



NEWSLETTER

VOLUME 6, No. 19

SPRING 1988

THE GOVERNOR PROCLAIMS!

by Roy D. Sedwick

On April 29, 1988, Governor William P. Clements signed two official proclamations. The first declared the Month of May as "Flood Awareness Month" and the second declared the week of June 5-11, 1988 as "Hurricane Awareness Week." The Flood Awareness Month proclamation was initiated by the Texas Water Commission and the Hurricane Awareness proclamation was initiated by the Texas Department of Public Safety. Both strive for public recognition of the hazards associated with floods and hurricanes and the need to prepare for such disasters.

The Texas Water Commission mailed out over 1,200 copies of the May Proclamation to Floodplain Administrators and Emergency Management Coordinators with a transmittal letter encouraging the initiation of a local flood awareness campaign during May. A "Helpful Hint Sheet" which contained useful life and property saving suggestions, was also provided. We are encouraging all Floodplain Administrators to contact their local news media and ask them to promote flood awareness. Working through our Public Information Office, we were able to secure commitments from Commissioners' Courts in Bexar, Harris and Dallas Counties to proclaim a week in May as local flood awareness week. Let's hope many more follow suit. DPS is also involved in an extensive mail out and media campaign with their Hurricane Awareness Proclamation.

A special thanks to Governor Clements for signing the Proclamation and supporting TWC efforts and thanks to all of you who engaged in promotion and awareness activities during May, and for that matter, throughout the year!

TEXAS FLOODPLAIN MANAGEMENT ASSOCIATION - OFF AND GROWING!

By Roy Sedwick

The first organizational meeting of the Texas Floodplain Management Association was held in Austin, Texas on May 4, 1988. The association LOGO was displayed and officers were selected to fill the top four positions on the Board of Directors. The Association's new Chairman is Steve Vaughn, City of Pampa; Vice-Chair is Harold Barr, City of Longview; Secretary is Cathy Schlegel, Floodplain Consulting Services; and Treasurer is Joyce Richmond, Matagorda County.

Membership applications are being mailed out and the Association is seeking members to serve in the 8 regional positions on the Board of Directors and on the various committees. This Association has the potential to be the largest of its kind in the nation. With all of your support, we can make TFMA work for us in elevating the standards of floodplain management in Texas and provide recognition for all those who have dedicated their lives to public service in the fields of floodplain management and emergency management. Throw your hat in the ring and let your voice be heard.

JOIN NOW! More information on pages 13-14 of this Newsletter.

PROCLAMATIONS AT CENTERFOLD

TEXAS FLASH FLOOD CONFERENCE—A GREAT SUCCESS! *By Roy D. Sedwick*

The First Texas Flash Flood Conference held in Austin, Texas on May 3-4, was a great success. With 137 participants, it was our largest conference effort to date. The Conference Agenda was highlighted by morning presentations on NFIP - New Directions, Flood Loss Reduction, and Flash Floods; followed by afternoon workshops on Flood Warning, Flood Insurance Marketing, Federal Agency Permits and Assistance, and Disaster Response and Recovery. The second day of the conference included presentations on Flood Insurance and Public Awareness, Disaster Response and Mitigation Plans followed by morning workshops on Permits and Subdivision Platting, Flood Zone Determinations, and Dam Safety.

Speakers and workshop panelists included Roy Sedwick, TWC; Jim LeGrotte, FEMA; John Croslin, National Weather Service; Brian Morganroth, City of Austin; Chief Oscar Carpenter, San Marcos; Bill Taylor, Upper San Marcos Watershed District; Doug Bartosh, Soil Conservation Service; James Graham, U.S. Corps of Engineers; John Gourley, U.S. Fish & Wildlife Service; John Clark and Sharon Nalls, American Red Cross; Chief Raymond Holloway, City of Kerrville; Bill Barton, NFIP-CSC; Bob Gibson, DPS; Eric Friedrich, Texas Department of Highways and Public Transportation; John Ivey, Albert Halff, Inc.; Warren Samuelson, TWC; Wayne Graham, U.S. Bureau of Reclamation; Larry Spenser, Landata Corp; David Tandy, Stewart Title Austin, Inc.; Cathy Schlegel, Floodplain Consulting Services; Bonita Hamilton, USAA-Flood; Dave Griffin, State Farm Insurance; JoAnn Davis, State Farm Insurance; and Jim Allen, Delta-Lloyds Insurance.

The Conference was also highlighted by a "Vendor Display." Bob Wademan and Cathy Schlegel of Sierra-Misco provided information on flood warning systems; Mel Holland and Jess Livesay of Handar provided information on flood warning systems and displayed some of their equipment; Jerry McKinney of Presray displayed information on flood proofing equipment and Larry Stewart of Whelen Engineering Company provided information on siren systems.

