PROJECT LEADER TIP #7
HOW TO ADD SAMPLE GEOMETRY

Before beginning, it is important to understand that sample site and sample locations are set-up hierarchically. For Pacific Flyway Shorebird Survey the hierarchy is as follows:
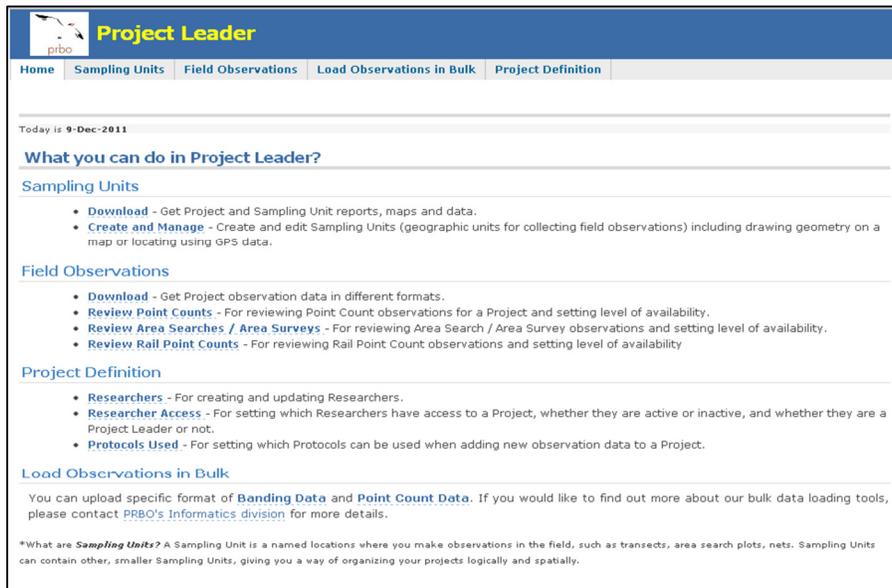
1. **Project** (i.e., San Diego Shorebird Survey [SDSS])
   a. **Study Area** (i.e., North Bay)
      i. **Shorebird Area** (i.e., 188; aka Sampling Location or Sampling Unit)

There are different ways of adding sampling unit geometry in CADC:
1. Using an embedded Google Earth application in the Edit feature
2. Uploading an ArcGiS shapefile or Google Earth kml file.

TO USE THE EMBEDDED GOOGLE EARTH APPLICATION:

1. Log-in to CADC and choose the Project Leaders application
2. Under Sampling Units, select "Create and Manage"

3. On the following screen, choose your project of interest and click enter.

4. Locate the Study Area (Study Location) or Shorebird Area (Sampling Unit) where you want to add geometry from the expandable tree and click on it. It should highlight yellow.

