US Army Corps of Engineers ®
Mobile District

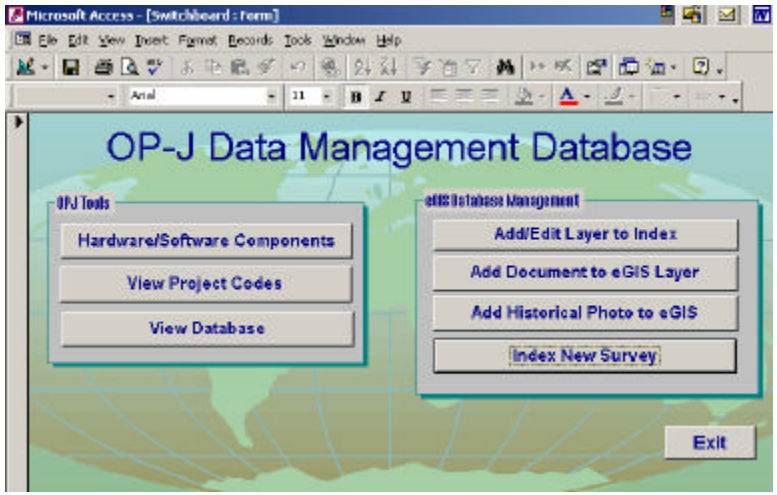
Data Migration Procedures: October 15, 2003

GIS Data Formating Guide for
ECoastal GIS

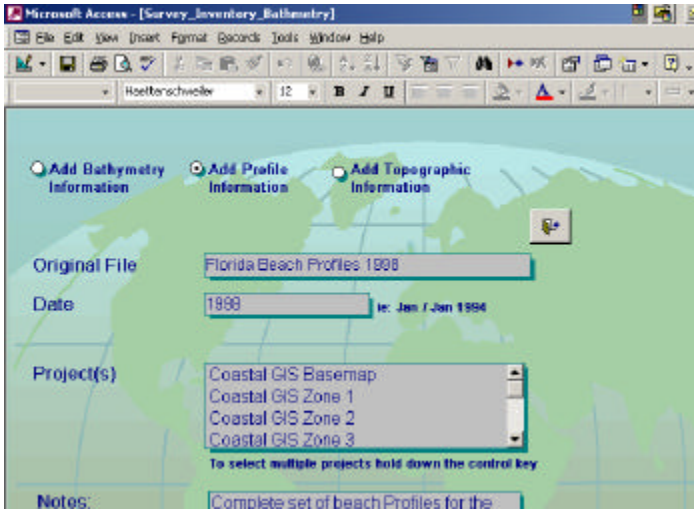
To being the Survey Data load process, **Bathymetry**, **Profile**, or **Topological**, the user must enter the survey into the GIS Management Database in order to retrieve that surveys unique ID. This database will give an organization one location, which will house all the information and number of surveys for that District.

To Retreive the Unique survey ID you must enter the Survey file in the Database:

