

**California Marine Life Protection Act Initiative
North Coast Study Region Data Outreach Meeting**
(revised July 22, 2009)

Thursday, July 23, 2009
10:00 a.m. – 4:00 p.m.

**Humboldt Bay Aquatic Center
921 Waterfront Drive
Eureka, CA 95501**

Meeting Objectives

- *Provide background information about the MLPA Initiative*
- *Convey data needs of the MLPA Initiative*
- *Coordinate data collection efforts and minimize duplication of effort*
- *Maximize usefulness of data collection to MLPA North Coast Project*

Meeting Agenda

9:45 a.m.		<i>Arrival and greetings</i>
10:15 a.m.	1.	Welcome, agenda review, and brief introductions
10:30 a.m.	2.	Presentation on MLPA Initiative background and data needs <ul style="list-style-type: none"> • Followed by question/answer period
11:30 a.m.	3.	Presentation on north coast spatial data <ul style="list-style-type: none"> • Followed by question/answer period
12:30 p.m.		<i>Lunch</i>
1:30 p.m.	4.	Activity: Who has what data? <ul style="list-style-type: none"> • 3-4 min per participant group • Complete "data outreach forms"
2:00 p.m.	5.	Coordination of data collection: break out into subject-specific groups and discuss ways to minimize duplication of effort <ul style="list-style-type: none"> • Habitat • Human use (consumptive and non-consumptive) • Water Quality • Physical Oceanography • Biological Characteristics • Tribal • Others as needed
3:45 p.m.	6.	Next steps <ul style="list-style-type: none"> • Coordination with the MLPA Initiative • Coordination among other organizations

Handouts

1. What is the MLPA Initiative? (with map of MLPA North Coast Study Region)
2. What are marine protected areas?
3. Goals of the Marine Life Protection Act
4. Opportunities for public participation in the MLPA North Coast Study Region
5. Spatial Data Layers Identified for the North Coast Study Region
6. North Coast Study Region Basic Data Criteria
7. Protocol for Evaluating Incoming Data from Sources External to the Master Plan Science Advisory Team
8. Form for the Submission of External Data
9. Form for the Submission of External Information

Marine Life Protection Act Initiative



Summary of Spatial Data Used in the Planning of Marine Protected Areas in California

North Coast Data Outreach Meeting
July 23, 2009 • Eureka, CA

Paulo Serpa, California Department of Fish and Game

Outline

- **MLPA data needs and current data in the database**
 - Overview of data themes
 - Where they are from
 - How they are used
- **Where do new data come from?**
 - How you can introduce additional data to the process
 - Criteria for data to be useful
 1. Scale
 2. Coverage
 3. Methodology
 4. Formats



Needs of the Process

Science-based, stakeholder driven process to evaluate existing marine protected areas (MPAs) and recommend alternative MPA designs for each study region

- Participants include: Regional stakeholder group (RSG), science advisory team (SAT), blue ribbon task force (BRTF), California Fish and Game Commission (FGC), MLPA Initiative staff, public
 1. All require access to the same basic information



Needs of the Process

MPA planning requires:

- Spatial data on distribution of key habitats, socioeconomic uses, marine managed areas, points of reference, etc.
- Tools to facilitate the exploration of data and support MPA design and evaluation
 1. Iterative process that requires efficient automation of information capture
 2. Tools will be covered in future presentations



