

Heavy Rainfall Event May 7-9, 2019

Synopsis:

A slow moving storm system resulted in two rounds of heavy rainfall over Harris County. The first round focused across extreme northeast Harris County on the afternoon of May 7th and then over southern Harris County during the evening hours. Flash flooding occurred with this round of storms mainly in the Kingwood area. The second event occurred on the evening of May 9th into the early morning hours of May 10th where numerous severe thunderstorms containing excessive rainfall rates developed across west-central Harris County and then spread into southern and eastern Harris County. Flash flooding occurred with this event primarily due to already saturated grounds and the intense short duration rainfall rates. Numerous streets were impacted across the county during both rainfall events, but bayous and creeks performed well with most remaining in banks and those that briefly exceeded banks not reaching heights that would cause significant and widespread structure flooding. In addition to the excessive rainfall and flooding, widespread hail resulted in damage across several portions of the county. In fact the hail on Thursday evening is likely one of the more extensive hail events Harris County has experienced in recent history.

Rainfall:

May 7:

Heavy rainfall rates developed due to slow storm motions over northeast Harris County including the Humble and Kingwood areas. A 30-min rate of 2.9 inches was recorded at US 59 and the West Fork of the San Jacinto River and a 1 hour rate of 4.0 inches. A 6-hr rainfall rate of 7.9 inches was recorded at the East Fork of the San Jacinto River and FM 1485. Rainfall rates between the 15-min and 6-hr time periods on Tuesday afternoon and evening averaged between a 2-yr and 50-yr frequency over the extreme northeast portions of Harris into southeast Montgomery Counties. This rainfall was relatively isolated in the far northeast portions of Harris County and the Kingwood area.

May 9-10:

6-hr rainfall totals averaged 2.0-6.0 inches across Harris County with the heaviest rainfall occurring across the Spring Branch area of the county during the early evening hours and then across the eastern and southern part of the county during the late evening and early morning hours of the 10th. 1 hour rainfall rates of 3-5 inches were recorded over the lower portion of Greens Bayou, with Greens Bayou at Normandy recording 5.30 inches in one hour and 4.0 inches in 30-minutes. The 4.0 inches in 30-min exceeds the 500-yr rainfall frequency by .20 of an inch. The 5.30 inches in one hour exceeds the 100-yr rainfall frequency by 1.0 inch. The majority of the county experienced rainfall rates in the 30-min to 3-hr time period that averaged between a 2-yr and 25-yr rainfall event. This rainfall

event was more widespread than the Tuesday afternoon and evening event which when combined with already saturated grounds resulted in more run-off.

The regional Flood Warning System gages recorded a total of 163 locations that experienced a rainfall of 1.0 inch in 15 minutes and 22 locations that recorded 4.0 inches in one hour.

Impacts:

Intense local rainfall rates greatly exceeded internal and primary drainage systems capabilities resulting in significant and at times deep street flooding and sheetflow. This was especially true in the Kingwood area on Tuesday afternoon and in the Spring Branch area, Cloverleaf area, and across portions of southern and eastern Harris County Thursday night into Friday morning.

130 structures were flooded in the Elm Groove Village subdivision in the northern portions of Kingwood on Tuesday evening. HCFCD staff investigated this area on Wednesday, May 8th and determined that the flooding was potentially caused by development upstream in Montgomery County that sent large volumes of sheetflow into the subdivision and Taylor Gully (G103-80-03.1). The isolated nature of the heavy rainfall on Tuesday afternoon prevented more widespread flooding impacts.

Isolated structure flooding occurred Thursday night and Friday morning in the Spring Branch and Cloverleaf areas due to overwhelmed internal drainage systems. Six homes flooded along the middle portions of Halls Bayou near I-45 and West Mt. Houston from the minor overbank conditions along middle Halls Bayou between I-45 and Airline Dr. The City of Deer Park currently indicates that 20-25 homes flooded in their jurisdiction mainly from internal drainage systems being overwhelmed.

The following channels reached or exceed bankfull:

- Armand Bayou
- Clear Creek
- West Fork of the San Jacinto River
- East Fork of the San Jacinto River
- Halls Bayou (I-45 to Airline Dr.)
- Spring Creek (headwaters to SH 249)
- Little Cypress Creek (headwaters to below Becker Rd.)
- Briar Branch

Flooding along these channels was mainly limited to roadways and rural lands near the channel and few structures were impacted.

HCFCF Actions:

- HCFCF staff actively monitored rainfall and creek/bayou water levels both Tuesday and then again Thursday/Friday both from HCFCF offices and the Emergency Operations Center as well as provided support to the Joint Information Center (JIC).
- The Clear Creek Second Outlet Gates were opened on Wednesday, May 8th and remained open until Monday, May 13th to help expedite the flow of storm water out of Clear Lake.
- HCFCF staff collected a total of 31 discharge measurements across Harris County and assisted Fort Bend County with four measurements on the Brazos River.
- HCFCF staff conducted approximately 35 media interviews between May 7 and May 11 and produced six press releases and approximately 90 social media posts.

Rainfall Intensity Report
12PM 5-7-19 thru 12PM 5-8-19

Clear Creek, A100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
100	0.4	0.6	0.7	0.9	1.0	1.0	1.0	1.1	1.1	A100 Clear Lake 2nd Outlet @ SH 146
105	0.3	0.8	1.3	1.6	2.3	2.3	2.5	3.8	3.9	Mary's Creek @ Winding Road
110	0.2	0.6	1.0	1.5	2.1	2.3	2.3	2.6	2.6	A100 Clear Creek @ I-45
115	0.4	0.8	1.2	1.6	2.0	2.0	2.1	2.6	2.6	Cowart Creek @ Baker Road
120	0.3	0.7	1.3	2.0	2.6	2.7	2.7	3.7	3.7	A100 Clear Creek @ FM 528
125	0.2	0.6	1.1	1.5	2.0	2.0	2.1	2.6	2.6	Chigger Creek @ Windsong Lane
130	0.2	0.6	1.0	1.4	2.0	2.2	2.2	2.6	2.6	A100 Clear Creek @ Bay Area Boulevard
135	0.4	0.9	1.7	2.6	3.2	3.2	3.4	4.2	4.2	A100 Clear Creek @ FM 2351
140	0.3	0.8	1.2	2.0	3.1	3.2	3.3	4.7	4.7	A119 Turkey Creek @ FM 1959
150	0.3	0.7	1.0	1.3	1.9	2.0	2.6	3.7	3.7	A100 Clear Creek @ Country Club Drive
160	0.2	0.7	1.2	1.9	2.0	2.1	3.0	4.1	4.1	A120 Beamer Ditch @ Hughes Road
170	0.3	0.8	1.4	1.9	2.8	3.0	3.0	3.2	3.2	A100 Clear Creek @ Nassau Bay
175	0.5	1.2	1.9	2.7	3.0	3.4	4.0	4.8	4.8	A100 Clear Creek @ Pearland Pkwy
180	0.3	0.9	1.6	2.4	3.0	3.2	3.6	4.1	4.1	A100 Clear Creek @ Mykawa Road
190	0.2	0.3	0.6	0.8	0.8	0.8	1.2	1.4	1.4	A100 Clear Creek @ SH 288
200	0.3	0.7	1.0	1.7	2.5	2.6	2.6	3.1	3.1	A104 Taylor Lake @ Nasa Road 1