1. Open the GIS Management Database
2. Click; Index New Survey



3. At the top, **Select** the appropriate type of survey data.

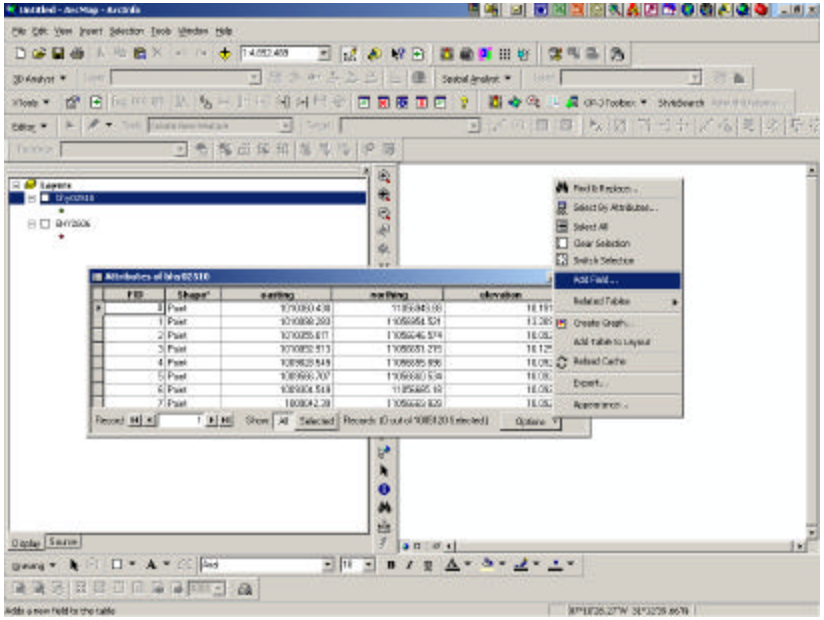


4. Enter in the Survey information and obtain the Unique Survey ID and Project ID for the survey.

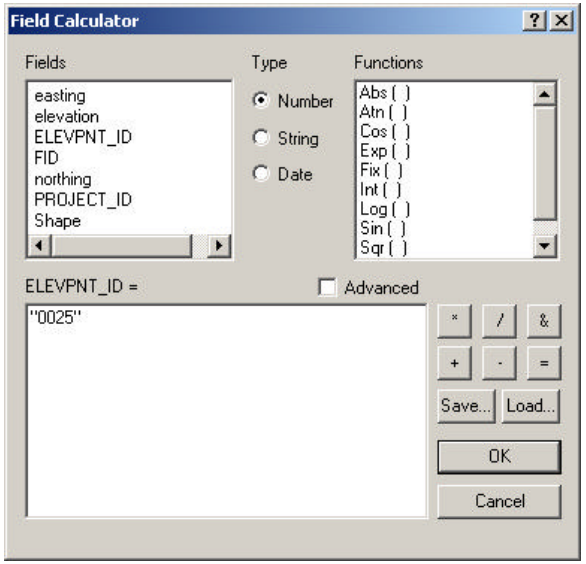
This Survey ID, along with the appropriate Project Code, will need to be added to the survey data before the survey is load into the geodatabase.

Profile Data Loading Process:

?? Open ArcMap.
?? Add in original profile survey shapefiles.
?? In the original shapefiles, **ADD** two new fields to the attribute tables:



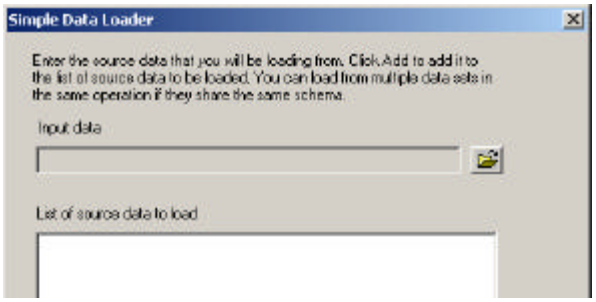
- ELEVPNT_ID (text, 20): This field will contain the four-digit Unique Survey ID given to the file from the GIS Management Database.
- PROJECT_ID (text, 20): This field will contain the four-digit Unique Project ID given to the file from the GIS Management Database.



?? Repeat this process for Project ID.
?? Close ArcMap.
?? Open ArcCatalog
?? Connect to the eCoastal geodatabase.

Load Profiles into Geodatabase:

- In the geodatabase, open landform (which is the appropriate feature dataset for profiles) and right-click on elevation_profile_point. Select Load Data…



- Select “I want to load all features into a subtype” and choose the appropriate subtype and click **Next**.
- Match the Target fields with the Source fields. Set ELEVATION = Depth, COORD_X = Easting, and COORD_Y = Northing. ELEVPNT_ID and PROJECT_ID should already be matched appropriately because they are identical to the source field attributes.
- Click **Next**, **Next**, **Finish**
- **Continue this process for each profile shapefile.**

?? Close ArcCatalog

Instructions for Building Layerfiles for Profile Surveys inside the eCoastal Geodatabase:

?? Retrieve the Unique Survey ID and the Project ID for the Profile Survey from the GIS Management Database.

