

# Assessing Flood Risk on the Texas Gulf Coast



**Topic:** Disaster management

**Problem Statement:** Corpus Christi has experienced extensive urban expansion in the Southside. How do land cover and other physical properties affect the amount of run-off?

**Level:** Beginning remote sensing: advanced /intermediate GIS

**Software:** ENVI, ArcGIS, Spatial, 3D Analyst, Active Sync, ArcPad 7.1.1, Publishing software, and Fire Fox

**Description:** This Learning Unit uses real world data and methods to identify flood risk in the Oso Creek-Nueces Rio Grand-Coastal Basin. Student teams use Landsat images and other spatial data to carry out the analysis and build a model.

**Keywords:** Remote sensing, PCA, DEM, GPS

