



DROUGHT PREPAREDNESS COUNCIL

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NIM KIDD
Council Chairperson

February 28, 2011

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Ms. Esperanza Andrade, Secretary of State, State of Texas
The Honorable Robert Duncan, President Pro-Tempore of the Senate, State of Texas
The Honorable Joe Straus, Speaker of the House, State of Texas
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Jim Pitts, Chairman, House Appropriations Committee, State of Texas
The Honorable Allan Ritter, Chairman, House Natural Resources Committee, State of Texas
The Honorable Yvonne Gonzalez-Tourelles, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Pete Gallego, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Ray Sullivan, Chief of Staff, Office of the Governor
Mr. Josh Havens, Texas Governor's Office of Homeland Security

FROM: Assistant Director Nim Kidd, Texas Division of Emergency Management

SUBJECT: Statewide Drought Situation Report

Nim Kidd, Chairman
Texas Division of Emergency Mgmt

Lance Williams, Member
Texas Department of Agriculture

Carla Baze, Member
Texas Department of Transportation

Chris Loft, Member
Texas Commission on Environmental
Quality

Michael Dunivan, Member
Texas Forest Service

John Sutton, Member
Texas Water Development Board

Dr. Travis Miller, Member
Texas AgriLife Extension Service

David A. Van Dresar, Member
Texas Alliance of Groundwater Districts

Thomas Walker, Member
Office of the Governor
Economic Development & Tourism

Gus Garcia, Member
Texas Department of Rural Affairs

Richard Egg, Member
State Soil & Water Conservation Board

Cindy Loeffler, Member
Texas Parks & Wildlife Department

Suzanne Burnham, Member
Texas Department of State Health Services

Dr. John W. Nielsen-Gammon, Member
Office of the State Climatologist

Marisa Callan
Texas Department of Housing and
Community Affairs

1. NEXT COUNCIL MEETING

March 10, 2011 at 2:00 p.m. via teleconference.

2. GENERAL CONDITIONS

Most of central and eastern Texas received much needed rain in January 2011 but by the end of the month, drought conditions were still prevalent across most of the state. Wild fires have already affected many counties across the state and continue to be a large threat because of an abundance of dried-up vegetation. During the month of January, the percentage of Texas with at least moderate drought (D1) designation decreased from 66.68% to 53.00% and the percentage of Texas with extreme drought (D3) dropped from 13.04% to 6.93%. The areas showing the most improvement as a result of January precipitation were the Coastal Bend and Piney Woods region, in eastern Texas.

Most of the counties in the High Plains, Rolling Plains and Edwards Plateau recorded less than half an inch of January 2011 precipitation. In the Trans Pecos region, most areas received less than a hundredth of an inch of precipitation. In the Edwards Plateau, an area of D3 stretched from Val Verde County east into Edwards and Real Counties. By the end of January, the largest D3 area was located in East Texas, stretching from Lee County to the Texas-Louisiana border in Newton and Sabine counties. During January, the entire Trans Pecos region was degraded from D1 to severe drought (D2) designation.

January precipitation was much above normal throughout a large swath of Central Texas, extending from the Metroplex southward to Corpus Christi through the Interstate-35 corridor. Most areas in this region saw a 1-2 drought category improvement, e.g. D3 to D2 or D1, from the beginning to the end of the month. Caldwell County improved from D3 to abnormally dry (D0) while 4-5 inches of precipitation in January eliminated drought conditions in Corpus Christi. Though drought conditions have improved and many of the county burn bans have been lifted, there is still a significant wildfire threat in this part of the state and across most of Texas.

According, to the Climate Prediction Center the January improvements in the Coastal Bend will be short-lived, as over the next three months, drought conditions are expected to develop in addition to the development of drought in the Panhandle. Drought conditions are expected to persist or intensify in all areas of Texas currently with drought except extreme Northeast Texas, where some improvement is possible by the beginning of spring. For both February 2011 and the February-April 2011 period, there is an equal chance of above normal, below normal, and near normal precipitation in Northeast Texas and a greater than equal chance of below normal precipitation across the rest of the state. In both cases, the greatest probability of below normal precipitation is in the Trans Pecos and western Panhandle regions.

