectives**
 3. **Likelihood of proposals to meet the MLPA goals**
- Department guidelines outlined in document: *"Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals"*



Why Feasibility Criteria?

- Purpose of DFG Feasibility criteria & feedback:
 - Create MPAs that are easy for the public to understand
 - Create MPAs that are enforceable
 - Help avoid design qualities that may pose a risk to MPA success
 - Help avoid creating a management burden (enforcement, monitoring, public expectations)



Feasibility of MPAs

MPA design and regulations must be:
simple, easily understood & enforceable

- Categories of Feasibility Criteria:
 - MPA Names
 - Boundaries
 - Take Regulations
 - Design Considerations
 - Other Guidance



MPA Names

Names should:

- Be simple, reasonably short, and reflect the geographic area designated
- Include the MPA designation type (e.g., *Bodega Head State Marine Conservation Area*)
- Not be named after individuals or groups



Boundaries

Boundaries should not:

- Use depth contours or distance offshore
- Use curving or undulating lines

Boundaries should:

- Use straight due north/south, east/west lines
- Be placed at **readily determinable lines** of latitude (lat.) and longitude (long.)
- Placed at **easily recognizable permanent landmarks**



Boundaries: Readily Determined Lines

Examples of Readily Determinable Lines of Lat. & Long.

- Preferred: Whole minutes (36° 50' N; 121° 46' W)
- Less Desirable: Half minutes (36° 50.5' N; 121° 46.5' W)
- Least Preferred: 1/10th Minutes (36° 50.3' N; 121° 46.7' W)



Boundaries: Landmarks

Landmarks should:

- Be easily recognizable
- Be permanent and readily observable
 - E.g., rocks, points, headlands, navigational buoys, etc.
- Have coordinates assigned
- Should use 1/100th Minutes (36° 50.31' N; 121° 46.74' W)

*If landmarks are utilized, include both landmark name / description and coordinates in the proposal.



Guidelines for Boundary Type Usage

- When to use easily recognizable permanent landmarks versus readily determinable lines of latitude and longitude
 - Consider the overarching aspects of the area
 - Accessibility
 - Relative level of shore-based vs boat based usage
 - Type of boat usage (large boats vs. kayaks)
- In areas with heavy shore based use or use by less equipped boats the use of easily recognizable permanent landmarks is preferred



Boundaries: Corners and Diagonals

Corners should:

- Be at 90° angles; and
- Be at readily determinable lines of lat. and long.

Diagonal Lines (IF used):

- Should be used sparingly
- Must follow the angle of the coastline
- Should be placed sufficiently offshore to accommodate nearshore users without GPS
- Must be “anchored” at whole minutes of latitude and longitude for both offshore corners



Written Boundary Descriptions

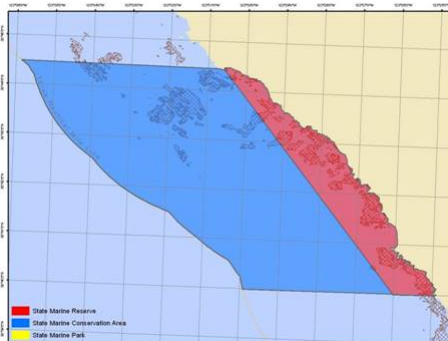
Each MPA should include a written description in MarineMap

- Coastline Boundary: “Mean high tide line”
- Offshore Boundary: “State water boundary”
- Example:
 - Northern boundary: $43^{\circ} 12.000'N$
 - Eastern boundary: Mean high tide line
 - Southern boundary: $\sim 42^{\circ} 12.363'N$ (at the sand rock interface on the north end of Weston State Beach)
 - Western boundary: State water boundary

