

Marine Life Protection Act Initiative



Overview of Spatial Data Layers Available for MPA Planning

Presentation to the MLPA North Central Coast Regional Stakeholder Group
July 10, 2007 • Pacifica, CA

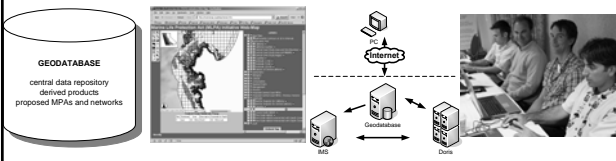
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Overview

- GIS Overview
- The Internet Map Service (IMS)
- Basic Analysis and Cartography
- Accessing the Geodatabase
- Assessing Data Quality

GIS Overview: What is GIS?

- A Geographic Information System (GIS) is a system of computer software, hardware, data and personnel to help manipulate, analyze and present information tied to a spatial location.
- MLPA Geographic Information System
 - Spatial database ("geodatabase")
 - Web based mapping and analysis software
 - Server and desktop computer systems
 - The GIS Team



GIS Overview: Why have a GIS?

GIS Overview: Data Types

Vector (points, lines, polygons)
- cities rivers, habitat boundaries


Raster (grids)
- aerial photos, nautical charts

GIS Overview: Resolution & Scale


- Scale is the ratio of map distance to real world distance.
- Data resolution is an important variable to understand when interpreting information at various scales.
 - Lower resolution data are appropriate for interpretation only at small scales (less info per unit area = broad generalization)
 - Higher resolution data may be used at larger scales (more info per unit area = fine details)

GIS Overview: What's in a layer?

Layer




Table




Metadata

Source
Use
Quality
Description



Geodatabase: What's in there?

- Base
- Bathymetric
- Biological
- Cultural
- Consumptive
- Habitat
- Management
- MPAs
- Nautical Charts
- Physical



MLPA GIS: How to get there


<http://marinemap.org/mlpa>

Links to:

- Internet Map Service (IMS)
- Metadata Server
- Doris (decision support tool)

For expert GIS users:

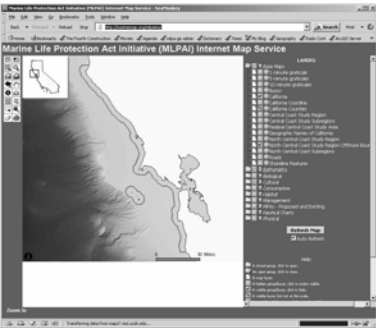
- Instructions for connecting via ArcGIS
- Database download



Internet Map Service: Demonstration

Standard Web Browsers

- Internet Explorer
- Mozilla (Firefox)
- Safari




Metadata Explorer: Demonstration

Standard web browsers


- Internet Explorer *

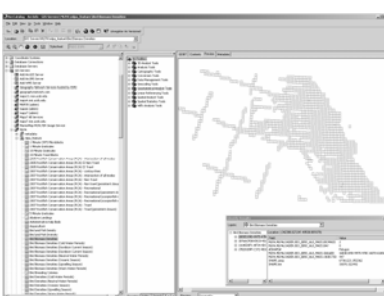
Searching by keyword

Browse MLPA folders



For Expert GIS Users: ArcCatalog 9.2



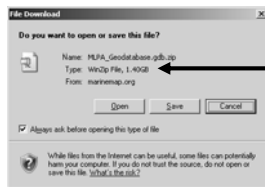


URL of Server is <http://marinemap.org> , services are metadata and mlpa_feature



Downloading the Entire Geodatabase

http://marinemap.org/mlpa/database/MLPA_Geodatabase.gdb.zip



Yikes!

You must have ArcGIS 9.2 (and patience)



GIS Team

Staff are available to help you with your data and GIS analysis needs:

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Summary

You should now know how to:

- Visualize and query the MLPA geodatabase
- Access and search the MLPA Metadata Server
- Create simple maps
- Use metadata to assess data quality

<http://marinemap.org/mlpa>

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