3. OVERALL STATEWIDE DROUGHT CONDITIONS

Based on drought indices through the end of January 2011, the state is still experiencing drought conditions in the East Texas region, although the situation has improved with significant rainfall on January 9, 15 and 16. The NOAA Climate Prediction Center predicts that drought is likely to develop, persist, or intensify for most of the state over the next three months.

Palmer Drought Severity Index (PDSI):

The East Texas region was in moderate drought, a slight improvement over the severe drought conditions experienced in December. The Trans-Pecos region was in mild drought and the High Plains region escalated to incipient dry spell. The Edwards Plateau region was still in incipient dry spell. All other regions were either in normal or in wet conditions.

Crop Moisture Index (CMI)

All regions were in slightly dry condition except for the Upper Coast region which improved to an abnormal moist condition.

Standardized Precipitation Index (SPI)

All regions were in a near normal condition except for the East Texas region which experienced a moderately dry condition.

Keetch-Byram Drought Index (KBDI)

Four regions (Trans Pecos, Edwards Plateau, South Central and Lower Valley) were in a high fire risk condition, four (High Plains, Low Rolling Plains, North Central, and Southern) experienced above average fire risk, and two (East Texas and Upper Coast) were in an average or low fire risk condition.

Stream Flow Index (SFI)

Stream flows were near normal or high range in all regions.

4. WATER UTILITY STATUS

February 2011 begins with 63 public water systems on the drought list that are asking customers to restrict water use by following outdoor water use restrictions. Of these systems, 32 are asking customers to follow a mandatory watering schedule and 31 are asking customers to follow a voluntary watering schedule. The recent precipitation events in January have resulted in 12 public water systems relaxing water-use restrictions on their customers.

Future forecasts continue to predict little rain in the coming months. If this holds true public water systems will enter the traditional outdoor growing season with dry conditions resulting in increased water demand and water supplies that have not been replenished with normal rainfall. This could result in numerous water systems reaching the triggers of their Drought Contingency Plans and asking customers to restrict outdoor watering.

5. WATER RIGHTS – STATEWIDE

Surface water conditions were normal for most of the State during the month of January. New temporary water use permit applications are being reviewed on a site-specific basis and issued if there is sufficient surplus water at the requested source. Applications for new water use permits and amendments to existing permits remained normal for the month. Water rights owners in the Brazos River Basin, whose permits contain Hale Clause restrictions are observing the less severe stream flow restrictions of their permits during the winter months. The availability of unappropriated water for new permits continues to decrease in all river basins in the State, and the search for long-term, dependable alternate sources of water remains a high priority issue.

6. WATER RIGHTS – LOWER RIO GRANDE / RIO GRANDE WATERMASTER (RGWM)

Current Conditions: On January 22, 2011, the U.S. combined ownership at Amistad/Falcon stood at 98.67% of temporary conservation capacity, impounding 3,458,489 acre-feet, up from 81.00% of normal conservation capacity, impounding 2,747,496 acre-feet

a year ago at this time. Overall the system is holding 94.42% of temporary conservation capacity, impounding 5,773,877 acre-feet with Amistad at 101.40% of conservation capacity, impounding 3,321,479 acre-feet and Falcon at 87.96% of temporary conservation capacity, impounding 2,497,798 acre-feet. Mexico has 88.70% of temporary conservation capacity, impounding 2,315,388 acre-feet at Amistad/Falcon.

Allocations: As of the printing of the December ownership report, the U.S. has allocated 552,219.751 acre-feet to Class A & B water rights, which include irrigation, mining and recreation. Additionally, the U.S. has an amount of approximately 685,505 acre feet for future allocations in 2011.

Storage & Loss Amistad vs. Falcon: The U.S. is currently storing approximately 1.841 million acre-feet at Amistad (100%); and approximately 1.62 million acre-feet (97.2%) of temporary conservation capacity at Falcon. Evaporation and seepage losses at Amistad cycle, as of 01/22/11, are 31,809 acre-feet. For the same period, the U.S. has lost 38,806 acre-feet at Falcon.

