

# Blue Bonnet Hills Subdivision Watershed Determination

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# Background

- Preliminary plan for 3.13 acre, single family subdivision currently in review
- City of Austin maps show site to be:
  - In Lady Bird Lake watershed, defined by code as Urban
  - Over the Edwards Aquifer Recharge zone
- Recharge zone map triggered a site evaluation
  - Site geology indicates property is in Edwards Aquifer **Contributing Zone**, not recharge zone
- Surface water runs off site to Lady Bird Lake via drainage along Robert E. Lee Road
- Drainage along Robert E. Lee is likely area of recharge for Barton Springs





Barton Springs Pool

Barton Springs

Robert E. Lee Rd



# Blue Bonnet Hills Plan

3.066

DISPOSAL OR IRRIGATION IS PROHIBITED.

BOUNDARY, TREE AND  
TOPOGRAPHICAL SURVEY OF  
TRACT B, LOT 2 AND 3  
ZILKER HILLTOP ADDITION  
VOLUME 61, PAGE 377, T.C.P.R.  
TRACT B: 0.55 ACRES (36,999 SQ. FT.)  
IN THE HENRY P. HILL LEAGUE NO. 2  
TRAVIS COUNTY, TEXAS

0.080 AC.  
R.O.W. DEDICATION

5' CONCRETE  
SIDEWALK

5' CONCRETE  
SIDEWALK

STANDARD  
CURB & GUTTER

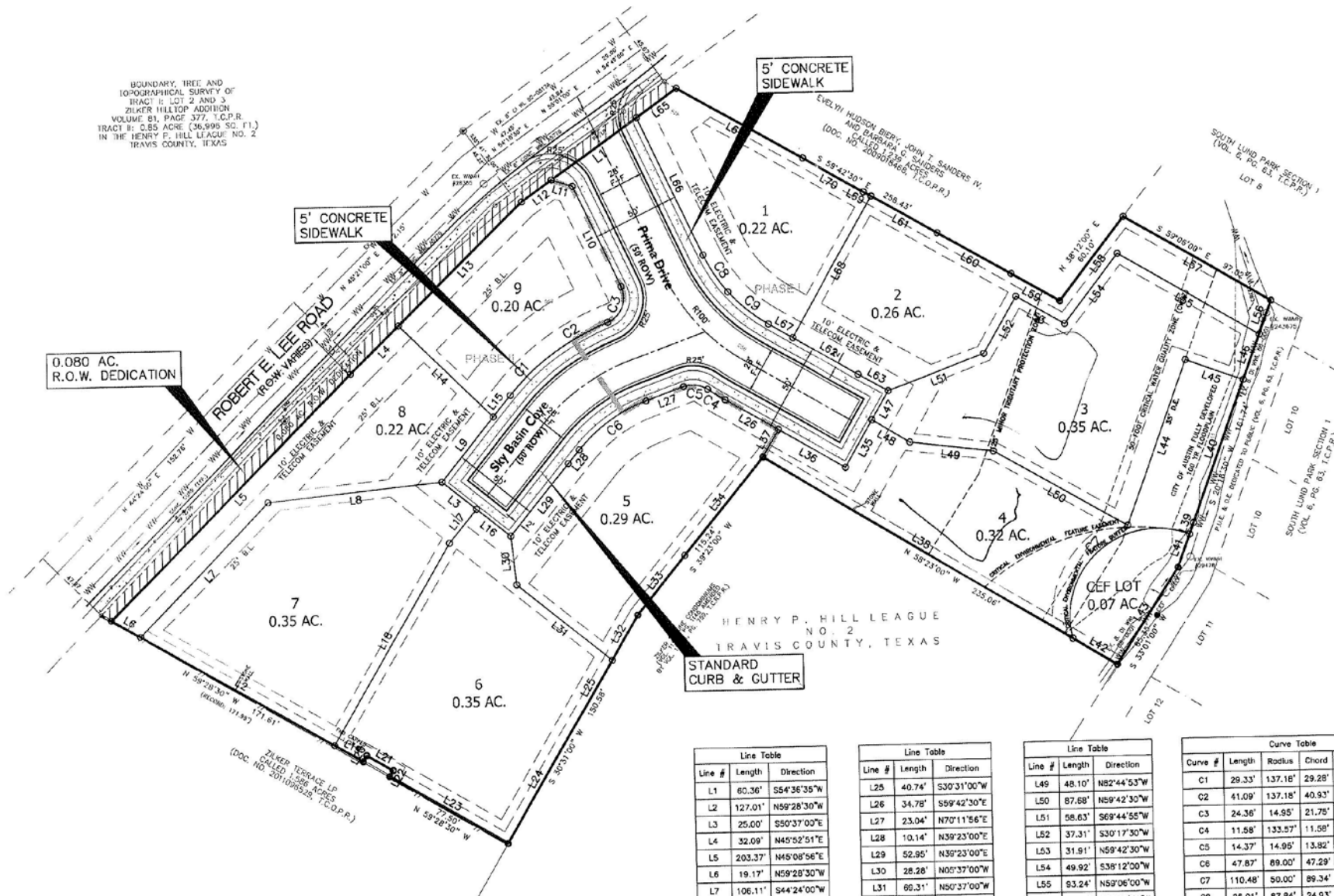
ZILKER TERRACE LP  
CALLED 1.556 ACRES  
(DOC. NO. 2011095326, T.C.P.R.)

