

The soil type shapefile is the result of the combination of an American shapefile and a Mexican shapefile. To be able to correctly project these two layers in ArcMap the corresponding metadata was modified, since each shapefile had different projection styles. The next step was to remove all overlapping areas along the border with the use of the GeoProcessing wizard clip tool in ArcGIS 8.3. After removing the overlapping areas, we joined the American and Mexican shapefiles into a single layer with the use of the GeoProcessing wizard merge tool. The result of this action was a single shapefile with several gaps along the border of the two countries. This problem was eliminated with the utilization of the Zipper tool in ArcGIS 9.1. This tool was used in the areas where there was a gap present, setting tolerance level appropriately to prevent modifying the polygons adjacent to the gaps. After all these tasks were completed, we reviewed the soil classification systems of each country. Mexico utilized the older 1974 FAO Soil Map of the World (FAO/UNESCO), whereas the United States utilized the most recent 2006 World Reference Base (WRB). Each Mexican classification was compared to the new WRB and was assigned its corresponding value, which was then added to the NAME field in the merged shapefile.