



MEMORANDUM

Floodplain Management

Regional Flood Control District



DATE: June 13, 2007

TO: Flood Control District Staff

FROM: Brian Jones, CFM
Principal Hydrologist

SUBJECT: 12-10 and 11-10 Area Special Study

The purpose of the 12-10 Special Study mapping is provide uniformity in how building permits are processed within the area in order to ensure that improvements are adequately protected from flood hazards.

The initial 12-10 Special Study mapping was approved for regulatory purposes in June, 2003 and covered the area within Township 12 South, Range 10 East that was not impacted by FEMA floodplains. Because the mapping focused on the specific Township and Range, it inadvertently created a small territory of land within Township 11 South, Range 10 East that, while flood prone, was not evaluated. This area, bounded on the south by the 12-10 mapping and bounded on the north, east and west by FEMA floodplains, was mapped and approved for regulatory use in March, 2006.

Both the 12-10 and 11-10 annex mapping was conducted in a manner equivalent to a Level I Flow Analysis for sheet flooding as outlined in Arizona State Standard SSA 4-95. More specifically, the assessment included:

- Size of the watersheds impacting the Township and Range
- Utilization of detailed topography, vegetative patterns and recent aerial photography to determine flow paths
- Identification of features such as agricultural ditches and berms with the potential to create ponding areas upstream and/or potential break-out flows downstream due to berm failure
- In the flat agricultural areas, assumptions were made about conditions under fully developed conditions with respect to encroachments within the floodplain and resultant diversion of flow.

Prior to the Floodplain and Erosion Hazard Management Ordinance 2005 FC-2 (2005 Ordinance), the 12-10 mapping constituted permitting guidelines for counter sign-offs, not necessarily requiring Floodplain Use Permits. Section 16.08.640 of the 2005 Ordinance, adopted by the Board of Supervisors in October, 2005 made this Special Study Area a regulatory floodplain by definition, thereby requiring Floodplain Use Permits for most development within the mapped areas.