



Reata Wash Flood Control Study

Get Ready to Participate:

- Send TEXT message
 - TO: 22333
 - MESSAGE: gciaz
- You will receive a reply:
 - You've joined Theresa Gunn's session (GCIAZ)





Reata Wash Flood Control Study

Public Meeting
March 2, 2016

Tonight's Agenda

- **Interactive Exercise: The Reata Wash Floodplain**
- **Overview of the Reata Wash Flood Control Study**
- **Discussion:**
 - *Importance of reducing flood risks*
- **Next Steps**
- **Questions via “Poll Everywhere” & question cards**
- **Open House**

Tips for a Good Meeting

- Silence phones but keep available to participate
- Everyone encouraged to participate
 - Public discussion, not a debate
- Allow time for others (no long speeches)
- Be respectful of others' opinions
 - Do not interrupt other participants
- Listen with an open mind

Reata Wash Flood Control Study

Purpose

- Protect residents and property
- Protect community facilities & infrastructure
- Maintain emergency access

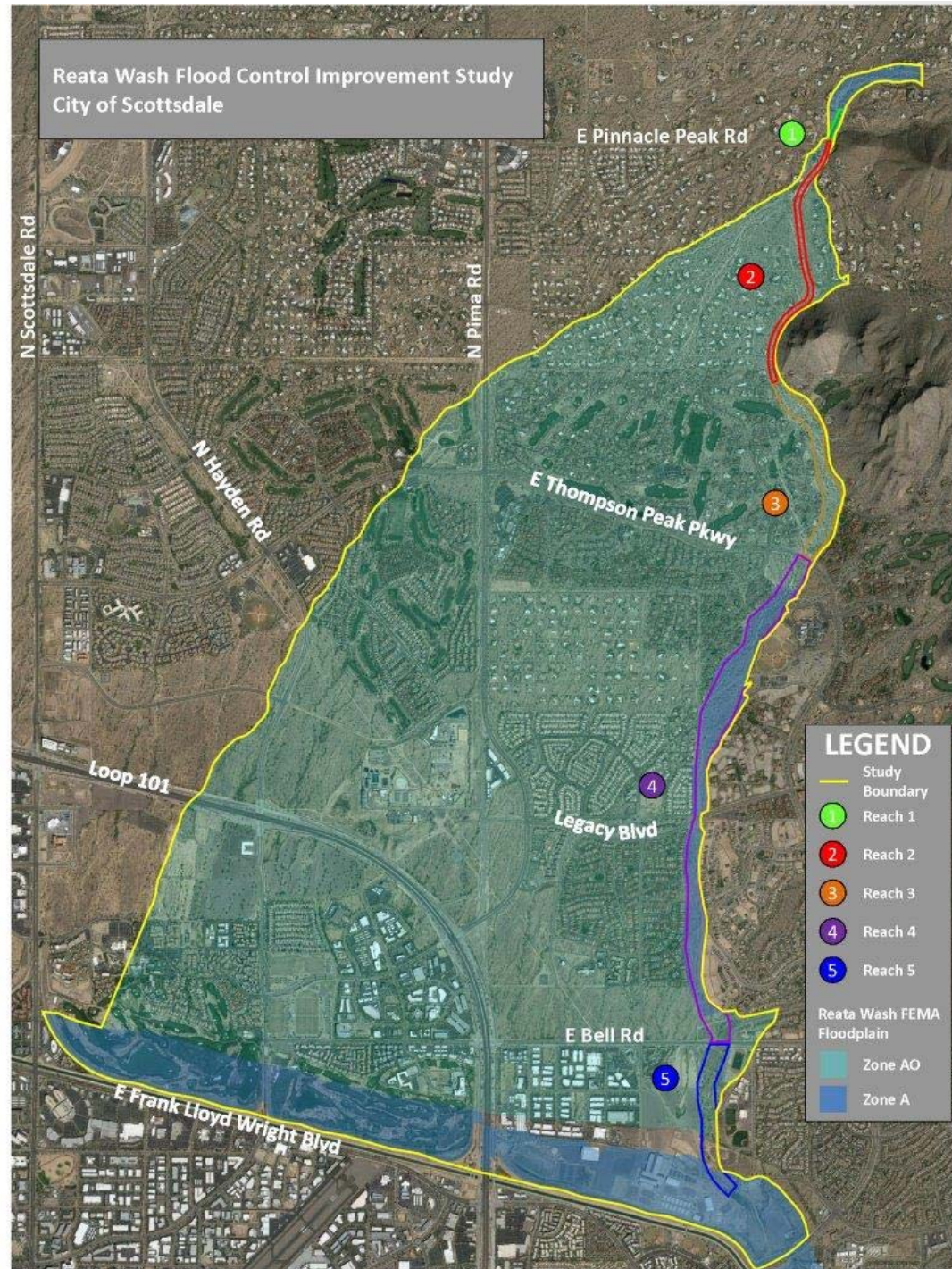
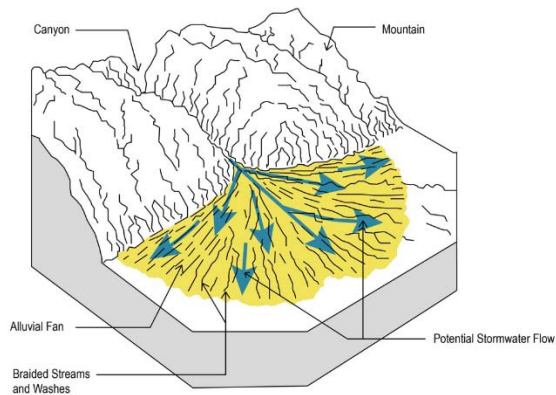
How

