Texas Senate Subcommittee on Flooding and Evacuation Hearing on Interim Charge Nos. 1 and 3 Presenter: David M. Oliver, Jr.; Partner – Allen Boone Humphries Robinson LLP

TESTIMONY REGARDING FORT BEND COUNTY LEVEE IMPROVEMENT DISTRICT EXPERIENCES

Background on Levee Improvement Districts in Fort Bend County

Levee systems and their related flood control works in Fort Bend County are constructed, operated, and maintained by local government agencies called levee improvement districts and municipal utility districts (collectively referred to herein as "Levee Districts"). Levee Districts are political subdivisions of the State of Texas, which operate pursuant to the Texas Constitution and Chapters 49 and 57 of the Texas Water Code. Levee Districts are created to construct and maintain levees and other flood control improvements along rivers; to reclaim lands from overflow from the rivers; to control and distribute the waters of the rivers by straightening or improving the rivers; and to provide for proper drainage of the reclaimed lands that they protect. The Levee Districts use taxexempt municipal bonds, whose issuance is approved by the TCEQ and the Attorney General of Texas, to fund the construction of their flood control works. The Levee Districts then provide for the payment of the principal and interest on the bonds through their authority to levy and collect ad valorem taxes on all taxable property within their boundaries. Levee Districts also provide for the long-term inspection, maintenance, repair, and rehabilitation of their levee systems and other related flood control works through annual operation and maintenance tax revenues collected pursuant to their ad valorem taxing authority.

Fort Bend County levee systems and related flood control works protect more than 35,000 acres of property, more than \$10 billion worth of Fort Bend County property (accounting for approximately one quarter of the County's appraised value), and more than 120,000 residents. By the time full development has occurred in areas of Fort Bend County protected by Levee Districts, it is estimated that these levee systems will protect more than \$20 billion worth of property and more than 240,000 residents. Levee Districts in Fort Bend County will have issued more than \$375,000,000 in principal amount of publicly sold tax exempt municipal bonds, requiring debt service of more than \$750,000,000 in debt service, to finance the design and construction of their levee systems and other related flood control works. It is estimated that Levee Districts in Fort Bend County will also spend more than \$12,000,000 annually to operate and maintain their levee systems and other related flood control works, as well as to carry out their other regular business. Importantly, Levee Districts in Fort Bend County have not previously received

and do not currently receive any federal funds to construct, operate, maintain and rehabilitate their levee systems or other related flood control works.

Recent Levee Recertification Efforts in Fort Bend County

To be recognized by the Federal Emergency Management Agency ("FEMA") under the National Flood Insurance Program ("NFIP") as providing protection from the 100-year flood on the Flood Insurance Rate Maps ("FIRMs"), levee systems must meet and continue to satisfy FEMA's minimum design, operation, and maintenance requirements. Levees and other related flood control works in Fort Bend County have been engineered and constructed to the highest national and local standards. In addition to being accredited by FEMA under the NFIP as providing protection against a 100-year flood, Fort Bend County imposes additional requirements that generally allow these levee systems to achieve protection against a 250-year flood or greater. Levee systems and other related flood control works in Fort Bend County are maintained during normal and emergency conditions to the highest national standards pursuant to each Levee District's adopted Operation and Maintenance Manual that incorporate the FEMA requirements and other guidelines from the United States Army Corps of Engineers ("USACE").

In connection with FEMA's Map Modernization Program, FEMA and Fort Bend County entered into a Cooperative Technical Partners Partnership Agreement to carry out a study to update the Brazos River flood elevations and to update the FIRMs for the County. FEMA began its study in 2005 and its preliminary findings were released in late 2006. As a result of the preliminary study, Levee Districts in Fort Bend County were required to construct new levee segments and increase the height of existing levee segments by varying degrees, in some cases by as much as two (2) feet, in a very brief period of time (less than 18 months) to maintain their accreditation by FEMA under the NFIP as providing 100-year flood protection on the new FIRMs.