?? Open ArcMap and connect to the eCoastal geodatabase.

?? Add in elevation_profile_point (under landform) from the eCoastal geodatabase.

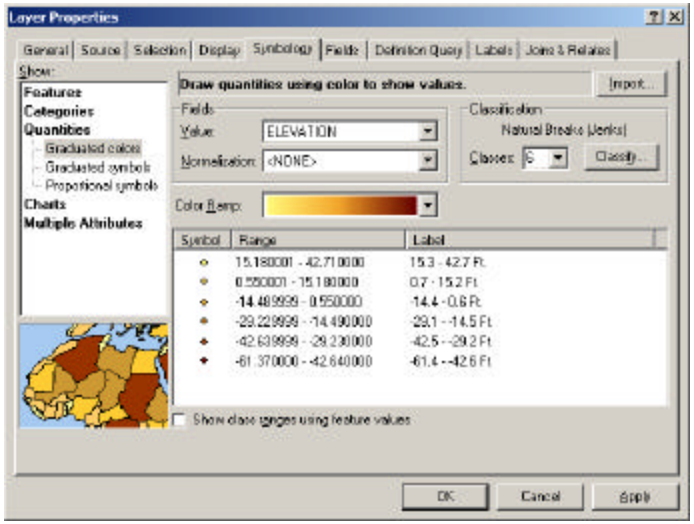
?? Right click on elevation_profile_point and select properties.

?? Select the Definition Query Tab and Click Query Builder…

- Under the Fields, double-click ELEVPNT_ID and set it Equal to the four-digit number of the first profile. Click AND then double click on PROJECT_ID and set it equal to the appropriate project code.
  - ✍ Example: ELEVPNT_ID = ‘0000’ AND PROJECT_ID = ‘C000’
- Click Ok, Apply.

?? Select the Symbology Tab

- Under Show: Select Quantities, Graduated Color.
- Under Fields, Value: Choose Elevation
- Under Classification, Classes: Change to 6.
- There will then be two columns below showing the elevations. In the column to the right (lable), change to one decimal place and add Ft. to the end of each.
  - ✍ Example: 3.2 – 1.7 Ft.



- Click Apply

?? Select the General Tab

- Change the Layer Name to the original profile name used in the “Profile Survey ID” table.
- Click Apply – Ok.

?? Right click on the file and select Save as Layer File… Browse to the appropriate project folder under 'Sam-apgis' \Sam_Gis\Work and click save.

?? Remove file from ArcMap and reload elevation_profile_point.

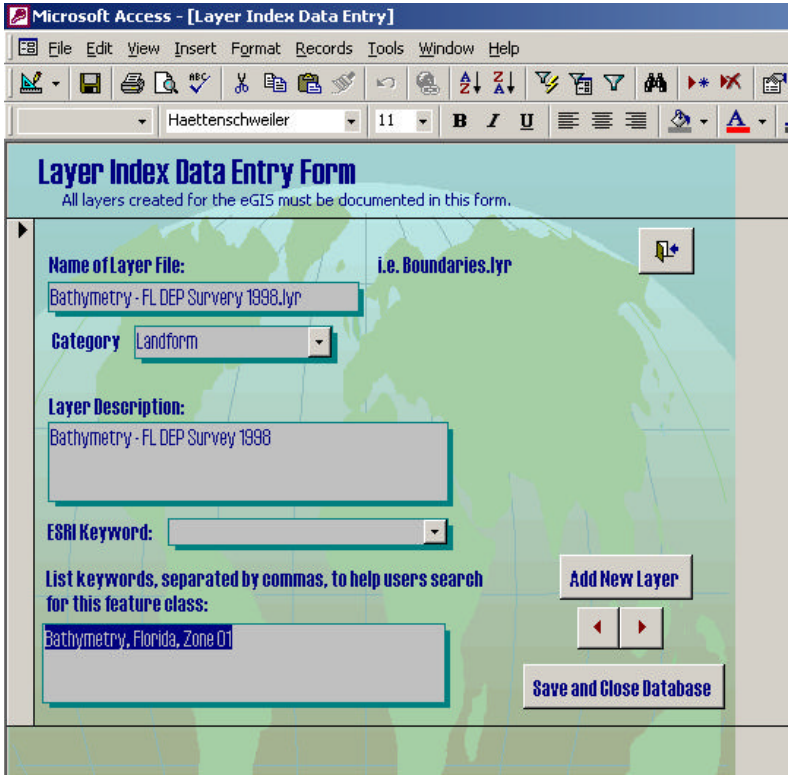
?? Repeat the process for each profile.

