

Steps used to create the Environmentally Sensitive Areas Layer in GIS for the County of San Diego

Step 1

- Data Available through – State Water Resources Control Board - <http://www.swrcb.ca.gov>

- Download the State 303 (d) waters
- Spatial (GIS) data files of the 1998 California 303(d) List and TMDL Priority Schedule. (following text taken from website)

- These data files are downloadable zipped files containing ArcView shapefiles. These files were prepared for those interested in preparing computerized maps of the 303d list. In order to use these files, you will need ArcView (manufactured by ESRI) GIS computer software.

- The zipped files contain a separate ArcView shapefile for each water body type for each Region. The projection for these shapefiles is Teale-Albers. Metadata for each water body type are also included in each zipped file for each Region.

- The ArcView shapefiles were created by Regional Water Quality Control Board and State Water Quality Control Board staff using the GeoWBS computer program developed by the University of California, Davis, Information Center for the Environment.

- Please note that every water body on the 303(d) list is represented, but there are some minor differences. For instance, you will find that a few water body names are slightly different but still recognizable. For example, Delta Waterways is now called Sacramento Delta Waterways, or Cache Creek is now Cache Creek, lower. A few water bodies were difficult to represent and had to be lumped together. For example, Calleguas Creek Reach 1 and Calleguas Creek Reach 2 are now Calleguas Creek Reach 1 and 2 and Shasta Lake and Keswick Reservoir are now Shasta Lake (including Keswick Reservoir).

- If you have any questions or comments, please contact Nancy Richard at the SWRCB at (916) 657-0642, or you can contact the following Regional Board staff:

•North Coast Region 1	Bruce Gwynne	707-576-2661
•San Francisco Bay Region 2	Steve Moore	510-622-2439
•Central Coast Region 3	Karen Worcester	805-549-3333
•Los Angeles Region 4	Renee DeShazo	213-576-6783
•Central Valley Region 5	Gene Davis	916-255-3102
•Lahontan Region 6	Judith Unsicker	530-542-5417
•Colorado River Basin Region 7	Jason Vaskonian	760-776-8933
•Santa Ana Region 8	Pavlova Vitale	909-782-4920
•San Diego Region 9	Brennan Ott	858-268-5362

Step 2

Collect the latest Preserve GIS information: Including but not limited to the MSCP preserve lands, the pre-approved mitigation lands (pama), and the lands preserved outside of the pama but still inside the boundary of the MSCP (biological easements). These Preserve lands used in the ESA must also include “Areas of Significant Biological Concern” as listed in the BASIN plan.

Step 3

Map the RARE waters as listed in the BASIN plan: For DPLU GIS this was approached by matching the reach segment of the states 1:100,000 hydrology layer to the sub-basin number and name of the RARE water in the BASIN plan. This was accomplished with an Arc/INFO AML which selected the appropriate sub-basins (by number) and then reselect the hydrology reach segments that matched the name specified in the BASIN plan (by number then by text field, i.e., reselect all hydrology arcs in a given sub-basin, then reselect the RARE water segment by name from that selection). The reselected RARE water arc segments of each specified sub-basin were then exported into a single new ArcINFO cover.

Step 4

Combine these polygon data layers into a single layer: Union these data or merge them. Add a 200 ft buffer.

Step 5

Combine these arc data layers into a single layer: Union the arc data or merge them. Add a 200 ft buffer.

Step 6

Combine these data layers into the ESA layer: Union the polygon data or merge them.

Considerations –

- **ESA** areas which are on the edge of a given jurisdiction need to consider the neighbors land use and vice versa.
- The positional accuracy for the **Albers** projection used with the state data can be improved with more specific projection information when converting to state plane or UTM
- **Rarewater** names are duplicated through out the county so that the sub-basin number is very important.
- There are only **two 303 (d) watersheds** affected by sediment in the county.
- The state 303 (d) waters come in **5 GIS layers** (covering lagoons, lakes, shoreline rivers, etc.). These layers can be combined into two layers, i.e., arcs and polygons