



TOWN OF HUACHUCA CITY

The Sunset City

HUACHUCA CITY TOWN COUNCIL WORK SESSION MEETING

Thursday, April 24, 2025, at 6 PM

COUNCIL CHAMBERS

500 N. GONZALES BLVD.

HUACHUCA CITY, AZ 85616

The meeting room will be open by 5:30 PM

AGENDA

A. Call to Order – Mayor

- a. Pledge of Allegiance
- b. Roll Call and Ascertain Quorum

B. New Business Before Council - Mayor

B.1 Discussion/Presentation [Dr. Jim Johnson]: Proposed Flood Hazard Determinations for Cochise County, Arizona and Incorporated Areas, Including Huachuca City. The Federal Emergency Management Agency [FEMA] has issued a preliminary Flood Insurance Rate Map [FIRM], and Flood Insurance Study [FIS] report, reflecting proposed flood hazard determinations. The Town and any affected property owners may wish to challenge FEMA's proposed determinations. Copies of the FIRM are available for review at FEMA's website or by calling the FEMA Mapping and Insurance eXchange [FMIX] at 1-877-FEMA MAP (1-877-336-2627).

C. Adjournment

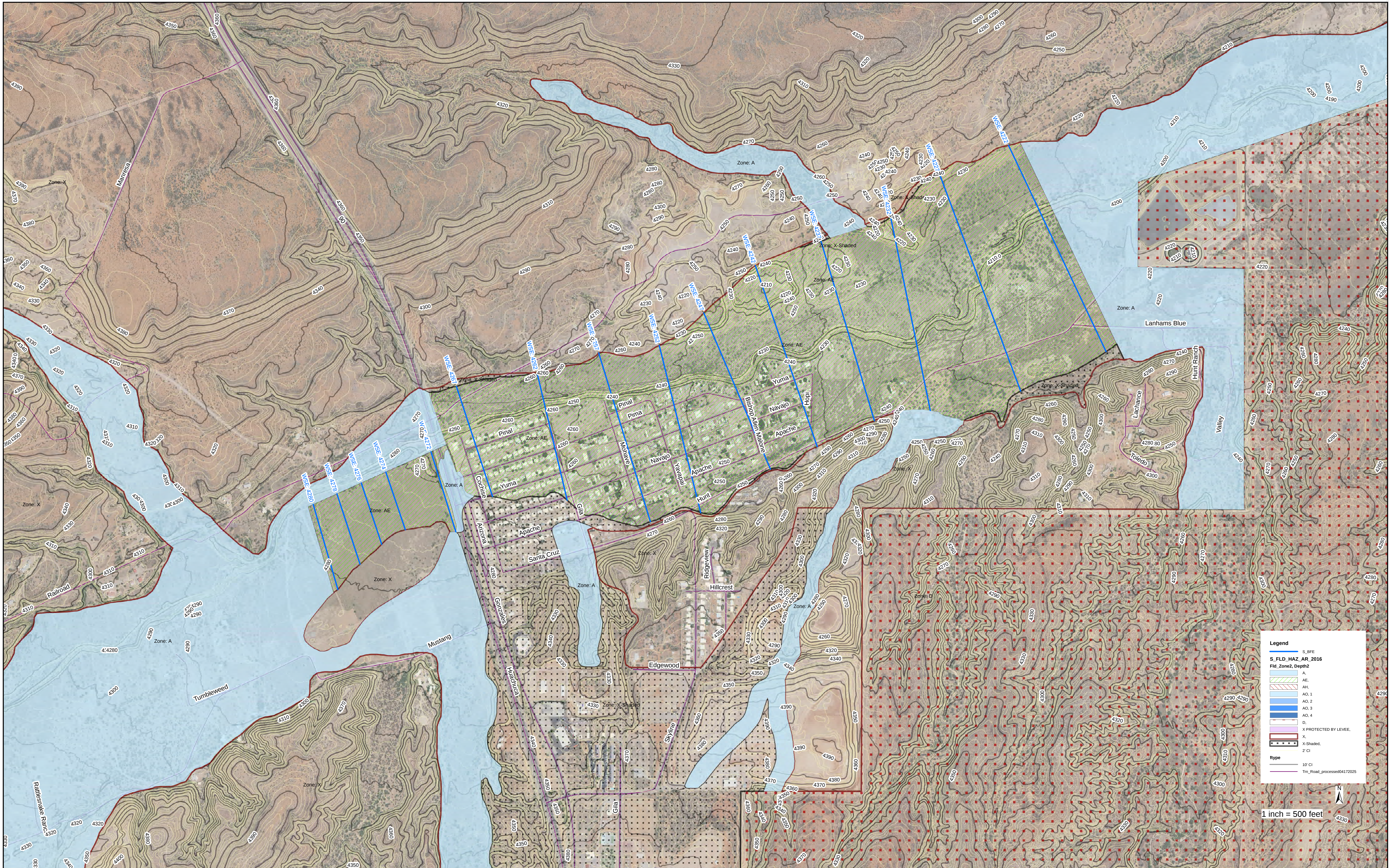
Posted at 5:00 PM on April __, 2025, at the following locations:

Town Hall Bulletin Board 500 N. Gonzales Blvd. Huachuca City, AZ 85616	Town Hall Lobby 500 N. Gonzales Blvd. Huachuca City, AZ 85616	Town Website https://huachucacityaz.gov
Huachuca City U.S. Post Office 690 N. Gonzales Blvd. Huachuca City, AZ 85616	Huachuca City Library 506 N. Gonzales Blvd. Huachuca City, AZ 85616	Huachuca City Police Department 500 N. Gonzales Blvd. Huachuca City, AZ 85616

Ms. Brandye Thorpe
Town Clerk

Note: This meeting is open to the public. All interested people are welcome to attend. A copy of agenda background material provided to the Councilmembers, with the exception of confidential material relating to possible executive sessions, is available for public inspection at the Town Clerk's Office, 500 N. Gonzales Blvd., Huachuca City, AZ 85616, Monday through Friday from 8:00 a.m. to 5:00 p.m. or online at www.huachucacityaz.gov

Individuals with disabilities who need a reasonable accommodation to attend or communicate at a town meeting, or who require this information in alternate format, may contact the Town at 456-1354 (TTY 456-1353) to make their needs known. Requests should be made as early as possible so there is sufficient time to respond.



Federal Emergency Management Agency
2016 Effective Mapping

TWO WORKING DAYS
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REVISIONS		DATE
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PROJECT TITLE	SHEET TITLE
COCHISE COUNTY HIGHWAY/FLOODPLAIN DEPARTMENT ENGINEER NO. DIVISION	

COCHISE COUNTY
HIGHWAY/FLOODPLAIN
DEPARTMENT
ENGINEER NO. DIVISION



DESIGN BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

DATE:	
SCALE:	
SHEET	OF



Cochise County Engineering & Natural Resources

Public Programs...Personal Service
www.cochise.az.gov

JACKIE WATKINS, PE
Director

April 21, 2025

Patrick Clancey
Project Manager - FEMA Region IX
Risk Analysis Branch, Mitigation Division
1111 Broadway, Suite 1200
Oakland, CA 94607

**Re: Comments to FEMA RiskMAP Preliminary Mapping: Cochise County, AZ for
Huachuca City**

The following are comments from Cochise County Engineering and Natural resources Department for the Town of Huachuca City:

Huachuca, Babocomari River

Hydrologic Analysis concerns

- 1) Section 3.1.4 why do channel roughness's have values of 0.05? Normal Channel Roughness's with sand bottom, sides of trees and shrubs or rock (Chow 1959) should be .032 to 0.035. Maximum range from 0.04 to 0.045. These are normal channels and not completely covered in brush and the sand bottom channels are clean. In comparison (for subbasin Huac_W550) the HEC-HMS files utilize Manning's roughness coefficient values of 0.012 for overbanks and 0.05 for channels while the HEC-RAS file utilizes 0.05 for the overbanks and 0.035-0.045 for the channels. Why are they not consistent?
- 2) Section 5.1 of the Huachuca City Hydrology report indicates a revised drainage area of 199.26 square miles (s.m.) and a revised discharge of 17,862 cubic feet per second (cfs) at state Hwy 90. This conflicts with the 61 subbasins shown on shapefile layer (S_Subbasins.shp) which totals 211.31 s.m. (See Figure 1 of this comment document). This corresponds to Junction 26 (Huac_Junction-26) of the HMS program file. The discharge at this junction indicates a drainage area of 211.48 and discharge of 18,045 cfs. The HMS summary table at J223 indicates an area of 199.26 s.m. but has a resultant 100-yr 24-hr discharge of 17,876 cfs. It appears that the Junction for the Babocomari, per the subbasin and node shapefiles, should be at Huac_Junction-26. Please verify drainage area and resultant discharge at the State Route 90.
- 3) Summary of Final Discharge values, Section 6, The table indicates a drainage area of 188.9 s.m. with a 100-yr discharge of 18,135, cfs at node Huac_J308. The ArcMap shape

1415 Melody Lane, Building F
Bisbee, Arizona 85603
520-432-9310
1-800-752-3745
highway@cochise.az.gov
floodplain@cochise.az.gov

files indicates 199.02 s.m. (See Figure 2 of this comment document). The HMS summary table, at J308 indicates an area of 188.9 s.m. but has a resultant 100-yr 24-hr discharge of 18,170 cfs. Please verify drainage areas and resultant discharges within the table.