If there was any negative aspect to the conference, it was that I had too much expertise in too short of a time period. Some of the speakers were rushed in their presentations and there was not enough time for questions. For this, I apologize to my speakers and participants. To overcome this problem, the next two conferences will be a full 2 days in length.

To all those who spoke and to everyone who participated and especially to the "Vendors" - Sierra-Misco, Handar, Whelen, and Presray, my sincere thanks to all for your support.

The next conference will be the Texas Flood and Hurricane Conference. Tentative date and place is July 26-27, 1988 in Houston, Texas. Watch for details to follow!

STATE COORDINATOR'S PROFILE

By Roy Sedwick

In this issue of the newsletter, I will profile the Floodplain Management Program in the City of Galveston, located on the coastal barrier island of Galveston County. Galveston was first chartered in 1830 and now boasts a year-around population of 62,667 with seasonal peaks to 300,000.

The City occupies almost the entire area of Galveston Island except for a few small land areas on the west end and Galveston Island State Park. The island, approximately 2 miles off the Coast, is about 28 miles long and from 1/2 to 3 miles wide at its widest point. It is bounded on the north by West Bay, on the northeast by Galveston Bay and Galveston Channel, on the east and south by the Gulf of Mexico, and on the west by San Luis Pass. The City is connected to the mainland by IH-45 (Galveston Causeway) and the San Luis Pass Bridge, which was completed in 1966. Ferries connect Galveston to the Bolivar Peninsula.

The climate of Galveston is typical of the humid subtropical climate zone. Average annual rainfall is approximately 43 inches, with the heaviest rains usually occurring during hurricane season, which extends from June through October. The topography of the City is generally low, with natural elevations west of the seawall averaging about 6 feet, and raised grade elevations from 14 to 18 feet adjacent to Seawall Boulevard. With the City sitting on a barrier island, surrounded by water, you can guess that Galveston is no stranger to flooding. Principal flood problems result from tidal surge and associated wave action caused by hurricanes and tropical storms. Heavy rain from these storms, as well as summertime thunderstorms, can produce brief periods of street flooding and ponding of surface runoff in low areas. Galveston has been visited by several major storms which have brought death and destruction. The following are brief descriptions of several significant storms:

September 7-10, 1900 - This severe hurricane crossed the Texas Coastline near San Luis Pass, about 20 miles south of Galveston. The peak of the storm surge that was generated by this hurricane and inundated the City for seven hours reached about 14.5 feet NGVD - Galveston's beach front was badly eroded to 300 feet inland and the first 2-5 blocks of the eastern, southern, and western sections of the City were swept over by the storm surge. This storm killed an estimated 6,000 of the island's habitants and completely destroyed 3,600 homes. Not one building on the island escaped damage, and property damage was estimated at more than \$30 million.

The citizens of Galveston responded to the destruction by starting construction in 1902 on a seawall to protect the City against future storms. The first phase of the seawall totalling 17,593 feet was completed by Galveston County in July 1904 at a cost of \$1.5 million. While the county seawall was being constructed, the U.S. Government authorized construction of an additional 4,935 feet of seawall along Fort Crockett. This section of the wall was completed in October, 1905 at a cost of \$295,000. The seawall was soon subjected to a test!

July 21, 1909 - An intense hurricane of small diameter crossed the Texas Coast about 45 miles southwest of Galveston near Freeport. The storm took 41 lives in Texas and caused approximately \$2 million in damage. At Galveston, tides were estimated at 10 feet NGVD and all structures not protected by the seawall were damaged or destroyed. After the storm, the seawall was redesigned and rebuilt.

August 16-17, 1915 - A very severe hurricane, with a radius of 32 nautical miles, made landfall near Matagorda, approximately 40 miles southeast of Galveston. Storm surge at Galveston, reached an estimated 12.7 feet NGVD, with 16.1 feet reported at the causeway. Storm tides inundated parts of the City for more than 40 hours. Crests of breaking waves reached 21 feet at the seawall, throwing great quantities of water over the wall and causing extensive damage and scouring of pavement and building foundations. The seawall proved the adequacy of its design in protecting the City from a repetition of the damage it had experienced in 1900. In Galveston the loss of life from this storm was 12 and the total property damage was estimated at \$4.5 million, both figures many times less than that caused by the 1900 hurricane.

September 14, 1919 - Although this hurricane made landfall near Corpus Christi, about 140 miles south of Galveston, the storm produced a surge of 8.8 feet above

normal on Galveston Island. The downtown area of Galveston was flooded and damages were estimated at \$1 million.

August 30, 1942 - This storm went inland near Port O'Connor, about 120 miles southwest of Galveston but brought the City a tidal surge elevation of 6.3 feet. The southwestern portion of Galveston Island was inundated, and some residential and business sections of the City were flooded.

July 27, 1957 - Hurricane Audrey brought tides of 6.0 feet at Galveston Island 2 to 3 hours before the center of the storm made landfall east of Port Arthur. Almost all of Galveston's downtown streets were flooded; some in the Strand area near the waterfront were under 2 feet of water. Boats were swept up on streets in the Galveston Yacht Basin area, and the Seventeenth Street Pier was washed away.