Line Table		
Line #	Length	Direction
L1	60.36'	S54°36'35"W
L2	127.01'	N59°28'30"W
L3	25.00'	S50°37'00"E
L4	32.09'	N45°52'51"E
L5	203.37'	N45°08'56"E
L6	19.17'	N59°28'30"W
L7	106.11'	S44°24'00"W

Line Table		
Line #	Length	Direction
L25	40.74'	S30°31'00"W
L26	34.78'	S59°42'30"E
L27	23.04'	N70°11'56"E
L28	10.14'	N39°23'00"E
L29	52.95'	N39°23'00"E
L30	28.28'	N05°37'00"W
L31	66.31'	N50°37'00"W

Line Table		
Line #	Length	Direction
L49	48.10'	N82°44'53"W
L50	87.68'	N59°42'30"W
L51	56.63'	S69°44'55"W
L52	37.31'	S30°17'30"W
L53	31.91'	N59°42'30"W
L54	49.92'	S38°12'00"W
L55	53.24'	N59°06'00"W

Curve Table				
Curve #	Length	Radius	Chord	Chord Direction
C1	29.33'	137.18'	29.28'	S45°18'44"W
C2	41.09'	137.18'	40.93'	S60°01'07"W
C3	24.36'	14.95'	21.75'	S21°55'27"W
C4	11.58'	133.57'	11.58'	S37°19'17"E
C5	14.37'	14.95'	13.82'	S82°22'04"E
C6	47.87'	89.00'	47.29'	N54°47'28"E
C7	110.48'	50.00'	89.34'	N49°20'25"E
C8	25.01'	87.84'	24.93'	N32°49'08"E



# City Code Section 25-8-2

## *(Descriptions of Regulated Areas)*

Subsection (A) requires WPD to maintain a map of the regulated areas.

Subsection (B) authorizes the Watershed director to determine the boundaries.

Subsection (C) authorizes Council to determine boundaries of the recharge zone and the WPD director to require technical reports if within 1500 feet of any boundary.

Subsection (D) defines regulated areas:

(D)(1) *BARTON SPRINGS ZONE means all watersheds that contribute recharge to Barton Springs, including those portions of the Barton, Williamson, Slaughter, Onion, Bear and Little Bear Creek watershed located in the Edwards Aquifer recharge or contributing zones.*

