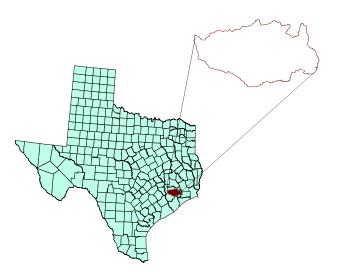
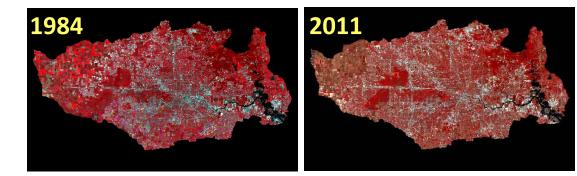


Land Cover Change Analysis of the Buffalo San Jacinto Watershed Region in Texas

Fatimah Alhassan* and B. B. Maruthi Sridhar *Email: <u>f.alhassan6122@student.tsu.edu</u> Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX

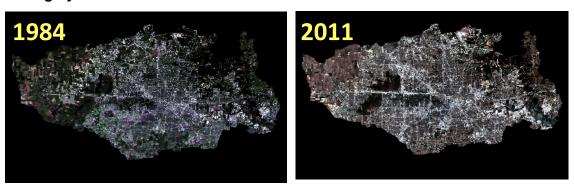
Study Area: Buffalo San Jacinto Watershed Region in Texas



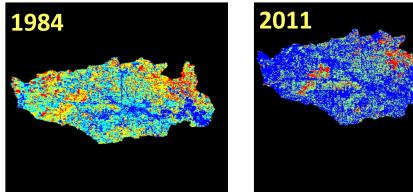


The pseudo color imagery of Buffalo San Jacinto Watershed region where Landsat bands 2, 3 and 4 are represented as blue, green and red respectively. All the vegetation is shown in Red and Water in blue color. In the Buffalo San Jacinto watershed area, the density of vegetation in 1984 was higher than the dense of the vegetation in 2011.

Objective: The objective of the study is to show the land use and land cover changes in the Buffalo San Jacinto watershed region using Landsat imagery.



The natural color imagery of Buffalo San Jacinto Watershed region where Landsat bands 1, 2 and 3 are represented as blue, green and red respectively. The study area shows that there were more urban area and less vegetation in 2011 in contrast to 1984.



The single band ratio image (R4,3) of band 4 to band 3 of Buffalo San Jacinto Watershed region where all the vegetation is shown in bright colors. The study area shows considerable decrease in areas with robust green vegetative growth in 2011 imagery compared to 1984 imagery.

This project work was done as part of the ES718 – Special Topics in Environmental Toxicology course during the Fall 2014 Semester at Texas Southern University.