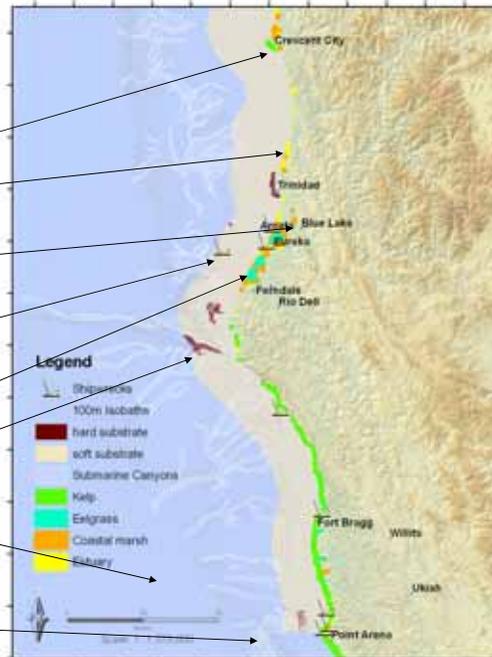
Database organization

- **Habitat**
 - Distribution of substrate types, bathymetry, intertidal substrate, kelp, seagrass
- **Biological**
 - Distribution of fish, birds, mammals, invertebrates, corals
- **Physical**
 - Sea surface temperatures (SST), upwelling, salinity, currents, impaired water bodies
- **Cultural**
 - Distribution of ports, coastal access points, cities
- **Socioeconomic**
 - Consumptive and non-consumptive activities (e.g., commercial and recreational fishing, recreational boating, diving, educational)
- **Base (reference) Layers**
 - Existing MPAs, study region, graticules, nautical charts



Habitats

- Kelp canopy mapping from DFG
- Estuaries from TNC and USFWS NWI
<http://www.fws.gov/wetlands/>
- Coastal marsh from NOAA ESI
<http://response.restoration.noaa.gov>
- Shipwrecks generated from NOAA ENC
<http://www.nauticalcharts.noaa.gov>
- Eelgrass from Eric VanDyke and DFG
- Geologic benthic classification from NOAA EFH EIS * (update in progress)
<http://www.nmfs.noaa.gov/habitat>
- Bathymetric isobaths from DFG and NOAA (NGDC)
<http://www.ngdc.noaa.gov>
- Submarine canyons from NOAA EFH
<http://www.nmfs.noaa.gov/habitat>



Physical

Coastal hydrography from USGS
<http://nhd.usgs.gov/>

Shoretype and coastline delineation from NOAA ESI
<http://response.restoration.noaa.gov>

High resolution multibeam bathymetric imagery and substrate classification * from CSUMB
<http://seafloor.csumb.edu/index.html>