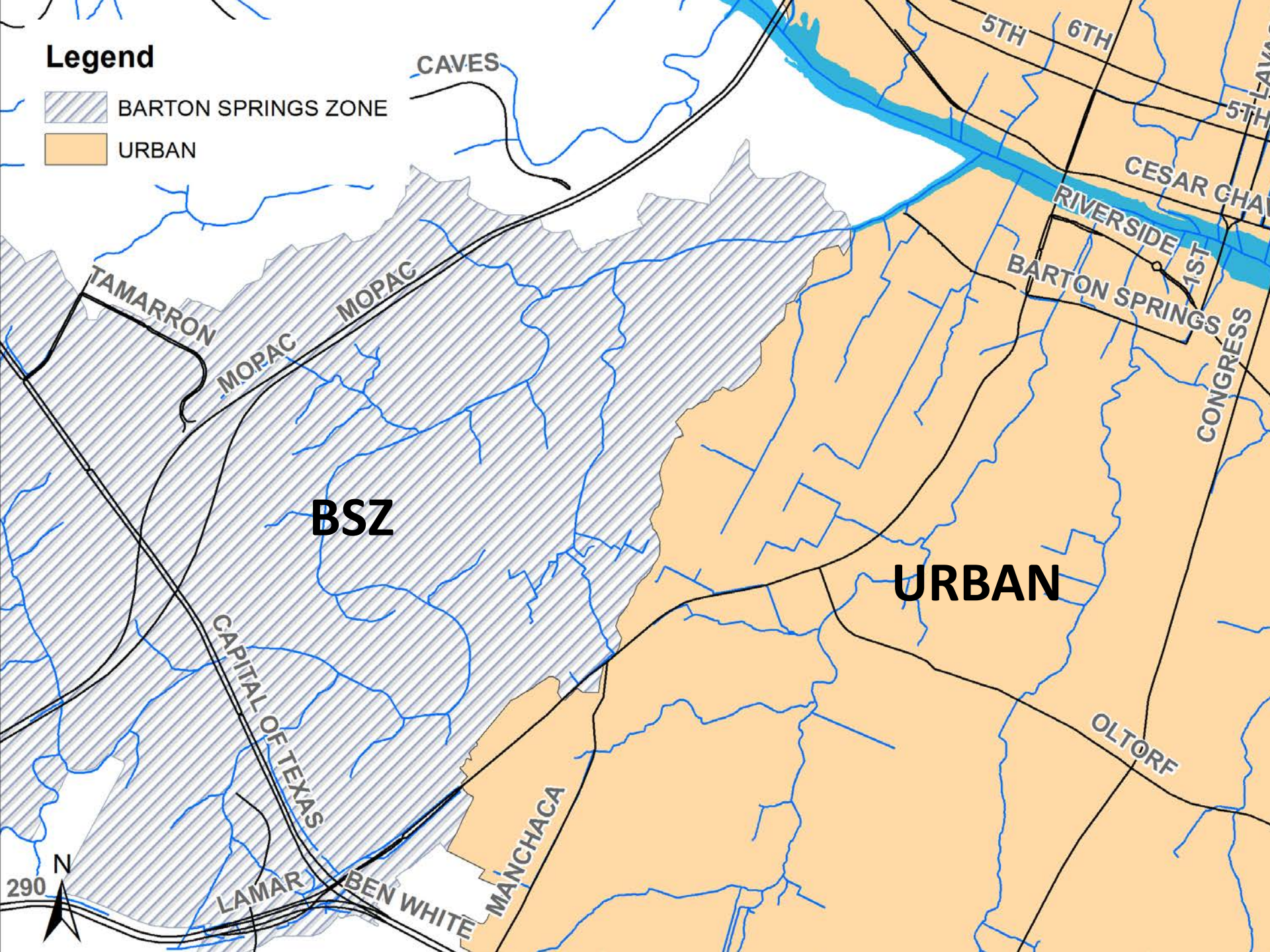
(D)(8) *URBAN WATERSHEDS include:*

- (a) *the Blunn, Buttermilk, East Boggy, East Bouldin, Fort, Harper Branch, Johnson, Little Walnut, Shoal, Tannehill, Waller, and West Bouldin creek watersheds;*
- (b) *the north side of the Colorado River watershed from Johnson Creek to U.S. 183; and*
- (c) *the south side of the Colorado River watershed from Barton Creek to U.S. 183.*