September 11, 1961 - Hurricane Carla was one of the most devastating storms to hit the Texas Coast. The 30 to 40 mile diameter eye to this immense hurricane crossed the shoreline more than 100 miles south of Galveston near Port O'Connor. At Galveston, four day rainfall totals reached 15.32 inches and maximum tides reached 9.3 feet NGVD. High tides crossed the unprotected bay shore and inundated the City. Galveston was isolated when the tide swept over both the old causeway and the approach to the new causeway. Areas of elevation less than 9 feet were flooded; these included a major part of the business and industrial area in the northern portion of the City. In the area behind the seawall, no lives were lost and no buildings were destroyed. Hurricane surge overflow did enter the City around the west end of the seawall and flooded many residential areas at the west end of the City. Of the total damage estimated at \$43 million in Galveston, \$29.8 million was due to tidal overflow.

July 25, 1979 - Tropical Storm Claudette brought record rainfalls and wide-spread flooding to southeast Texas. Estimated tides were between 4-5 feet in Galveston Bay and almost 3 feet on the open coastline. Heavy rains flooded many streets in the City and washed out roads in the west end subdivisions, while the island's protective sand dunes sustained appreciable damage from the runoff.

August 17-18, 1983 - Hurricane Alicia crossed the Texas Coast near San Luis Pass at the southwest tip of Galveston Island. Winds near the center of the storm were estimated at 115 mph. Along the open Gulf Coast, surge tide elevations ranged from about 8.5 feet near High Island at the eastern end of Galveston County to a

maximum of 13.7 feet on the western shore of San Luis Pass near the point of landfall. In the upper reaches of Galveston Bay, surge elevations ranged from 8 to 10 1/2 feet. On Galveston Island, flooding occurred in the City from 8 inches of rain. Most problems were limited to major street flooding but on the west end of the island beyond the seawall, destruction was extensive. Many of the beach front homes were totally destroyed by wind and tidal surge. High water isolated Galveston Island making total evacuation impossible. Property damage in Galveston County was estimated at over \$100 million.

In recognition of this major flood threat from hurricanes, tropical storms and heavy rainfall events, FEMA first published Special Flood Hazard Boundary maps for the City of Galveston on May 26, 1970. Detailed Flood Insurance Studies were completed in May, 1971 and the City was provided with Flood Insurance Rate Maps containing base flood elevation data. Several revisions to the maps have occurred, and the current maps, dated October 16, 1984, reflect flood elevations adjusted for wave height. The City has a variety of flood zones. Along and in front of the seawall, the floodplain is delineated as a V-Zone with an elevation of 19 feet NGVD. Behind the seawall are areas of Zone B and C and then much of the City residential area and Galveston Port is located in a Zone A with an elevation of 11 feet NGVD. Velocity zones at the west end of the island near San Luis Pass carry surge elevations of 20 feet NGVD.

In response to the flood potential, Galveston first joined the Emergency Phase of the National Flood Insurance Program on May 19, 1970 and converted to the Regular Phase of the Program on May 7, 1971. By virtue of this participation, Galveston established a major floodplain management program to blend with its structural flood control measures. Over the years, the program has experienced changes and improvements. After "Alicia", a moratorium on building and reconstruction was declared to give officials time to evaluate the causes of building failure and assess the City's Code requirements. The City adopted new Southern Standard Building Code requirements with wind standards up to 110 mph. Changes addressed pile size and embedment, strapping, bracing, roof sheathing size, etc. In 1987, additional changes were made to building codes requiring all structures to meet windload criteria to 140 mph. These new requirements address all critical elements of anchoring, bracing and connections.

The City has developed an effective permit system to deal with development. Before development can proceed within Galveston, a Building Permit Application must be filled out and filed with the Building Department. Then Paul Grabel, the Chief Building Official or Phil Young will review the application and determine if the

development is in a floodplain and will determine the proper floor elevations above the base flood elevation. All of these determinations are clearly stated on the permit application. The application must be submitted with two sets of plans which contain a detailed site or plat plan as well as information on foundations.

The application and plans are then forwarded to 8 departments for proper review and coordination of all City requirements.

There are three inspections required. A foundation inspection is first, followed by a frame inspection. City inspectors will not perform the frame inspection until the builder furnishes an elevation certificate showing floor elevations in compliance with permit requirements. After the final inspection, the City will issue a certificate of occupancy if all is in compliance. For structures in V-Zones, the City requires an engineer's seal on plans with detailed information on piling size and depth. All information is kept in permanent record files.

The City of Galveston has also developed extensive zoning standards, subdivisions regulations and a beach and dune management plan.