Releases to meet demands: As of 01/22/11, Mexico has released 11,407 acre-feet from Amistad and 269,009 acre-feet from Falcon Mexico needs. The U.S. has released 78,083 acre-feet from Falcon and 26,861 acre-feet from Amistad for U.S. needs. Combined with gains between Amistad and Falcon, U.S. inflows to Falcon have totaled 70,963 acre-feet. The U.S. demand in the lower Rio Grande has been met at a rate of 91% by direct Rio Grande inflows and Amistad releases this year.

Upper Rio Grande (New Mexico): Currently, Elephant Butte in New Mexico is at 23.40% of capacity, impounding 473,454 acre-feet and Caballo Dam in New Mexico, downstream of Elephant Butte, is at 10.36% of capacity, impounding 23,511 acre-feet.

Outlook: No charge diversions ceased on January 8, 2011. All accounts began 2011 with 100% of their usable balance. Falcon Reservoir remains on a temporary conservation level of 303.42 feet through the winter months. The National Weather Service continues to report moderate to strong La Nina conditions resulting in extremely dry weather across deep South Texas.

According to the U.S. Drought Monitor, the entire Rio Grande Basin continues to experience drought conditions ranging from "Abnormally Dry" to "Severe Drought" in areas between Presidio and Cameron Counties.

7. SOUTH TEXAS WATERMASTER – GUADALUPE / LAVACA / SAN ANTONIO / NUECES REGION

Area Counties: Bee, Goliad, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg

Rainfall and Area Conditions: This area received some rainfall during the second and third weeks of January. These rainfall events provided soil moisture to the area as well as runoff into area streams, although the streams quickly declined. Stream flows of most area streams are currently flowing below the mean average for this time of the year. The U.S. Drought Monitor indicates that counties to the far west and inland counties in the southern part of this area are currently experiencing "Abnormally Dry" conditions at this time. Counties in the Coastal Bend, including Nueces, San Patricio, Aransas, Refugio, Goliad, Victoria and Calhoun are not experiencing any drought conditions at this time. Most of the

surface water diversions in this area continue to be for municipal and industrial use with little irrigation use being noted.

Approximate Stream flow Conditions:

Site	January Beginning flows CFS	January Ending Flows CFS	January Historical Mean CFS
<i>South Texas Watermaster</i>			
Guadalupe River near Victoria	768.00	824.00	1730.00
San Antonio River near Goliad	360.00	366.00	606.00
San Antonio River at McFaddin below Goliad	490.00	502.00	786.00
Guadalupe River near Tivoli	1310.00	1350.00	2500.00
Mission River near Refugio	18.00	36.00	57.00
Nueces River at Calallen Dam	13.00	5.90	83.00
Aransas River near Skidmore	9.30	9.80	12.00

Stream flows of the Guadalupe River continue to flow over the “saltwater barrier” near Tivoli, Texas; however, the major streams are all flowing below their historical averages.

Corpus Christi Reservoir System: The Corpus Christi Reservoir System did not receive significant inflows for the month of January. The level of the reservoir system has decreased and was at 81.9% of capacity, impounding 779,881 acre-feet compared to 63.1% of capacity, impounding 601,135 acre-feet at this time last year. The level of Choke Canyon was at 79.6% of capacity, impounding 553,287 acre-feet compared to 69.2% of capacity, impounding 481,130 acre-feet at this time last year. The level of Lake Corpus Christi was at 88.1% of capacity, impounding 226,594 acre-feet compared to 46.6% of capacity, impounding 120,005 acre-feet at this time last year. The City of Corpus Christi continues to divert much of their monthly water supply needs from Lake Texana.

Drought Restrictions: There are no permits being restricted due to drought conditions in this area.

Area Counties: Atascosa, Karnes, Gonzales, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, and Jackson

Rainfall and Area Conditions: The southernmost portions of this area received 2.2 to 4.5 inches of rainfall for the month of January and the eastern portions of the area, including the Lavaca area, received 2.5 to 5 inches. Winter oats and rye crops are doing much better due to a good general rain event in this area. There is very little irrigation activity at this time. Lake Texana is at 85% of capacity, 41.28 ft. above mean sea level. According to the U.S. Drought Monitor, this area is experiencing “Abnormally Dry” to “Severe Drought” conditions at this time.