Armand Bayou, B100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
210	0.2	0.7	1.1	1.5	2.2	2.4	2.5	3.2	3.2	B100 Armand Bayou @ Pasadena Lake (Nasa Road 1)
220	0.4	1.0	1.6	2.2	2.6	3.2	3.8	5.8	5.8	B100 Armand Bayou @ Genoa-Red Bluff Road
230	0.4	0.8	1.4	1.9	2.0	3.4	3.7	5.8	5.8	B106 Big Island Slough @ Fairmont Parkway
250	0.4	1.1	2.0	2.6	3.4	3.5	3.8	5.4	5.4	B104 Horsepen Creek @ Bay Area Boulevard
270	0.5	1.0	1.4	2.0	2.4	3.1	3.6	5.8	5.8	B112 Willow Spring Bayou @ Fairmont Parkway

Sims Bayou, C100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
310	0.3	0.6	1.0	1.7	1.8	2.0	2.8	3.4	3.4	C106 Berry Bayou @ Nevada Avenue
320	0.3	0.5	0.8	1.2	1.4	1.4	2.2	2.6	2.6	C106 Berry Bayou @ Forest Oaks Boulevard
340	0.2	0.7	1.0	1.6	1.8	2.0	2.4	2.8	2.8	C100 Sims Bayou @ Telephone Road
360	0.3	0.4	0.8	1.1	1.2	1.4	1.8	2.1	2.1	C100 Sims Bayou @ Martin Luther King Road
370	0.2	0.6	0.7	1.3	1.6	1.7	2.3	2.6	2.6	C100 Sims Bayou @ SH 288
380	0.2	0.6	0.7	1.4	1.6	1.9	2.5	3.0	3.0	C100 Sims Bayou @ Hiram-Clarke Road

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Brays Bayou, D100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1020	0.5	1.3	1.7	2.5	3.0	3.4	3.9	4.1	4.1	NRG Park
400	0.7	1.4	1.8	2.3	2.7	3.0	3.3	3.4	3.4	D109 Harris Gully @ South McGregor Way
405	0.3	0.8	1.2	1.7	2.0	2.2	2.4	2.6	2.6	D100 Brays Bayou @ Martin Luther King Blvd
410	0.2	0.4	0.5	0.8	1.1	1.3	1.5	1.8	1.8	D100 Brays Bayou @ Lawndale Street
420	0.5	1.2	1.6	2.2	2.7	2.9	3.2	3.4	3.4	D100 Brays Bayou @ South Main Street
430	0.5	1.0	1.4	2.5	3.1	3.3	3.5	3.6	3.6	D100 Brays Bayou @ Stella Link Road
435	0.4	1.1	1.8	3.4	4.1	4.4	4.8	5.0	5.0	D112 Willow Water Hole @ Willowbend Boulevard
440	0.4	1.1	1.6	3.1	3.7	4.1	4.4	4.6	4.6	D100 Brays Bayou @ Rice Avenue
445	0.4	0.9	1.5	2.9	3.8	4.3	4.8	5.0	5.0	D112 Willow Water Hole @ Landsdowne Drive
460	0.4	0.8	1.3	2.4	3.0	3.5	4.0	4.3	4.3	D100 Brays Bayou @ Gessner Road
465	0.3	0.7	1.2	1.8	2.4	2.7	3.2	3.6	3.6	D100 Brays Bayou @ Beltway 8
470	0.2	0.4	0.6	1.2	1.8	2.0	2.5	2.9	2.9	D100 Brays Bayou @ Belle Park Drive
475	0.2	0.5	0.8	1.3	1.7	1.9	2.2	2.6	2.6	D100 Brays Bayou @ Bellaire Boulevard
480	0.4	1.1	1.8	3.1	4.0	4.6	5.6	6.1	6.1	D118 Keegans Bayou @ Roark Road
485	0.1	0.4	0.5	0.8	1.2	1.4	1.9	2.2	2.2	D100 Brays Bayou @ SH 6
490	0.3	0.6	1.0	2.0	3.0	3.6	4.3	4.6	4.6	D118 Keegans Bayou @ Keegan Road
495	0.3	0.6	0.8	1.4	2.3	2.8	3.5	4.1	4.1	D118 Keegans Bayou @ Rocky Valley

White Oak Bayou, E100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
510	0.1	0.2	0.4	0.6	0.7	0.8	1.0	1.0	1.0	Harris County Flood Control @ Brookhollow
520	0.1	0.2	0.5	0.7	0.9	1.0	1.2	1.3	1.3	E100 White Oak Bayou @ Heights Boulevard
530	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.7	0.7	E100 White Oak Bayou @ Ella Boulevard
535	0.1	0.2	0.2	0.4	0.4	0.5	0.6	0.6	0.6	E100 White Oak Bayou @ Pinemont Drive
540	0.0	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	E100 White Oak Bayou @ Alabonson Road
545	0.0	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	E100 White Oak Bayou @ Fairbanks North Houston Road
550	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	E100 White Oak Bayou @ Lakeview Drive
555	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	E100 White Oak Bayou @ Jones Road
560	0.1	0.2	0.4	0.5	0.6	0.7	0.9	0.9	0.9	E101 Little White Oak Bayou @ Trimble Street
570	0.1	0.2	0.2	0.2	0.4	0.4	0.6	0.8	0.8	E101 Little White Oak Bayou @ Tidwell Road
575	0.0	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.6	E100 White Oak Bayou @ Tidwell Road
580	0.1	0.2	0.2	0.3	0.4	0.4	0.6	0.6	0.6	E115 Brickhouse Gully @ Costa Rica Road
582	0.1	0.2	0.3	0.4	0.6	0.6	0.8	0.8	0.8	E115 Brickhouse Gully @ Hollister
585	0.0	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	E121 Vogel Creek @ Victory Drive
590	0.0	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.5	E117 Cole Creek @ Deihl Road
595	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.6	E121 Vogel Creek @ Gulf Bank Road

Little Cedar Bayou, F216										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
610	0.3	0.9	1.3	1.6	2.2	2.4	3.3	4.7	4.7	A104 Taylor's Bayou @ Shoreacres Boulevard
620	0.4	1.2	1.9	2.6	3.3	3.4	5.4	6.8	6.8	F216 Little Cedar Bayou @ 8th Street
640	0.4	1.0	1.6	2.0	2.4	2.9	4.7	6.1	6.2	F101 Lateral @ Sens Road