- Identify existing flood control structures
 - Determine Federal Emergency Management Agency (FEMA) compliance
- Identify potential flood control measures and their cost
- Engage public/seek input

Results

- Recommend alternative solutions to Council
 - Reduce risk of flooding
 - Remove or reduce current FEMA floodplain
- No funding currently identified for improvements
 - Council would need to allocate \$ to move forward

Reata Wash Floodplain



Q: What is a 100-year flood?



Desert Mountain subdivision, Scottsdale
Aug. 2014 storm

What is a 100-year flood?

- A. 1% chance to occur in any year
- B. Can have more than one in a single year
- C. Determined by NOAA using historical data
- D. 4-5" of rain in 24 hours
- E. All of the above

A: All of the Above

- 1% chance to occur in any year
- Can have more than one in a single year
- Determined by National Oceanic and Atmospheric Administration (NOAA) using historical rainfall data
- 4-5" of rain in 24 hours over this watershed

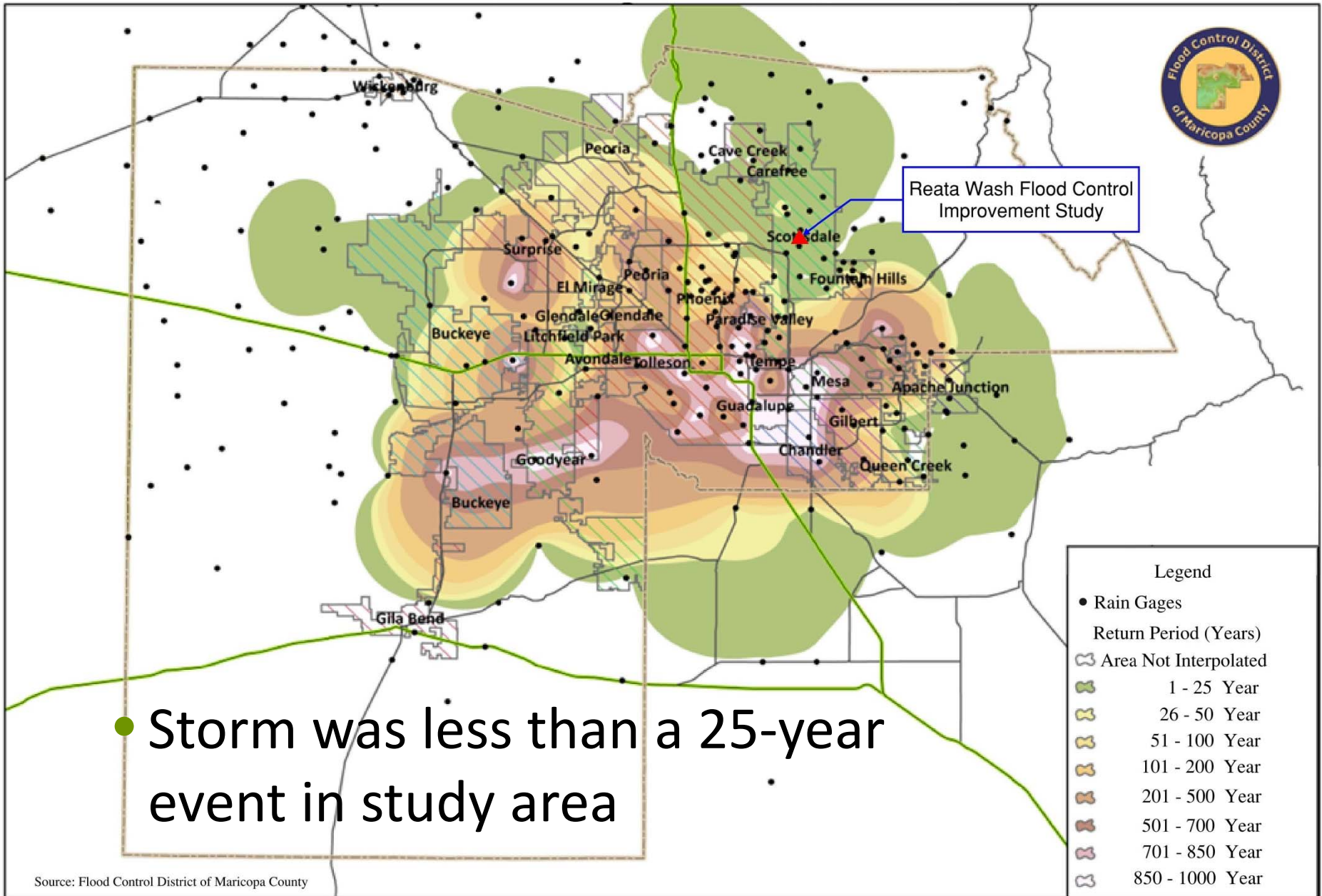
Why We Care About the 100-Year Flood

- Used to determine the FEMA floodplain hazard areas
- Federal and local standard for structural flood protection measures



