RESOLUTION NUMBER 01-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WESTON LAKES, FORT BEND COUNTY, TEXAS, ADOPTING APPENDIX 13 TO THE FORT BEND COUNTY MULTI-JURISDICTIONAL MITIGATION PLAN. APPENDIX 13 REPRESENTS THE UPDATE TO THE FORT BEND MITIGATION PLAN THAT FULLY INTEGRATES THE CITY OF WESTON LAKES INTO THE FORT BEND COUNTY MULTI-JURISDICTIONAL MITIGATION PLAN.

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved hazard Mitigation Action Plan as a condition of receipt of certain future Federal mitigation funding after November 1, 2004; and

WHEREAS, the County of Fort Bend and its municipalities, in order to meet this requirement, has developed a regional, Multi-Jurisdictional Hazard Mitigation Plan covering 17 municipalities prior to the incorporation of the City of Weston Lakes; and

WHEREAS, the City of Weston Lakes has agreed by previously approved Resolution 09-06, dated April 28, 2009 to be a participant in the Fort Bend County Multi-Jurisdictional Hazard Mitigation Plan; and

WHEREAS, the City of Weston Lakes has submitted Appendix 13 as an addendum to the Fort Bend County Plan to the County, the State and FEMA for the purpose of formally establishing a FEMA approved Mitigation Action Plan for the City of Weston Lakes; and

WHEREAS, and with the approval of this annex the City of Weston Lakes will meet all of the requirements of full participation in the Fort Bend County Multi-Jurisdictional Mitigation Plan and be eligible for receipt of Federal mitigation funding;

NOW, therefore be it resolved, that the City of Weston Lakes City Council *HEREBY:*

- (a) Approves Appendix 13 as the integration of the City of Weston Lakes into the Fort Bend County Mitigation Action Plan.
- (b) Agrees to take such other action as may be reasonably necessary to carry out the objectives of the Mitigation Action Plan.

PASSED AND APPROVED by a vote of $\frac{3}{2}$ "ayes" in favor and $\frac{0}{2}$ "nays" against on this first and final reading on the 13th day of January 2010.

APPROVED:

Mary Rose Zdunkenicz, Mayor 7

ATTEST:

Kathv Niďa. Citv Secretarv

Appendix 13

City of Weston Lakes

Background

Weston Lakes is a newly incorporated City with an incorporation date of May 20, 2008 and the establishment of an elected City Council in November of 2008. The City primarily incorporated a gated sub division, Weston Lakes, included in Appendix 6, Existing and Planned Sub Divisions, of the base Fort Bend County Mitigation Plan. Weston Lakes is still in the process of building out the development with approximately 500 of 1,465 available lots still to be constructed upon. This 1,400-acre master-planned community is nestled in a natural setting among gentle rolling landscapes, hardwood trees, pecans and oaks, and a series of ponds and waterways that connect to Bessie's Creek in the north and the Brazos River in the South. Drainage is open ditch, and underground drains using natural contours and swales to move runoff water to the waterways. Maps of jurisdictional boundaries and a copy of our current FIRM are attached at <u>Tab A</u> and <u>Tab B</u>. The City council is made up of five elected alderman and an elected Mayor. The Mayor Mary Rose Zdunkewicz is the Emergency Management Director, by ordinance, a Copy is at <u>Tab C</u>. The Mayor Pro Tem, Clifton H. Aldrich is the appointed Emergency Management Coordinator. The Assistant Emergency Management Coordinator is the elected City Marshal, Ron Horowitz. The operations officer/plans officer is Alderman Trent Thomas who is assisted by Emergency Services District #4 Commissioner, Jim Minton and Communications Officer, Jeff Donofri. The logistics officer is Alderman DenisDeLuca. Specific contact information is included at <u>Tab D</u>. The City is a Fort Bend County Joint Resolution Jurisdiction. The Joint Resolution is at <u>Tab E</u>.

