

**The Woodlands Township  
Storm Drainage Task Force Meeting  
Meeting Summary  
January 24, 2017**

**Purpose of this Document:** This document is designed to capture the essence of the discussion, and will serve to summarize the results, actions, and follow-up items agreed to during this meeting.

- **Meeting called to order - The Woodlands Township**

Task Force members and visitors were welcomed by Director and Task Force Chairman Bruce Rieser, who invited introductions by members in attendance, including: Jim Stinson, General Manager – The Woodlands Joint Powers Agency (WJPA); Albert Tomchessen, Montgomery County MUD 60, Laura Norton and Roland Johnson, Montgomery County MUD 47, and Rich Jackovac, Harris Montgomery County MUD 386; Josh Stuckey, Harris County Public Infrastructure; Jeff Lindner, Harris County Flood Control District; Mark Mooney, Montgomery County Engineering; David Parkhill, San Jacinto River Authority; David Brown, USGS; Stewart Schroeder, Cochran’s Crossing Village Association; Antonio Paz, The Woodlands Development Company; and, Don Norrell, The Woodlands Township.

- **Public Comments – directed to the committee**

Dave Harland, representing Eagle Mead subdivision, working closely with TWT on issues related to the Del Webb community drainage issues, acknowledges complexity of issues and appreciates the coordination and communication taking place. Introducing himself to this group, and recognizing there are overlapping interests, seeking clarity on how the task force moves forward; common areas include need for clear policy regarding whose responsibility it to maintain adequate drainage off The Woodlands property, The Woodlands Development Company’s property, The Woodlands residents’ property, and clear policy for communications, some process that provides an easy way for residents to put issues into the queue, monitor it, get reports on progress.

Steve Reed, introducing himself, is new to the area, asking/confirming that public comments and questions would be allowed at the end of meeting.

- **Review problem areas from the April and May, 2016, storm events (water in houses and garages) and discuss actions taken to date and planning for long term recommendations.**

- **Receive presentations from Montgomery County MUD’s (Jim Stinson) and Harris Montgomery County MUD 386 (Rich Jackovac)**

Jim Stinson reviewed the resident concerns resulting from the referenced storm events. Mr. Stinson’s key points follow:

- Approximately 130 resident concerns were recorded, including reports of water damage in homes/garages, streets/neighborhoods, cross property/lot drainage, and drainage ditches; 120 have been contacted by email/phone; funds of \$3.3M have been budgeted by WJPA/MUD for engineering/construction to address drainage issues.
- Approximately 50 homes were directly impacted by water in homes/garages

- To date, 120 residents have been contacted by phone/email; 30 sites have received detailed survey work/visual inspection – high water marks, etc.; 5 ½ miles of drainage ditch survey and cross sections. Currently, 20 drainage improvements are in review status, and 35 projects completed or ready for construction. The table below represents the location of these projects, by MUD district:

MUD District	Review / Design / Constructed
1	7
6	3
7	7
36	5
39	0

MUD District	Review / Design / Constructed
46	5
47	19
60	4
67	5
Total	55

- MUDs have identified and implemented improvement for neighborhood drainage issue. Some concern acknowledged with Bear Branch flood plain area and impacted properties/water was flowing out of banks across the street and into residential communities causing street ponding and residential flooding. It was noted that such project(s) would involve multiple jurisdictions to plan, fund, and implement. Bear Branch was estimated to exceed banks and cause water across Research Forest of 6-9 inches in depth. District 39 is generally the area east of I-45, including the Harper’s Landing community – no home damage reported. The new Del Webb community, while not in a MUD, is adjacent to the boundary of MUD 47 and has submitted drainage plan approved to meet Montgomery County guidelines; run-off on the property is subject to State guidelines, and diverts to watershed according to Texas Commission on Environmental Quality standards. Concerns were expressed that the initial plan had been issued with an estimated 3 to 4 years to complete, which ultimately should meet the standard. However, in the meantime, runoff flowing onto adjacent property is creating concerns with silting and standing water. Although residents understand that the implementation of the drainage plan will ultimately fix the problem, they are concerned about recurring draining problems until the Del Webb Drainage plan is fully implemented.

As introduction, Rich Jackovac is President of Harris Montgomery County MUD 386 and is filling in for Zach Toups (PE for Jones Carter), who is away on business. MUD 386 Board regularly has drainage and drainage projects on their agenda. Summary of current projects include:

- Drainage improvement project for extreme event swales – pending board approval, contract to be awarded for approximately \$160K in improvements to proceed in 2017.
- Storm sewer inspection and maintenance program– approximately 300,000 linear feet of storm water lines, including about 135,000 privately owned by MUD 386 (similar to WJPA,) with remainder owned by the county. District has authorized TV inspection of 30,000 linear feet on a proactive basis, expected to be complete in February; results will enable District to better understand the system’s conditions and help shape future maintenance and inspections.
- Surface drainage improvement maintenance program – District is responsible for approximately 7.5M sq.ft. of surface drainage improvements (channels, swales, and detention facilities), most of

which the District performs maintenance 10 months per year -- maintenance consisting of mowing, seeding, and fertilizing. Currently in the process of taking inventory of related assets, some newly conveyed or still in warranty.