Stream flow Conditions:

Site	January Beginning flows CFS	January Ending flows CFS	January Historical Mean CFS
<i>South Texas Watermaster</i>			

San Antonio River near Falls City	339.00	325.00	425.00
Cibolo Creek near Falls City	51.00	49.00	98.00
Guadalupe River near Gonzales	884.00	820.00	1460.00
The Lavaca River at Edna	45.00	59.00	299.00
Navidad River near Hallettsville	11.00	10.00	132.00
Atascosa River near Whitsett	6.40	9.50	75.00
Frio River near Tilden	.17	.57	97.00
Nueces River near Tilden	0	1.00	114.00

Drought Restrictions: There are no Water Rights permits being restricted due to drought conditions in this area at this time

Area Counties: Bandera, Blanco, Comal, Kendall and Kerr

Rainfall and Area Conditions: This area received 1.10 to 0.25 inches of rainfall for the month of January. The Crop Moisture Index indicates this area of the hill country is classified as “Slightly Dry” to “Favorably Moist”. Most of the surface water diversions in this area are for municipal and industrial uses with a few surface water permit holders irrigating hay and sod fields. The U.S. Drought Monitor indicates that this area is currently experiencing “Severe Drought” to “Extreme Drought” conditions.

Stream flow Condition:

Site	January Beginning flows CFS	January Ending flows CFS	January Historical Mean CFS
<i>South Texas Watermaster</i>			
Guadalupe River at Kerrville	59.00	59.00	112.00
Guadalupe River at Comfort	82.00	91.00	176.00
Medina River at Bandera	35.00	30.00	112.00

All the major streams and their tributaries are below their historical averages

Drought Restrictions: There are currently no permits being restricted in this area due to drought conditions. Temporary water rights issued in the San Antonio River Basin (above Lake Medina) and the Guadalupe River Basin (above Canyon Lake) are reviewed on a case by case basis.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle, and Webb

Rainfall and Area Conditions: There was little relief from the severe drought conditions across the South West Texas area during the month of January. The range of rainfall in the area was 0 to .75 inches. There have been very few surface water diversions in this area due to little or no stream flows. Crops being irrigated in the area are cabbage, onions, hay grazer and pecans. Soil conditions are exceptionally dry.

The U.S. Drought Monitor indicates that this area is experiencing “Abnormally Dry” to “Extreme Drought” conditions at this time.

Stream flow Conditions: Most stream flow readings in this area are at or near historical lows at this time.

Site	January Beginning flows CFS	January Ending flows CFS	January Historical Mean CFS
<i>South Texas Watermaster</i>			
Nueces River at Laguna	29.00	32.00	108.00
Nueces River near Brackettville	.17	.14	2.30
Nueces River below Uvalde	5.90	5.20	71.00
Frio River at Concan	28.00	25.00	89.00
Sabinal River at Sabinal	6.40	7.80	13.00
Leona River near Uvalde	1.10	.71	39.00

Drought Restrictions: Permits that have not met their stream flow restrictions are being regulated. The Zavala/Dimmit Water District is not allowing diversions other than for domestic and livestock use.

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalupe, Hays, and Medina

Rainfall and Area Conditions: Approximately 3.03 inches of rainfall was measured in the San Antonio Regional Area for the month of January. The U.S. Drought Monitor dated January 25, 2011 indicates the San Antonio Regional Area is experiencing “Abnormally Dry” to “Moderate Drought” conditions at this time.

Stream flow Conditions: The flows in the Guadalupe, San Marcos, and Blanco Rivers have continued to decrease due to the lack of rainfall for the month of January. The small creeks and perennial creeks have continued to remain dry. Irrigation use has not increased and industrial use remains constant.

Site	January Starting flows CFS	January Ending flows CFS	January Historical Mean CFS
<i>South Texas Watermaster</i>			
Guadalupe River at Spring Branch	122.00	105.00	292.00
San Marcos River at Luling	208.00	188.00	455.00
Blanco River at Wimberley	60.00	53.00	125.00

As of January 31, 2011, Canyon Lake Reservoir was at 907.81 feet elevation and 97.44% of capacity, impounding 369,070 acre-feet. Lake Medina Reservoir was at 1047.38 feet elevation and 64.45% of capacity, impounding 164,242 acre-feet. San Marcos Springs were flowing at 156 CFS. The historical monthly average for the San Marcos Springs in January is 201 CFS. Comal Springs were flowing at 317 CFS. The historical monthly average for the Comal Springs in January is 314 CFS. The J-17 Bexar reading was at 673.4 on January 31.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, Schleicher.