Instructions for Updating the GIS Management Database Table with the New Survey Layer:

?? Open the GIS Management Database

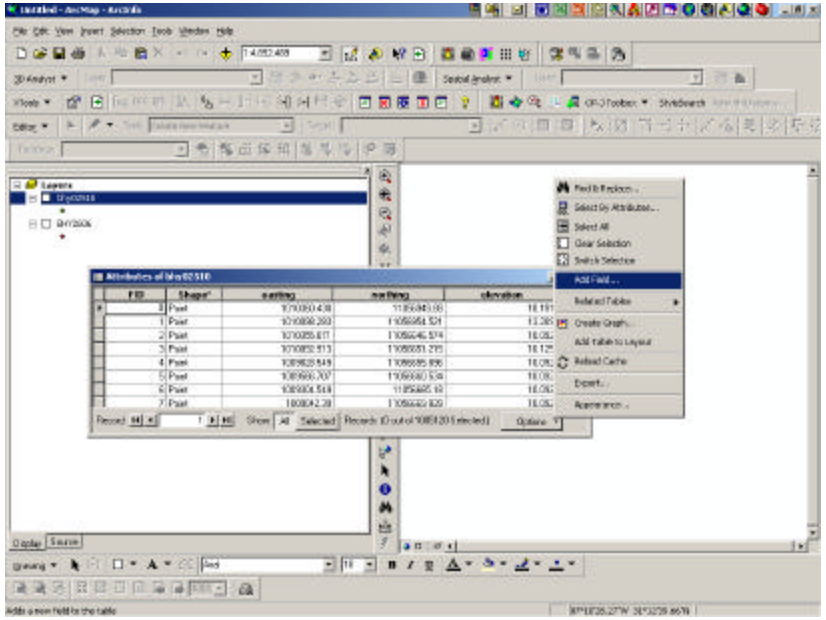
?? Click Add/Edit Layer to Index

?? Enter in applicable information regarding the layer file. Click Add Layer to index new layer.



Bathymetry Data Loading Process:

?? Open ArcMap.
?? Add in original profile survey shapefiles.
?? In the original shapefiles, **ADD** two new fields to the attribute tables:



?? In the original shapefiles, add two new fields to the attribute tables:
- HYDSRV_ID (text, 20): This field will contain the four-digit Unique Survey ID given to the file from the GIS Management Database.
- PROJECT_ID (text, 20): This field will contain the four-digit Unique Project ID given to the file from the GIS Management Database.

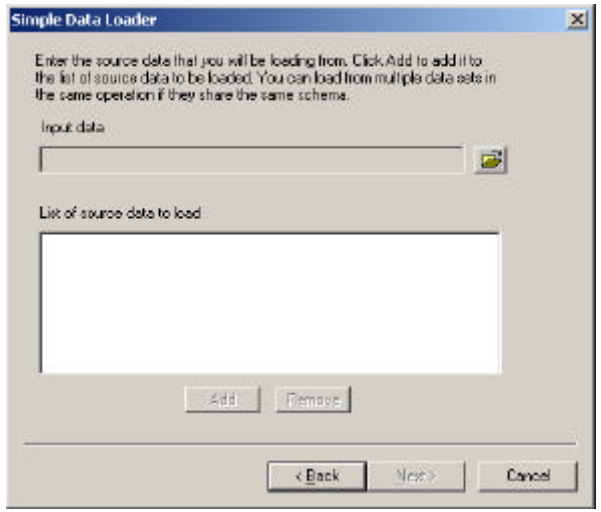
?? Once the fields are added, Right click on the HYDSRV_ID field and select **Calculate Values…**

?? Enter the Unique Survey ID inside of double quotes.

