



Floodplain Delineation Studies

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2005

Sunday, February 27, 2005

SECTION B

Recent rains post stunning number

By Shaun McKinnon
The Arizona Republic

Phoenix records third-wettest Jan.-Feb. in over 100 years

Take a good pair of mud boots if you have business in Cave Creek. It's going to be a while before it dries out in what has become Maricopa County's version of a rain forest.

Since Jan. 1, a rain gauge 1 mile west of Cave Creek Town Hall has recorded 11.02 inches

of rain, more than twice the 4.86 inches that has fallen at Sky Harbor International Airport.

That makes Cave Creek the country's rainiest place where people actually live.

Gauges further north actually picked up even more rain:

At the top of Mount Union, 10 miles southeast of Prescott, 19.33 inches has fallen since the year's start, and at nearby Horseshoe Basin the total is nearly 16 inches.

Those totals shouldn't detract from Sky Harbor's official total, which made this the

third-wettest January and February in more than 100 years, according to the National Weather Service.

But the storms definitely dumped the most rain in the higher elevations of central Arizona, which doesn't surprise meteorologists.

Even a modest upslope can make a difference, wringing more moisture from the clouds as the air rises.

"It can happen with a gradual rise," said Doug Green, science officer for the Weather Service in Phoenix.

"You wouldn't think it would

azte
Keep up with it
at weather.azte

make that much
it does. The
the rain.
You don't
to make

Valley bridges withstand onslaught

ASU IN
SUN BOWL
New look for Sun Devils
KICKOFF Noon today, Ch. 5 SPORTS, C1

day's quick read
OUR WORLD A summary of today's top stories.

Gift-givers
are now
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By Robert Aggion
and Brent Scarborough
The Arizona Republic

A portion of Alma School Road is crumbling into the Salt River, but transportation engineers say the bridge spanning the river will remain standing even if there is no way for drivers to get to it.

Workers and through the Valley have withstood the onslaught of rain since heavy rain and snowmelt hit the region in the county, said the county's Department of Transportation spokesman.

1 span closed because of road erosion

At the top of Alma School Road, a crumbling into the Salt River, but transportation engineers say the bridge spanning the river will remain standing even if there is no way for drivers to get to it.

At the top of Alma School Road, a crumbling into the Salt River, but transportation engineers say the bridge spanning the river will remain standing even if there is no way for drivers to get to it.

11 rescued safely from flooded Salt



Friday, January 1, 2005

SECTION B

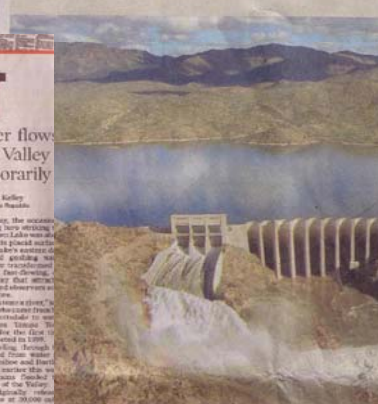
WATER RUNS THROUGH IT



He stood on a path along the Salt River as water courses over the west dam of the Tempe Town Lake on Friday. Inflows from the upstream dams at the normally calm Lake Salt Lake are being held back by the dam.

SALT RIVER TO FLOW

Tempe Town Lake to become a river



In the Tonto National Forest, water flows Thursday from the spillway at the Bartlett Dam into the



Workers check out damage to Alma School Road due to erosion of the Salt River bridge's approach. The bridge, on the Salt River Reservation north of the Loop 202, has not suffered damage and is not in jeopardy but is closed.

CASA GRAND
RV pa
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lot premit
By Alan R...
The Arizona Republic

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Water from this week's
surges showed away the south
embankment near the bridge,
topping power lines and un...
destining the roadway near...
The bridge itself is secure
and appears to have no...
the bridge and crosses 12 by

FIESTA
4-P
GAME
Rosters, histories
SPORTS, C1

WHAT'S NEXT FOR UTAH, PITT?
Future wide open for Utes, Panthers
SPORTS, C1

2005 Fiesta Bowl
at Sun Devil Stadium
UTAH
Pittsburgh

Our Mission

is to provide flood hazard identification, regulation, remediation and education to the people of Maricopa County so that they can reduce their risks of injury, death, and property damage due to flooding while enjoying the natural and beneficial values served by floodplains