Rainfall and Area Conditions: The Concho River Valley received below average rainfall amounts for the month of January. Rainfall in San Angelo was 0.26 inches. Areas surrounding San Angelo received slightly higher rainfall amounts. The average rainfall for the month of January is 0.78 inches. The Texas Crop Moisture Index indicates the area as having “Slightly Dry” to “Favorably Moist” soil conditions. The State Drought Monitor Index indicates the Concho Valley as having “Moderate Drought” to “Abnormally Dry” conditions.

Stream flow Conditions: Lake Nasworthy is at 81% of capacity, impounding 8,300 acre-feet. O.C. Fisher is at 2% of capacity, impounding 2,037 acre-feet. Twin Buttes Lake is at 18% of capacity, impounding 33,374 acre-fee.

Site	January Beginning Flows CFS	January Ending Flows CFS	January Historical Mean Flows
<i>Concho Watermaster</i>			
Spring Creek above Twin Buttes Reservoir	6.10	7.80	17.00
Concho River at San Angelo and Bell St.	8.20	9.80	27.00
South Concho at Christoval	4.20	5.00	19.00

Drought Restrictions: There are no additional drought restrictions on diversions in the Concho Valley at this time.

8. UPPER COLORADO (Concho River watershed not included)

The upper Colorado River area received less than normal precipitation during January 2011. The National Weather Service in San Angelo reported monthly precipitation of 0.68 inches, which is 0.14 inches less than normal. According to the U.S. Drought Monitor, area drought conditions in Crockett, Reagan and Kimble counties are moderate to severe; Schleicher, Menard, Mason, Irion, Tom Green and Concho counties have moderate drought conditions; Sterling and McCulloch counties have abnormally dry to moderate drought conditions; Coke County has abnormally dry drought conditions; and Sutton County has severe drought conditions. USGS gauges indicate flows in the Colorado River near Gail down to Ballinger are less than the USGS long term medians. The San Saba River has flow less than the

USGS long-term median from Menard, TX to San Saba, TX. The North Llano River above and the Llano River below Junction, TX to the Llano River below Mason, TX are flowing lower than the USGS long-term median. The pool levels of EV Spence Reservoir and OH Ivie Reservoir have decreased from December levels. The pool levels are 2.7% and 32.2% of capacity, respectively.

9. TEXAS PANHANDLE AND SOUTHERN HIGH PLAINS

Amarillo Area:

Lake Greenbelt started January 2011 at 52.64 feet and ended January at 52.62 feet. Lake MacKenzie started January 2011 at 71.68 feet and ended January at 71.47 feet. Lake Meredith started January 2011 at 38.37 feet and ended January at 38.28 feet. The National Weather Service in Amarillo has recorded a total of 0.05 inches of moisture since January 1, 2011, 0.48 inches below the average for January.

Lubbock Area:

Reporting Station: Lubbock Preston Smith International Airport

	Precipitation	Average	Departure
January	0.06	0.50	-0.44
2011 Year-to-date	0.06	0.50	-0.44

Reservoir report:

Reservoir Basin (Brazos)	Conservation Pool (elevation)	Current (elevation)	% of Capacity	% Change (from last report)
Alan Henry	2220.00	2217.73	93.67	- 0.76
White River	2372.20	2315.84	33.77	- 0.45

The long term drought situation has not changed. All communities previously noted as initiating water restrictions remained on those restrictions. There was no change to the list during January. The cities of Amherst, Levelland, and Lubbock remained on mandatory drought restriction status. The cities of Ralls, Crosbyton, Spur and Post, White River MWD, and Valley WSC in the South Plains area remained on voluntary drought restriction status.

10. WILDLIFE CONCERNS

No information was received by the time of this report.