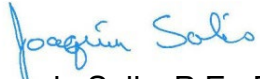
- 4) Table 6 summarizes 24-hr discharge values for the Babocomari River and 6-hr discharge values for the Huachuca Canyon Creek and unnamed tributaries. Please include the storm durations on the table.

Hydraulic Analysis concerns

- 1) At River station (RS) 69857 (Water Surface Elevation [WSE] 4282), approximately 2,130 feet upstream of the bridge structure, the floodway is contained within the channel. Although the floodplain is reduced from the current effective mapping, how do both the floodplain and floodway widen as it approaches the bridge? With the channel widening (field visit) just downstream of RS 69857, the slope remaining consistent down to the bridge structure and an increase in incising of a channel (to RS , how do the floodplain and floodway increase with over 5,000 cfs of stormwater decrease? (See Figure 3 of this comment document).
- 2) How does the floodway width increase from the effective mapping with less discharge?
- 3) The HEC-RAS model utilizes 18,633 cfs 100-yr discharge from the most upstream river station (RS80336) to the most downstream station (RS59339). This value is not consistent with the hydrologic model. Concentration point HUAC_Junction-19 has a 100-yr discharge of 20,496 cfs upstream of RS80336. The flow decreases at concentration point Huac_Junction-24 to 18,607 cfs which is just upstream of RS69857. Flow decreases again to 18,045 cfs at the bridge (RS67803). At the end of the hydrologic model (Huac_Junction-27) the discharge is 17,088 cfs. The floodplain (HEC-RAS) model needs to be consistent with the hydrologic (HEC-HMS) results.
- 4) The flood hazard areas (in acres) need to be corrected. A flood hazard area is either Zone X, 0.2 Pct annual chance flood hazard or Zone AE but not both. Please correct the quantity of acreage within the S_Fld_Haz_Ar.shp file. The clipping process, within ArcMap should correct the areas that overlay (floodway, floodway fringe and X-0.2 Pct. areas).
- 5) Please revise shape file S_XS.shp file to be consistent with HEC-RAS Model/ The WSE's are different (see Figure 4 of this comment document).
- 6) Why is a revised lower discharge with an incised channel from the effective mapping higher than the current value? The WSE at RS66064 per the revised HECRAS program (WSE=4260.71) is approximately 1.2 feet higher than an interpolated value of 4259.5 from the current FIS Data.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in blue ink that reads "Joaquin Solis". The signature is written in a cursive, flowing style.

Joaquin Solis, P.E., Floodplain Engineer

Cc: Jackie Watkins, P.E., Engineering & Natural Resources Dept. Director, County Engineer
Dr. Jim Johnson, PhD, CBO, CCI, Huachuca City Building Official