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San Jacinto River, G103										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
710	0.1	0.2	0.3	0.4	0.5	0.6	0.9	1.3	1.3	G103 San Jacinto River @ Rio Villa
720	0.0	0.1	0.1	0.2	0.2	0.3	0.6	0.8	0.8	G103 San Jacinto River @ US 90
740	0.2	0.4	0.6	0.7	1.1	1.2	2.0	2.6	2.7	G103 Lake Houston @ FM 1960
750	0.1	0.1	0.1	0.2	0.3	0.4	0.6	1.0	1.1	G103 Lake Houston Dam Spillway
755	0.5	1.2	1.7	2.2	2.2	2.4	4.2	4.7	4.7	G103 San Jacinto River @ Kingwood Country Club
760	0.6	1.5	2.9	4.0	4.2	4.5	6.1	6.6	6.6	G103 San Jacinto River @ US 59
765	0.4	1.2	1.6	2.6	3.8	4.5	4.9	5.2	5.3	G103 San Jacinto @ SH 99
780	0.1	0.2	0.2	0.4	0.5	0.7	0.8	1.0	1.1	Caney Creek @ FM 2090
785	0.3	0.6	1.1	1.8	2.0	2.4	4.4	4.7	4.8	Peach Creek @ FM 2090
790	0.6	1.5	2.3	3.7	4.8	5.4	7.9	8.4	8.6	G103 East Fork San Jacinto @ FM 1485
795	0.3	0.6	1.1	1.6	2.2	3.4	5.6	6.0	6.1	G103 East Fork San Jacinto @ FM 2090

Hunting Bayou, H100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
820	0.1	0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.0	H100 Hunting Bayou @ I-10
830	0.1	0.1	0.2	0.3	0.5	0.7	0.8	1.0	1.0	H100 Hunting Bayou @ Loop 610 East
840	0.0	0.1	0.2	0.3	0.4	0.4	0.6	0.7	0.7	H100 Hunting Bayou @ Lockwood Drive

Vince Bayou, I100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
920	0.2	0.6	0.7	1.2	1.4	1.7	2.6	3.1	3.1	I100 Vince Bayou @ West Ellaine Down Stream
940	0.4	0.9	1.0	1.2	1.2	1.7	3.0	3.4	3.4	I101 Little Vince Bayou @ Jackson Avenue
240	0.4	1.0	1.4	2.3	2.3	2.4	3.8	4.2	4.2	I101 Little Vince Bayou @ Burke Road

Spring Creek, J100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1040	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	J100 Spring Creek @ FM 2978
1050	0.5	1.3	2.1	2.5	2.9	3.4	4.2	4.5	4.6	J100 Spring Creek @ I-45
1052	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	Mill Creek @ FM 149
1054	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	Mill Creek @ FM 1486
1055	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.8	0.8	Bear Branch @ Kuykendahl
1056	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	Mill Creek @ FM 1774
1060	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	J100 Spring Creek @ Kuykendahl Road
1070	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	J100 Spring Creek @ SH 249
1072	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	Walnut Creek @ Nichols Sawmill
1074	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	Walnut Creek @ Joseph Road
1075	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	Tomball Repeater
1076	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Birch Creek @ Riley Road
1080	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	J100 Spring Creek @ Cypress Rosehill
1084	0.1	0.2	0.4	0.5	0.6	0.6	0.6	0.7	0.7	Threemile Creek @ Joseph Road
1086	0.1	0.2	0.4	0.4	0.4	0.4	0.5	0.6	0.6	Threemile Creek @ FM 362
1090	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	J100 Spring Creek @ Hegar Road

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Cypress Creek, K100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1110	0.3	0.8	1.2	1.2	1.8	2.4	2.9	3.3	3.4	K100 Cypress Creek @ Cypresswood Drive
1115	0.4	1.1	1.5	2.4	2.8	3.0	3.9	4.2	4.2	K600 Cypress Creek @ Inverness Forest
1120	0.3	0.7	1.0	1.5	1.7	2.0	2.7	3.0	3.0	K100 Cypress Creek @ I-45
1130	0.3	0.5	0.7	0.8	0.9	1.4	1.8	2.0	2.0	K100 Cypress Creek @ Kuykendahl Road
1140	0.2	0.2	0.3	0.5	0.5	0.7	1.0	1.2	1.2	K100 Cypress Creek @ Stuebner-Airline Road
1150	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	K100 Cypress Creek @ SH 249
1160	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	K100 Cypress Creek @ Grant Road
1165	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.3	K100 Cypress Creek @ Eldridge Parkway N.
1170	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	K100 Cypress Creek @ Huffmeister Road
1175	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	K100 Cypress Creek @ US 290
1180	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	K100 Cypress Creek @ Katy-Hockley Road
1185	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	K100 Cypress creek @ Sharp Road
1186	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.4	Live Oak Creek @ Penick Road
1190	0.0	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	K166 Little Mound Creek @ Mathis Road
1195	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	Mound Creek @ FM 362
1210	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	L100 Little Cypress Creek @ Kluge Road
1220	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	L100 Little Cypress Creek @ Cypress Rosehill Road
1230	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	L100 Little Cypress Creek @ Becker Road

Willow Creek, M100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1320	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.6	0.6	M100 Willow Creek @ Kuykendahl Road
1340	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	M100 Willow Creek @ SH 249

Carpenters Bayou, N100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1420	0.2	0.5	0.7	0.9	1.0	1.3	1.9	2.5	2.5	N100 Carpenters Bayou @ I-10
1440	0.0	0.1	0.2	0.3	0.4	0.6	0.8	1.0	1.0	N100 Carpenters Bayou @ Wallisville Road
1460	0.1	0.1	0.1	0.2	0.3	0.4	0.6	0.9	1.0	N100 Carpenters Bayou @ US 90

Goose Creek, O100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1520	0.3	0.6	1.1	1.5	1.8	2.5	4.3	5.2	5.2	O100 Goose Creek @ SH 146
1540	0.2	0.6	1.0	1.4	2.4	2.6	3.4	3.9	3.9	O100 Goose Creek @ Baker Road

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Greens Bayou, P100										
\	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1600	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.8	0.8	P100 Greens Bayou @ Mount Houston Parkway
1610	0.1	0.2	0.4	0.5	0.6	0.8	1.0	1.2	1.2	P100 Greens Bayou @ Normandy Street
1620	0.1	0.1	0.1	0.2	0.3	0.3	0.6	0.8	0.8	P100 Greens Bayou @ Ley Road
1630	0.3	0.8	1.0	1.0	1.0	1.1	1.4	1.9	1.9	P130 Garners Bayou @ Beltway 8
1640	0.0	0.0	0.1	0.1	0.2	0.2	0.4	0.5	0.5	P100 Greens Bayou @ US 59
1645	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.7	P100 Greens Bayou @ Beltway 8
1650	0.4	1.1	1.3	1.9	2.0	2.0	2.7	3.1	3.1	P130 Garners Bayou @ Rankin Road
1655	0.2	0.2	0.4	0.5	0.5	0.7	0.8	1.0	1.0	P145 North Fork Greens Bayou @ Ella
1660	0.2	0.3	0.5	0.6	0.6	0.8	0.9	1.2	1.2	P100 Greens Bayou @ Knobcrest Drive
1665	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.5	P100 Greens Bayou @ Bammel N Houston Road
1670	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	P100 Greens Bayou @ Cutten Road
1685	0.0	0.1	0.1	0.2	0.3	0.4	0.7	1.0	1.2	P100 Greens Bayou @ Tidwell Road
1695	0.0	0.1	0.1	0.2	0.2	0.2	0.4	0.6	0.6	P138 @ Aldine Westfield Road

Halls Bayou, P118										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1675	0.0	0.1	0.1	0.1	0.2	0.2	0.4	0.6	0.6	P118 Halls Bayou @ Tidwell Road
1680	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.5	P118 Halls Bayou @ Jensen Drive
1690	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.6	P118 Halls Bayou @ Airline Drive