**Note:** Consider project hierarchy to find the correct sampling location. Some projects have all of the Sampling Locations displayed in one list. Other projects have Sampling Locations grouped into Study Areas. This distinction is important in step 6.
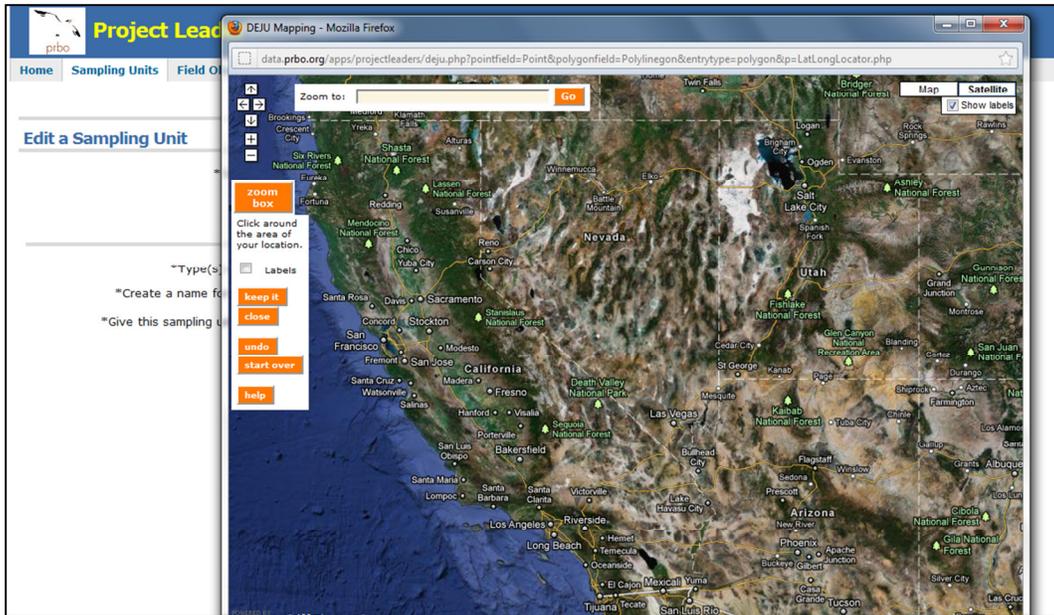
5. Click the orange "edit" button under Manage the highlighted feature on the right.
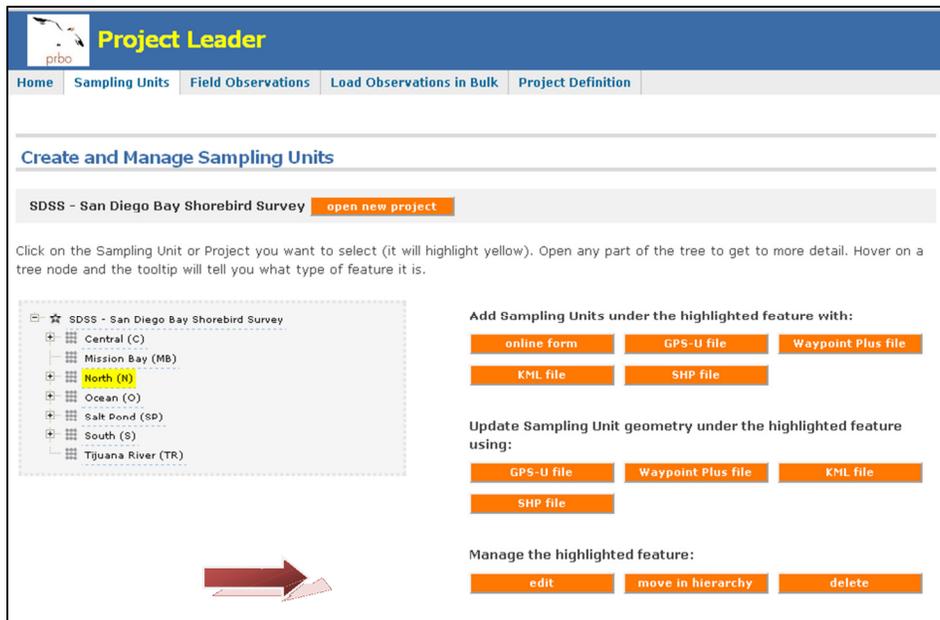
6. For existing sampling units, the type of Sampling Unit should already be selected. Simply click enter to move to the next screen.
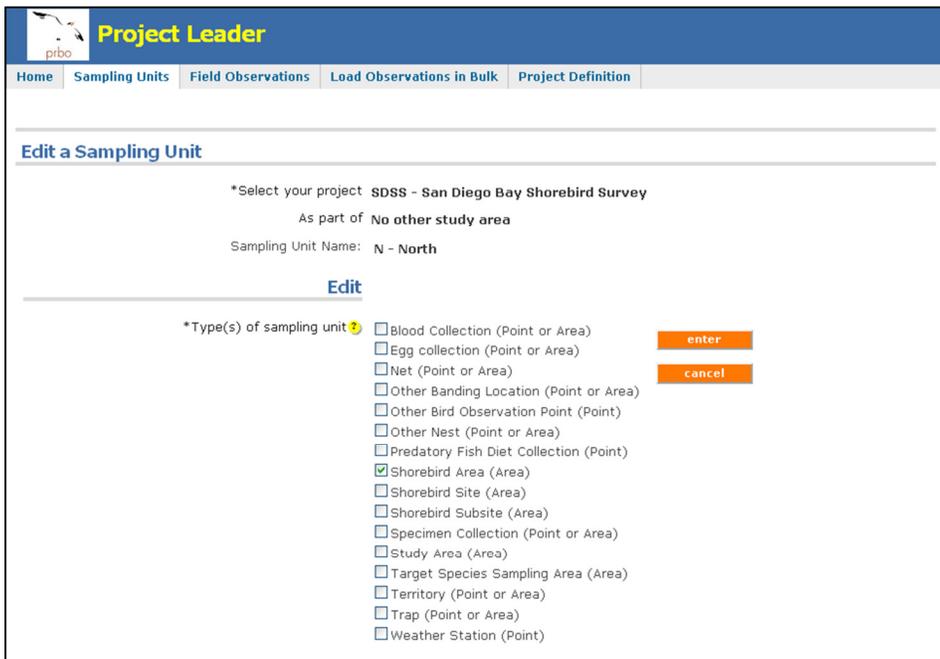

7. On the next screen, click **Geometry.** This launches a Google Earth application that allows you to draw and save the geometry of the sampling are or unit.