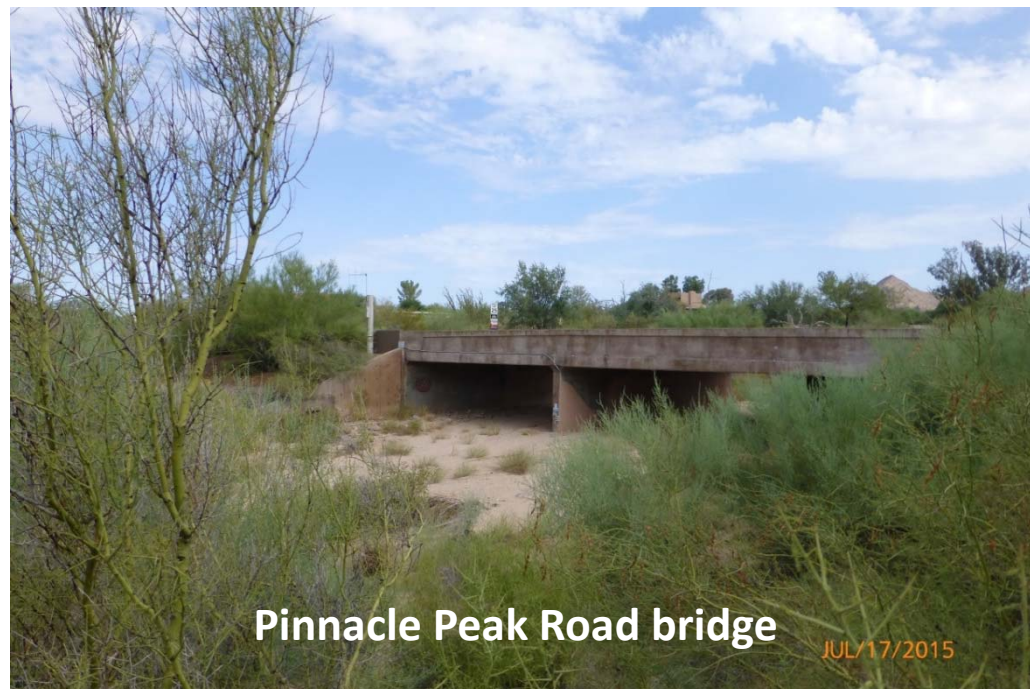
Storm of September 8, 2014

6 Hour Rainfall Return Periods



Q: *How much water is expected to flow at the top of Reata Wash during a 100-year flood?*

Measured
in cubic
feet per
second
(CFS)

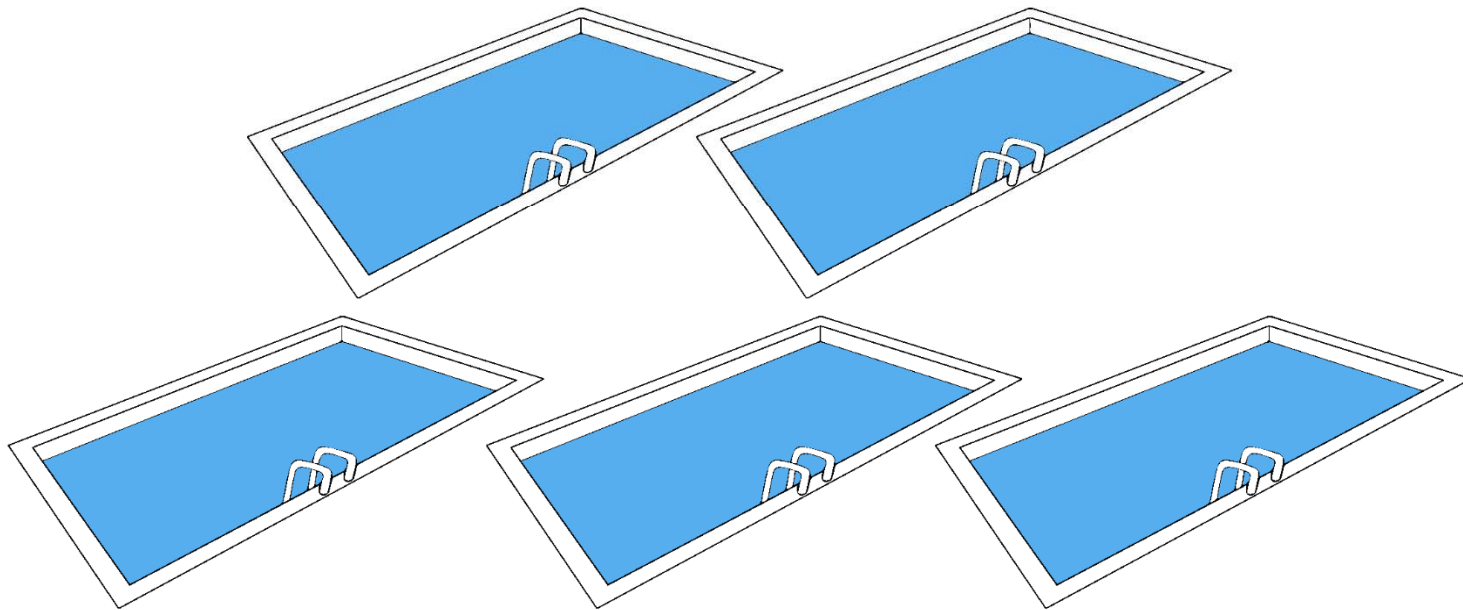


How much water is expected to flow at the top of Reata Wash during a 100-year flood?

