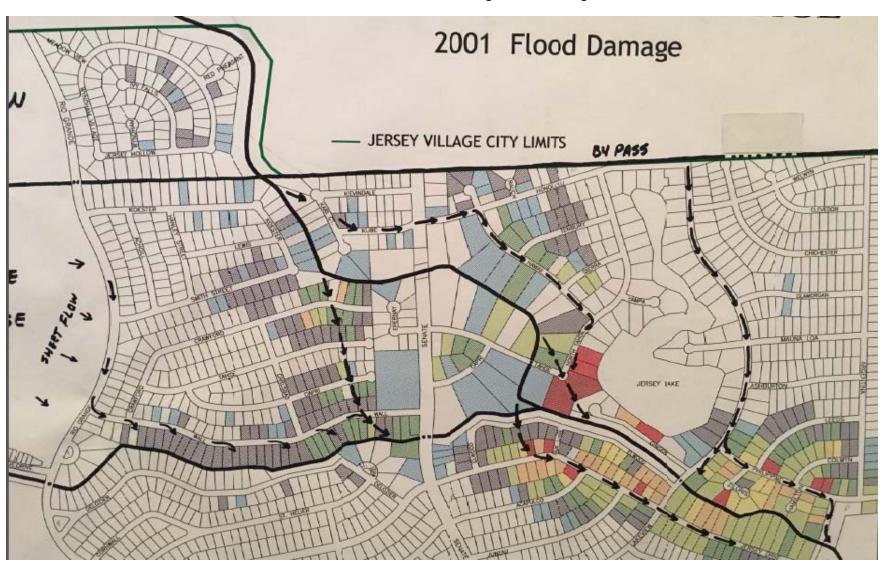
RESIDENTS WORKING TO IMPROVE JERSEY VILLAGE

Town Hall meeting hosted by Dannenbaum Engineering to seek input from Jersey Village residents about flooding issues.

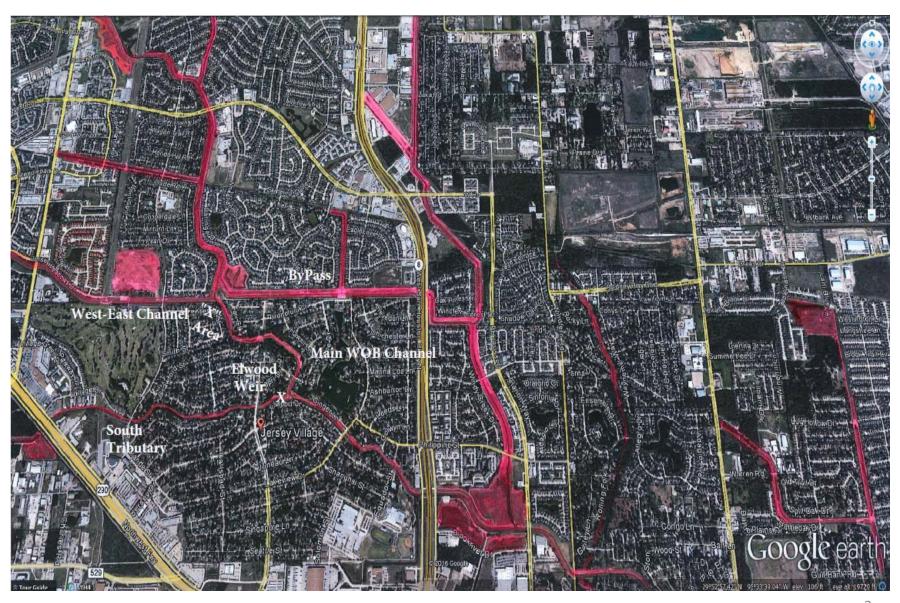


Courtesy of Community IMPACT Newspaper

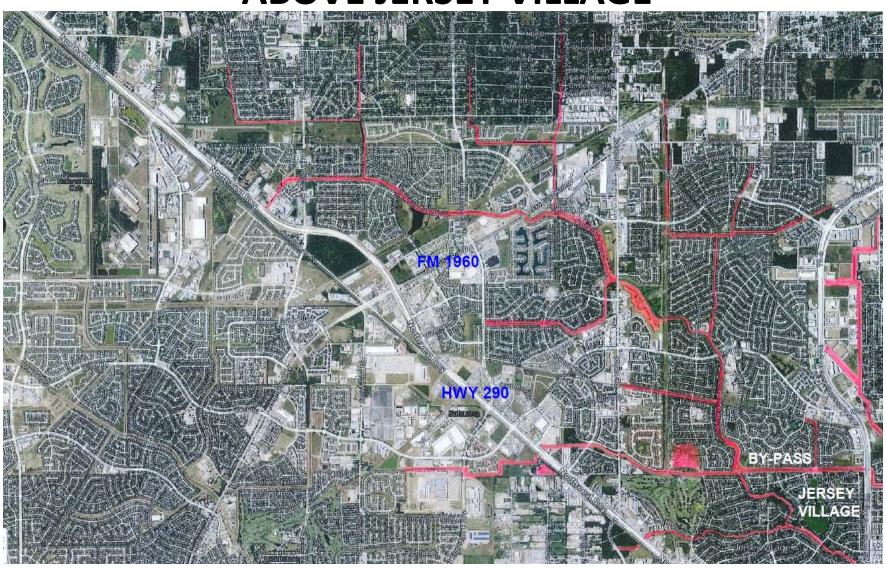
WHITE OAK BAYOU OVERFLOWS DURING T.S. ALLISON (2001)