11. AGRICULTURE CONCERNS

Precipitation (rain, snow, sleet) has reduced drought conditions across most of the Central, North, East, Gulf Coast and the Rio Grande Valley, improving surface moisture conditions, but conditions remain very dry across most of the High Plains, Far West, Southwest and West Central Texas. Favorable moisture conditions for planting spring crops has been obtained for much of the Rio Grande Valley and Gulf Coast.

Much of the state's 6 million acre winter wheat crop is in the High Plains and Rolling Plains, where moisture is very short. One of the risks of winter wheat production is winter kill or loss to severely cold weather. This potential to lose wheat stands is greatly exacerbated by dry conditions. While no firm figures are available, observers are seeing stand loss to the combined very cold and very dry conditions. As wheat grain prices are unusually high in 2011, the drought/winterkill economic losses could be substantial. Loss estimates will not be available until milder weather allows for re-growth. The dry weather across most of our wheat producing region has also significantly reduced the availability of winter forages, causing stress on livestock herds and greatly increased feed bills for ranchers overwintering herds.

Below are comments from AgriLife Extension field reporters on drought conditions that impact agriculture across the state as of February 8:

Central: Producers were heavily supplementing livestock as the frigid weather caused feed intake to greatly increase. There was some freeze damage to wheat and oats as warmer temperatures prior to the cold front stimulated the growth of spring grasses, making them more vulnerable.

Coastal Bend: The region had sub-freezing temperatures with sleet, ice and snow in some areas. Very little, if any, fieldwork took place. Livestock were stressed by the cold weather, and, in response, producers put out large volumes of feed.

East: Prolonged freezing temperatures with as much as 4 inches of ice and snow set back winter forages. Henderson County producers reported that all oats were frozen out. They are waiting to assess damage to wheat, rye and clover. Cattle remained in fair to good condition with producers providing heavy supplemental feeding, but hay supplies were being quickly depleted. Soil-moisture and stock-pond levels were improved by the rain and snow. Some damage was reported on fruit and nut trees due to limb breakage from snow and ice. Most cool-season vegetable crops had just been planted or were not planted yet so damage due to cold was minimal.

Far West: Very cold temperatures across the district with snowfall reported in several counties. High winds redistributed much of the snow, reducing the beneficial impact on dry soils. Producers were continuing to provide supplemental feed to livestock. Due to freezing temperatures, there were many broken water lines and producers had to haul water to livestock.

North: Soil moisture was mostly in the adequate range. Most of the region received freezing temperatures and rain, sleet and 3 to 8 inches of snow. At the time of this report, it was uncertain how much freeze damage the weather caused to small grains and winter annual pastures. Farmers were concerned as well about freeze-damage to fruit trees and numerous other crops. There was some tip-damage observed on wheat due to the ice and temperatures in the teens. There was great concern over possible injury to ryegrass and small grains due to the extremely low temperatures. Supplemental feeding of livestock continued, and hay supplies were running very low. Livestock were in fair to good condition. Rangeland and pasture conditions varied widely from county to county, from very poor to good.

Panhandle: The region had extremely cold temperatures, with a few days of wind chills as cold as minus 35 degrees. Some snow fell early in the reporting period but was blown around by 30 mph winds. Producers were busy tending to livestock, putting out feed ahead of the storm, placing livestock behind windbreaks, thawing water and breaking

ice. The cold, windy weather was very hard on the cattle that did not have shelter. The effect of this weather on crops was not fully determined at the time of this report, but record lows dating back to early 1900's were broken. Much of the winter wheat crop was showing damage and stand loss from drought and cold before the latest storm. Supplemental feeding of cattle on rangeland continued.

Rolling Plains: The region received much needed moisture but it arrived as more than 6 inches of ice and as snow. It was extremely cold, with temperatures dropping into the single digits and with wind chills below zero. The upside was that when the snow melted most of the moisture was directly absorbed by the soil. The hard freeze was expected to dramatically reduce insect populations. The weather was hard on livestock, and producers had to supply large amounts of supplemental feed and hay. Livestock were in generally fair condition with some in poor condition. The extreme cold froze stock ponds, and some producers had to haul water to livestock.

