



## Floodplain Delineation Studies for Maricopa County

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WEST Consultants, Inc. was contracted by the Flood Control District of Maricopa County to perform on-call engineering and surveying services including FEMA submittals, floodplain delineation studies, and GIS requirements as necessary. WEST performed six studies.

- ***Letter of Map Revision (LOMR) for Camelback Ranch Levee, Agua Fria and New River.*** Floodplain/floodway delineation and study documentation following completion of construction of soil-cement levees at the confluence of the Agua Fria and New Rivers. The hydraulic analysis was completed using the U.S. Army Corps of Engineers HEC-2 water-surface profile computer model.
- ***Floodway Analysis for 10<sup>th</sup> Street Wash.*** Encroachment analyses were performed for various scenarios in the vicinity of an island area to determine if a separate floodway district could be identified. The U.S. Army Corps of Engineers HEC-RAS computer model was utilized for the analysis. While a floodway could be successfully defined at many cross sections, encroachment at the cross sections containing and bounding the island was not feasible.
- ***Dreamy Draw Wash West Floodplain Delineation.*** The existing FIRM floodplain for Dreamy Draw West was a Zone A (approximate) and did not account for the presence of the Arizona Canal Diversion Channel (ACDC). A detailed Zone AE type re-study of this floodplain was performed with the aid of the U.S. Army Corps of Engineers HEC-RAS program. The study included preparation of the Technical Data Notebook and the required FEMA forms.
- ***Update of Laveen Floodplain Delineation Study.*** Floodplain delineation update for a five-mile reach of Maricopa Drain that had previously been delineated in the early 1990's. The hydrology for the watershed was updated by the Flood Control District. The floodplain and floodway delineations were developed using the U.S. Army Corps of Engineer's HEC-2 computer model. The floodway district of the Salt River floodplain (recently updated) was utilized as the starting water-surface elevation.
- ***Floodplain Delineation and Sediment Transport Study for the Agua Fria River.*** A Conditional Letter of Map Revision was completed for the reach from Cactus to Bell Roads based on the reduction in flow rates due to completion of New Waddell Dam. The floodplain and floodway were evaluated using HEC-RAS and sediment transport using HEC-6T.

**Project Owner:**

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