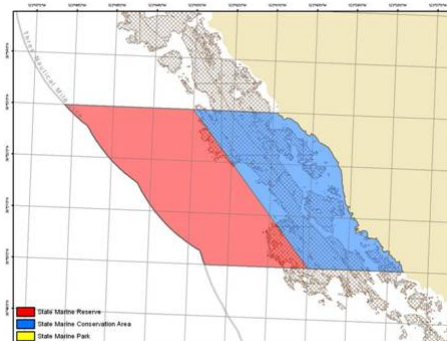


Example: Diagonals

Boundaries: Diagonal Lines



Incorrect



Correct



Example: Diagonals



Incorrect use of diagonal lines

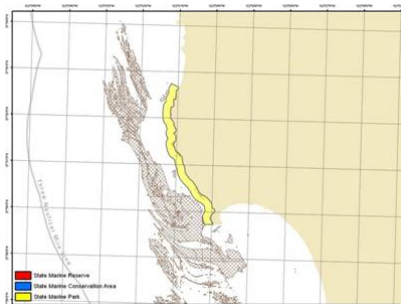
Incorrect



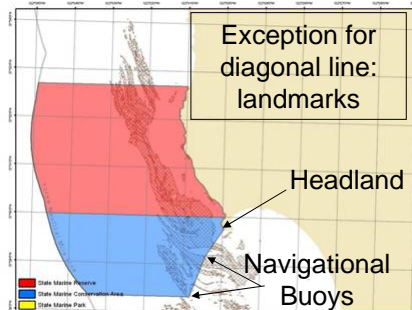
Feasibility Criteria: MPA Design

Intertidal MPAs:

- Not Recommended
- MPAs should extend to adjacent subtidal waters



Existing MPA



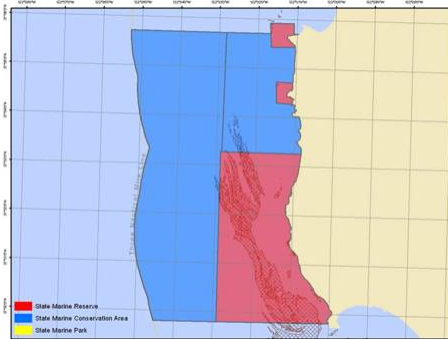
Improved MPA



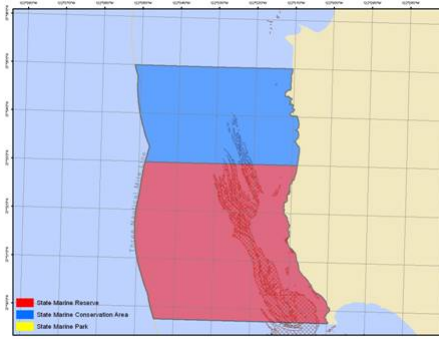
Feasibility Criteria: MPA Design

Multiple Zoning:

- Occurs when an area is split to allow for different uses in multiple portions of the area.



Not Consistent with Guidelines,
Doughnut and L-Shapes

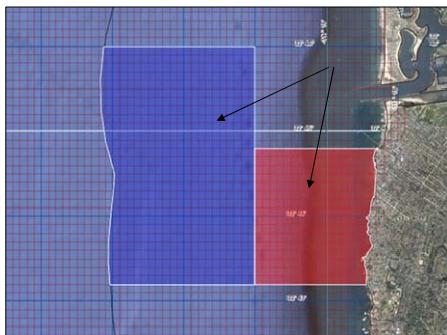


Consistent with Guidelines

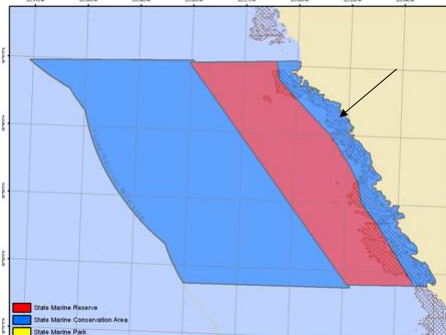


Feasibility: MPA Design

MPA Designs that do not Meet Department Guidelines



L-Shaped Designs



Ribbon Design



Feasibility Criteria: Take Regulations

Take regulations should:

- Be simple and easily understood
 - E.g., using categories like “pelagic finfish”
 - Avoid conflict with existing regulations
 - Not create new fishery management regulations (i.e., different bag limits, size limits, or seasons).
- ❖ The best regulations are those that can be simply stated in one or two sentences without clarifying language.