# Legend

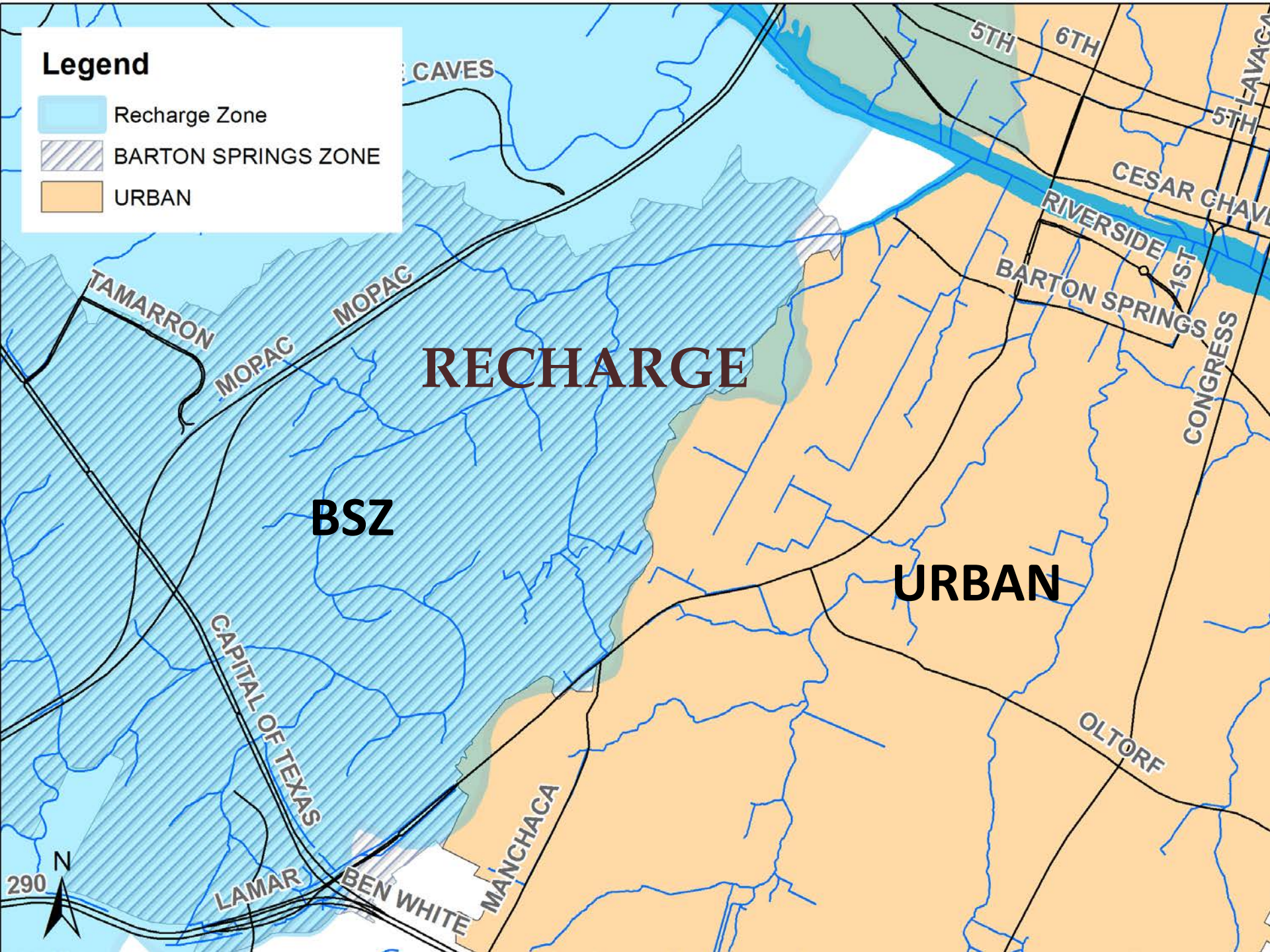
-  BARTON SPRINGS ZONE
-  URBAN