?? Repeat this process for the project ID, entering the Project Code inside of Double quotes.

?? Close ArcMap.

- In the geodatabase, open landform (which is the appropriate feature dataset for the files) and right-click on sounding_point. Select Load Data…



- Browse to the first shapefile to be loaded and click Add, Next.
- Select "I want to load all features into a subtype" and choose the appropriate subtype and click Next.
- Match the Target fields with the Source fields. Set ELEVATION = Depth, COORD_X = Easting, and COORD_Y = Northing. HYDSRV_ID and PROJECT_ID should already be matched appropriately because they are identical to the source field attributes.
- Click Next, Next, Finish
- **Continue this process for each shapefile.**

?? Close ArcCatalog

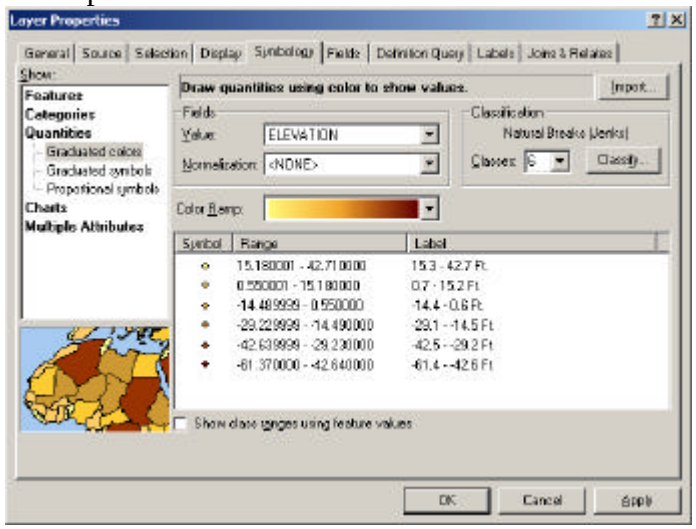
Instructions for Building Layerfiles for Bathymetry Surveys inside the eCoastal Geodatabase:

?? Retrieve the Unique Survey ID and the Project ID for the Profile Survey from the GIS Management Database

- Click Ok, Apply.

?? Select the Symbology Tab

- Under Show: Select Quantities, Graduated Color.
- Under Fields, Value: Choose Elevation
- Under Classification, Classes: Change to 6.
- Under Fields, Value: Choose Elevation
- In the column the right (label), format the numbers as and add Ft. to the end of each.
  - ✍ Example: 3.2 – 1.7 Ft.



- Click Apply

?? Select the General Tab

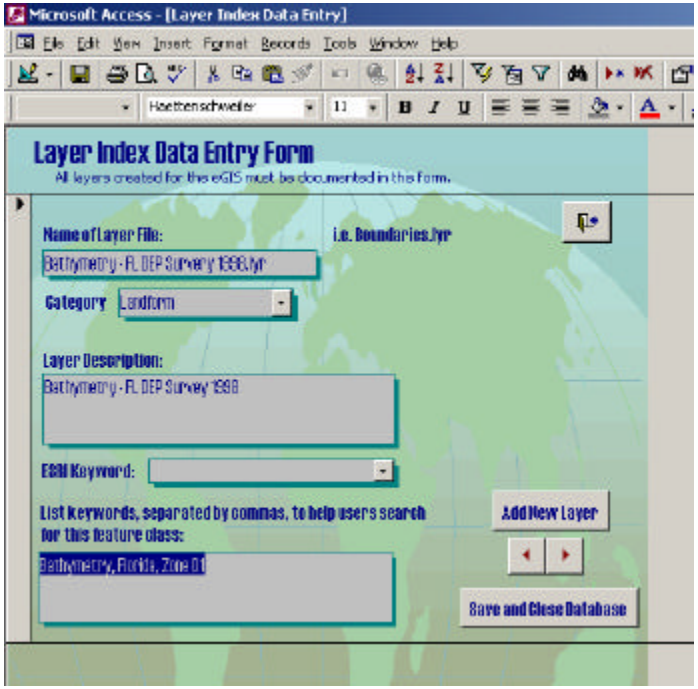
- Change the Layer Name to the original survey name.
- Click Apply – Ok.