Beach and Dune Management policies address 36 different problems. Several of the more important policies are: A program of dune improvement including filling in major breaches, constructing sand fences, and planting vegetation; all public access through the dunes should be limited to designated access roads and dune walkovers; use grants to acquire land on the unprotected West End for parks; areas adjacent to the Gulf of Mexico should have a disclosure statement which identifies the projected rate of erosion in the area, and that erosion may have an adverse impact on property and structure; all lots in new subdivisions should be set back from the vegetation line to allow for ten years of shoreline erosion; and dune areas in all subdivisions should be dedicated to public use for protection and maintenance. If you are interested in the beach and dune program, you may wish to contact Mike Elms in the Planning and Zoning Department.

Certainly the program as it exists today in Galveston can stand as an example for all our Coastal communities. The City of Galveston is to be congratulated for its insight in developing such comprehensive programs protecting the natural and man-made resources which make Galveston a unique and attractive area of Texas. Special thanks to Phil for his help and assistance in developing the article. Again, congratulations to all for a job well done. Next quarter, I will profile the City of New Braunfels.

SUSPENSION LOOMS - PART II !

by Keith Krause

In our last issue we published a list of 47 Texas communities facing suspension from the NFIP on May 4, 1988. The communities were to be suspended for failure to update their local Floodplain Management Ordinance / Court Order to comply with changes to the NFIP regulations that became effective October 1, 1986. That list included communities qualified under *Section 60.3(c), (d), (e) or (d+e)* of the regulations. Forty-four of those communities took action to comply, three did not and were suspended. (Coryell County, City of Lumberton, Village of Quintana)

Seventy-nine additional communities, affected by *Section 60.3(b)*, are facing suspension later this year if they do not take action by the dates indicated below. The Chief Elected Official of each community has been notified of the action required to avoid suspension.

DEADLINE AUGUST 16,1988

Alto, City of
Alvarado, City of
Anton, City of
Baird, Town of
Bartlett, City of
Bayview, Town of
Blooming Grove, City of
Bowie County
Bracketville, City of
Brewster County
Briar, City of
Brooks County
Brownell, City of

Calvert, City of
Cameron, City of
Cherry Hill MUD
Clarksville, City of
Clifton, City of
Colorado County
Cotulla, City of
Daisetta, City of
Dublin, City of
Duval County
Edcouch, City of
Ferris, City of
Franklin, Town of

Frona, City of
Fruitvale, City of
Gregg County
Groveton, City of
Gruver, City of
Hardin, City of
Haskell County
Hawley, City of
Hebron, City of
Hidalgo, Town of
Holliday, City of
Hudspeth County

DEADLINE SEPTEMBER 2,1988

Joaquin, City of
Kinney County
Knox City, City of
Kountze, City of
La Grulla, City of
La Vernia, City of
Ladonia, City of
Ranson Canyon, Town of
Limestone County
Mabank, City of
Malone, City of
Marfa, City of
Marion, City of
Morton, City of

Muleshoe, City of
Naples, City of
Nash, City of
Needville, City of
Newton County
Nocona, City of
Normangee, City of
Primera, City of
Prosper, City of
Quanah, City of
Reno, City of
Rusk County
Sachse, City of
San Augustine, City of

San Diego, City of
San Saba County
Seagraves, City of
Shamrock, City of
Shepherd, City of
Starr County
Teneha, City of
Trinidad, City of
Trinity, City of
Tuscola, City of
Valentine, Town of
Van Horn, Town of
Warren City, City of

What does SUSPENSION mean for your community? First and foremost, flood insurance may not be sold or renewed within suspended communities. Within the initial list of non-compliant communities there were 4,429 flood insurance policies covering \$302 million property. Can your local government afford that liability?

Suspended communities are also subject to the provisions of Section 202(a) of Public Law 93-234, as amended. This section prohibits Federal officers or agencies from approving any form of loan, grant, subsidy, disaster assistance loan or grant (in connection with a flood), or any other form of direct Federal assistance for acquisition or construction purposes within your community's Special Flood Hazard Areas. Included in this prohibition is the making of mortgage loans guaranteed by the Veterans Administration or insured by the Federal Housing Administration. If you are suspended, you will not qualify for federal disaster assistance in the event of a flood!

To avoid suspension, your community must adopt the required floodplain management measures; and forward two copies to FEMA Region VI and one copy to Texas Water Commission.

We realize this is a dynamic problem and updated ordinances are being received daily. Our list is as current as we could make it. If you have already taken action, please disregard this article. If you need help, please call us. Don't wait for the next flood, before you take action.

DROUGHT NOW ! FLOODS LATER ?