Maricopa County
 9622 square miles





Background

- Founded in 1959
- Municipal Corporation
- Secondary Property Tax Funding
- Unique Relationship with Maricopa County
- Governed by Board of Directors/Supervisors
- Kinder, Gentler Philosophy



Strategic Goal

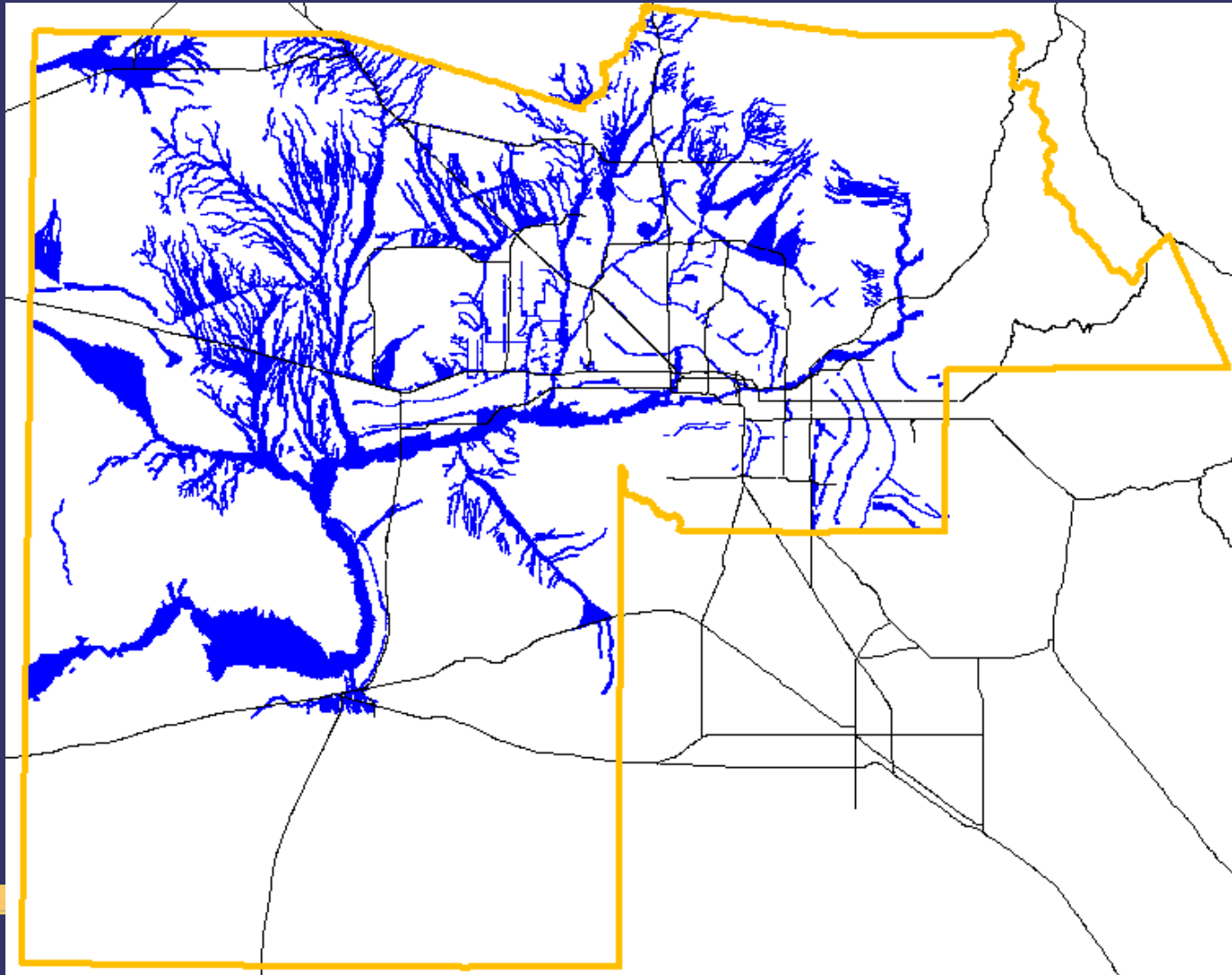
To balance the tools and resources provided to the District to maximize public protection and minimize risk from storm water flooding events.