- A. 800 csf
- B. 1,200 csf
- C. 6,800 csf
- D. 13,000 csf
- E. 18,000 csf
- F. 23,500 csf

A: 13,000 cfs

5 SWIMMING POOLS
every **SECOND**



Q: *Approximately how many buildings do you think are in the floodplain?*

- Includes homes, businesses, schools, fire stations, post offices, hospitals, etc.



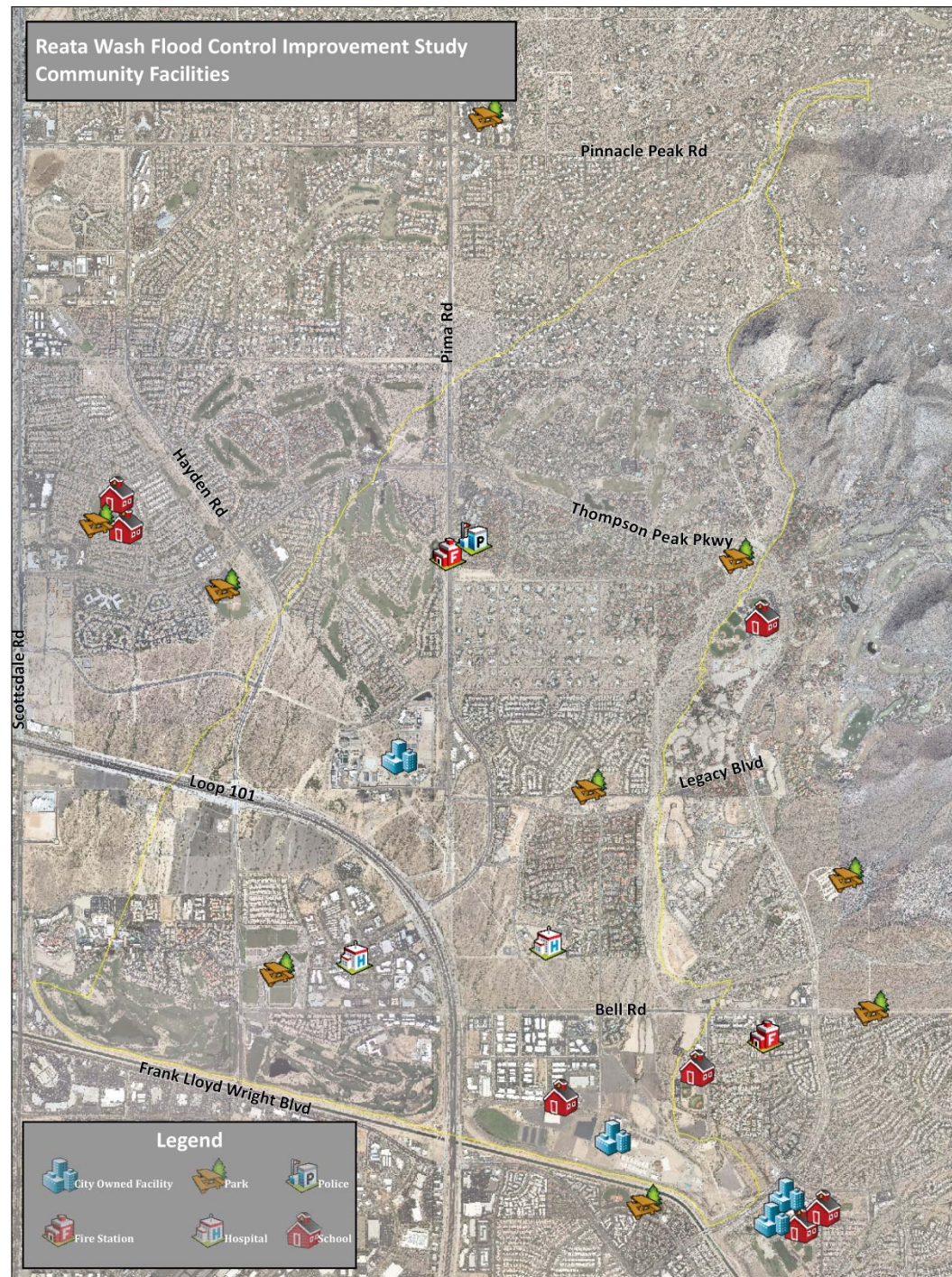
Approximately how many buildings do you think are in the floodplain?