WHITE OAK BAYOU & TRIBUTARIES IN 2016



LARGE DRAINAGE AREA - 18 SQ MILE ABOVE JERSEY VILLAGE



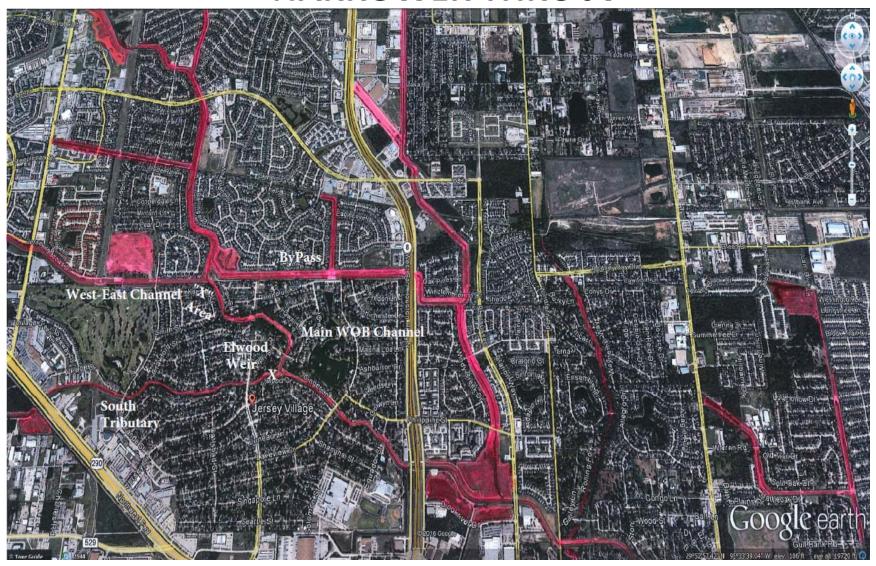
LARGE DRAINAGE INTO WOB IN 18 SQ MILE UPPER REACH

- Large drainage system feeds into narrow channel system that runs through Jersey Village
- Channels <u>above and below JV</u> are WIDE and STRAIGHT..... however
- Channels in JV are narrow, with numerous 45^o and 90^o turns.....slowing the water flow
- JV is the <u>bottleneck of WOB</u>, like the neck of an hour glass
- Channels in JV have never been widened or deepened, even though HCFCD has an approved, but unfunded project

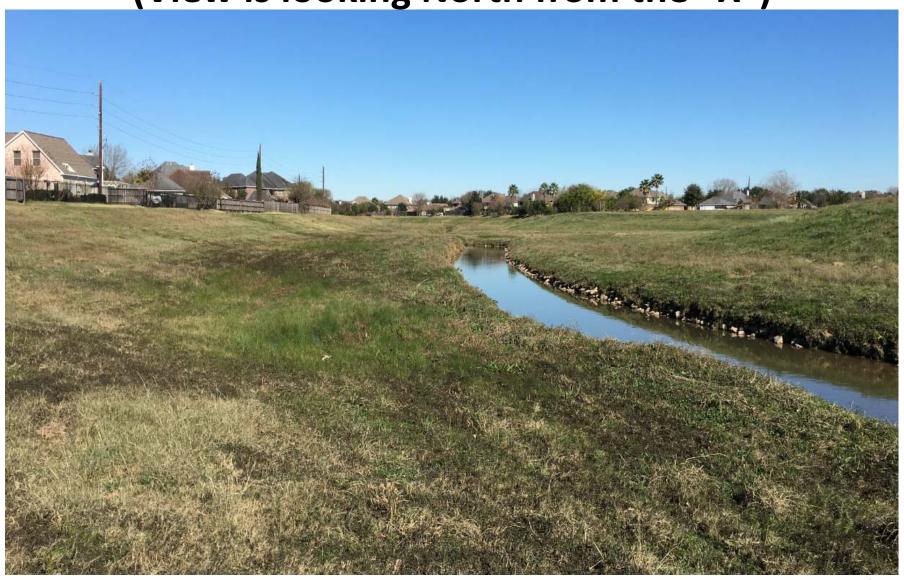
LARGE DRAINAGE INTO WOB IN 18 SQ MILE UPPER REACH (cont'd)

- Propose HCFCD & JV govt work in joint partnership to enlarge the WOB easement through JV so bayou can be widened
 - Work with homeowners to enlarge the easement
- Consider removing excess sediment, "benching" and steepening of banks with concrete or stone in narrow easement sections
- Review effectiveness of existing detention ponds above JV
- Is the County considering additional detention ponds upstream of JV?