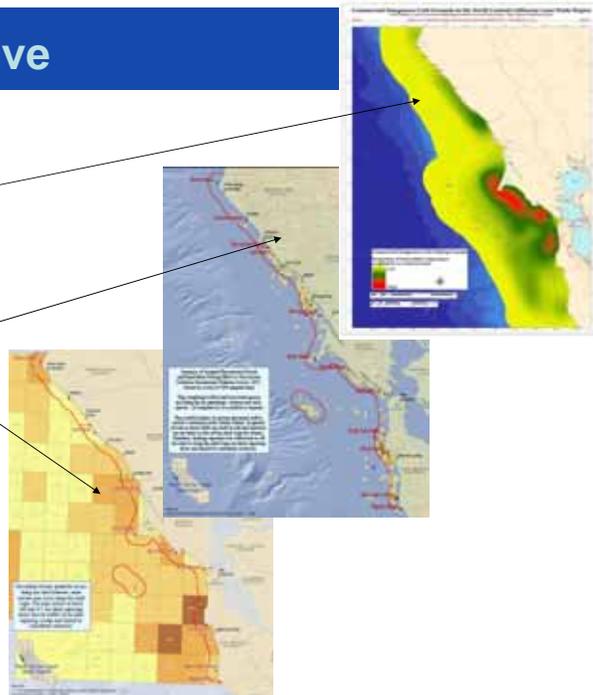


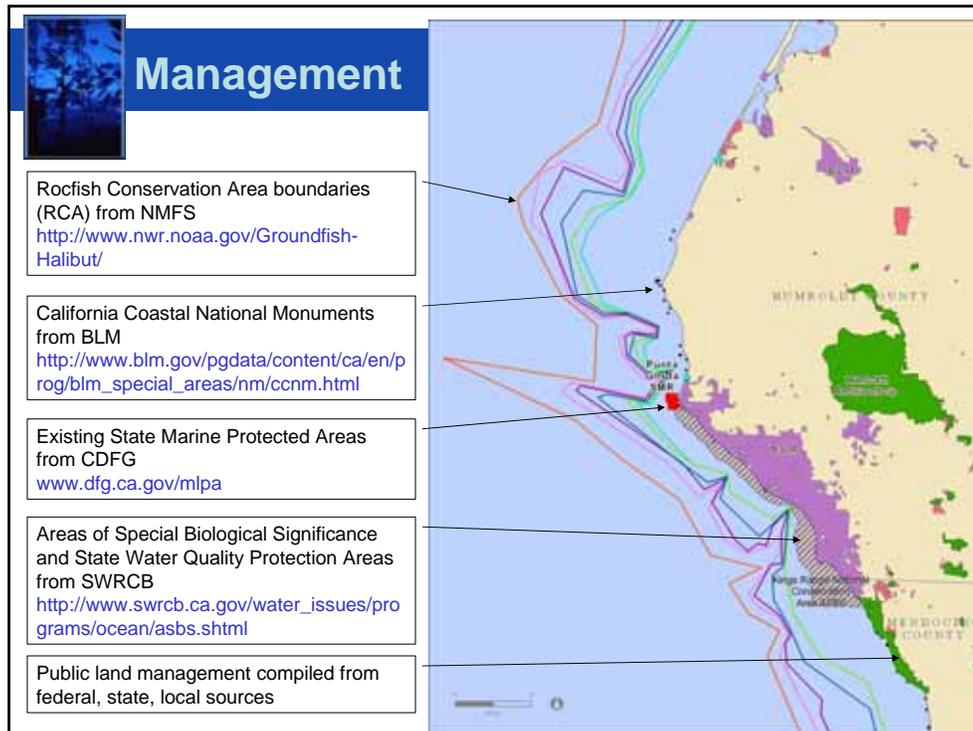
Consumptive

Commercial and recreational gishing ground areas of importance from Ecotrust fisher surveys

Recreational observer or survey data from California Recreational Fisheries Survey (CRFS)

Commercial landing receipt or logbook data from California Fisheries Information System (CFIS)





How Data are Used

Data are processed into a Geographic Information System (GIS)

- o Must have a spatial reference linked to specific attributes
- o All data have a common spatial reference
- o Allows for comparison of information in same space and time
- o Data are presented on maps or in tabular format in a variety of media
 1. Static maps, figures and tables (printed and online)
 2. Direct public connection to our database
 3. Through MarineMap, a custom MPA planning tool for viewing these data



How Data are Used

Data and associated mapping tools are utilized by groups in different ways:

- RSG
 1. Reviews data during planning to target specific areas of interest, confirm boundaries, meet guidelines
- SAT
 1. Reviews data prior to planning process and during evaluation of proposals drafted by RSG
 2. Uses data to quantify analyses of drafted proposals
- All others (including, BRTF, staff and public)
 1. Review data and summaries by SAT to better understand the spatial distribution of thematic areas of interest and how proposals fit the distribution and guidance given by the SAT



How You Can Contribute Information

Formally submit data for consideration

- Initial step is data submission form
- Data will be reviewed by staff and passed on to SAT for final review. Initial considerations are:
 1. Will data help SAT answer a question or inform process?
 2. Are there other similar data already included?
 3. What is the spatial resolution?
 4. What is the source?
 5. Are methods/analysis appropriate?
 6. What is the level of peer review?
 7. Are the data readily usable?
 8. What is the extent of the data?



Data Exploration

- **Still early in MLPA North Coast Study Region (NCSR) planning process**
 - We will continue to acquire many new updates and datasets as we progress
 - Cartography and synthesis of some data has only just begun
 - Region profile in the works
 - <http://www.dfg.ca.gov/mlpa/nccprofile.asp>
- **A quick look at the list of features in the handout**
- **A quick look at [marinemap](#) to see how data are presented and used in the south coast**
 - Because we early in the NCSR we don't have these data represented in maps yet.
 - 1.Products will start showing in early fall



Thank You

pserpa@dfg.ca.gov
www.dfg.ca.gov/mlpa

Questions?

SAMPLE HANDOUT #1 FOR DATA WORKSHOP

California Marine Life Protection Act (MLPA) Initiative North Coast Study Region Basic Data Criteria *July 14, 2009*

The MLPA Initiative welcomes the submittal of data relevant to the MLPA North Coast Study Region (California/Oregon border in Del Norte County to Alder Creek near Point Arena in Mendocino County) and will attempt to use these data to the greatest extent possible. Organizations interested in submitting data should note that some forms of data are more useful in the MLPA planning process than others. At a minimum, data should:

- be relevant to marine protected area (MPA) planning,
- be spatially explicit,
- have "metadata" that explain the data characteristics (source, methods, etc.), and
- be readily available by requiring minimal to no processing.

