

## MARINMAP PROJECTS 2011-2012

# Description	EST. COST	Lead	Notes
<p><b>1 Road Classification Data Model</b>                      Develop specifications for functional, legal and physical classifications of roadway network countywide. Project will allow for members to input their Federal Aid routes, historic data regarding use of roads, paths, steps, fire roads as well as legal status ie acceptance, ownership and offers of dedication. The public will have access to this data.</p>	\$10,000	Geodata Analytic	Not including data
<p><b>2 Benchmark Inventory Application and Schema</b>                       Develop framework to unify survey benchmarks now in various formats and frequently unavailable to surveyors and the public. Important application is use for flood hazard elevations</p>	\$5,000	Matrix/County Surveyor	Not including data-Read Only
<p><b>3 Develop Scope of Work for Geodetic Control Hosting</b>                       Marinmap and the survey community have entered discussions about Marinmap being a repository for survey information. In this way survey monuments can be better protected from loss by paving-over, and the public and survey community can perform online queries instead of time consuming public counter requests of member agencies.</p>	\$0	Matrix/County Surveyor	Surveyors and MMAP not yet aligned on project description
<p><b>4 CIP Application Data Input</b>                       This project can be found in the line item budget as a \$2000 per member allowance to have Marinmap input projects with traffic coordination impacts, or for special member projects if CIP input is done in-house</p>	\$0	Geodata Analytic	Paid from member allowance
<p><b>5 Training- web video clips etc</b>                       A series of member training sessions will be conducted, ensuring maximum usage of GIS and Marinmap by all member agencies, along with posting training videos on the Marinmap website</p>	\$10,000	Matrix/Geodata	Videos not funded-training only

**6 Geocode FEMA Map Amendments (LOMA, LOMC etc)**

**\$2,000** Contract- potentially San Rafael

This project incorporated FEMA flood zone map amendments created by residents surveying their properties for more precise application of flood zones to structures. It created a layer showing properties with revisions to the FEMA digital Flood Insurance rate map. This project has been done and implemented, but marinmap needs to update it as new map amendments are made, as well as allow for public access.

**7 Streetlights**

**\$10,000** TBD

This project, backlogged from 2010/11 due to funding, intends to unify streetlight information now held by member agencies as well as MGSA's contractor, Republic Electric. In this way, MGSA's valuable asset will be inventoried for location and pole numbering, as well as comparing, correcting and linking Republic's inventory and maintenance history. It can also allow for creation of a public layer for streetlights to be on marinmap, as well as a potential application for outage reporting and condition assessment.

**8 Community Base Map Project**

**\$0** Matrix

Additional work unfunded

MarinMap has developed a community base map, a cartographically elegant set of four countywide images with increasing detail at each of the four scales. It contains many of MarinMap's data layers, including landmark references such as major businesses and other regional points of interest. The map images will be used as a background for many of MarinMap's web applications and are especially well suited to mobile applications used by smart phones and tablets. This project will refine the base map by gathering local information and proofing for possible errors and omissions. MarinMap's agreement with ESRI calls for the map to be updated at least once per year, but the membership might request semi-annually or quarterly updates to keep the images more current. The work is to be performed by MarinMap's technical services group, the Marin County Matrix Team.

**9 Updated Digital Terrain Model**

**\$15,000** Matrix

DTM=\$8000,  
Regenerate synthetic streams= \$7000

San Francisco State University will be delivering countywide LiDAR by November of this year. The deliverable also includes hyperspectral photo images that would need to be georeferenced into 30-centimeter pixel orthophotographs (SFSU might have a budget for this). MarinMap should compare the existing digital terrain model with the model derived from LiDAR. Discrepancies should be corrected to create a consistent countywide data set (the current model uses break lines and contours in addition to LiDAR near bay and ocean). Work products to flow from the data include:  
Revise flow lines (steams and pipes) for the National Hydrography Database, integrate storm water infrastructure that appeared in the MarinMap database after March 2011.), water body updates, Generate building rooftops/footprints from differences between "first return" signals and the bare earth LiDAR model to update 2004 vintage footprints.

<b>10 Rectify Census Bureau Data to More Accurate Marinmap Geometry</b>	<b>\$5,000</b> Matrix
<p>“Rectify” Census Boundary geometry to more precise MarinMap geometry in order to display both sets in GIS applications. If MarinMap displays Census geometry as is, many viewers might question why there are discrepancies. For GIS data users the discrepancies make spatial intersect analysis prone to error (i.e. polygons would not fall within other polygons such as city boundaries, watersheds, communities, some neighborhoods and so forth).</p> <p>Of the 4,506 blocks in the Bureau's data set approximately 2,400 need at least some adjustment to “snap” to MarinMap geometry. Examples of MarinMap geometry to be used are city boundaries; streams; ridges; reservoirs, parks, and fire roads. Most of these require only a simple copy of a line feature. A time-motion study on a sample of Census blocks offered an estimate of 90 seconds on average for rectifying the block. Once the line work has been assembled, block polygons are generated. From these block groups and tracts are generated through a dissolve on block group a</p>	
<b>11 LAFCO Agency Boundary History Compilation</b>	<b>\$11,000</b>
<p>Annexations and other public agency boundary adjustments occur over time. This project will compile LAFCO historical records in a single location on Marinmap to facilitate research of boundary changes.</p>	
<b>12 National Hydrographic Dataset (NHD)</b>	<b>\$15,000</b> Team NHD
<p>A significant effort has already been undertaken by Marinmap to create an accurate countywide stream layer, and one that is compatible with standards set through the National Hydrographic Dataset (NHD). This project aims to complete the dataset, which will have positive impacts to the community, agency stormwater mangers, environmental stewardship, flood control and MCSTOPPP.</p>	
<b>13 Marketing Consulting</b>	<b>\$800</b> Program Director
<p>Steering Committee members are interested in pursuing marketing concepts of MarinMap products. \$800 provides a place holder for consulting services</p>	
<b>TOTAL PROJECTS</b>	<b>\$83,800</b>