Optimum Flood Hazard Mitigation



Floodplain Delineations on Maricopa County



Purpose of Floodplain Delineations

- Provide accurate information about flood hazard
- Part of the District's Strategic Plan
- FEMA requirement
- Maintain conveyance path for runoff



Development without the benefit of good floodplain information



Paradise Valley 1957

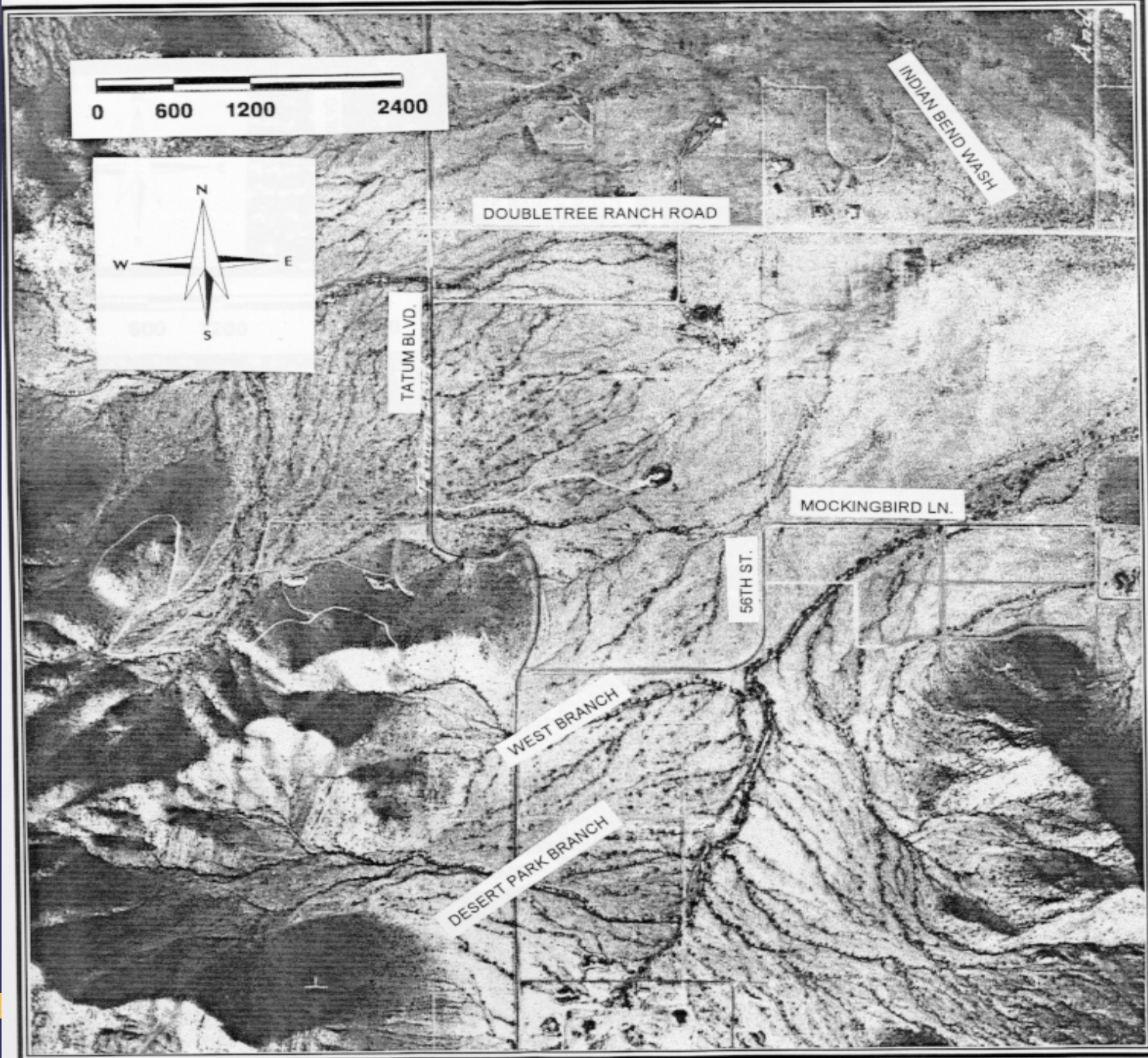
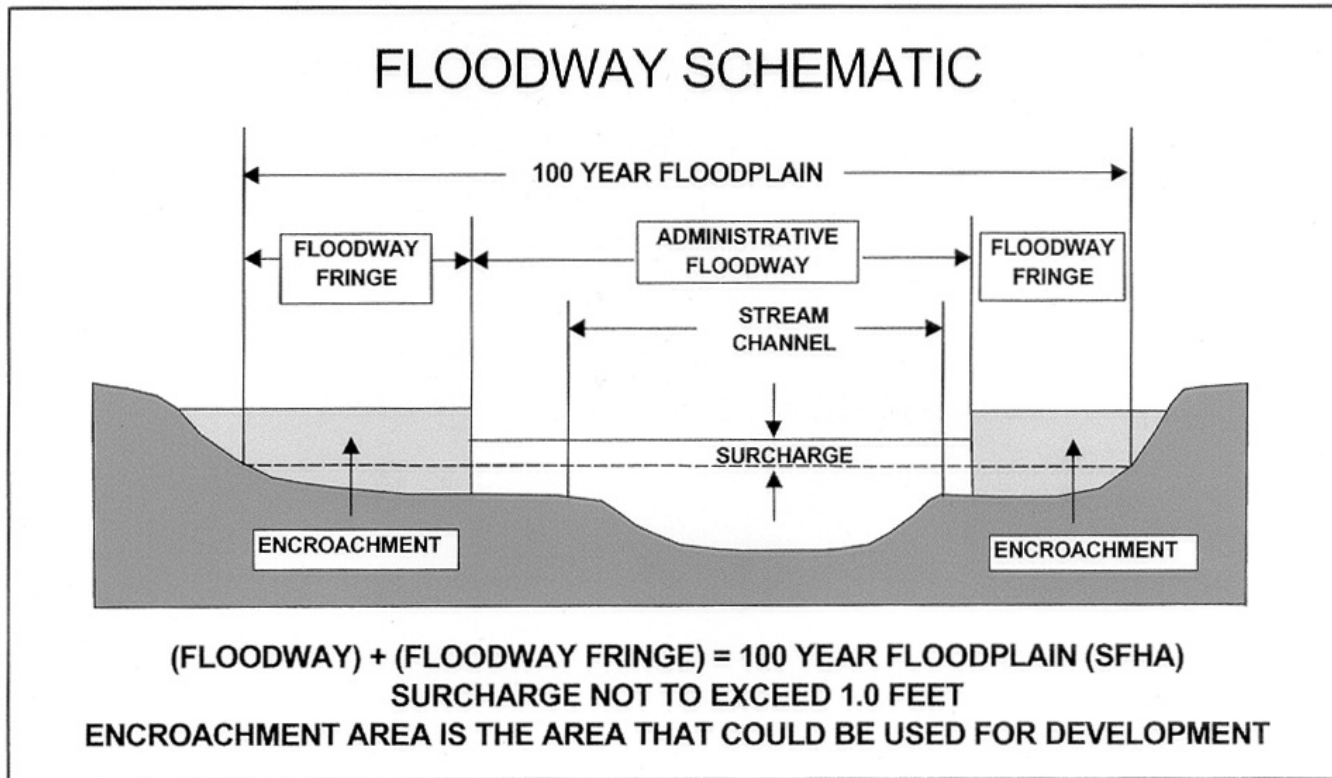