Cedar Bayou, Q100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1720	0.4	0.8	1.3	1.6	2.2	2.7	3.1	3.4	3.4	Q100 Cedar Bayou @ SH 146
1725	0.2	0.4	0.5	0.7	1.3	1.6	1.9	2.3	2.3	Smith Gully @ SH 146
1730	0.1	0.2	0.2	0.2	0.3	0.4	0.7	1.1	1.1	Q100 Cedar Bayou @ FM 1942
1740	0.0	0.1	0.2	0.2	0.3	0.4	0.7	1.0	1.0	Q100 Cedar Bayou @ US 90

Jackson Bayou, R100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1840	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.9	1.0	R102 Gum Gully @ Diamond Head Boulevard

Luce Bayou, S100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1930	0.2	0.4	0.6	0.8	1.1	1.2	1.9	2.5	2.6	Huffman Repeater
1940	0.2	0.6	1.0	1.6	2.4	2.7	4.6	5.2	5.2	S100 Luce Bayou @ FM 2100

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Barker Reservoir, T100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
2010	0.1	0.2	0.2	0.4	0.8	1.0	1.2	1.5	1.5	Barker Dam
2015	0.2	0.4	0.5	0.8	1.2	1.6	2.2	2.9	2.9	Clodine Ditch @ Grand Mission
2020	0.1	0.3	0.4	0.4	0.5	0.6	1.1	1.3	1.3	T101 Mason Creek @ Prince Creek Drive
2025	0.1	0.3	0.6	0.7	0.8	0.9	1.5	1.8	1.8	T100 Buffalo Bayou @ Peek Road
2030	0.1	0.2	0.3	0.4	0.5	0.6	1.1	1.3	1.3	T100 Buffalo Bayou @ Greenbusch Road
2040	0.0	0.1	0.2	0.3	0.4	0.5	0.8	1.0	1.0	T100 Buffalo Bayou @ US 90
2050	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.6	0.6	Cane Island Branch @ Clay Road
2060	0.1	0.2	0.2	0.4	0.6	0.7	1.2	1.5	1.5	Willow Fork Creek @ Pederson Road
2090	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5	Brookshire Katy Drainage District @ Morrison Road

Addicks Reservoir, U100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
2110	0.1	0.2	0.2	0.4	0.6	0.8	1.0	1.2	1.2	Addicks Dam
2115	0.1	0.1	0.2	0.2	0.4	0.5	0.6	0.8	0.8	U100 Langham Creek @ Clay Rd
2120	0.0	0.1	0.1	0.1	0.2	0.2	0.4	0.4	0.4	U100 Langham Creek @ West Little York Road
2130	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	U106 Horsepen @ Trailside Drive
2140	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	U100 Langham Creek @ Longenbaugh Road
2150	0.1	0.2	0.3	0.4	0.4	0.5	0.9	1.0	1.0	U101 South Mayde @ Greenhouse Road
2160	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.5	U102 Bear Creek @ Clay Road
2170	0.0	0.1	0.1	0.2	0.2	0.2	0.4	0.5	0.5	U101 South Mayde @ Morton Road
2180	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	U102 Bear Creek @ FM 529
2185	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	John Paul Landing
2190	0.0	0.1	0.1	0.2	0.2	0.2	0.4	0.5	0.5	U101 South Mayde Creek @ Peek Road

Buffalo Bayou, W100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1000	0.1	0.2	0.4	0.6	0.8	0.9	1.2	1.2	1.2	Houston Transtar
2210	0.2	0.3	0.4	0.6	1.1	1.3	1.4	1.6	1.6	W100 Buffalo Bayou @ Turning Basin
2220	0.2	0.4	0.7	1.1	1.4	1.4	1.6	1.7	1.7	W100 Buffalo Bayou @ Milam Street
2240	0.2	0.4	0.7	1.1	1.4	1.4	1.8	1.9	1.9	W100 Buffalo Bayou @ Shepherd Drive
2250	0.1	0.2	0.3	0.5	0.7	0.7	1.0	1.0	1.0	W140 Spring Branch @ Bingle Road
2253	0.1	0.2	0.3	0.5	0.7	0.7	0.9	1.0	1.0	W140-06 Buttermilk Creek @ Moorberry Lane
2255	0.1	0.2	0.3	0.6	0.7	0.8	1.0	1.1	1.1	W140-01 Briar Branch @ Campbell Road
2260	0.2	0.4	0.6	1.1	1.3	1.4	1.7	1.8	1.8	W100 Buffalo Bayou @ San Felipe Drive
2265	0.2	0.4	0.8	1.2	1.5	1.6	2.0	2.1	2.1	W100 Buffalo Bayou @ Piney Point Rd
2270	0.2	0.3	0.5	0.9	1.2	1.2	1.6	1.9	1.9	W100 Buffalo Bayou @ West Beltway 8
2280	0.1	0.2	0.4	0.7	1.0	1.0	1.3	1.5	1.5	W156 Rummel Creek @ Brittmoore Road
2290	0.2	0.2	0.4	0.6	1.0	1.3	1.6	1.9	1.9	W100 Buffalo Bayou @ Dairy Ashford Road

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Region 1--Addicks, Barker, Cypress, Spring, and Willow									
Period	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day
2-year	0.7	1.1	1.4	1.9	2.2	2.5	2.9	3.4	4.1
5-year	0.9	1.4	1.8	2.5	3	3.3	4	4.8	5.8
10-year	1	1.5	2.1	2.8	3.5	3.9	4.9	5.9	7.1
25-year	1.1	1.8	2.4	3.4	4.2	4.8	6.1	7.4	9
50-year	1.2	2	2.7	3.8	4.9	5.6	7.2	8.7	10.6
100-year	1.3	2.2	3	4.2	5.5	6.5	8.5	10.2	12.4
500-year	1.5	2.7	3.9	5.5	7.5	9	12.2	14.7	17.7

Region 2--Brays, Buffalo, Greens, Hunting, Luce, West Fork San Jacinto, and White Oak									
Period	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day
2-year	0.7	1.1	1.5	2.0	2.3	2.6	3.1	3.7	4.4
5-year	0.8	1.4	1.8	2.5	3.1	3.5	4.3	5.1	6.2
10-year	0.9	1.5	2.1	2.9	3.6	4.1	5.1	6.2	7.6
25-year	1.0	1.7	2.4	3.4	4.3	5.0	6.4	7.8	9.6
50-year	1.1	1.9	2.7	3.8	5.0	5.8	7.6	9.2	11.3
100-year	1.2	2.1	3.0	4.3	5.7	6.7	8.9	10.8	13.2
500-year	1.4	2.6	3.8	5.5	7.6	9.2	12.8	15.5	18.9