By Roy D. Sedwick

Right now it is difficult to talk or even think about floods and flood awareness because much of the State is suffering what has been described as a "Moderate intensity" drought. Lack of rainfall has dried up much of our rangeland, and ranchers unable to obtain feed have been forced to sell cattle prematurely. Twenty-seven Texas counties have asked the Governor to declare them as disaster areas due to the intensifying drought. Counties asking for drought assistance are: Atascosa, Baylor, Coleman, Cottle, Crockett, Culberson, Dimmit, Duval, Frio, Irion, Jim Hogg, Jim Wells, Karnes, Kinney, La Salle, Live Oak, McMullen, Medina, Reagan, Reeves, Starr, Throckmorton, Tom Green, Upton, Uvalde, Webb, and Wilson. Of these 27 counties, five (Baylor, Live Oak, McMullen, Duval, and Starr) requests have already been sent to Washington seeking Federal Disaster Declarations. Other county requests are awaiting damage assessment reports.

The lack of rain has been staggering. The Fort Stockton area has received only 0.2 of an inch of rain since January, compared with normal rainfall of 3 to 4 inches. In Duval County it has rained less than an inch since May of last year. It has even been dry in many of our wetter coastal counties with Houston reporting a rainfall deficit of 7.39 inches. The worst area is the southern and western portion of the State where the last general rains were in June 1987. Del Rio (Val Verde County) has recorded only 18% of its normal rainfall.

But, the rains will come again and when they do the potential for floods will be high. With soil surfaces hard and void of most vegetation such as grasses and weeds, runoff from heavy rains can be quite rapid. Historically, most of our major droughts have been broken by near record rainfalls and flooding. The long drought of the 1950's was broken by extremely heavy rains and floods in April, May, and June of 1957. Some experts do not foresee a lengthy drought. Joel Gunn, an archaeologist and associate professor of anthropology at the University of Texas, San Antonio, who observes sunspots and their long-term meteorological effects, predicts that the South Texas drought will continue through mid-summer, but tropical storms on the Gulf Coast should then bring relief. Ron Stagno, meteorologist with the Houston office of the National Weather Service does not believe the area will see a repetition of the torrid, dry summer of 1980 because atmospheric conditions are not the same as conditions which led to the long dry spell. For any substantial rainfall, the area must await the arrival of the tropical systems, including the easterly waves which usually begin with the advent of the hurricane season June 1.

You may or may not believe in long range predictions, but it will rain again. In fact some areas of the State were blessed with ample rainfall during late April and into May.

On April 29, Galveston County was drenched with more than 4 inches of rain, breaking an 83-year old record of 3.93 inches for rainfall in a 24-hour period set in 1905. On the western end of Galveston Island, streets of Jamaica Beach were flooded when an unofficial total of 5 inches of rain fell. On May 10-11, thunderstorms dropped heavy rain across Tom Green County (one of the same counties seeking drought assistance). Runoff from these heavy rains swept through a low-water crossing on the Concho River in Concho County, taking the life of a 67-year old San Angelo woman who was camped in the area. Reports of 5 to 6 inches of rain came in from several areas of the County.

A line of thunderstorms moved through Central Texas on May 20-21 dropping heavy rain in several hill country counties. Fredericksburg (Gillespie County) was the hardest hit area with unofficial rainfall totals of 7 1/2 inches and heavy hail. Many low water crossings in Kerr County were closed due to heavy rains.

THE LESSON! Don't let this dry spell spread apathy over your community. Keep talking floods and doing public awareness so that when the rains and floods do come, you and your community will be prepared.

WANT TO MAKE A SAND DUNE?

by Jim LeGrotte

If you want to grow a sand dune, you will need as primary ingredients an endless supply of blowing sand, sea oat seeds, great quantities of hope and patience.

In late September, sprinkle the sea oat seeds over the sand near the seashore and hope that those which are not eaten by birds and rodents are buried in less than six inches of sand. Wait until spring and hope there has been enough rain to cause the seeds to germinate and not enough rain to wash the seeds out to sea or to uncover what few seeds are left so that they too may be eaten. Wait again for the primary shoots to poke through the sand and hope that primary tillers (underground stems called rhizomes) and nodes are extending outward through the sand and producing new surface leaves or primary shoots. When sea oat grains and sand have accomplished the above, hope that the new seedlings are not sand-blasted, buried, blown out or washed out. This is important because the new sea oats do not become firmly established until their second growing season.

It will take these new plants another three to five years to reach maturity and a point at which they will produce new seeds, then begins another four to six year cycle.

You're not through yet. Hope that the new plants trap sand, that new plants grow, that this process or cycle continues for many years and that there are no hurricanes. If all this happens, you will have grown a sand dune. You will have aided in filling an important niche in the beach environment by stabilizing barriers which will protect inland areas from storm winds and waves.

Sea oats along our coast are found from the southern Virginia coast along the Atlantic and Gulf Coasts as far south as the State of Tobasco, Mexico.

The next time you visit the beach, take time to examine sand dunes and to appreciate the hardy sea oat, but don't do anything to disturb their growth.

It generally takes but a few minutes for us to destroy what it has taken nature years to create. Nature also seems to know better than we what is needed and will provide for our needs if we can only learn to recognize and accept the services. We must also learn to preserve rather than destroy the areas nature has provided for our needs.