Figure 4.1. Cherokee Wash Study Area, 1957

**Paradise
Valley
1997**



Floodway Delineation



Information Needed For a Floodplain Delineation Study

- Topographic Mapping
- Hydrologic Data (Rainfall)
- Hydraulic Data (Runoff)



Hydrologic Data Needed

- Drainage Area
- Concentration Point
- Amount of Rainfall
- Time Length of Rainfall
- Rainfall Losses

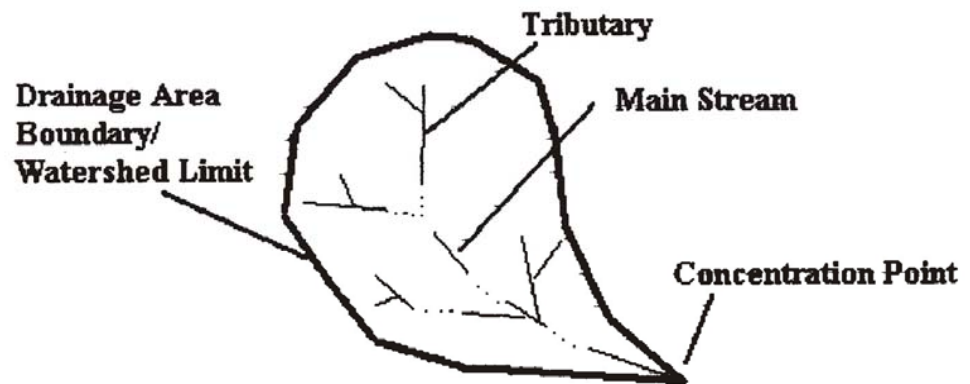
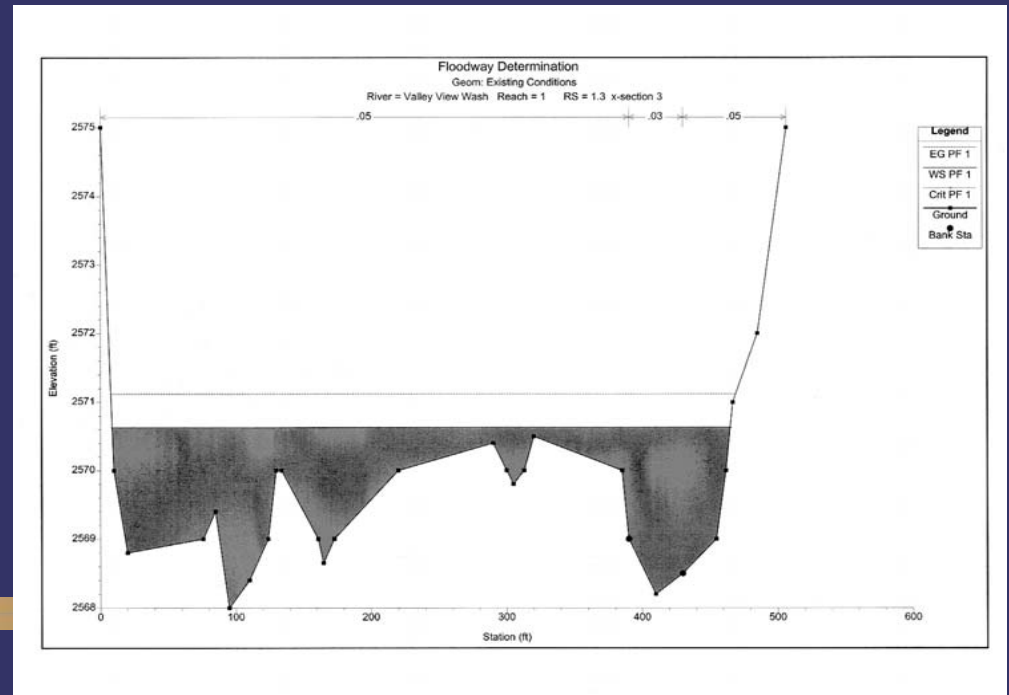