Region 3--Armand, Carpenters, Ceder, Clear, Galveston Bay, Goose, Jackson, Lower San Jacinto River, Sims, Ship Channel and Vince									
Period	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day
2-year	0.7	1.1	1.5	2.0	2.4	2.7	3.2	3.8	4.5
5-year	0.8	1.4	1.9	2.5	3.1	3.5	4.4	5.3	6.4
10-year	0.9	1.5	2.1	2.9	3.7	4.2	5.3	6.4	7.8
25-year	1.0	1.7	2.4	3.4	4.4	5.1	6.6	8.0	9.8
50-year	1.1	1.9	2.7	3.8	5.0	5.9	7.7	9.5	11.6
100-year	1.2	2.1	3.0	4.3	5.7	6.8	9.1	11.1	13.5
500-year	1.4	2.5	3.7	5.5	7.7	9.4	13.1	15.9	19.3

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Clear Creek, A100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
100	0.6	1.4	2.3	2.9	3.1	3.1	3.7	4.0	4.0	A100 Clear Lake 2nd Outlet @ SH 146
105	0.7	1.7	3.2	4.6	5.0	5.2	5.7	6.2	6.2	Mary's Creek @ Winding Road
110	0.8	1.7	2.6	3.5	4.0	4.1	4.7	5.2	5.2	A100 Clear Creek @ I-45
115	0.5	1.4	2.6	3.4	3.8	3.8	4.5	5.0	5.0	Cowart Creek @ Baker Road
120	0.5	1.3	2.5	3.6	4.2	4.2	4.9	5.4	5.5	A100 Clear Creek @ FM 528
125	0.5	1.3	2.2	3.1	3.5	3.6	4.2	4.8	4.8	Chigger Creek @ Windsong Lane
130	0.5	1.5	2.4	3.3	3.8	3.9	4.6	5.2	5.2	A100 Clear Creek @ Bay Area Boulevard
135	0.7	1.6	2.8	4.0	4.5	4.7	5.2	5.9	5.9	A100 Clear Creek @ FM 2351
140	0.6	1.6	2.9	4.2	4.7	4.9	5.5	6.1	6.1	A119 Turkey Creek @ FM 1959
150	0.4	1.1	1.5	3.0	3.4	3.7	4.2	4.7	4.7	A100 Clear Creek @ Country Club Drive
160	0.4	1.1	1.7	3.1	3.5	3.7	4.2	4.7	4.7	A120 Beamer Ditch @ Hughes Road
170	0.8	1.9	2.5	3.0	3.3	3.4	4.0	4.4	4.4	A100 Clear Creek @ Nassau Bay
175	0.6	1.5	2.2	3.4	3.8	4.0	4.4	5.0	5.0	A100 Clear Creek @ Pearland Pkwy
180	0.6	1.4	1.8	3.0	3.5	3.7	4.1	4.7	4.7	A100 Clear Creek @ Mykawa Road
200	0.7	1.8	3.0	3.9	4.3	4.4	5.1	5.6	5.6	A104 Taylor Lake @ Nasa Road 1

Armand Bayou, B100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
210	0.6	1.6	2.4	3.2	3.4	3.5	4.2	4.6	4.6	B100 Armand Bayou @ Pasadena Lake (Nasa Road 1)
220	0.6	1.7	2.8	4.2	4.4	4.6	5.0	5.4	5.4	B100 Armand Bayou @ Genoa-Red Bluff Road
230	0.6	1.4	2.4	3.7	3.9	4.0	4.6	4.9	4.9	B106 Big Island Slough @ Fairmont Parkway
250	0.5	1.3	2.2	3.3	3.7	3.8	4.5	4.9	4.9	B104 Horsepen Creek @ Bay Area Boulevard
270	0.6	1.6	2.8	3.8	4.2	4.4	4.9	5.3	5.3	B112 Willow Spring Bayou @ Fairmont Parkway

Sims Bayou, C100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
310	0.4	0.9	1.5	2.6	3.2	3.3	3.8	4.3	4.3	C106 Berry Bayou @ Nevada Avenue
320	0.4	1.0	1.9	2.8	3.8	3.8	4.4	4.8	4.8	C106 Berry Bayou @ Forest Oaks Boulevard
340	0.3	0.8	1.2	2.0	2.7	2.8	3.3	3.6	3.6	C100 Sims Bayou @ Telephone Road
360	0.4	1.2	2.4	2.8	3.6	3.6	4.2	4.6	4.6	C100 Sims Bayou @ Martin Luther King Road
370	0.6	1.6	2.6	2.9	3.6	3.8	4.2	4.6	4.6	C100 Sims Bayou @ SH 288
380	0.5	1.3	2.1	2.4	3.0	3.1	3.5	3.9	3.9	C100 Sims Bayou @ Hiram-Clarke Road

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Brays Bayou, D100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1020	0.6	1.4	2.2	2.4	3.3	3.4	3.8	4.2	4.2	NRG Park
400	0.6	1.3	1.8	2.6	3.5	3.6	4.1	4.5	4.5	D109 Harris Gully @ South McGregor Way
405	0.5	1.2	1.9	2.6	3.1	3.2	3.6	3.9	3.9	D100 Brays Bayou @ Martin Luther King Blvd
410	0.7	1.5	2.4	3.6	4.2	4.2	4.7	4.9	4.9	D100 Brays Bayou @ Lawndale Street
420	0.4	1.0	1.6	1.9	2.7	2.8	3.2	3.5	3.5	D100 Brays Bayou @ South Main Street
430	0.4	1.0	1.6	1.8	2.4	2.6	2.9	3.2	3.2	D100 Brays Bayou @ Stella Link Road
435	0.4	1.0	1.5	2.0	2.4	2.5	2.9	3.3	3.3	D112 Willow Water Hole @ Willowbend Boulevard
440	0.4	1.0	1.6	1.8	2.2	2.3	2.7	3.1	3.1	D100 Brays Bayou @ Rice Avenue
445	0.4	1.0	1.6	1.9	2.5	2.7	3.1	3.5	3.5	D112 Willow Water Hole @ Landsdowne Drive
460	0.2	0.5	0.8	1.2	1.7	1.8	2.2	2.5	2.5	D100 Brays Bayou @ Gessner Road
465	0.2	0.4	0.6	0.8	1.1	1.2	1.6	1.9	1.9	D100 Brays Bayou @ Beltway 8
470	0.2	0.4	0.5	0.6	0.7	0.9	1.3	1.6	1.6	D100 Brays Bayou @ Belle Park Drive
475	0.2	0.4	0.6	0.7	0.8	0.9	1.3	1.5	1.5	D100 Brays Bayou @ Bellaire Boulevard
480	0.2	0.3	0.5	0.8	1.1	1.2	1.6	2.0	2.0	D118 Keegans Bayou @ Roark Road
485	0.2	0.7	1.0	1.4	1.8	2.0	2.8	3.2	3.3	D100 Brays Bayou @ SH 6
490	0.1	0.3	0.4	0.7	0.8	0.9	1.3	1.6	1.6	D118 Keegans Bayou @ Keegan Road
495	0.2	0.4	0.6	0.8	0.9	1.0	1.4	1.7	1.7	D118 Keegans Bayou @ Rocky Valley