SOURCE: Texas Parks & Wildlife, August 1987, "SEA OATS"

NEW FEATURE *By Keith E. Krause*

We are very pleased to introduce a new feature to our Newsletter,

"Flood Follies" by David Terry. David is a native Texan, born in Dallas, and is currently completing an Internship with the Texas Water Commission as part of his Masters Degree in Environmental Science. He is also a talented,

aspiring cartoonist and will be a continuing contributor to future Newsletters.

David's work has appeared in Wichita Falls Medicine, and Wichita Falls Times and Record News. He has also designed a logo for his school and, last but not least, he designed the logo for our new Texas Floodplain Management Association (TFMA) that appears on page 12 of this issue. Let us know if you like his work.

FLOOD FOLLIES

David Terry





OFFICIAL MEMORANDUM
STATE OF TEXAS
OFFICE OF THE GOVERNOR

The state of Texas is traversed by countless miles of rivers and watercourses which periodically overflow and cause inundation by flood waters.

These areas of inundation, known as flood plains, have historically attracted large numbers of people and developments due to the easy accessibility to water, transportation and fertile ground.

People who settle in these areas and their developments have in the past and will continue to be subject to the severities of flood waters which are devastating to both life and property.

There is a need for people to gain an understanding of the flood hazards which exist in our state and learn how they can prepare, respond and recover from floods.

There are many government agencies and publications available to assist citizens in preparing for floods, mitigating their losses and insuring their belongings.

It is fitting that we recognize the need to become more aware of the hazards of floods in order to protect the health, safety and welfare of the citizens of our state.

Therefore, I, William P. Clements, Jr., Governor of Texas, do hereby designate the month of May, 1988, as:



FLOOD AWARENESS MONTH

in Texas and urge appropriate recognition thereof.

In official recognition whereof, I hereby affix my signature this

29TH day of APRIL, 19 88.

W.P. Clements, Jr.
Governor of Texas



OFFICIAL MEMORANDUM
STATE OF TEXAS
OFFICE OF THE GOVERNOR

Although during the past several years there has been a lack of hurricane activity along the state's Gulf Coast, coastal residents and visitors are encouraged to consider the consequences of a hurricane or tropical storm and make themselves prepared for these storms which will inevitably strike our coastline.

Local governments and private citizens are encouraged to take the initiative in learning about these destructive forces of nature and find ways to lessen the effects of these violent storms. Assistance with hurricane preparedness is available from state, federal and local governments, as well as from the private sector.

The Division of Emergency Management, the National Weather Service and the Insurance Information Institute are joining local governments and businesses in promoting hurricane awareness and preparedness in the coastal communities of Texas.

With hurricane season officially beginning June 1, it is fitting that we recognize the need to increase awareness and preparedness.

Therefore, I, William P. Clements, Jr., Governor of Texas, do hereby designate the week of June 5-11, 1988, as:

HURRICANE AWARENESS WEEK



in Texas and urge appropriate recognition thereof.

In official recognition whereof, I hereby affix my signature this

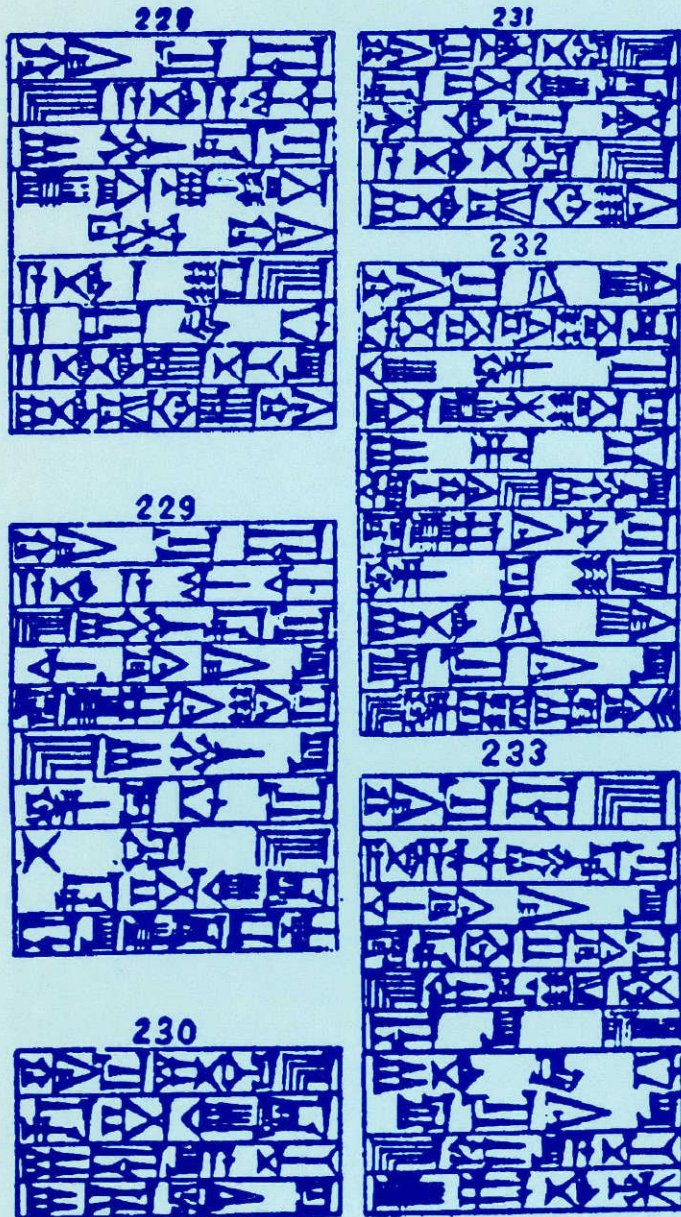
29TH day of APRIL, 19 88.