## Legend

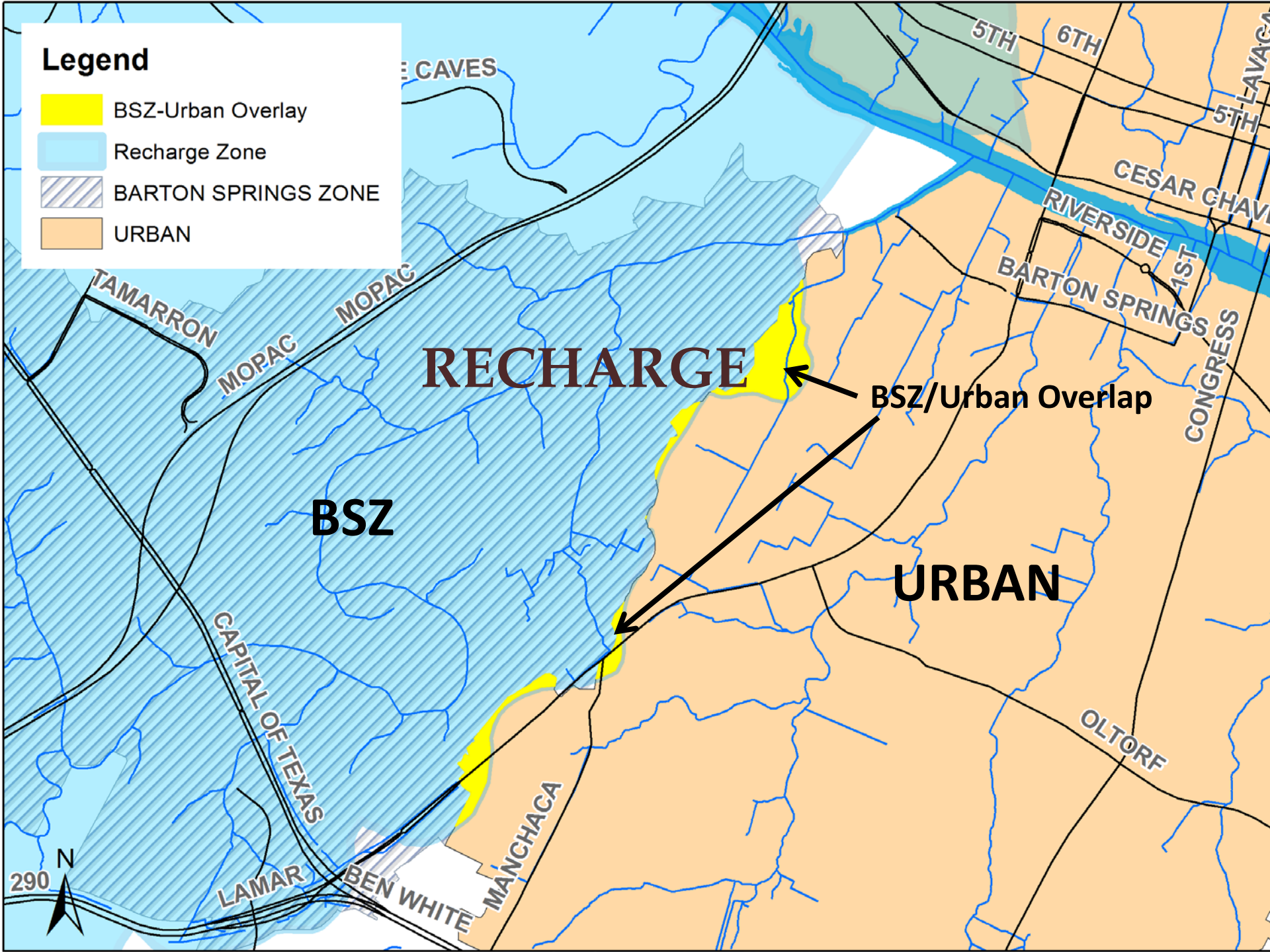
-  Recharge Zone
-  BARTON SPRINGS ZONE
-  URBAN