The most useful data, which are more likely to be incorporated into the MLPA process, have the following attributes:

- broad spatial extent, covering the entire study region, or at least a significant portion of the study region;
- an appropriate spatial resolution for the given data type;
- include analytical products showing aggregated summary data, as opposed to raw data;
- in a format compatible with our geographic information system (GIS) databases (e.g. ESRI shapefiles or geodatabases, Access or SQL databases, excel tables, etc.); and
- peer reviewed and complemented with comprehensive metadata.

In our effort to compile MPA planning data within specific applicable subjects (i.e. base data, benthic substrate data, water quality data, etc.), the MLPA Initiative will attempt to use the best readily available data provided, including some that do not meet the above criteria. However, it cannot be guaranteed that any specific dataset will be used within the process due to the limitations of certain data or the resources required to synthesize certain data. Some examples of data that are less easy to incorporate include:

- tabulated data (e.g. excel spreadsheets) that do not link to specific geographic locations (e.g. latitude/longitude locations),
- very large data sets that have not been incorporated into a summary map or document (e.g. a 50-year, monthly time series on sea surface temperature), and
- data that require significant additional conditioning for use in our spatial database (e.g. non-digital data or formats that require complex transformations).

Questions regarding data needs and uses should be directed to MLPA Initiative Principal Planner Evan Fox (evanwfox@gmail.com).

SAMPLE HANDOUT #2 FOR DATA WORKSHOP

California MLPA Master Plan Science Advisory Team Protocol for Evaluating Incoming Data from Sources External to the Master Plan Science Advisory Team *Adopted February 24, 2009*

Background

Based on experiences in prior MLPA study regions, the MLPA Master Plan Science Advisory Team (SAT) anticipates that external groups will come forward with data intended to enhance SAT analyses and evaluations. However, data submissions may be numerous, and may come from a variety of sources, in a variety of conditions, covering a wide range of topic areas. A protocol for dealing with incoming data from external sources is needed so the SAT can efficiently and effectively determine whether or not such data is beneficial to incorporate as the SAT conducts scientific evaluations in support of the MLPA process.

Protocol

1. External data should be initially submitted along with a completed data submission form to a designated MLPA staff person. The appropriate data submission form is titled: "California MLPA Master Plan Science Advisory Team Form for the Submission of External Data". The form has been approved by the SAT and is posted to the MLPA website where it can be accessed by external groups. If needed, MLPA staff can be available to assist those who provide external data in obtaining and completing the form.
2. MLPA staff person will perform a preliminary assessment of the data against the as many of the below criteria as possible. Much of this information will be captured on the data submission form.
 - a. Will the data help the SAT answer a question or inform a scientific issue for the MLPA planning or design process?
 - b. Does the SAT already have data of a similar type, or data that addresses the same question? If so, then the staffer will evaluate whether the data sets are complimentary (with the potential that both sets may be considered) or if the datasets overlap. This may require the MLPA staff to consult with SAT member(s) and/or other MLPA staff to determine what data is already in-house.
 - c. What is the spatial resolution of the data?
 - d. What is the source of the data?
 - e. Do methods and/or analyses appear appropriate and/or acceptable?
 - f. What is the level of peer review?
 - g. Which components of the MLPA will benefit from the data (MLPA Blue Ribbon Task Force, South Coast Regional Stakeholder Group, SAT, GIS Team, regional profile or MarineMap)

*As the MLPA staff person performs the preliminary assessment, he/she will check the completed data submission form, noting fields that need to be corrected or clarified. MLPA staff will also make a recommendation for how and where the data should be used in the MLPA process.

SAMPLE HANDOUT #2 FOR DATA WORKSHOP

*California MLPA Master Plan Science Advisory Team
Protocol for Evaluating Incoming Data from
Sources External to the Master Plan Science Advisory Team
(Adopted February 24, 2009)*

*MLPA staff may determine that input from SAT members is necessary for proper evaluation against some of the above criteria, in which case he/she may bring it to the attention of SAT members in step 3 below.