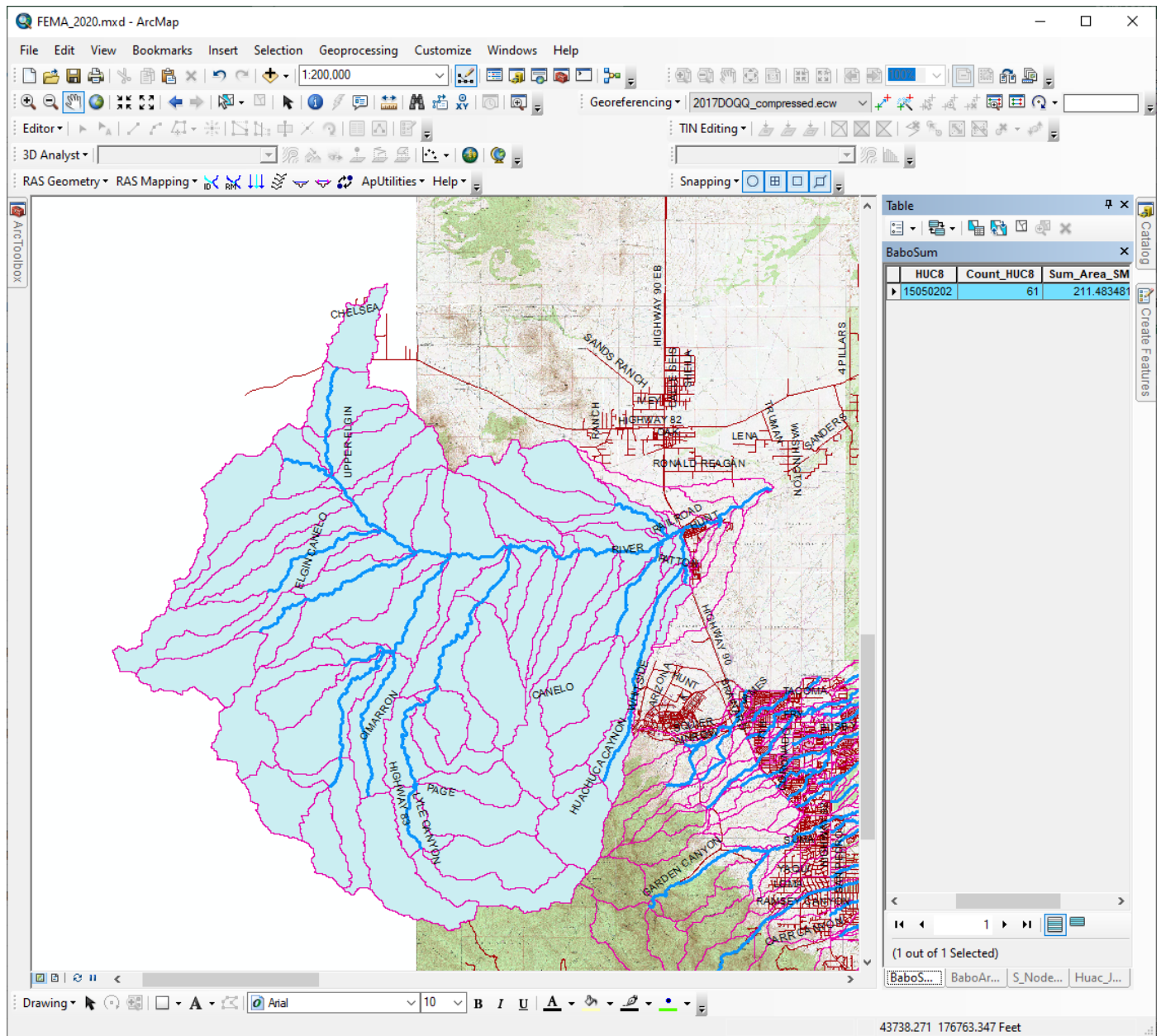


Figure 1: Babocomari drainage area at state Hwy 90, per ArcMap, 61 subbasins, indicate 211.48 s.m.