Redesigning Existing MPAs

Existing MPA

- Boundaries do not meet guidelines
- Complex regulations

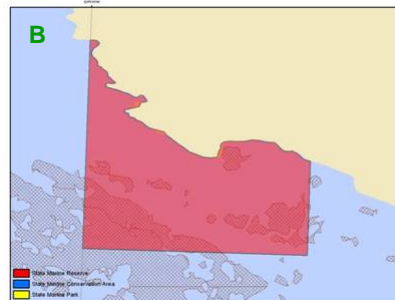


MPA Type: SMP

Take Regulations: prohibited, All marine aquatic plants; All invertebrates EXCEPT red abalone, chiones, clams, cockles, rock scallops, native oysters, crabs, lobsters, ghost shrimp, sea urchins, mussels and worms.

Improved MPA

- Boundaries meet guidelines
- Regulations simplified



MPA Type: SMR

Take Regulations: No take of living marine resources allowed.



Other Guidance: Special Closures

Special Closures:

- No access regulations
- Can only be used for water-based access concerns (not land-based)
- Should use lines of lat. & long. along mainland
- Can use circle only around island or rock;
 - Either 300' or 1000' distance from shoreline
- Only if other state and federal regulations are inadequate
- Should be used sparingly



Other Guidance: SMRMAs

- SMRMA = State Marine Recreational Management Area
- If considering placing an MPA where waterfowl hunting currently occurs:
 - Use SMRMA designation
 - SMRMAs can provide MPA-like protection subtidally while allowing hunting to continue
- Staff are compiling list of areas in study region where waterfowl hunting occurs



Goals and Objectives

- For each MPA proposal, the Department *will*:
 - Review goals, objectives and site-level rationale for each MPA
 - Give feedback on alignment of goals and objectives with MPA design
 - Provide options to improve MPA design to meet stated goals and objectives



Prospects of MPAs to Meet MLPA Goals

- The Department will evaluate MPA proposals based on:
 - Guidelines from Master Plan for MPAs
 - MLPA Master Plan Science Advisory Team (SAT) guidance, and
 - DFG feasibility criteria
- The Department will advise on improving MPA proposals to better meet MLPA goals



Summary of DFG Guidelines Purpose

DFG Guidelines are intended to ensure that MPAs have:

- Simple regulations, easy to enforce and understand
- Reasonable goals and objectives for each proposed MPA
- Good prospects to meet MLPA goals

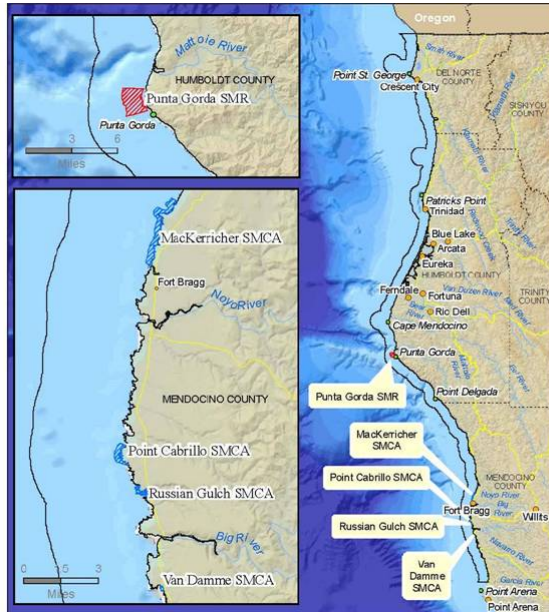


North Coast Study Region - Existing MPAs

- North Coast Study Region (NCSR) Boundaries
 - Alder Creek (near Point Arena) north to the Oregon Border
- Existing MPAs
 - 5 total MPAs
 - 4 state marine conservation areas (SMCAs; all in Mendocino County)
 - 1 state marine reserve (SMR in Humboldt County)
 - No existing MPAs located in Del Norte County



