



This project was focused on updating a Watershed Management Plan for a 33 square mile rural watershed in Hernando and Citrus Counties. It utilized a fast-track schedule in order to meet FEMA floodplain submittal deadlines and was completed in approximately 12 months.

The project included utilization of digital topographic information from LiDAR data for use as a digital terrain model. A detailed watershed evaluation was undertaken through both desktop review and field investigation efforts. The desktop review included the incorporation of environmental resource permit information, geotechnical soils data, and high water mark records into a project GIS database. The field investigation included an inventory of drainage facilities with conditions assessment and survey to capture elevation data.

Further evaluation of the watershed was conducted where available data was used to generate hydrologic features (subbasins) to represent storage and conveyance features. The hydrologic features were in turn used to develop a hydraulic features network (junctions and reaches) representing conveyance (channels, culverts, outfalls, etc.) and overland flow. This data was stored in a topologically controlled GIS geodatabase developed in accordance with SWFWMD guidelines and specifications. From the GIS database, the project included the development of a detailed hydrologic and hydraulic model using ICPR to evaluate floodplain extent and impacts. A Watershed Management Plan Floodplain Justification Report was prepared summarizing efforts undertaken. Flood zones were delineated for transmittal to a separate contractor for digital flood insurance rate map generation for FEMA purposes.

The project included interfacing with a Peer Review consultant for QA/QC review, conducting public meetings for impacted property owners in Hernando County, and presentations to the SWFWMD governing board.

