EL PASO COUNTY DRAINAGE BASIN PLANNING STUDY SYSTEM

STORMWATER INFORMATION MANAGEMENT AND MODELING SYSTEM

In order to decrease the cost and time to complete the DBPSs, the Stormwater Information Management and Modeling System (SIMMS) project has developed an accelerated and less expensive way in which to complete the studies. The new study process allows a wider range of data processing and sources for the topographic mapping including existing aerial photography and contour mapping from the United States Geological Survey (USGS) and other sources readily available to the County at no cost. The USGS product does not include the detail necessary to produce acceptably accurate 100-year floodplain maps. LIDAR (LIght Detection And Ranging) point data owned by the County is available throughout the County Basins for processing digital mapping and terrain models for use with these studies, which is more than adequate for production of topography meeting the standards.

By utilizing the hydrologic and hydraulic modeling programs recently produced by the U.S. Army Corps of Engineers, County data available within the County's GIS databases may be made directly available and quickly processed by this new modeling methodology, thereby reducing the time to produce the engineering, and overall project timeline.

The current scope for DBPSs and accurate 10-year and 100-year discharge information has been clarified and expanded. The new studies will include the following:

- Preliminary improvements and costs on major channels including:
    - The new Prudent Line channel alternative
    - Conventional channels
    - Roadway crossings
    - Regional detention pond sizes
    - Drop structures
    - Other necessary major drainage improvements
    - Water Quality requirements and Best Management Practices including water quality capture volume with detention when determined to be required by the City/County Drainage Criteria Manual Volume 2.