NCSR- Existing MPAs



Evaluation of NCSR Existing MPAs

- None of the existing NCSR MPAs meet all of the Department's feasibility criteria
 - Issues include:
 - Use of depth contours
 - Distance offshore as boundary delineations
 - Complex take regulations
 - MPAs with Low level of protection as assigned by the SAT
 - Intertidal MPAs
- ✧ A detailed evaluation of each existing MPA has been provided as a separate document



Evaluation of Round 1 MPA Arrays

Eight external MPA arrays were submitted for evaluation in Round 1

- Frequently noted design elements include:
 - MPA classification (designation type) improperly assigned
 - Boundaries that utilize distance or depth contours
 - Boundary descriptions that do not include explicit description of intended boundaries (e.g., “aligns with headland” or “from the sand / rock interface”)
 - Take regulations that do not specify all allowed commercial and recreational take and gear types



Feasibility Evaluation of Round 1 Arrays

Summary of Individual MPA Evaluation Findings

Array	# of Proposed MPAs	% of Proposed MPAs that Meet Guidelines for Both MPA Boundaries and MPA Design	% of Proposed MPAs that Meet Guidelines for Both MPA Type and Take Regulations*
A	15	46%	20%
B	12	33%	8%
C	15	20%	0%
D	16	37%	0%
E	14	28%	57%
F	13	23%	0%
G	13	23%	0%
H	10	30%	0%

* Much of this can be addressed by properly assigning an MPA type and specifying the allowed take for each MPA



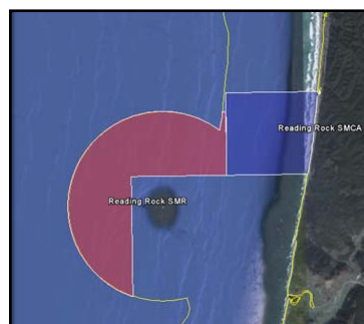
Round 1 Arrays- General Feedback

- MPA Type
 - If take is allowed in an MPA, an MPA classification other than SMR should be used
- Management Schemes in MPAs
 - Mobile MPAs, as proposed in Array A, would not meet the goals of the MLPA
 - If proposals such as Marine Stewardship Zones are desired, they should be brought directly to the California Fish and Game Commission



Round 1 Arrays- MPA Design

- Awkward Shapes and Wedges





Round 1 Arrays- Allowed Take

- General Feedback
 - Allowed take should be explicitly stated (commercial and/or recreational, species and gear type) for each MPA
 - Must apply and be available to everyone
- Trap Removal
 - Allowing the removal of commercial fishing gear is not a defined regulated activity that should be applied to an individual MPA
 - Enforcement has developed a policy memo on this subject



Round 1 Arrays- Other Proposed Uses

- Removal of Invasive Species
 - This should not be applied to an individual MPA
 - DFG has programs in place regarding invasive species



Round 1 Arrays- Other Proposed Uses (Cont.)

- Existing Permitted Activities
 - Should be taken into consideration when designing MPAs
 - A new MPA designation would not automatically prohibit these activities
 - In areas with these activities, the Department recommends:
 - Using the appropriate MPA designation type, and
 - Specifically allowing the activity to continue
- Future uses that may be incompatible with the goals and objectives of an MPA
 - Can recommend they be disallowed

*See the 25 September 2009 AG memo for guidance on this subject



Round 1 Arrays- Individual MPA Evaluations

- Feedback on feasibility aspects of each round 1 MPA is provided in the evaluation document
 - Should help improve round 2 draft proposals



Round 1 Arrays - Next Steps

- Expect that feasibility aspects will improve in subsequent rounds
- Department staff is available to answer questions and provide guidance regarding feasibility aspects of potential MPA designs