

City of Maricopa, Pinal County, AZ

I. Introduction

BakerAECOM was contracted by the Federal Emergency Management Agency (FEMA) to provide updated riverine analysis for Pinal County, Arizona, specifically, the area of City of Maricopa.

II. Goals and Objectives

The primary tasks are to develop one dimension steady state hydraulic computer models to estimate water surface profiles for the 1-percent annual chance flood events (100-year) for the Vekol Wash Tributary, Sacaton Tributary, South Side Canal #1, and South Side Canal #2. DFIRM databases and maps that display the floodplain extents for the 1-percent annual chance (100-year) flood events will also be developed. BFE's will be developed and displayed on DFIRM maps for the Detailed Study of Vekol Wash Tributary, whereas BFE's will be developed and not displayed for the Limited Detail studies of Sacaton Tributary and South Side Canal #1 & #2. A model will be available for local use for the Limited Detail studies.

This project will start from Scoping and proceed through Post-Preliminary map. A Physical Map Revision (PMR) will be used to update FEMA's Countywide Digital Flood Insurance Rate Maps (DFIRM) for Pinal County.

III. Study Area

- A. Study reaches for all tributaries are located within the community of City of Maricopa.
- B. The study stream reaches are listed in Table 1 and presented on the attached figure. The study streams include approximately 7 miles of the Vekol Wash Tributary and approximately 3 miles of the Sacaton Tributary and approximately 4 miles of the South Side Canal Tributaries (5 panels total).

Table 1 -Study Reaches

Stream Name	Estimated Length of Stream (miles)
Vekol Wash Tributary	7
Sacaton Tributary	3
South Side Canal #1	2
South Side Canal #2	2
Total	14

IV. Scope of Work (see BakerAECOM TO# HSFE09-09-J-001 for details)

A. Scoping

- 1. Scoping Meeting was completed on December 8 & 9, 2009.

B. Outreach

C. Field Surveys

1. Utilize Existing Facilities Inventory ArcGIS shapefile contained within Final Master Drainage Study and Plan Report

D. Topographic Data Development & Independent QA/QC Review

1. Obtained Topographic Data from the City of Maricopa (2/24/2010 & 3/12/2010).
 - a.) 44 square miles
2. QA/QC review was completed (3/17/2010).

E. Base Map Acquisition and Preparation & Ind. QA/QC Review

F. Hydrologic Analyses & Ind. QA/QC Review

1. Reviewed Vekol Wash Tributary Hydrologic Model (200 square mile watershed) prepared by HDR. QA/QC review was completed (3/5/2010).
 - a) Utilized HDR Hydrologic Model for Vekol Wash Tributary flows.
2. Review Sacaton ADMP
 - a) Utilize Regional Regression Equations and compare to Sacaton ADMP model for Sacaton Tributary & South Side Canal Tributaries flows.

G. Hydraulic Analyses & Ind. QA/QC Review

1. Vekol Wash Tributary - Model hydraulic structures and streams using HEC-RAS 4.0 and flows developed by HDR.
2. Sacaton & South Side Canal – Model hydraulic structures and streams using HEC-RAS 4.0 and flows developed by regression equations/ADMP model.

H. Floodplain Mapping & Ind. QA/QC Review

1. Prepare database displaying floodplain extents for the 1-percent annual chance (100-year) flood events, and Base Flood Elevations (if applicable).
2. All LOMRs will be incorporated into panels that will be updated per this study

I. Develop Draft DFIRM Database

J. Distribute Preliminary Map Products

K. Post-Preliminary Processing

V. Tentative Schedule

A. Project Miles Stones

1. BakerAECOM conducted Scoping Meeting in December 2009.
2. Obtained and reviewed City of Maricopa Topographic Data in March 2010.
3. Obtained and reviewed HDR Vekol Wash Tributary in March 2010.

B. Please see tentative schedule on next page.

C. The completion date is tentatively scheduled for October 1, 2012.

Table 2 - Tentative Schedule

Acquire Base Map	04/15/10	06/15/10
Develop Topographic Data	04/15/10	04/31/10
Perform Field Survey	04/15/10	09/15/10
Develop Hydrologic Data	04/15/10	07/31/10
Develop Hydraulic Data	08/01/10	11/01/10
Perform Floodplain Mapping	11/01/10	01/01/11
Develop DFIRM Database	01/01/11	03/01/11
Perform Preliminary Map Production	03/01/11	07/01/11
Perform Post Preliminary Processing	07/01/11	10/01/12

VI. Players

- A. FEMA and BakerAECOM will provide close coordination with City of Maricopa and Pinal County throughout various aspects of the project.