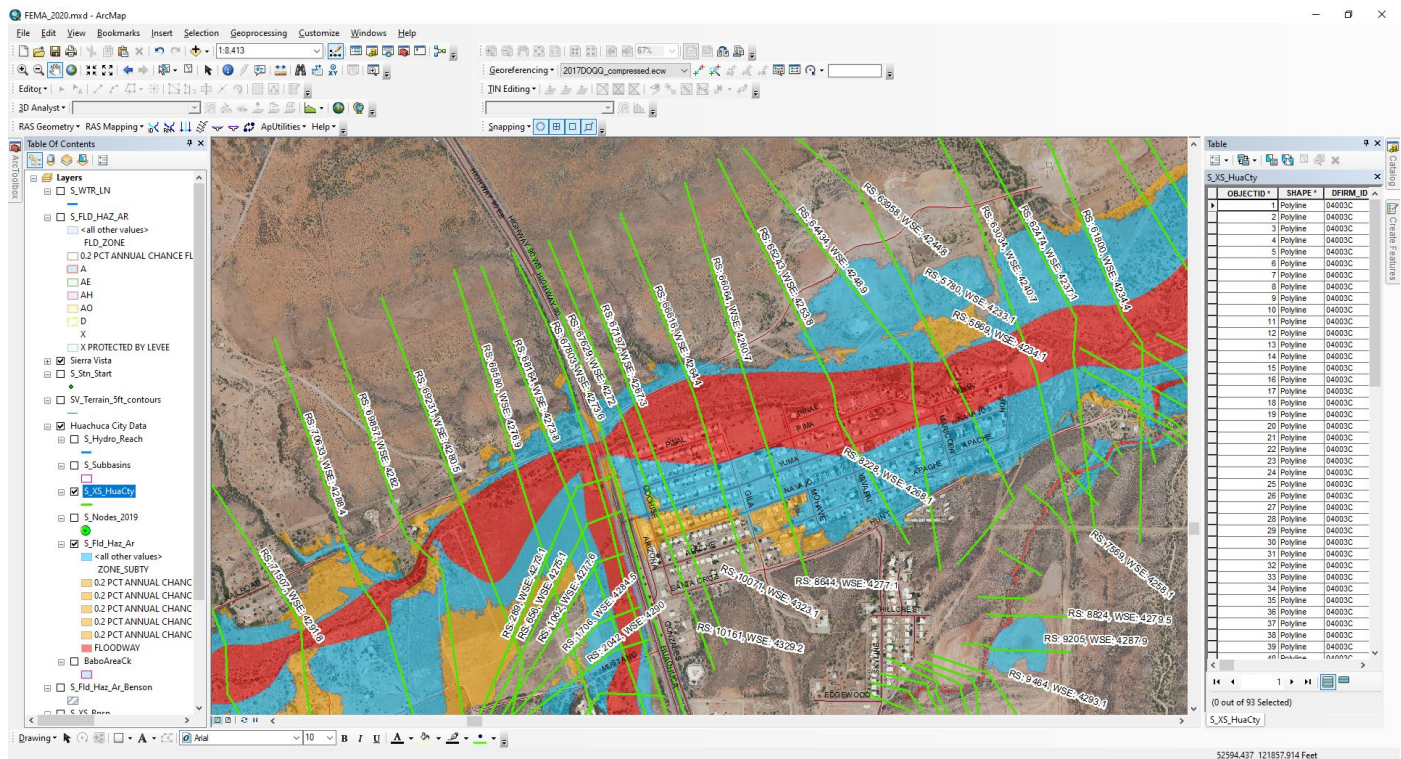


Figure 3. Revised floodplain mapping

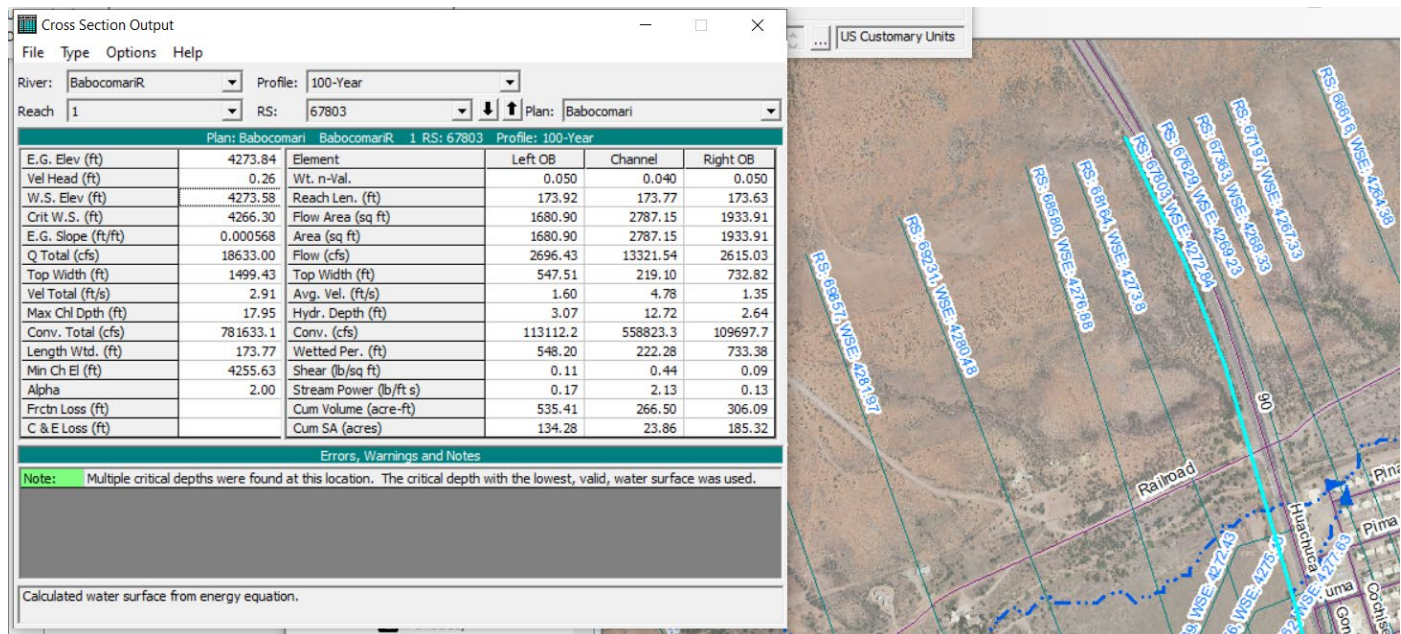


Figure 4. Inconsistent water surface elevation values between HEC-RAS file and S_XS.shp file