White Oak Bayou, E100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
510	0.4	1.0	1.4	1.5	2.8	2.9	3.4	4.1	4.1	Harris County Flood Control @ Brookhollow
520	0.4	0.9	1.0	1.5	2.1	2.1	2.4	2.6	2.7	E100 White Oak Bayou @ Heights Boulevard
530	0.5	1.0	1.4	1.9	2.9	3.0	3.4	3.8	3.8	E100 White Oak Bayou @ Ella Boulevard
535	0.5	1.3	1.8	2.4	3.2	3.9	5.1	5.7	5.7	E100 White Oak Bayou @ Pinemont Drive
540	0.3	0.6	1.2	2.0	2.7	3.4	3.7	4.4	4.4	E100 White Oak Bayou @ Alabonson Road
545	0.3	0.8	1.2	1.8	2.7	3.3	3.8	4.4	4.4	E100 White Oak Bayou @ Fairbanks North Houston Road
550	0.2	0.4	0.7	1.3	2.0	2.5	2.6	3.2	3.2	E100 White Oak Bayou @ Lakeview Drive
555	0.2	0.4	0.6	0.9	1.4	1.6	1.7	2.2	2.2	E100 White Oak Bayou @ Jones Road
560	0.3	0.8	1.5	2.4	3.3	3.3	3.7	4.1	4.1	E101 Little White Oak Bayou @ Trimble Street
570	0.4	1.2	2.2	3.0	3.9	4.1	4.4	5.1	5.1	E101 Little White Oak Bayou @ Tidwell Road
575	0.5	1.0	1.6	2.2	3.0	3.8	4.8	5.5	5.5	E100 White Oak Bayou @ Tidwell Road
580	0.4	1.0	1.6	1.9	2.7	3.3	4.4	5.0	5.0	E115 Brickhouse Gully @ Costa Rica Road
582	0.4	1.0	1.6	2.1	3.3	4.0	4.6	5.2	5.3	E115 Brickhouse Gully @ Hollister
585	0.4	0.9	1.8	2.5	3.1	3.8	4.2	4.8	4.8	E121 Vogel Creek @ Victory Drive
590	0.4	1.1	1.8	2.5	3.4	4.1	4.6	5.1	5.1	E117 Cole Creek @ Deihl Road
595	0.2	0.6	1.1	1.7	2.3	2.8	3.1	3.8	3.8	E121 Vogel Creek @ Gulf Bank Road

Little Cedar Bayou, F216										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
610	0.4	0.9	1.7	2.9	3.3	3.4	4.0	4.3	4.3	A104 Taylor's Bayou @ Shoreacres Boulevard
620	0.5	1.2	1.8	3.0	3.2	3.3	3.9	4.2	4.2	F216 Little Cedar Bayou @ 8th Street
640	0.7	1.8	2.6	3.7	4.0	4.0	4.6	5.0	5.0	F101 Lateral @ Sens Road

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San Jacinto River, G103										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
710	0.3	0.9	1.5	2.3	2.6	2.6	3.2	3.4	3.4	G103 San Jacinto River @ Rio Villa
720	0.4	1.0	1.8	2.7	3.1	3.1	3.6	4.1	4.2	G103 San Jacinto River @ US 90
740	0.2	0.6	1.1	1.7	2.2	2.3	2.8	3.2	3.2	G103 Lake Houston @ FM 1960
750	0.3	0.8	1.3	2.0	2.4	2.5	3.0	3.3	3.3	G103 Lake Houston Dam Spillway
755	0.5	1.2	1.8	2.6	3.0	3.1	3.6	3.9	3.9	G103 San Jacinto River @ Kingwood Country Club
760	0.3	0.7	1.0	1.8	2.2	2.3	2.6	3.0	3.0	G103 San Jacinto River @ US 59
765	0.6	1.6	2.6	3.4	5.8	5.9	6.2	6.8	6.8	G103 San Jacinto @ SH 99
780	0.1	0.2	0.4	0.8	1.2	1.5	1.6	2.2	2.2	Caney Creek @ FM 2090
785	0.2	0.4	0.6	0.8	1.0	1.1	1.6	2.0	2.0	Peach Creek @ FM 2090
790	0.3	0.6	1.0	1.4	1.7	1.8	2.2	2.6	2.6	G103 East Fork San Jacinto @ FM 1485
795	0.2	0.2	0.3	0.6	0.8	0.9	1.4	1.8	1.8	G103 East Fork San Jacinto @ FM 2090

Hunting Bayou, H100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
820	0.8	2.0	3.2	4.2	4.6	4.6	5.1	5.3	5.3	H100 Hunting Bayou @ I-10
830	0.5	1.4	2.4	4.0	4.6	4.7	5.2	5.4	5.4	H100 Hunting Bayou @ Loop 610 East
840	0.5	1.5	2.4	3.2	4.1	4.1	4.6	4.8	4.8	H100 Hunting Bayou @ Lockwood Drive

Vince Bayou, I100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
920	0.4	0.8	1.4	2.0	2.8	2.8	3.4	3.7	3.7	I100 Vince Bayou @ West Ellaine Down Stream
940	0.5	1.0	1.7	2.9	3.8	3.8	4.3	4.6	4.6	I101 Little Vince Bayou @ Jackson Avenue
240	0.5	1.2	2.1	3.3	4.2	4.3	4.8	5.2	5.2	I101 Little Vince Bayou @ Burke Road

Spring Creek, J100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1040	0.3	0.7	1.0	1.9	2.2	2.2	2.6	3.2	3.2	J100 Spring Creek @ FM 2978
1050	0.3	0.7	1.2	1.8	2.1	2.2	2.5	2.9	2.9	J100 Spring Creek @ I-45
1052	0.4	0.8	1.1	1.3	1.4	1.5	1.8	2.2	2.2	Mill Creek @ FM 149
1054	0.3	0.8	1.3	1.7	2.2	2.3	2.5	3.0	3.0	Mill Creek @ FM 1486
1055	0.3	0.7	1.2	1.5	1.7	1.8	2.0	2.6	2.6	Bear Branch @ Kuykendahl
1056	0.4	1.0	1.8	2.8	3.2	3.2	3.6	3.7	3.7	Mill Creek @ FM 1774
1060	0.4	0.9	1.3	1.5	1.8	1.9	2.2	2.8	2.8	J100 Spring Creek @ Kuykendahl Road
1070	0.4	0.8	1.1	1.7	2.0	2.1	2.4	2.9	2.9	J100 Spring Creek @ SH 249
1072	0.3	0.6	1.1	1.9	2.2	2.3	2.6	3.0	3.0	Walnut Creek @ Nichols Sawmill
1074	0.4	1.1	1.7	2.3	2.6	2.7	3.1	3.4	3.4	Walnut Creek @ Joseph Road
1075	0.4	0.6	1.1	1.9	2.3	2.3	2.6	3.2	3.2	Tomball Repeater
1076	0.5	1.0	1.4	1.9	2.2	2.3	2.6	2.9	2.9	Birch Creek @ Riley Road
1080	0.5	1.5	2.4	3.1	3.7	3.7	4.0	4.5	4.5	J100 Spring Creek @ Cypress Rosehill
1084	0.1	0.3	0.6	1.0	1.8	1.8	2.2	2.6	2.6	Threemile Creek @ Joseph Road
1086	0.3	0.8	1.3	2.1	2.4	2.4	2.7	3.0	3.0	Threemile Creek @ FM 362
1090	0.3	0.7	1.1	1.7	1.9	2.0	2.2	2.6	2.6	J100 Spring Creek @ Hegar Road