?? Right click on the file and select Save as Layer File… Browse to the appropriate project folder under 'Sam-apgis' \Sam_Gis\Work and click save.

?? Remove file from Arcmap and reload sounding_point.

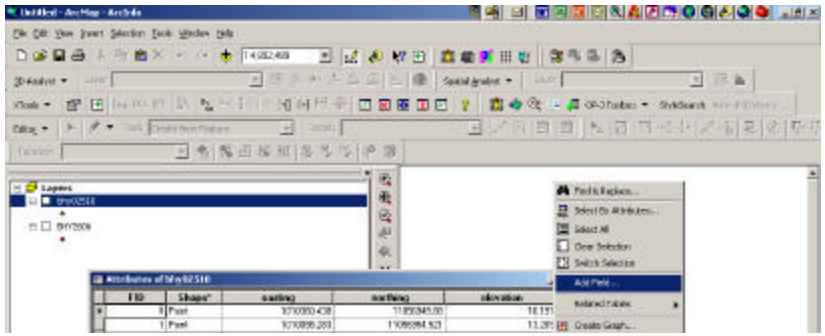
?? Repeat the process for each shapefile.

Instructions for Updating the GIS Management Database Table with the New Survey Layer:



Topography Survey Data Loading Process:

?? Open ArcMap.
?? Add in original topography survey shapefiles.
?? In the original shapefiles, **ADD** two new fields to the attribute tables:

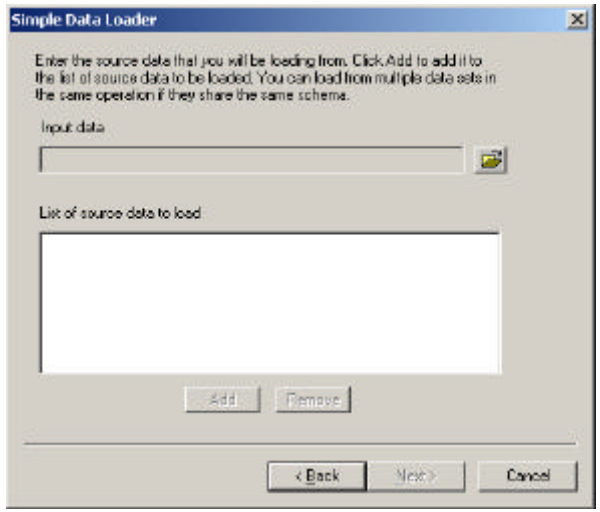


?? In the original shapefiles, add two new fields to the attribute tables:
   - SPT_ELE_ID (text, 20): This field will contain the four-digit Unique Survey ID given to the file from the GIS Management Database.
   - PROJECT_ID (text, 20): This field will contain the four-digit Unique Project ID given to the file from the GIS Management Database.

?? Once the fields are added, Right click on the SPT_ELE_ID field and select **Calculate Values…**
?? Enter the Unique Survey ID inside of double quotes.
?? Repeat this process for the project ID, entering the Project Code inside of Double quotes.
?? Close ArcMap.