3. MLPA staff will contact SAT member(s) with the relevant expertise, and consult/review with them details on the information resulting from the preliminary assessment of step 2.
4. If SAT member(s) in step 3 determine that data would add value to the MLPA process, then SAT member(s) will present the data to the full SAT for discussion. The full SAT would subsequently make the final recommendation for how and where the data should be used in the MLPA process.
5. If the MLPA staff member determines that another component of the MLPA process would benefit from the information or data then the information will be passed on to that MLPA component.

SAMPLE HANDOUT #3 FOR DATA WORKSHOP

California MLPA Master Plan Science Advisory Team Form for the Submission of External Data *Adopted February 24, 2009*

- Please complete a separate form for each dataset -

Name: _____

Organization: _____

Contact Information: _____

Issue or question data is intended to inform for the MLPA process:

Type of Data: Habitat/substrate Non-consumptive human use
 Water quality Consumptive human use
 Physical oceanography Biological characteristics
 Other (please describe) _____

Data Format: ESRI shapefile KML file
 GeoTIFF Non-digital map
 Other (please describe) _____

Extent of Data: Entire study region If data covers less than entire study
 Most of study region region, describe spatial extent here:
 Small portion of study region
 One specific location _____

Spatial Coverage: Continuous Evenly-spaced grid Coastal points
 Other (please describe) _____

Spatial Resolution: 10-100 km 1-10 km <1 km <1 m

Temporal Frequency: One-time collection Periodic collection (describe) _____
 Other (please describe) _____

Data Privacy: Public data set Confidential data set
 Specific privacy issues: _____

Peer Review: Published in journal Not peer-reviewed Government data
 Reviewed by SAT or other scientists.
Identify reviewer: _____

Data Condition: Ready to incorporate into database Data needs some conditioning

Data collection date(s): _____

Metadata¹: XML FGDC Simple description Not included

MLPA Initiative Staff Use Only (recommendation for how/where data should be used in the process):

- MLPAL staff / regional profile SAT / evaluations
- RSG / guidance information RSG / designing alternatives
- BRTF / guidance information Other (please describe):

SAT Use Only (final recommendation for how/where data should be used in the process):

- MLPAL staff / regional profile SAT / evaluations
- RSG / guidance information RSG / designing alternatives
- BRTF / guidance information Other (please describe):

Please provide any further details regarding this data:

¹ "Metadata" is information that describes who collected the data, how data collection was conducted, and other details regarding the background of a data set. The MLPA Initiative will not use data sources that do not include metadata.

SAMPLE HANDOUT #4 FOR DATA WORKSHOP

California MLPA North Coast Project Form for Submission of External Information

As part of our joint fact-finding effort, the Marine Life Protection Act (MLPA) Initiative is requesting information regarding the MLPA North Coast Study Region. Local knowledge and anecdotal information may be used to inform the MLPA Initiative marine protected area (MPA) planning process through the regional profile of the study region and the regional stakeholder group. This form is intended to record local knowledge of the study region, such as key habitats, breeding and foraging locations of species likely to benefit from MPAs, important recreational uses/areas, important commercial uses/areas, commercial and recreational fishing information, natural or cultural heritage sites, etc., that has not been gathered in a formal manner, but rather acquired through time spent working and recreating in the study region. For commercial and recreational fishing information, please also participate in the Ecotrust Fisheries Uses and Values Project (<http://www.ecotrust.org/mlpa/>). To submit scientific datasets, please use the California MLPA Master Plan Science Advisory Team Form for Submission of External Data.

Name:

Organizational affiliation, if any:

Contact Information (phone, email, address):

Please complete a separate form for each type of information

Type of Information (please circle):

Habitat/substrate	Biological characteristics/marine life
Physical oceanography	Consumptive human use/areas
Water quality	Non-consumptive human use/areas
Other (please describe):	

Time frame information or knowledge was acquired:

If your information is limited to a specific geography, please list the geography here:

What information would you like to share with the MLPA Initiative planning process? (Please be as detailed as possible and continue on back of sheet)

Questions regarding submission of external information should be directed to Dominique Monié at dominiquemonie@gmail.com or 805-692-1413.