- A. 750
- B. 2,800
- C. 4,600
- D. 8,300
- E. 10,000

A: 4,600 Structures

Some of these include:

- 3,200 homes
- 229 multi-family
- 7 schools
- 2 fire stations
- 2 hospitals
- 1 police station
- 4 city owned facilities
- 8 parks



The Power of Floodwater



- Videos taken by Scottsdale property owner and provided to City

Estimated Cost of Flood Damage

DAMAGE COST

\$41,840	\$78,300	\$104,440	\$125,760	\$136,200
				
1" Depth of Water	6" Depth of Water	12" Depth of Water	24" Depth of Water	36" Depth of Water
<ul style="list-style-type: none"> • Flooring • Carpeting 	<ul style="list-style-type: none"> • Baseboards • Drywall 	<ul style="list-style-type: none"> • Electrical Outlets • Computers 	<ul style="list-style-type: none"> • Furniture • Cabinets 	<ul style="list-style-type: none"> • Appliances • AC / Furnace

* Damage estimates based on national average flood damage. (source: floodsmart.gov). From 2010 to 2014, the average flood claim amounted to nearly \$42,000. (source: fema.com).

ESTIMATED COST OF FLOODING [4,000 sq.ft. HOUSE]

Flood Damage



*Desert Mountain subdivision
\$250k storm damage – Aug. 2014 storm*

Flood Damage



Desert Mountain subdivision

Flood Damage



Sandflower subdivision

Q: *Approximately how much do property owners in Scottsdale pay annually for flood insurance premiums?*

Flooded pool area



Approximately how much do property owners in Scottsdale pay annually for flood insurance premiums?

- A. \$150,000
- B. \$750,000
- C. \$2 Million
- D. \$4 Million
- E. \$10 Million

A: \$ 4 Million

- The total annual premiums paid by Scottsdale policyholders: \$4,047,883* annually
- The total coverage: \$2.3 billion*
- 35% of these policies are for properties in the Reata Wash floodplain⁺
 - 3,052 policies, \$1.8 million in premiums