Load Topography Survey Data into Geodatabase:

?? Open ArcCatalog
?? Connect to the eCoastal geodatabase.
?? Load Shapefiles into Geodatabase:
   - In the geodatabase, open landform (which is the appropriate feature dataset for the files) and right-click on spot_elevation_point . Select Load Data…



   - Browse to the first shapefile to be loaded and click Add. Next

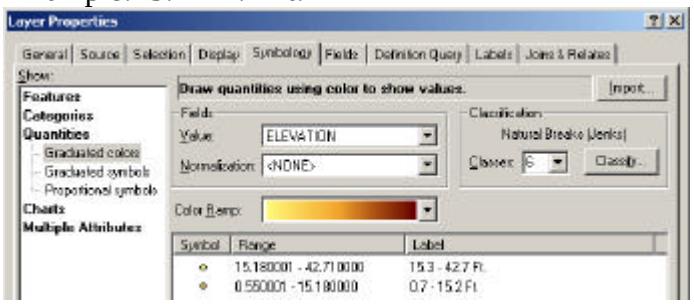
?? Close ArcCatalog

Instructions for Building Layerfiles for Topo Surveys inside the eCoastal Geodatabase:

?? Retrieve the Unique Survey ID and the Project ID for the Profile Survey from the GIS Management Database
?? Open ArcMap and connect to the eCoastal geodatabase.
?? Add in spot_elevation_point (under the landform Feature Dataset) from the geodatabase.

?? In ArcMap, right click on spot_elevation_point and select properties.
?? Select the Definition Query Tab and Click Query Builder…
- Under the Fields, double-click SPT_ELE_ID and set it Equal to the four-digit number of the first shapefile. Click AND then double click on PROJECT_ID and set it equal to the appropriate project code.
  - ✍ Example: SPT_ELE_ID = '0000' AND PROJECT_ID = 'C000'
- Click Ok, Apply.

?? Select the Symbology Tab
- Under Show: Select Quantities, Graduated Color.
- Under Fields, Value: Choose Elevation
- Under Classification, Classes: Change to 6.
- Under Fields, Value: Choose Elevation
- In the column the right (label), format the numbers as and add Ft. to the end of each.
  - ✍ Example: 3.2 – 1.7 Ft.



- Click Apply

?? Select the General Tab
- Change the Layer Name to the original survey name.
- Click Apply – Ok.

?? Right click on the file and select Save as Layer File… Browse to the appropriate project folder under 'Sam-apgis' \Sam_Gis\Work and click save.

?? Remove file from ArcMap and reload spot_elevation_point .

?? Repeat the process for each shapefile.

Instructions for Updating the GIS Management Database Table with the New Survey Layer:

?? Open the GIS Management Database

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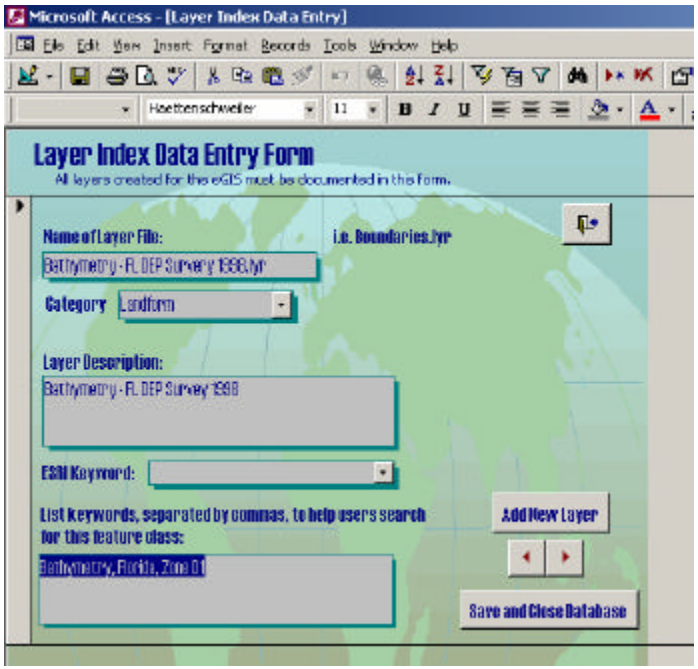
?? Enter in applicable information regarding the layer file. Click Add Layer to index new layer.