- Surface drainage improvement inspection program – District performs visual inspections at maintenance intervals, and is currently developing a formal program that documents the condition of the facilities, and identifying encroachments or unapproved changes that could have a negative impact on system’s function. For example, residents planting trees, shrubs, building other obstructions within the utility easement(s) are notified of need to remove within a timeframe, after which the District will proceed with removal.

On administrative basis, the District maintains a tax rate of 4 ½ cents per \$100 – to pay for maintenance needed today and as the District grows, with reasonable reserves available for unforeseen needs, example, Memorial Day flood. Customers are pleased overall with the District’s performance. A good relationship with Harris County Precinct 4 is essential, as owners of much of the assets – representatives invited to attend next MUD meeting, able to address issues such as sink holes, stop signs, often these type concerns are taken care of within 48 hours, such as safety/quality of life issues. Meetings are open to the public, and meetings will be held at Lone Star College Creekside Park, to accommodate the number of visitors. It was also noted that Harris County have worked in Spring Creek to mitigate a similar occurrence by removing debris.

- **Receive an update regarding early flood warning devices that could be installed and monitored on creeks and tributaries in or near The Woodlands if funding is available.**
  - Jim Stinson reported a recent meeting with WJPA, SJRA, HCFCD, USGS – all agreed cooperation among entities would be beneficial in exploring the concept, using technical experience within the group. Staging emergency equipment by entities would also be useful, suggested contact within The Woodlands Township.
  - HCFCD to be entering in to forecasting, and expand flood warning system into Montgomery County; working with MC and SJRA to determine placement of sensors.
  - Discussion surrounding characteristics of 100-year flood event, for which systems are designed and built. Intense rainfall rate over a short period of time causes the systems to fill quickly; the flow rate out is limited by the capacity of the drainage pipe. Example given, in filling a container using a funnel, the pitcher can be tipped to fill more quickly, but the funnel spout limits the flow rate causing an overflow. Once the ground is saturated, there is nowhere for the water to go, and runoff occurs. Conclusion, flood insurance is a good idea, and we are likely to flood again should we experience another rain event like last spring.
- **Updates from committee members**

Harris County / USGS: Monitoring devices (HCFCD) currently are in 3 active sites in the area; USGS has 1 to 2 sites, and the need for 4 additional sites have been identified – locations for additional sites have not yet been determined. Devices monitor rainfall and stage in real time broadcast over a radio frequency with information available to be viewed online; updates are reported within 3 minutes of .004” rainfall and 1/10” change in rise/fall in water level. Still some discussion involved for location of additional sites; USGS also studying watershed and potential sites that would be of interest.

SJRA: State grant for SJRA, Montgomery County, and City of Conroe. The current system consists of about 12 gauges scattered around the Lake Conroe watershed and the Lake Creek watershed, and is designed to equip the Authority with information to make decisions about releasing the floodgates on Lake Conroe dam. It was not designed to cover small neighborhood areas within the Lake Conroe area. The current system is about 10 years old and has reached capacity for the number of stations, and the grant will allow for technological upgrade, more compatible with HCFCD system, to better integrate the two systems – working with Harris County to make the reporting a web based site easy for the public to navigate. At the completion of this phase of the program, technology will be brought up to a level that would allow for expansion to include many additional stations. Next phase would involve adding stations with funding and cooperation from Montgomery County and the City of Conroe. San Jacinto River Authority has agreed to operate and maintain the additional stations on behalf of Montgomery County and the City of Conroe, up to some reasonable limit, without compensation.

Goals, phase 1 – raise technology levels as described for Lake Conroe phase 2 and 3, to expand where the County and City would find it most helpful.

WPJA: Reminder that ponding in the roadway and in the curbs and gutters systems, is expected and planned for in the drainage plan. Goal is to keep it out of houses and garages, but expect it to collect and pond in the roadway, up to as deep as 18” – too deep to drive through safely. Roadway becomes the conveyance system causing temporary ponding during a heavy downpour. It is estimated to begin receding within 20 to 30 minutes. Clarification was made that Research Forest as discussed previously, is a Bear Branch flood plain issue and not street ponding.

Action items noted: Take a closer look at the Bear Branch situation, cooperation between Montgomery County and Harris County Flood Control District on the Spring Creek watershed, as it affects the residents of The Woodlands.

- **Establish timeframe for next meeting:**

Committee to meet quarterly, date will be established and communicated. In addition to meeting each quarter, additional means needed to communicate with residents. Suggestion: local MUD monthly meetings are open to residents. Each MUD sends e-mail communication called “e-blast,” and informative inserts in monthly bill. Suggestion was made to include articles in community magazine publications. Residents were encouraged to view websites, [www.harriscountyfws.org](http://www.harriscountyfws.org) and [www.usgs.gov](http://www.usgs.gov) for real time information on rain gauges in Harris and Montgomery counties.

The next meeting of the Drainage Task Force is projected to be in late April, 2017.

- **Meeting adjourned**