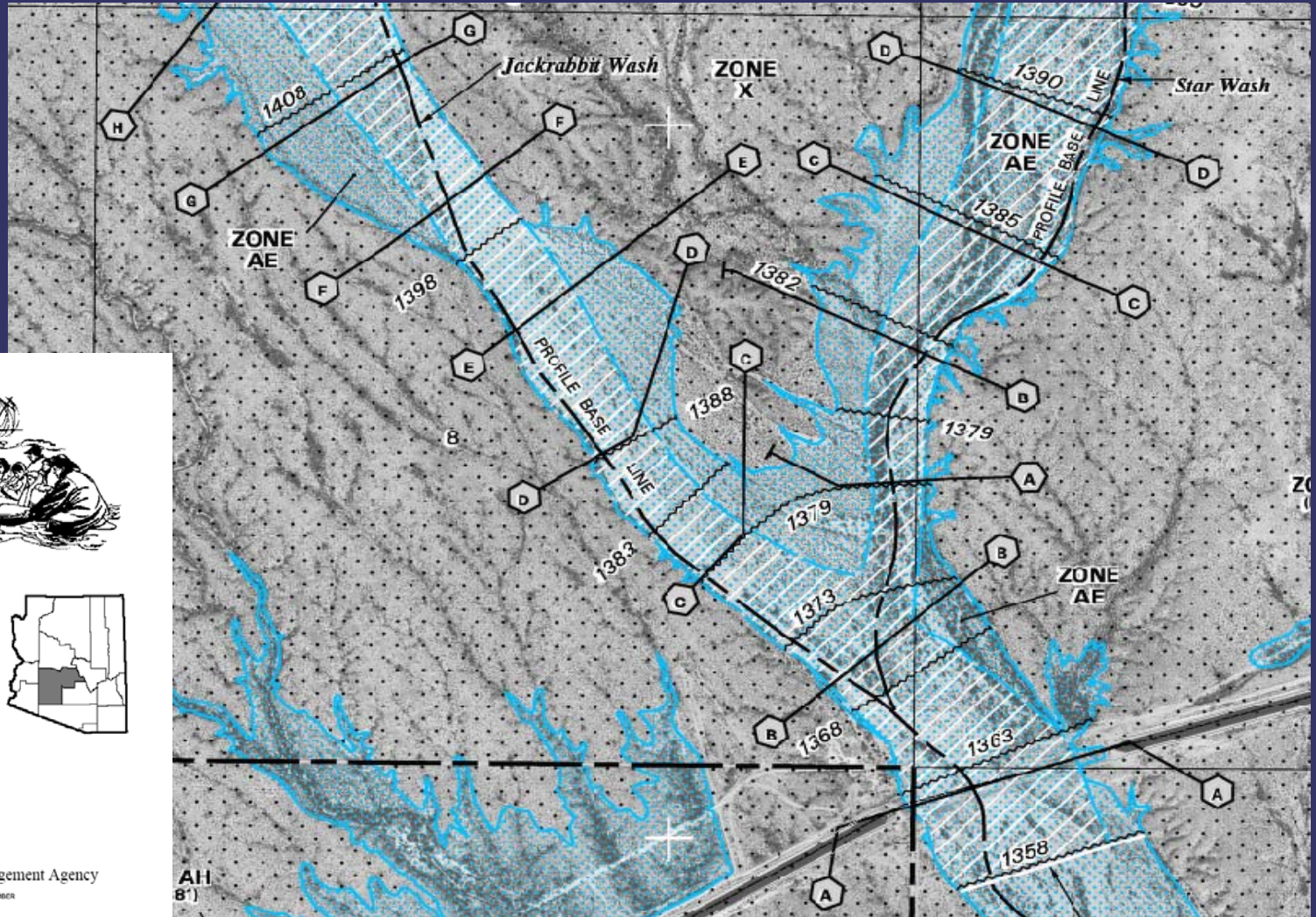
Figure 1. Illustration of Typical Drainage Area

Hydraulic Data Needed

- Discharge Value
- Cross Sectional Area
- Roughness Coefficient
- Slope



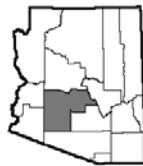
FIRM Panel



FLOOD INSURANCE STUDY



MARICOPA COUNTY,
ARIZONA
AND INCORPORATED AREAS
VOLUME 1 OF 16



COMMUNITY NAME	COMMUNITY NUMBER
AVONDALE CITY OF	04076
BUCKEYE TOWN OF	04078
CAMPBELL TOWN OF	04079
CHANDLER CITY OF	04080
CHANDLER CITY OF	04081
CHANDLER CITY OF	04082
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REVISED



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
0413CV001A

A11
8')



FEMA Process

- Submit for a Letter of Map Revision (LOMR)
- Update Flood Insurance Rate Map (FIRM)
- Update Flood Insurance Study (FIS)



FEMA Zone Definitions

- Zone A No Base Flood Elevations determined
- Zone AE Base Flood Elevations determined
- Zone AH Areas of ponding
- Zone AO Areas of sheet flow





District's Responsibility

- Floodplain Administration for Unincorporated County/12 Cities
- Supply updated floodplain information to FEMA
- Review/Issue Floodplain Permits
- Process Violations
- Provide Determinations
- CRS Program



Implications for Property Owners

- Any development must comply with floodplain regulations
- Flood insurance is mandatory if you have a federally backed loan
- They might get flooded





Some Common Myths About Flood Insurance

- You can't get flood insurance if you are in a floodplain
- Homeowners Insurance covers flooding
- Flood Insurance only covers homeowners
- You can't buy flood insurance if you have been flooded





Typical Questions Your Clients May Have

- Can I built in a floodplain?
- Can I built in a floodway?
- Will I be required to have flood insurance?
- How much does flood insurance cost?
- How much buildable space will I have?
- How many lots can I split out of this parcel?





How to get info from FEMA

- Web site www.FEMA.gov
 - FEMA Flood Map Store
 - FIRMette
 - Publications



Who to contact at the District

Floodplain Information Desk

602-506-1501

Or visit our web site at

FCD.Maricopa.gov





Flood Control District
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