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Cypress Creek, K100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1110	0.3	0.6	0.9	1.6	2.6	2.7	3.0	3.5	3.5	K100 Cypress Creek @ Cypresswood Drive
1115	0.4	1.0	1.6	2.1	2.3	2.4	2.8	3.2	3.2	K600 Cypress Creek @ Inverness Forest
1120	0.4	1.0	1.7	2.2	2.3	2.4	2.8	3.2	3.2	K100 Cypress Creek @ I-45
1130	0.5	1.2	1.9	2.2	2.5	2.5	2.7	3.2	3.2	K100 Cypress Creek @ Kuykendahl Road
1140	0.6	1.1	1.4	1.5	1.8	1.8	2.0	2.5	2.5	K100 Cypress Creek @ Stuebner-Airline Road
1150	0.0	0.1	0.2	0.4	0.5	0.6	0.8	1.3	1.3	K100 Cypress Creek @ SH 249
1160	0.1	0.2	0.2	0.3	0.5	0.6	0.7	1.1	1.1	K100 Cypress Creek @ Grant Road
1165	0.1	0.2	0.2	0.3	0.5	0.6	0.7	1.1	1.1	K100 Cypress Creek @ Eldridge Parkway N.
1170	0.1	0.2	0.3	0.3	0.5	0.6	0.7	1.1	1.1	K100 Cypress Creek @ Huffmeister Road
1175	0.1	0.2	0.4	0.4	0.4	0.6	0.7	1.2	1.2	K100 Cypress Creek @ US 290
1180	0.4	1.0	1.4	1.5	1.6	1.6	1.8	2.2	2.2	K100 Cypress Creek @ Katy-Hockley Road
1185	0.2	0.4	0.4	0.4	0.6	0.6	0.9	1.2	1.2	K100 Cypress creek @ Sharp Road
1186	0.1	0.2	0.3	0.4	0.5	0.5	0.8	1.1	1.1	Live Oak Creek @ Penick Road
1190	0.4	1.1	1.8	2.3	2.4	2.4	2.6	3.0	3.0	K166 Little Mound Creek @ Mathis Road
1195	0.5	1.2	1.5	1.8	1.8	1.8	2.1	2.4	2.4	Mound Creek @ FM 362
1210	0.1	0.2	0.3	0.4	0.5	0.6	0.7	1.1	1.1	L100 Little Cypress Creek @ Kluge Road
1220	0.4	0.9	1.7	2.2	2.4	2.4	2.6	3.2	3.2	L100 Little Cypress Creek @ Cypress Rosehill Road
1230	0.4	1.1	1.7	2.9	3.3	3.4	3.6	4.0	4.0	L100 Little Cypress Creek @ Becker Road

Willow Creek, M100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1320	0.2	0.4	0.5	0.6	0.8	0.9	1.3	1.8	1.8	M100 Willow Creek @ Kuykendahl Road
1340	0.4	0.7	0.8	1.5	2.0	2.0	2.2	2.8	2.8	M100 Willow Creek @ SH 249

Carpenters Bayou, N100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1420	0.8	2.1	3.3	4.8	5.4	5.4	5.9	6.1	6.1	N100 Carpenters Bayou @ I-10
1440	0.4	1.2	2.1	3.2	3.8	3.8	4.3	4.5	4.5	N100 Carpenters Bayou @ Wallisville Road
1460	0.4	1.0	1.9	3.0	3.4	3.4	3.9	4.2	4.2	N100 Carpenters Bayou @ US 90

Goose Creek, O100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1520	0.6	1.5	2.4	2.9	3.1	3.2	3.7	4.0	4.0	O100 Goose Creek @ SH 146
1540	0.6	1.6	2.9	3.9	4.2	4.2	4.8	5.0	5.0	O100 Goose Creek @ Baker Road

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Greens Bayou, P100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1600	0.5	1.1	2.1	3.4	4.0	4.1	4.5	4.9	5.0	P100 Greens Bayou @ Mount Houston Parkway
1610	0.8	2.2	4.0	5.3	5.8	5.8	6.4	6.6	6.6	P100 Greens Bayou @ Normandy Street
1620	0.8	2.2	3.1	4.3	4.7	4.7	5.3	5.6	5.7	P100 Greens Bayou @ Ley Road
1630	0.5	1.4	2.2	3.2	3.8	4.0	4.4	4.8	4.8	P130 Garners Bayou @ Beltway 8
1640	0.4	1.2	1.9	2.9	3.5	3.9	4.2	4.9	5.0	P100 Greens Bayou @ US 59
1645	0.3	0.8	1.1	2.1	3.0	3.2	3.4	4.0	4.0	P100 Greens Bayou @ Beltway 8
1650	0.5	1.1	1.7	2.8	3.2	3.3	3.7	4.1	4.2	P130 Garners Bayou @ Rankin Road
1655	0.1	0.2	0.4	0.8	1.2	1.3	1.5	2.1	2.1	P145 North Fork Greens Bayou @ Ella
1660	0.2	0.4	0.6	1.1	1.4	1.6	1.8	2.4	2.4	P100 Greens Bayou @ Knobcrest Drive
1665	0.2	0.5	0.6	0.8	1.1	1.2	1.3	1.9	1.9	P100 Greens Bayou @ Bammel N Houston Road
1670	0.3	0.8	1.0	1.3	1.8	1.9	2.0	2.6	2.6	P100 Greens Bayou @ Cutten Road
1685	0.8	2.0	3.0	4.3	4.6	4.7	5.2	5.5	5.6	P100 Greens Bayou @ Tidwell Road
1695	0.3	0.9	1.2	2.0	2.9	3.2	3.5	4.2	4.2	P138 @ Aldine Westfield Road

Halls Bayou, P118										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1675	0.9	2.3	3.4	4.5	5.0	5.2	5.5	6.3	6.4	P118 Halls Bayou @ Tidwell Road
1680	0.5	1.4	2.4	3.0	3.9	4.0	4.4	4.8	4.8	P118 Halls Bayou @ Jensen Drive
1690	0.5	1.2	1.6	2.4	3.6	4.0	4.5	5.1	5.2	P118 Halls Bayou @ Airline Drive

Cedar Bayou, Q100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1720	0.8	1.8	3.3	4.3	4.4	4.4	5.0	5.1	5.1	Q100 Cedar Bayou @ SH 146
1725	0.6	1.6	2.8	3.8	4.2	4.2	4.8	5.0	5.0	Smith Gully @ SH 146
1730	0.4	1.1	1.9	3.0	3.3	3.4	3.9	4.0	4.0	Q100 Cedar Bayou @ FM 1942
1740	0.5	1.5	2.6	3.5	3.8	3.8	4.4	4.6	4.6	Q100 Cedar Bayou @ US 90

Jackson Bayou, R100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1840	0.5	1.1	1.8	2.9	3.5	3.5	4.1	5.0	5.1	R102 Gum Gully @ Diamond Head Boulevard

Luce Bayou, S100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1930	0.7	1.8	3.0	4.3	4.8	4.9	5.4	5.7	5.8	Huffman Repeater
1940	0.6	1.4	2.5	3.7	4.2	4.3	4.8	5.1	5.1	S100 Luce Bayou @ FM 2100