Weston Lakes is a 24-hour guarded community with private streets. Recreational and social amenities include tennis courts, pools, an 18-hole golf course and a country club. Weston Lakes is located on FM 1093 two miles west of Fulshear and about two miles east of Simonton. The estimated population at the time of incorporation was 2,300 with a voting population of approximately 1,700. The designed development population is in excess of 3,800. Other than the Golf Course and Country Club there is no commercial activity in the community, and other than the water and waste water facilities in the community there are no industrial type activities. The community is described as moderately upscale with strict building standards, covenants, considerations, and deed restrictions. The City continues to receive services from the County through inter local agreements and therefore is not self sufficient in all aspects of municipal services. Its population is somewhat diverse. The racial makeup of the community is predominantly white with small minorities of Hispanics and African Americans. A large population of the community is retired and elderly, with a growing younger population. As a sub division in the unincorporated area of Fort Bend County, Weston Lakes was included, albeit not as a City, in the risk assessment of the Fort Bend County Multi Jurisdictional Mitigation Plan. This Appendix responds to a requirement that the City of Weston Lakes be integrated into the current Fort Bend County Multi Jurisdiction Mitigation Plan and will become a part of the Plan until it is updated in November 2010 and the City of Weston Lakes will be a full participant in that plan.

Upon incorporation the City focused on the establishment of a financial and administration structure to comply with the laws of the State of Texas. The City owns no property and leases offices in the Simonton City Hall approximately 1 and ½ miles from the City. The City also

leases property in the Country Club for their EOC. In March and April of 2009 the City moved forward to implement the Emergency Management Processes and Procedures that would integrate the City into the Fort Bend County Emergency Management Plan, the Debris Management Plan, and the Multi Jurisdictional Mitigation Plan by ordinance and resolution, <u>Tab</u> F and Tab G. Coincident with these actions the City joined the National Flood Insurance Program by ordinance, appointed a certified Flood Plain Administrator, established flood plain permitting procedures, and prepared a local emergency management operations plan for the City that amplified the County Plan and provided City specific procedures in responding to the County Plan. The City has established an Emergency Management Committee made up of citizens, representatives of the water companies, the property owners association, the local emergency services district, the fire chief of the Fulshear Simonton Volunteer Fire Department, the City Marshal, and the Country Club owner. All meetings are open to the public and they have participated with both presence and input in the development of the plans. The City achieved NIMS compliance through NIMCAST for 2009. Basic training FEMA courses are required of all emergency management volunteers and all have completed minimum of ICS 100 and 700 with most completing 200 and 800. The EMC and the Assistant EMC have also completed 300 and 400 courses. The city is actively pursuing having CERT trained individuals to provide neighborhood contact and assistance when needed in an emergency.

Risk Assessment.

The Fort Bend County Multi Jurisdictional Mitigation Plan includes and describes all hazards that impact and affect the City of Weston Lakes and the City can add no new hazards to the plan. Additionally, the City is in agreement with the collective mitigation goals as stated in the Fort Bend County Multi Jurisdictional Mitigation Plan. In the review and update of the Plan in November 2010 the City will add specificity to mitigation goals in the County Plan to address actions that the City can take to further the goals as they apply to the City of Weston Lakes. The most important planning and mitigation action is to ensure the ability of the City to respond to all hazards with the establishment and equipping of the City EOC to include the provision of Emergency backup power to the facility.

Weston Lakes Hazards

Although addressed in the basic Fort Bend Multi Jurisdictional Mitigation Plan the overall geographic hazards are of particular concern to the City or Weston Lakes. Table 1 below provides the Weston Lakes assessment of the Fort Bend County plan identified hazards that would impact the City of Weston Lakes. The primary hazard to the City is the effect of multiple weather events both anticipated and unanticipated. The Hurricane risk to the City has been recently documented by the Hurricanes of 2005, Hurricane Rita, and 2008, Hurricane Ike. Both impacted the City with strong winds with Hurricane Ike leaving the City in the dark for in excess of four days. Structure damage and insurance losses were nearly nonexistent. Tree blow down, restoration of power, and subsequent debris removal were the major focus of recovery. Although the City area has been effected by unanticipated weather events, such as, severe thunder storms the City has only experienced short periods of loss of electricity and standing water in the drainage swales that dissipated within the 48 hour drainage criteria of the Fort Bend County Drainage District. There is a risk to the community from the unanticipated weather event of tornado. No actual tornado touchdown has been documented; however, we have experienced tornado warnings and watches on a regular basis during periods of unstable conditions. Severe thunderstorms and hail events are recurring events within the City of

Weston Lakes. There have been significant losses due to hail damage to roofs in the recent years. There have been two events in the last eight years that have had significant losses. Home with weathered roofs were most vulnerable to the hail damage.

