# Summer Project

**Title**: The impact of urbanization and climate change on streamflow variation

**Theme**: Land Processes and Water Resources

**SUMMARY**: Within the boundary of a previously delineated watershed for which, the outlet coincides with a USGS stream flow gauge, a number of precipitation gauge will be selected. The rainfall dataset, reported for the gauges will be collected and the trend of data time-series, $90^{th}$ percentile, $95^{th}$ percentile will be analyzed. To perceive the effect of climate change on stream flow, the results will be then examined against the trend of USGS monitoring point data. To obtain a general understanding of the human induced impacts of urbanization on the streamflow, two NLCD land cover datasets over a period of at least two decades, will be quantitatively compared. Finally, for the years, corresponding to the selected NLCD data, the monthly average streamflow “quantile” and “recurrence interval” will be computed.