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Barker Reservoir, T100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
2010	0.4	1.2	2.1	3.4	4.8	5.4	5.9	6.4	6.5	Barker Dam
2015	0.3	0.6	1.2	1.5	1.5	2.2	3.1	3.6	3.6	Clodine Ditch @ Grand Mission
2020	0.3	0.6	0.8	1.4	2.6	3.1	3.5	4.0	4.0	T101 Mason Creek @ Prince Creek Drive
2025	0.3	0.7	1.4	2.2	3.6	3.8	4.2	4.9	4.9	T100 Buffalo Bayou @ Peek Road
2030	0.3	0.6	0.6	1.1	1.3	1.6	1.9	2.4	2.4	T100 Buffalo Bayou @ Greenbusch Road
2040	0.1	0.1	0.2	0.3	0.4	0.5	0.9	1.1	1.1	T100 Buffalo Bayou @ US 90
2050	0.0	0.1	0.1	0.2	0.4	0.5	0.8	1.0	1.0	Cane Island Branch @ Clay Road
2060	0.1	0.2	0.3	0.4	0.8	0.8	1.3	1.5	1.5	Willow Fork Creek @ Pederson Road
2090	0.2	0.5	0.5	0.5	0.7	0.7	1.1	1.3	1.3	Brookshire Katy Drainage District @ Morrison Road

Addicks Reservoir, U100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
2110	0.4	1.0	1.8	3.2	4.4	5.1	5.4	5.9	6.0	Addicks Dam
2115	0.4	0.8	1.3	1.8	2.5	3.0	3.2	3.6	3.6	U100 Langham Creek @ Clay Rd
2120	0.2	0.4	0.7	0.8	1.2	1.5	1.7	2.2	2.2	U100 Langham Creek @ West Little York Road
2130	0.2	0.4	0.6	0.7	1.0	1.2	1.4	1.9	1.9	U106 Horsepen @ Trailside Drive
2140	0.1	0.2	0.3	0.3	0.5	0.6	0.8	1.2	1.2	U100 Langham Creek @ Longenbaugh Road
2150	0.2	0.7	1.0	1.4	2.4	2.7	3.0	3.4	3.4	U101 South Mayde @ Greenhouse Road
2160	0.2	0.5	0.7	1.0	1.6	2.0	2.2	2.7	2.7	U102 Bear Creek @ Clay Road
2170	0.1	0.3	0.5	0.8	1.0	1.1	1.4	1.8	1.8	U101 South Mayde @ Morton Road
2180	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.8	0.8	U102 Bear Creek @ FM 529
2185	0.4	1.0	1.4	1.4	1.6	1.6	1.8	2.2	2.2	John Paul Landing
2190	0.2	0.4	0.5	0.5	0.5	0.6	0.9	1.3	1.3	U101 South Mayde Creek @ Peek Road

Buffalo Bayou, W100										
Sensor ID	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day	Site
1000	0.4	0.7	1.0	1.6	2.2	2.3	2.7	3.1	3.2	Houston Transtar
2210	0.5	1.3	2.5	3.8	4.4	4.4	4.9	5.1	5.1	W100 Buffalo Bayou @ Turning Basin
2220	0.4	1.2	2.1	3.0	4.0	4.0	4.5	4.8	4.8	W100 Buffalo Bayou @ Milam Street
2240	0.3	0.6	0.8	1.3	2.0	2.1	2.5	2.8	2.8	W100 Buffalo Bayou @ Shepherd Drive
2250	0.4	1.0	1.8	2.1	3.4	4.3	5.2	5.8	5.9	W140 Spring Branch @ Bingle Road
2253	0.4	1.0	1.6	2.4	4.0	4.8	5.2	5.7	5.8	W140-06 Buttermilk Creek @ Moorberry Lane
2255	0.4	1.0	1.8	2.0	3.4	3.9	4.6	5.2	5.2	W140-01 Briar Branch @ Campbell Road
2260	0.3	0.5	0.9	1.2	1.7	1.9	2.2	2.7	2.8	W100 Buffalo Bayou @ San Felipe Drive
2265	0.2	0.5	0.8	1.0	1.6	1.7	2.2	2.8	2.8	W100 Buffalo Bayou @ Piney Point Rd
2270	0.3	0.6	0.9	1.3	2.1	2.8	3.5	4.1	4.1	W100 Buffalo Bayou @ West Beltway 8
2280	0.4	0.9	1.7	2.1	3.0	4.0	4.4	4.9	5.0	W156 Rummel Creek @ Brittmoore Road
2290	0.4	1.1	1.9	2.8	4.4	5.0	5.7	6.2	6.2	W100 Buffalo Bayou @ Dairy Ashford Road

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Region 1--Addicks, Barker, Cypress, Spring, and Willow									
Period	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day
2-year	0.7	1.1	1.4	1.9	2.2	2.5	2.9	3.4	4.1
5-year	0.9	1.4	1.8	2.5	3	3.3	4	4.8	5.8
10-year	1	1.5	2.1	2.8	3.5	3.9	4.9	5.9	7.1
25-year	1.1	1.8	2.4	3.4	4.2	4.8	6.1	7.4	9
50-year	1.2	2	2.7	3.8	4.9	5.6	7.2	8.7	10.6
100-year	1.3	2.2	3	4.2	5.5	6.5	8.5	10.2	12.4
500-year	1.5	2.7	3.9	5.5	7.5	9	12.2	14.7	17.7

Region 2--Brays, Buffalo, Greens, Hunting, Luce, West Fork San Jacinto, and White Oak									
Period	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day
2-year	0.7	1.1	1.5	2.0	2.3	2.6	3.1	3.7	4.4
5-year	0.8	1.4	1.8	2.5	3.1	3.5	4.3	5.1	6.2
10-year	0.9	1.5	2.1	2.9	3.6	4.1	5.1	6.2	7.6
25-year	1.0	1.7	2.4	3.4	4.3	5.0	6.4	7.8	9.6
50-year	1.1	1.9	2.7	3.8	5.0	5.8	7.6	9.2	11.3
100-year	1.2	2.1	3.0	4.3	5.7	6.7	8.9	10.8	13.2
500-year	1.4	2.6	3.8	5.5	7.6	9.2	12.8	15.5	18.9

Region 3--Armand, Carpenters, Ceder, Clear, Galveston Bay, Goose, Jackson, Lower San Jacinto River, Sims, Ship Channel and Vince									
Period	5-min	15-min	30-min	1-hour	2-hour	3-hour	6-hour	12-hour	1-day
2-year	0.7	1.1	1.5	2.0	2.4	2.7	3.2	3.8	4.5
5-year	0.8	1.4	1.9	2.5	3.1	3.5	4.4	5.3	6.4
10-year	0.9	1.5	2.1	2.9	3.7	4.2	5.3	6.4	7.8
25-year	1.0	1.7	2.4	3.4	4.4	5.1	6.6	8.0	9.8
50-year	1.1	1.9	2.7	3.8	5.0	5.9	7.7	9.5	11.6
100-year	1.2	2.1	3.0	4.3	5.7	6.8	9.1	11.1	13.5
500-year	1.4	2.5	3.7	5.5	7.7	9.4	13.1	15.9	19.3

* 190 removed from report due to rain being low.