Geographic Information Systems (GIS)

The use of Geographic Information Systems (GIS) has become an indispensable tool for environmental management and planning applications. GIS uses sophisticated geographic software to process data that has a spatial component. When data are entered into a GIS they are stored in layers that allow the user to combine the spatial elements of a map with the information capabilities of a database.

Tenera’s experience with Global Positioning System (GPS) instruments and ESRI’s ArcGIS ® applications, the standard for GIS mapping and spatial data analysis, has enhanced our ability to provide solid resource planning, project mapping, and analysis to assist our clients in addressing diverse environmental issues.

Tenera has used GIS to generate spatial databases for a wide variety of projects. Tenera can combine base data derived from existing and archived sources with today’s current digital information data sources to create a cost-effective integrated solution for project-specific answers for management and planning. Our capabilities include:

SERVICES INCLUDE:

- GPS positional data processing and mapping
- Species/habitat modeling, range recognition, monitoring, and conservation mapping, including eelgrass mapping and marine mammal monitoring
- Bathymetric analysis for sea floor and reservoir mapping, maintenance, and dredging
- Spectral image analysis
- Spatial data modeling and analysis
- Environmental impact and regulatory compliance investigation and reporting
- Metadata generation capabilities for GIS and report documentation
- Individually tailored map services and Google Earth data visualization for clients
- Underwater cable delineation and mapping