The impact of the loss of Electrical Power to the residents of the City has had significant impact on the residents as one third of the community does not have back up power to their water system and the sanitation system for the entire community is without back up power. The risk to the residents in the area of public health is considered high. The recent loss of power during Hurricane Ike was a significant threat to public health. Currently, there is an anticipated cold weather event and power is again a major concern. An emergency generator would allow the EOC to be used as a central point for the Center Point coordination point for the restoration of power for the entire area. No other facility exists in the four city area of Simonton, Fulshear, Orchard and Weston Lakes. All future actions related to mitigation and emergency response depend on the procurement and installation of a backup generator to make our plans meet the expectations of our citizens and provide a visible reality and credibility to those plans.

Flooding

The risk of flooding within the community is documented by the FEMA prepared FIRMS and FIS for this area. There has been no recent recorded flooding or flash flooding, however, the City has drainage waterways that empty into the nearby waterways of Bessie's Creek and the Brazos River through a complex of streams and intermittent streams that pass through the City area. The flood plain maps show the limits of the 100 year flood plain to include the area on the edges of these waterways and well as new areas of the City adjacent to the Brazos River. Our neighboring City Simonton has experience severe flooding in residential areas of their city that sits adjacent to the Brazos River, the most recent in 1996. The City of Weston Lakes, although at a higher elevation could be impacted by a flooding event based upon increased flood levels on the Brazos, however there is no history of such. The City also faces the risk of local flooding due to obstructions, vegetation growth, illegal dumping of construction materials, and soil and residue build up in swales, drainage channels, and water outlets into the greater drainage waterways. Blockage of underground drains that move drainage to the local waterways of Pecan Lake and Oxbow Lakes would also cause local flooding. Most of the City is not in the 100 year flood plain.

Flooding has occurred with some frequency in the general area of the City of Weston Lakes but there are no recorded flood events within the City of Weston Lakes. The City itself is in most areas above the base flood elevations in the FIRM and the FIS. Some areas along drainage ways and waterways are in or close to the 100 year flood plain. Currently there are approximately 15 homes that are in the flood plain with elevation certificates that places their foundations above the required 18 inches above natural grade. BFEs for these areas have not been established by FEMA and there is no specific study to validate vulnerability. Fortunately, there have been no floods that have impacted this area to draw conclusions as to the severity of the potential risk. Newly proposed FIRMs have expanded the 100 year flood plain and if the proposed maps become final more than 60 homes will be within the 100 year flood plain.

The following table reflects the assessment of the hazards that impact the City of Weston Lakes as defined by the Fort Bend County Mitigation Action Plan.

City of Weston Lakes (Profiling Hazards Crosswalk paragraph 6 and 7)

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Hazard	Frequency of Occurrence	Warning Time	Potential Severity	Risk Level Medium		
Severe Thunderstorm	Highly Likely	3 to 6 Hours	Minor			
Hurricane	Highly Likely	More than 12 Hours	Substantial	High		
Tornadoes	Highly Likely	Minimal or None	Major	Medium		
Flooding	Likely	3 to 6 Hours	Limited	Medium		
Extreme Heat	Likely	More than 12 Hours	Limited	Low		
Drought	Likely	More than 12 Hours	Minor	Low		
Wildfire	Occasional	Minimal or None	Limited	Low		
Severe Winter Weather	Occasional	More than 12 Hours	Minor	Low		
Levee Failure	Not Applicable	N/A	N/A	N/A		

Table 1

The following Table provides a depiction of the historical experience of impact of major hazards on the City of Weston Lakes.