W.P. Clements, Jr.
Governor of Texas

THE GOOD OLE DAYS ! by Jim LeGrotte

As planners, floodplain administrators, elected officials, floodplain specialists and others involved in floodplain management, we have all been reminded of "the good ole days" before all the development restrictions existed. We could do what we wanted with OUR land.

The good ole days (as described by each of the persons making reference to the desired ole days) are chosen for the time THEY want - before FEMA - before Executive Orders 11990 and 11988 - before the requirement for hurricane clips and hangers - and so on. I choose the code of law below.



It is the earliest known code of law and was the building code of Hammurabi, founder of the Babylonian Empire. Translated it says:

"228 If a builder builds a house for a man and has completed it, that man shall pay him two shekels of silver per sar (approximately 12 square feet) of house as his wage."

"229 If a builder has built a house for a man and his work is not strong, and if the house he has built falls in and kills the householder, that builder shall be slain."

"230 If the child of the householder be killed, the child of the builder shall be killed."

"231 If the slave of the householder be killed, he shall give slave for slave to the householder."

"232 If goods have been destroyed, he shall replace all that has been destroyed; and because the house that he built was not made strong, and it has fallen in, he shall restore the fallen house out of his own material."

"233 If a builder has built a house for a man, and his work is not done properly and a wall shifts, then the builder shall make that wall good with his own silver."

I wonder how well a house would be constructed within the V-zones or within a floodway (providing minimum requirements are met) if we were to rely on the six Babylonian codes? Would we in fact be building and chancing destruction in some of the areas we now build in, or would we develop a new awareness and respect for our flood-prone areas?

Also remember that it was the Babylonians who built the Ziggurat, which was a temple tower, and when the Ziggurats got bats, they installed screens. So the Babylonians must be credited with creating the first "filtered ziggurat."

FLOODING TAKES FIRST LIFE OF 1988 !

By Roy D. Sedwick

Even drought stricken Tom Green County was not immune to flooding. A thunderstorm with high winds, hail and heavy rain ripped through the County on Tuesday night May 10th. Runoff from rains measured up to 6 inches in some areas, produced a rapid rise on the Concho River. Raging floodwaters moved swiftly down river into Concho County, and swept a travel trailer, two pickup trucks, a car and a tent into the water about 5 to 7 miles east of Paint Rock (which is 31 miles east of San Angelo). Three men escaped the flood waters by crawling to the top of a hill, but one man's wife, a 67-year old San Angelo woman, was swept away as she stepped from her travel trailer. Sheriff's officers, DPS troopers

and Parks and Wildlife Game Wardens joined in an extensive search for the woman. Helicopters were supplied by the U.S. Customs Service and the DPS.

The 23 foot camper trailer was found 9 miles downstream but it was not until Thursday afternoon, May 12th that searchers found the woman's body. The victim was found by Coleman County highway department workers at a Farm to Market Road crossing on the Colorado River. The floodwaters were so powerful that they carried the woman almost 20 miles down the Concho River and into the Colorado River.

Our deepest sympathy is extended to the family and friends of Hazel Dale Peoples.

FLOOD PROGRAM TO PAY CLAIMS FOR ANTICIPATED EROSION DAMAGE

By Keith E. Krause

NOTE: On May 6, 1988, FEMA made a News Release highlighting the key provisions of the recently passed Upton-Jones Amendment to the National Flood Insurance Act of 1968.

Significant extracts of that News Release are presented below:

New erosion coverage is available under provisions of the Housing and Community Development Act of 1987, signed into law by President Reagan on February 5, 1988. The National Flood Insurance Act of 1968 has been amended to include the payment of claims to relocate or demolish buildings that are subject to "imminent collapse or subsidence" due to erosion.

To qualify, buildings must be covered by flood insurance under the National Flood Insurance Program (NFIP) by June 1, 1988. After June 1, flood insurance must be in force for two years or the length of ownership of the building, whichever is less.

