

DRAFT
Tomales Bay Vessel Management Plan
Interactive Map

This layered PDF map document was developed by staff at the Gulf of the Farallones National Marine Sanctuary as a complement to the Tomales Bay Vessel Management Plan and to provide a geographic context for mooring permit applications. It enables the viewer to overlay several different map layers and to determine the geographic coordinates of specific locations without the use of specialized GIS software.

General Instructions

This map document (and these instructions) are designed to work with Adobe Reader Version X for Windows. (Other versions may behave slightly differently. If you are using a Mac, make sure that the map document does not open in Preview, which is the default.) Most layers are best viewed at about 400-800% zoom, which is equivalent to a map scale of about 1:30,000 depending on the size of your monitor. While it is possible to zoom in up to 6400%, please be aware that **the map accuracy does not increase as the zoom factor increases** (a known limitation of this digital format).

Map Layers

It often works best to first turn off all the layers and then turn on the ones you need. In order to access the list of map layers, move the cursor to the column just off the map document at top left (but still inside the reader window), then right-click one of the icons at the top of this column. Next, select 'Layers' from the drop-down menu and a new window will open up. Lastly, click on the + sign to the left of individual headings to show all of the layer names in that section. You can turn each layer on and off by clicking on the box to the left of each layer name.

Geographic Coordinates

To determine the geographic coordinates of a specific location (or to locate a point with specific coordinates), pull down the 'Edit' menu at the top of the page and select 'Analysis'. Then select 'Geospatial Location Tool'. A window will pop up that shows the approximate coordinates of the crosshair. You can change the format of the coordinates to either decimal degrees or degrees-minutes-seconds by selecting edit/preferences/measuring(geo) and selecting the desired format in the Geographic Location dialog box.

Updates

This map document is a work-in-progress and we would appreciate any questions, comments or suggestions you might have regarding format or content. Please send them, along with the title and version number of the document, to Tim Reed, tim.reed@noaa.gov or Brad Damitz, brad.damitz@noaa.gov .

Tomales Bay Map Layer Descriptions

June, 2012

Public Health and Water Quality

1. Aquaculture lease areas

Locations and extents of active aquaculture lease areas were provided by the CA Department of Fish and Game.

2. Swimming beaches with 100-foot buffers

Point locations of swimming beaches were provided by the National Park Service. 100-foot radius buffer zones were added.

Natural Resource Protection

3. Point Reyes National Seashore no-mooring zone

The PRNS no-mooring zone was clipped from the PRNS administrative boundary file to the area defined by the National Park Service.

4. California State Parks no-mooring zones

A 1000-foot buffer zone was added to lands owned by State Parks where they are adjacent to the shoreline. The buffer zone was clipped approximately perpendicular to the shoreline trend.

5. Seagrass beds

Seagrass bed extents from 1992 were merged with updates from 2000, 2001, and 2002 to represent current seagrass beds. (More recent data were not available at this time.) Data were provided by the CA Department of Fish and Game.

6. Seal haulouts with 300-foot buffers

Point locations of seal haulouts were provided by the National Park Service. 300-foot radius buffer zones were added.

Public Safety

7. Boat ramps with 100-foot buffers

Point locations of boat launching ramps were provided by the National Park Service. 100-foot radius buffer zones were added.

8. Navigation Channel

The navigation channel digital line file was provided by the National Park Service. It was converted to a polygon (for inclusion in the combined areas polygon) by adding a 1-foot buffer zone.

Combined Area of Siting Criteria

The above polygon coverages were merged and internal boundaries were dissolved using ArcGIS 9.3 to create a single polygon representing combined protection areas. GIS analysis and cartography was performed by Tim Reed, Marine GIS Analyst for Gulf of the Farallones National Marine Sanctuary, tim.reed@noaa.gov.