City of Weston Lakes Major Hazards Total

Occupancy Class	Total Assets	Future Assets	Major Flood	Coastal Storm Cat 4 or 5	Severe Thunder- storm Hail, Down- Burst & Tornado	Severe Winter Weather
Residential	975	476	0	0	100 (10%)	0
Commercial	2	0	0	0	1 (50%)	0
*Industrial	13		0	0	0	0
Agricultural	12	0	0	0	0	0
Religion	0	0	0	0	0	0
Government	0	0	0	0	0	0
Education	0	0	0	0	0	0
Number of Buildings	977	476	0	0	100	0
**Approximate Repair/Replacement (\$M)	330	500	0	0	.8	0
Number of People	2300	1200	0	0	200	0

^{*}Industrial sites are critical infrastructure, water plants/water wells (3), waste water plants(2), lift stations (5), telephone switching buildings (2), and natural gas regulating facility (1).

Table 2

^{**}Approximation is based upon Total Tax Appraisals

The data in Table 2 above representing the City of Weston Lakes Major Hazards Totals was derived from:

An examination of the City of Weston Lakes Appraisal District tax data along with property records are the basis for the property values in the table and represents the total taxable property in the City. Non-real estate property value was approximated and extracted based upon Fort Bend County base plan. Information on businesses and industries came from a simple survey of the few commercial and industrial operations within the City. Data to determine loss estimates came from estimated past losses due to natural disasters and projections on possible future losses were extracted from the Fort Bend County base plan. Population projections came from the Fort Bend County Economic Development Council at the time of incorporation.

<u>Mitigation Actions</u> (Specific Hazard Mitigation Action Items are at **Tab** L)(<u>14 Crosswalk</u> <u>Identification and Analysis of Mitigation Actions)</u>

Specific Mitigation Actions

- 1. It is planned that the City will implement building standards in 2010 that will require Hurricane tie downs and other wind resistance building methods to minimize damage to houses within the City. A significant number of recently constructed houses have such protections included but a City ordinance will reinforce good building practices. An ordinance will be required to enforce the standards.
- 2. The City will be implementing a citizen warning plan for anticipated events to mitigate the numbers of unwarned and unprotected persons within the community during such events. The plan will include telephone, email, and house to house notifications.
- 3. Loss of electrical power is a significant threat to the ability of the City to sustain itself as a shelter in place community. To mitigate this threat the City has worked with the Electrical Utility to establish a restoration priority for critical facilities with the City. Currently the priority has gone to the water and waste water facilities and the Emergency Operations Center. Emergency generation is available for the water plants within the MUD 81 area. Lift Stations have this year been outfitted with special connections so that they can be emptied as required in a power outage situation. Our private water company Aqua Texas is in the process of planning for the provision of backup power for the water plant under the State mandated SB 361. There is no mitigation strategy for the mitigation of a power outage impacting the sanitation system as the technology used is a pump grinder system and the State and TCEQ has not required a private company to yet implement backup power for that type system. The City has no authority to mandate such. The City does have a plan to provide comfort facilities, shower facilities and ice for the residents with planned back up power to the leased City facilities. Backup power is our most important mitigation goal.
- 4. The procurement of back up electrical generation for the City Emergency Operations Center is considered the highest priority mitigation action and goal at this time. A mitigation grant from FEMA is the desired method of funding as the City does not have the resources to procure otherwise. The backup power will allow the City to conduct Assessment, Response, Recovery and Citizen Support Operations in accordance with the City Emergency Management Plan without interruption and without becoming a burden to other jurisdictions, the County, State

and Federal support agencies. The backup power will also enable the City to maintain communication with Regional authorities and keep them informed and be informed through a consistent availability of Situation Awareness information.