This amendment expands the NFIP's existing coverage, which previously paid claims on insured buildings that sustained physical damage as a result of storm-related erosion or were damaged as a result of erosion caused by water at higher-than anticipated cyclical levels.

The amendment applies to buildings along the shores of the Great Lakes and also to buildings along all of the nation's other waterways, including coastal areas.

The amendment specifies that a building subject to imminent collapse or subsidence from erosion would be eligible for a claim payment totalling up to 40 percent of value (or cost of relocation, if less) when the building is to be relocated or up to 100 percent of the building's value plus 10 percent (or the cost of demolition, if less than 10 percent), if it is to be demolished.

The NFIP claims deductible carried by the policyholder, currently \$500 at minimum, will be applied to erosion-related claims.

The new NFIP coverage is for buildings only. It does not cover land, so there is no coverage for the value of or the damage to the land caused by erosion.

If your community has erosion problems that are threatening some structures, you should seek additional information on this subject by contacting Keith Krause or Roy Sedwick at the Texas Water Commission, 512/463-8000.

TEXAS FLOODPLAIN MANAGEMENT ASSOCIATION

MEMBERSHIP APPLICATION



TEXAS FLOODPLAIN MANAGEMENT ASSOCIATION
P.O. BOX 162632
AUSTIN, TEXAS 78716

TEXAS FLOODPLAIN MANAGEMENT ASSOCIATION

The **Texas Floodplain Management Association (TFMA)** was established in 1988 to provide a professional forum for anyone interested in floodplain management in the State of Texas. Established primarily for the State's Floodplain Managers, this Association will serve as a means to exchange ideas, establish new techniques and procedures for floodplain management, elevate the professional status of floodplain managers, develop a new cooperation and coordination between various professional groups and agencies, and provide for a unified leadership role in future floodplain/flood mitigation activities in Texas.

MEMBERSHIP

The Texas Floodplain Management Association seeks memberships from all federal, state, and local governmental agencies, professionals such as engineers, surveyors, architects, lenders, real estate and insurance agents, septic tank inspectors and health officers, emergency management coordinators, and of course, our State's designated floodplain administrators. Corporate sponsors and student members are encouraged and welcome to join the Association.

ACTIVITIES AND MEMBERSHIP PARTICIPATION

The Association will co-sponsor workshops and seminars across the state to promote flood awareness. Topics will include floodplain management, hazard mitigation, structural and non-structural flood control measures, flood warning, disaster response and recovery techniques, and other technical assistance. An annual conference and election of officers will be held at a time specified by the Board of Directors.

Members are encouraged to participate in various committees to study and provide recommendations in such areas as floodplain management, flood warning and mitigation, legislative issues, training, education, awards, and technical problems such as floodplain mapping and development standards.

BENEFITS

Members will have an opportunity to voice their concerns and will have a hand in elevating the professional status of floodplain management to the level of priority and prominence it deserves. Members will be recognized for superior efforts in the promotion of flood awareness and, from time to time, awards will be given to recognize such service.

As a member of the association, you will receive a membership certificate and directory, a copy of the Association's Constitution and By-Laws, copies of the State of Texas Floodplain Management Newsletter, notices of meetings, workshops and other general information. Members will also receive discounted registration fees for all association sponsored workshops, seminars and conferences.

MEMBERSHIP CLASSIFICATION AND DUES

The Association has three classifications of members. The **Full Membership** is open to public or private professionals, elected officials and government employees involved in floodplain management. The **Associate Membership** is open to non-governmental persons who are not primarily involved with floodplain management but are interested in acquiring and/or sharing knowledge of floodplain management. (Lenders, Real Estate Agents, Insurance Agents, Surveyors, etc.). The **Student Membership** is open to registered, full or part time students interested in floodplain management. **Corporate Sponsors** will receive one Full Membership for a designated employee. These sponsors will be afforded discounted "Vendor" fees at conferences and workshops sponsored by the Association and will be provided with "Calling Card" advertising space in the Association's membership Directory. NOTE: Only Full Memberships have voting privileges.

JOIN NOW

MEMBERSHIP FORM

NAME _____

ORGANIZATION _____

TITLE _____

MAILING ADDRESS _____

CITY _____ STATE _____ ZIP _____

TELEPHONE NO. () _____

MEMBERSHIP CLASS:

FULL (\$20) [] ASSOCIATE (\$15) [] STUDENT (\$10) [] CORPORATE SPONSOR (\$50) []

Interested in Serving as Regional Representative on the Board of Directors? [] YES [] NO

Committees:	SERVE	INTERESTED IN
Membership	[]	[]
Floodplain Management & Mitigation Issues	[]	[]
Regulation & Legislation	[]	[]
Training & Education	[]	[]
Awards	[]	[]

MAIL TO: TEXAS FLOODPLAIN MANAGEMENT ASSOCIATION
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Remember

Your community receives one copy of this Newsletter. Please circulate to all key personnel with responsibilities in Floodplain Management or Emergency Management.

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