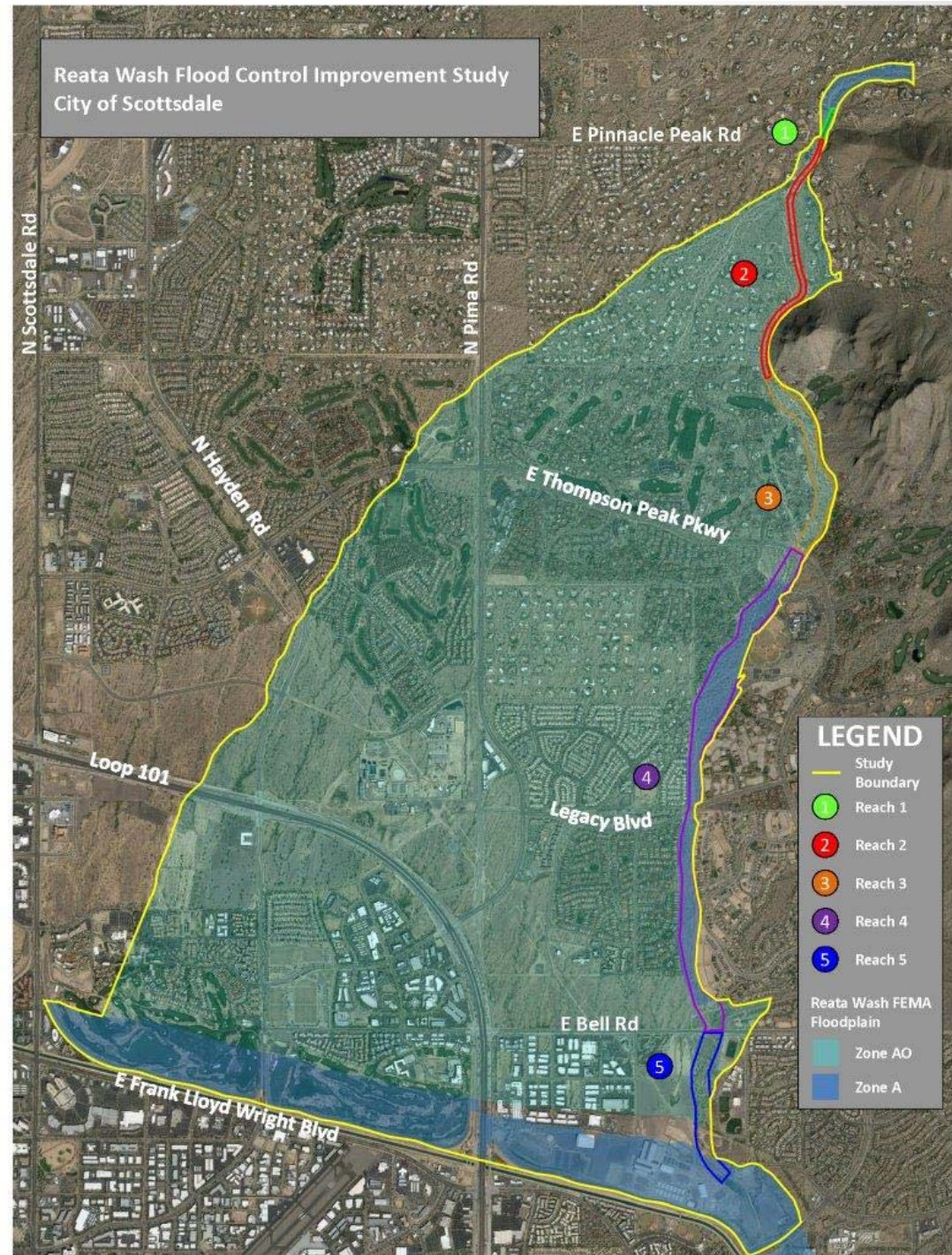
*Data as of May 15, 2015 for 8,798 policies
per FEMA records

⁺ Source: Flood Control District of Maricopa County
based on 2012 flood insurance data from FEMA



Study Corridor

- Need holistic solution for entire drainage corridor
- Has to connect to protect everyone



Reach 1



Pinnacle Peak Rd



Pinnacle Peak Bridge

JUL/17/2015

Reach 2



Foothills Drive Culvert



Reach 3



Thompson Peak Parkway bridge

Reach 4



Culvert



Bell Road Bridge

Reach 5



Dike 4 – East of WestWorld

Reach 11 Basin



Flood control can look like this



Buried bank protection
South of Thompson Peak Parkway – east bank

...and this



Bell Road levee

...and this



**Flood wall along Reata Wash upstream
of Pinnacle Peak Road**

DEC/ 9/2015

...and this



Thompson Peak Parkway bridge

Yes, and even this



DC Ranch Market Street

Q:

How important is it for the City to develop potential alternatives to reduce flooding risks in Reata Wash and remove FEMA flood insurance requirements?

*Property flooding,
Sandflower subdivision*



How important is it for the City to develop potential alternatives to reduce flooding risks in Reata Wash and remove FEMA flood insurance requirements?

- A.** Very Important
- B.** Somewhat Important
- C.** Not Important
- D.** Very Unimportant
- E.** Don't Know

Reata Wash Study - Next Steps

- Conduct technical and environmental analysis
- Develop alternatives within the corridor
- Input from community on alternatives
- Present alternatives to City Council for consideration and possible action
- If approved, funding would need to be identified for a project

**Stormwater Damage
Desert Mountain Golf Course Clubhouse
Photo taken June 2015**



Q: Text your questions or complete question card.....



Reata Wash Flood Control Study

Thank YOU!

- www.scottsdaleaz.gov
 - Search "Reata"
- Phone: 480-312-7328