8. Zoom or move map to your area of interest:
   a. Type a location into the "Zoom to:" field at the top of the popup screen
   b. Click the "+" or "-" buttons at the top left to zoom in or out
   c. Click the "zoom box" button and then, using your mouse, **click and drag** to create a box around the area of interest you wish to zoom-in on.

   Repeat this step as many times as necessary to zoom in to where you wish to draw geometry.
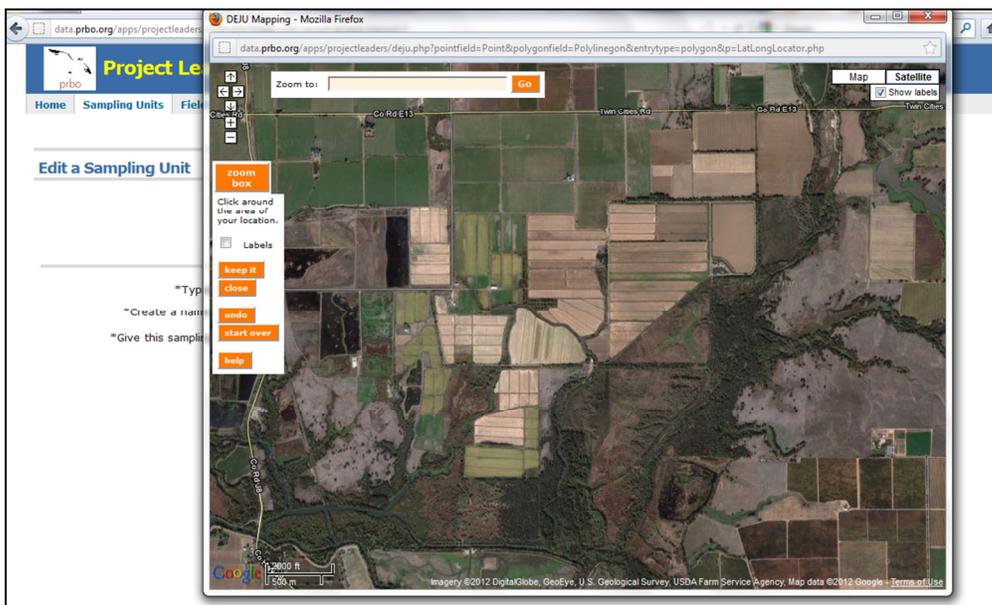

9. When you have located the area where you wish to draw geometry, you will outline the geometry of your area with a series of single mouse clicks. Your last mouse click is marked with

an X in a yellow box, and as you single-click your way around your area, a red-shaded shape will
appear, as illustrated below:

10. If you make a mistake: the "Undo" button will remove one click point/vertex at a time; "Start
Over" will erase the entire user-created polygon. Also, if you click "Close", the popup window
will close but will NOT save your changes.
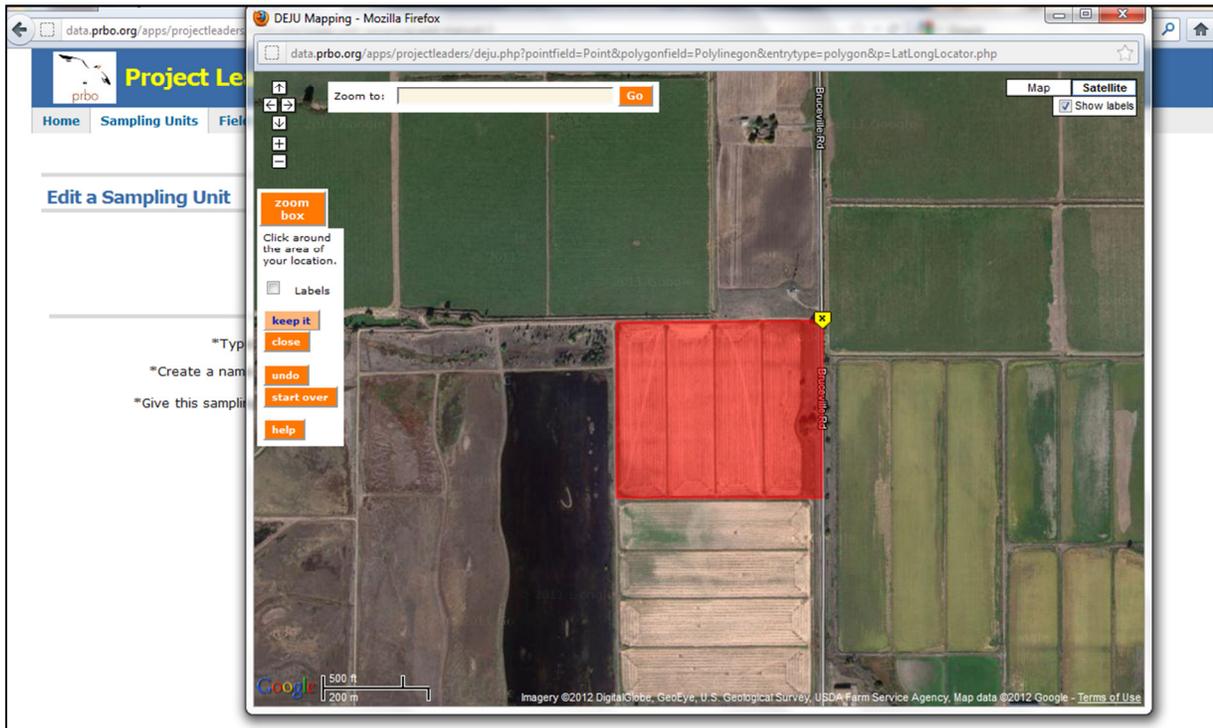
11. When you are satisfied with the digitized geometry, click "Keep it" – your changes will be
automatically saved in CADC and the popup window will close. You should now see Lat/Long
numbers printed next to Geometry & the "Area" button you clicked to begin editing Geometry.
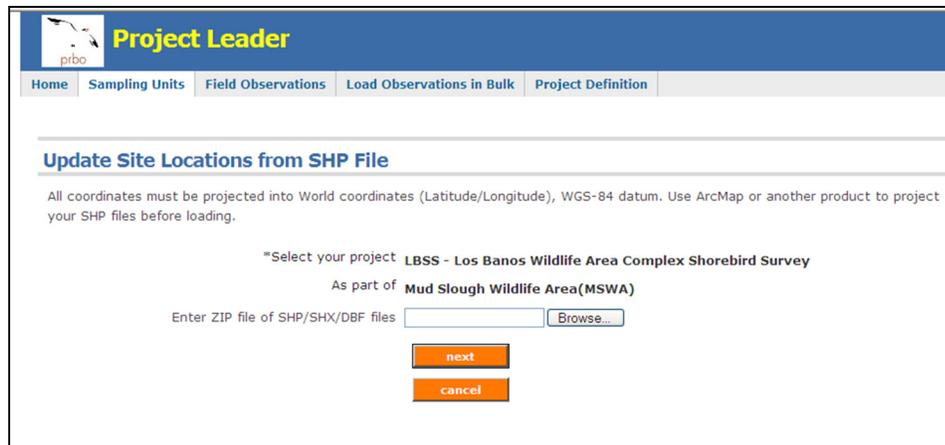
12. When finished, click "update"
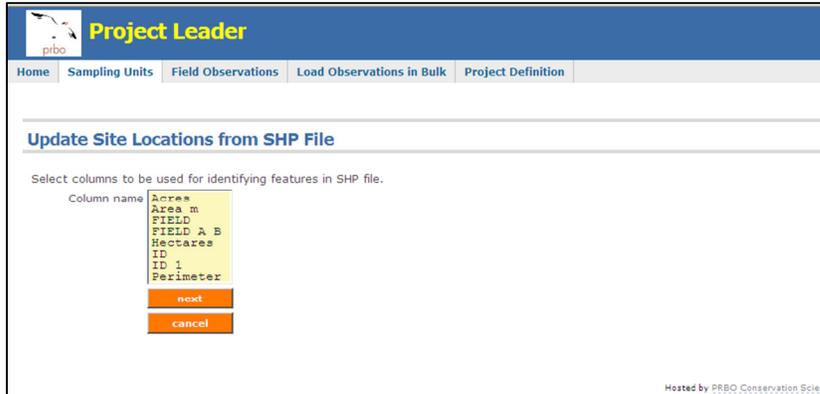
TO USE AN ARC GIS SHAPEFILE:

1. Follow steps 1- through 4 above.

2. Click the orange "SHP file" button under Update Sampling Unit Geometry… on the right.
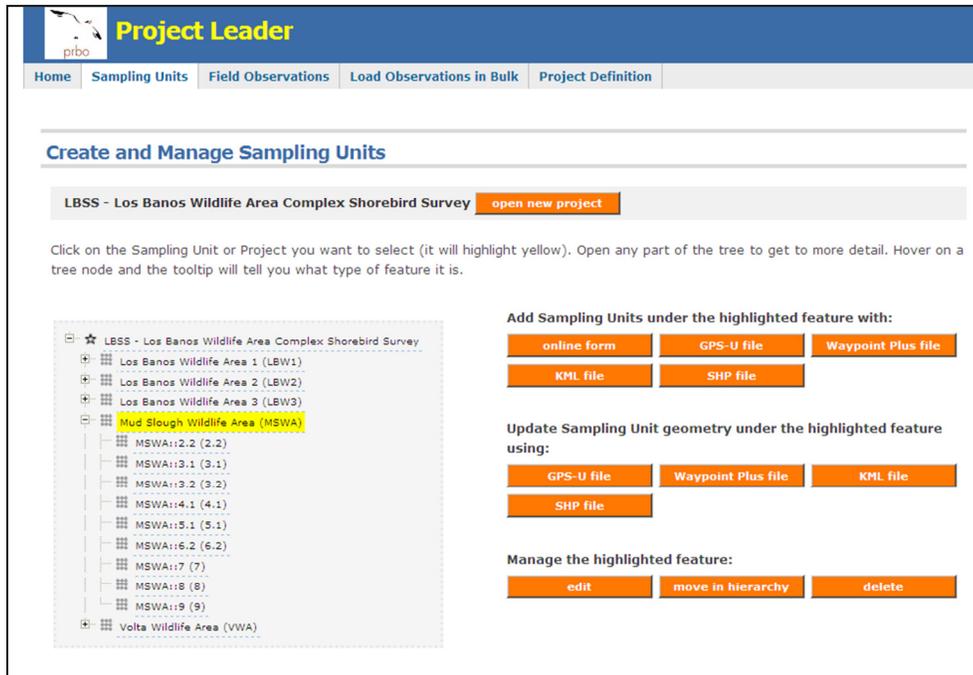

3. Navigate to your zipped file of the shapefile components

4. Choose the column using the header name that contains the survey area unit names. Usually **CADC_SN**

5. Match the names in Column 1 (SHP entry) with Column 2 (Sampling Unit) pair-by-pair. After selecting one name from Column1 and one name from Column2 press the orange "select" button. This will move the pair to Column 4. Once all names from Column have been matched with Column 2, click the orange "process" button.
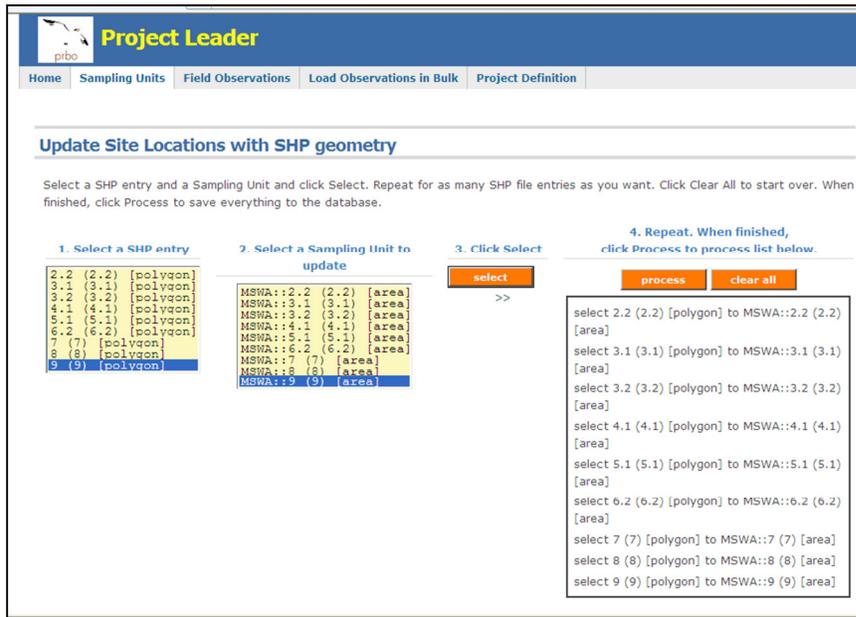
6. You will be taken back to the screen in step 2.