## Legend

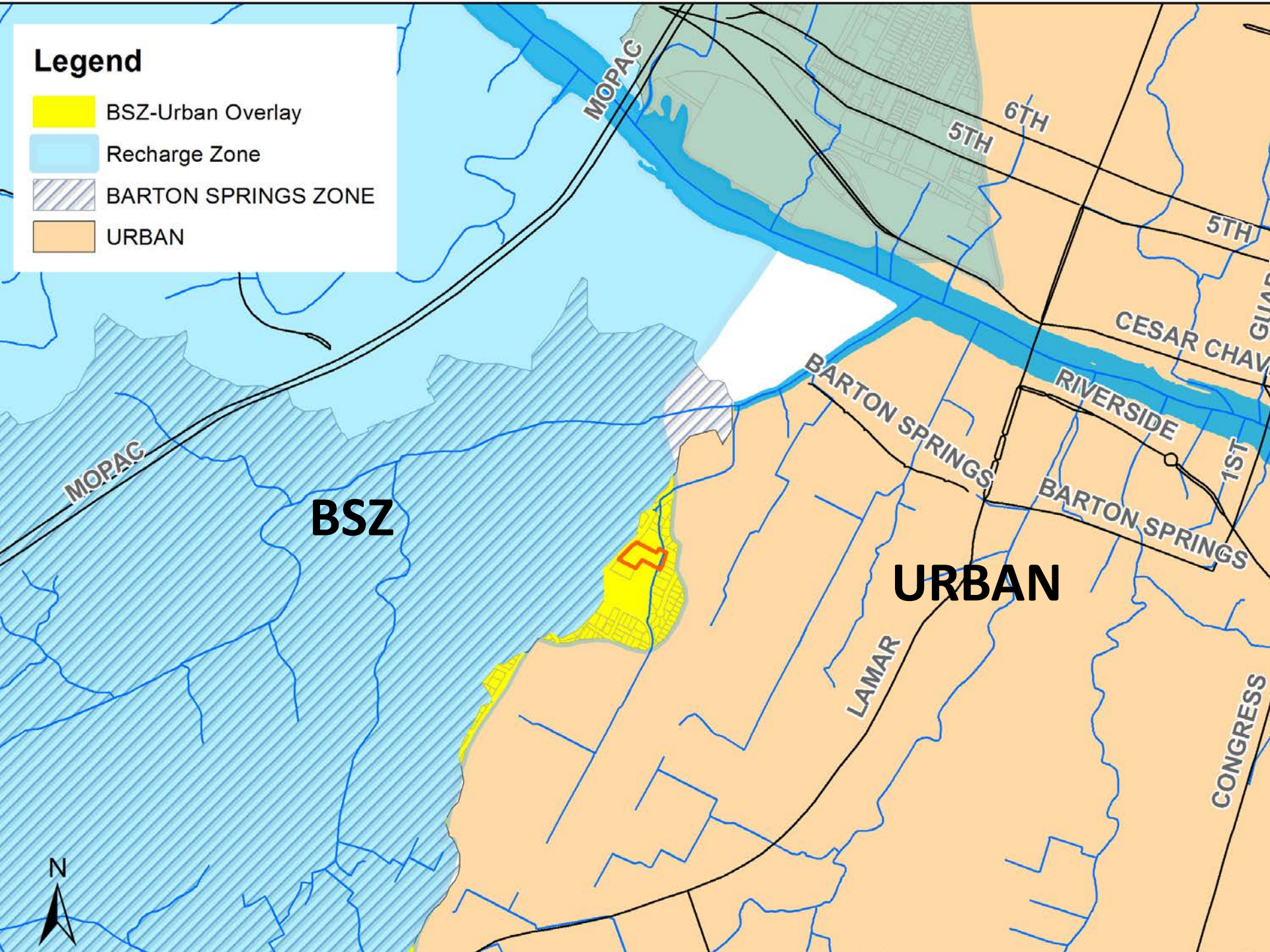
-  BSZ-Urban Overlay
-  Recharge Zone
-  BARTON SPRINGS ZONE
-  URBAN





# Legend

- BSZ-Urban Overlay
- Recharge Zone
- BARTON SPRINGS ZONE
- URBAN









# Regulatory Determination

- Primary differences between Urban and BSZ development rules are impervious cover and water quality treatment
  - BSZ IC limit is 15-25% and non-degradation water quality treatment
  - Urban IC has no specific residential IC limit and ½" plus water quality treatment. SF-2 zoning IC limit is 45%
- Historically sites located in an Urban watershed are reviewed under Urban watershed regulations, even if all or a portion of the site contributes recharge to Barton Springs.

Consistent with longstanding interpretation of code, the Blue Bonnet Hills project is being reviewed under the **Urban** watershed regulations



# Dye Trace

- A dye trace is being conducted by UT and COA staff near the site to determine the contribution of recharge from this area to the tributary along Robert E. Lee Rd.
- The trace could confirm the designation of the site as in the Contributing Zone or determine that it is not in the CZ

Since the regulatory evaluation acknowledged the site is in the CZ, the dye trace would not affect the final determination.