- 5. Completion of the equipping of the Emergency Operations Center with additional information technology capability, communications capability for interoperable communications with adjacent cities and Fort Bend County is an essential mitigation action that will make more effective the City Emergency Response capability and facilitate public awareness and preparation in the event of any of the hazards that are a threat to the City.
- 6. The City is a participant in the National Flood Insurance Program and has instituted a flood plain administration process of permits, public education, and review. The City has a Certified Flood Plain Administrator who reviews and approves all permits for building within the City of Weston Lakes. The City has worked closely with residents and our Flood Plain Administrator to explain and when appropriate research individual issues with elevations certificates, BFEs or lack of BFEs within a designated flood prone area. There is no history of flood losses within the City Limits of Weston Lakes. The City is in the process of establishing an annual assessment of drainage channels to ensure debris, trash, and vegetation does not impact the flow of drainage there by exacerbating the flood plain issues. This effort along with the NFIP effort is intended to mitigate current flood plain issues and prevent the unnecessary building of structures within the flood plain. Permits are required for any placement of a restriction into the water ways within the City.
- 7. The City will undertake an effort to educate the general public, builders, and contractors on the general subject of emergency preparedness with a focus on our mitigation plan to gain both public awareness and public participation in the mitigation planning process, fold plain permit system.
- 8. The City established a requirement in the Flood Plain Management Ordinance that foundations in the City be a minimum of 18 inches above BFE or natural grade whichever is greater. This is 6 inches above the minimum required in the FEMA model ordinance. In areas of the City closest to the Brazos River a standard of 24 inches above BFE or natural grade has been established by subdivision platting. The City will undertake to improve the flood plain permit process that is currently in place and working; however, the builders and property owners are not always aware of the permitting requirement. The permit process can be improved to ensure builders do not begin construction prior to issuance of the permit. Inspections and other mechanisms are not in place to date and coordination with the Architectural Control Committee of the Property Owner Association is required to implement.

Prioritization (Cross Walk 16 A) The City will follow the same methodology and logic for the prioritization of mitigation actions and the description of the elements used in the Fort Bend County base plan. **Tab** L provides the presentation of the specific City of Weston Lakes mitigation actions in the Fort Bend County format.

Planning Process (Cross Walk Para 4 A, B, C)

Public Involvement

As indicated above the general public was involved in the planning process through the appointed Emergency Management Committee by resolution at <u>Tab H</u>. The participants in that Committee include business personnel, emergency first responders, water and sanitation

representatives as well as community volunteers and observers. All who attend have the opportunity to speak and influence the process. The primary purpose of the meetings were to inform and receive public input related to the overall emergency planning process, but the mitigation plan and actions were included as a subset of the overall meeting. The general public and press were invited to our meetings and our recently completed Emergency Operations Center table top exercise that was attended by the Houston Galveston USCG planner LCDR Joseph Leonard as well as elected officials of Simonton. The attendance sheets and documentation for these public events are at $\underline{Tab\ I}$. The after action report and resultant City action plan is at $\underline{Tab\ J}$ and <u>Tab K</u>. Although just beginning, emergency management activities are being reported through the local new letters, web site notices, direct contact with citizens and citizen associations, and attempts to obtain local news coverage. Additional inter governmental coordination and sharing has occurred through the Fort Bend County Coordination Committee that meets monthly with attendees coming from all of the Fort Bend County participating jurisdictions. The Fort Bend County Mitigation Plan also documents the extensive public participation in the development of the basic plan through Newspapers and other media that provides coverage to the City of Weston Lakes. In an effort to gain regional involvement and awareness the City of Weston Lakes hosted a Small City Mayors meeting for the 12 small cities in Fort Bend County and the guest speaker again was Lieutenant Commander Joseph Leonard of the US Coast Guard who serves the senior planner for the Houston Galveston area for the Federal Response. Future involvement of the public will be accomplished through public notices, town hall meetings and presentations to all of the civic and social groups within the City to include the Women's Association, the three golf associations, the Municipal Utility District, the Emergency Services District #4, and the Property Owners Association.

External planning integration (Cross Walk Para 19) The incorporation of the City's mitigation goals and actions into other County and Local emergency planning activities will be targeted to the County Emergency Plan, City Emergency Plan, MUD 81 Emergency Action Plan, County Debris Management Plan, the Fort Bend County Multi Year Training and Exercise Plan and the City's Annual Budget planning process.

Emergency Management Coordinator

Approved

Mayor and Emergency Management Director