When the Levee Districts learned of the need for new levee segments and the increase in height of some existing levees, county-wide meetings were held to discuss the problem. Numerous options were examined, including dissolving some Levee Districts and increasing the size of others to create larger districts. Another option was that each Levee District would deal with the re-mapping on an individual basis and address their individual problems as an individual district. Eventually, through the cooperation of all interested stakeholders, the Levee Districts adopted a regional solution to the problem. Several Levee Districts on the east of the Brazos River entered into an Interlocal Agreement that removed the need for numerous individual levee systems to make expensive and time consuming improvements to internal levee systems and instead focus on improving the "perimeter levee" closest to the Brazos River to ensure it met FEMA and Fort Bend County height requirements. The Levee Districts all found that the creation of a "perimeter levee" reduced the construction time for the improvements that were needed to recertify the levee system, promoted regional cooperation and communication, and created more

comprehensive flood protection for the property all were trying to protect. Ultimately, this regional approach resulted in significant cost savings to all of the participant Levee Districts and significantly reduced the time required to certify the regional levee system. Several Levee Districts on the west side of the Brazos River followed a similar path and created their own "perimeter levee" system to realize the same synergies and advantages described above. Both groups have also entered into Interlocal Agreements to provide for the long-term maintenance and operation of their respective Perimeter Levee systems.

This massive coordinated effort in which the Levee Districts spent almost \$40 million in local funds to construct new levee segments and increase the height of existing levee segments, as well as improving other related flood control works was accomplished in a little more than a year and a half. During this process, Levee District and Fort Bend County representatives worked closely with FEMA to ensure that FEMA's mapping and modeling efforts included (i) the most current data available on conditions in the County and on the Brazos River and (ii) the results of the recently constructed and improved levee segments. Through their cooperative efforts, the Levee Districts, Fort Bend County, and FEMA representatives ensured that the Brazos River modeling and mapping process was a joint success.

All of the Levee Districts in Fort Bend County have been re-certified by FEMA in their recent floodplain re-mapping of Fort Bend County. The massive coordinated effort ensured that the majority of Fort Bend County would be shown out of the floodplain. Currently, each of the members of each of the "perimeter levee" meet to have annual inspections of their "perimeter levee" system and to discuss the maintenance and operation of these systems. The groups are now focusing a coordinated emergency operation procedure, as well as flood fighting and evacuation strategies that can be accomplished countywide.

Fort Bend Flood Management Association

In addition to their internal operations, Levee Districts in Fort Bend County conduct a regular schedule of regional and sub-regional meetings with officials from Fort Bend County, protected cities, and other Levee Districts to discuss best practices for maintaining levee systems and other related flood control works; to coordinate regional disaster response and flood-fighting efforts; and to review other matters of mutual interest, including recent developments related to FEMA's floodplain mapping and levee recertification activities, Federal and State legislative and regulatory developments, and the activities of other regional and national floodplain and stormwater management agencies.

Due to the benefit of meeting together to discuss maintaining and operating levees and the operations of Levee Districts, the individual Levee Districts decided to create a formal organization. The Levee Districts formed the Fort Bend Flood Management Association ("FBFMA"), a Texas 501(c)(6) corporation in December, 2009. FBFMA held its First Annual Flood Risk Reduction Symposium in May, 2010. This year's speakers included, George Grugett from the Mississippi Valley Flood Control Association, Edward Thomas of Michael Baker to discuss liability of owning and maintaining levees, US Senator Pete Olson, Texas Representative Charles Howard, and Texas Senator Glen Heggar. Representatives from the USACE also attended to discuss levees and upcoming changes coming to all levee owners. The FBFMA has been a huge success in sharing maintenance and operation strategies for all parties, as well as a unified voice in advocating for Fort Bend County Levee Districts at the local, state and federal levels.