CHANNELS ABOVE & BELOW JV ARE LARGE; BUT NARROWER THRU JV



WIDE CHANNEL JUST UPSTREAM OF JV (View is looking North from the "X")



NARROWER, WINDING CHANNEL IN JV (View is looking South from the "X")



ENTRANCE OF WEST-EAST CHANNEL INTO WOB (View is looking West from the "X")



ENTRANCE OF "BY-PASS" AT WOB (View is looking East from the "X")



NARROW, WINDING CHANNEL IN JV (View is further downstream of "X" looking South)



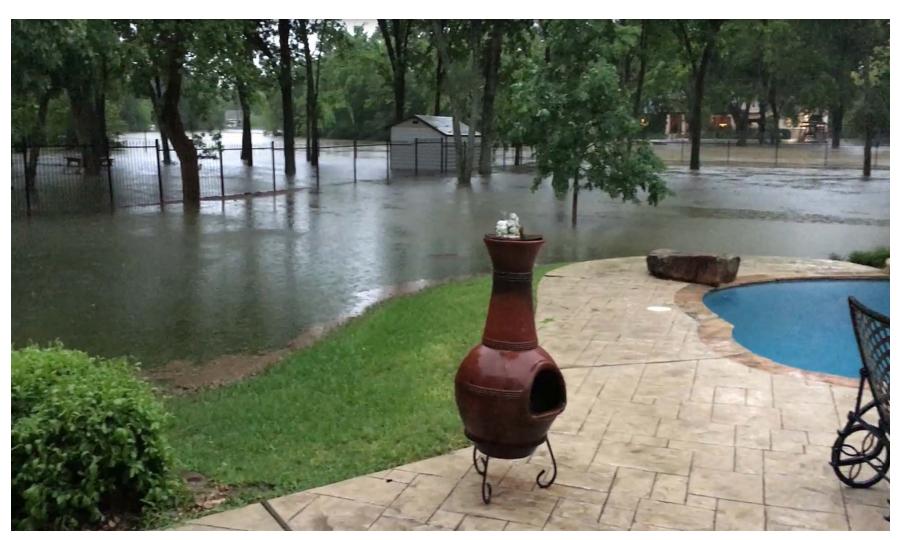
TAX DAY FLOOD 2016

- Flood waters stayed in bank in Willow Bridge area just north of JV.....however.....
- Flood waters came out of bank by 2.4 ft throughout JV
- Flooded in excess of 225 homes
- Many more "nearly flooded" homes
- JV govt contracted Dannenbaum Engineering to study flooding issues

WOB IN WILLOW BRIDGE ON MORNING OF TAX DAY FLOOD 2016 (View video)



WOB IN JV ON MORNING OF TAX DAY FLOOD 2016 (View back yard video)



WOB FLOWING DOWN HAWAII LN IN JV ON MORNING OF TAX DAY FLOOD 2016 (View front yard video)



"BY-PASS" ... WITH ROOM TO ENLARGE (View is looking East from in the "By-Pass")



"BY-PASS"

- "By-Pass" stayed in bank during Tax Day 2016 Flood by 5 – 6 ft, indicating extra capacity is available
- Entrance site to By-Pass could be improved & regraded more to the East
- By-Pass flows on strike to regional dip and has minimal grade from west to east
- As a result, water preferentially flows down the north-south main channel, not the By-Pass
- Propose a joint JV & HCFCD partnership & install a control structure to direct more water to By-Pass
- Enlarge & deepen the By-Pass to create a linear detention pond

"BY-PASS" ... WITH ROOM TO ENLARGE



"ELWOOD WEIR"... Drop Structure or Control Structure?



ELWOOD WEIR

- Higher water level witnessed by homeowners along the South Tributary since construction of the Elwood Weir (i.e., drop structure)
- It slows down & backs up water and adds to flooding from the bayou on Wall Street
- Was it added to slow water coming from Hwy 290 Expansion and Jones Rd extension?
- Reconsider the necessity of this structure and if it can be eliminated or reconfigured

NUMEROUS EROSIONAL "SLIPS" THROUGH JV (Just downstream of the "X")



NUMEROUS EROSIONAL "SLIPS" FILLING THE BAYOU THROUGH JV



NUMEROUS EROSIONAL "SLIPS" FILLING THE BAYOU THROUGH JV (Just downstream of Tahoe Bridge)



NUMEROUS EROSIONAL "SLIPS" FILLING THE BAYOU THROUGH JV

(Just downstream of Elwood Weir)



UTILIZE JERSEY MEADOW GOLF COURSE

- Build a berm around course to prevent "sheet flow" off course
- Enlarge the water hazards to detain water during floods
- Regrade flow?
- Other ideas?

IN SUMMARY

- We citizens and taxpayers serve as <u>"eyes, ears and voices"</u> specific to the Jersey Village WOB flooding issues for JV govt, HCFCD and the Commissioner's offices
- We realize the Commissioner has responsibilities covering a large bayou system....but
- We encourage "thinking out of the box" to mitigate the continual flooding in the JV area and we will assist in any way we can
- Simon Hughes, Ken Magee, Jim Pulliam, Fred Ziehe & others......