South: Soil-moisture conditions were mostly adequate throughout the region — except for the western part of the district where they remained very short. Freezing weather blanketed the entire region. Record, below-freezing temperatures lasted for about three to four days in many areas. Agents reported daytime and nighttime temperatures in the 20s to 30s. Snow, sleet and ice on rangeland and pastures caused a lot of vegetation damage and increased the need for supplemental feeding to livestock. Little fieldwork was done due to the cold weather, and there was possible crop damage. Producers in the western parts of the region irrigated spinach and cabbage fields to prevent freeze damage. At the time of this report, it was too early to determine how much damage was done to these crops or other vegetables in that area. In the southern part of the region, vegetables, watermelons, sugarcane and citrus were also affected by the freeze, but it was too soon to assess the damage there as well. Starr County reported that a 20-acre tomato crop was completely destroyed, but there was no visible damage to a neighboring field of onions.

South Plains: Sub-freezing temperatures lasted for three days and five nights. Some days, temperatures dipped into the single digits, which along with high winds caused extremely low wind chill factors. Snowfall ranged from 0.2 inch to 4 inches. Soil-moisture levels were very short to short. Winter wheat was in poor condition. Pastures and rangeland were in poor to fair condition. Livestock were in fair to good condition. Many ranchers were struggling to keep their livestock hydrated as many water troughs were frozen over. Supplemental feeding of livestock continued.

Southeast: Cold, windy conditions stopped growth of winter annuals and greatly increased hay consumption by livestock. The crop most likely damaged by days of freezing temperatures was strawberries, but no assessment was completed at the time of this report. Topsoil moisture was at fair levels. Producers ceased all field preparations for spring planting due to wet fields, but were optimistic they would be able to plant corn and sorghum in the next few weeks. Wheat looked good with no reported damage from the freezes.

Southwest: Four consecutive days with below freezing temperatures in the low 20s interrupted vegetable harvesting and may have damaged young spinach, onion and cabbage crops. The region remained very dry, with total cumulative rainfall since Aug.1 at about 35 percent of the long-term average. Fields were ready for early spring planting, but rain will be needed soon to make dryland planting feasible. Pastures and rangeland grasses were in winter dormancy. Forage availability was below average. Ranchers were busy caring for livestock as the calving/lambing/kidding season continued. Stress

to livestock from the cold weather was expected to be low as ranchers were able to take some precautions. However, some livestock were without water for some time as stock-tanks froze.

West Central: Small-grain crops may have been damaged beyond recovery in many areas by cold weather and snow. There was no field activity due to dry conditions. Producers continued supplemental feeding of all livestock and were breaking ice in stock-tanks.

12. WILDFIRE CONCERNS

The Keetch-Byram Drought Index (KBDI) is used to help determine the potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation, in 100ths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The relationship of the KBDI to fire danger is, as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and their relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of the spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring and early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer and early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

As of January 31st, 2010, there were 111 counties (illustrated in Attachment 2) with KBDI values in excess of 400. The values indicate areas within these counties are beginning to experience or sustain dry conditions which could result in an increased fire risk potential.

The Drought Preparedness Council is comprised of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Nim Kidd, Texas Division of Emergency Management, (512) 424-2436, fax (512) 424-2444, website: <http://www.txdps.state.tx.us/dem>

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, website: <http://www.twdb.state.tx.us>

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, website: <http://www.tceq.state.tx.us>

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, website: <http://www.tsswcb.state.tx.us>

Lance Williams, Texas Department of Agriculture, (512) 463-3285, fax (800) 835-2981, website: <http://agr.state.tx.us>

Dr. Travis Miller, Texas AgriLife Extension Service, (979) 845-4808, fax (979) 845-0456, website: <http://texasextension.tamu.edu>

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, website: <http://www.tpwd.state.tx.us>

Carla Baze, Texas Department of Transportation, (512) 416-3270, fax (512) 416-2941, website: <http://www.txdot.state.tx.us>

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Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, website: <http://www.governor.state.tx.us/divisions/ecodev>

David A. Van Dresar, Texas Alliance of Groundwater Districts, (979) 968-3135, fax (979) 968-3194, website: <http://www.texasgroundwater.org/>

Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, website: <http://www.met.tamu.edu/osc/>

Gus Garcia, Texas Department of Rural Affairs, (512) 936-7876, fax (512) 936-6776, website: <http://www.tdra.state.tx.us>

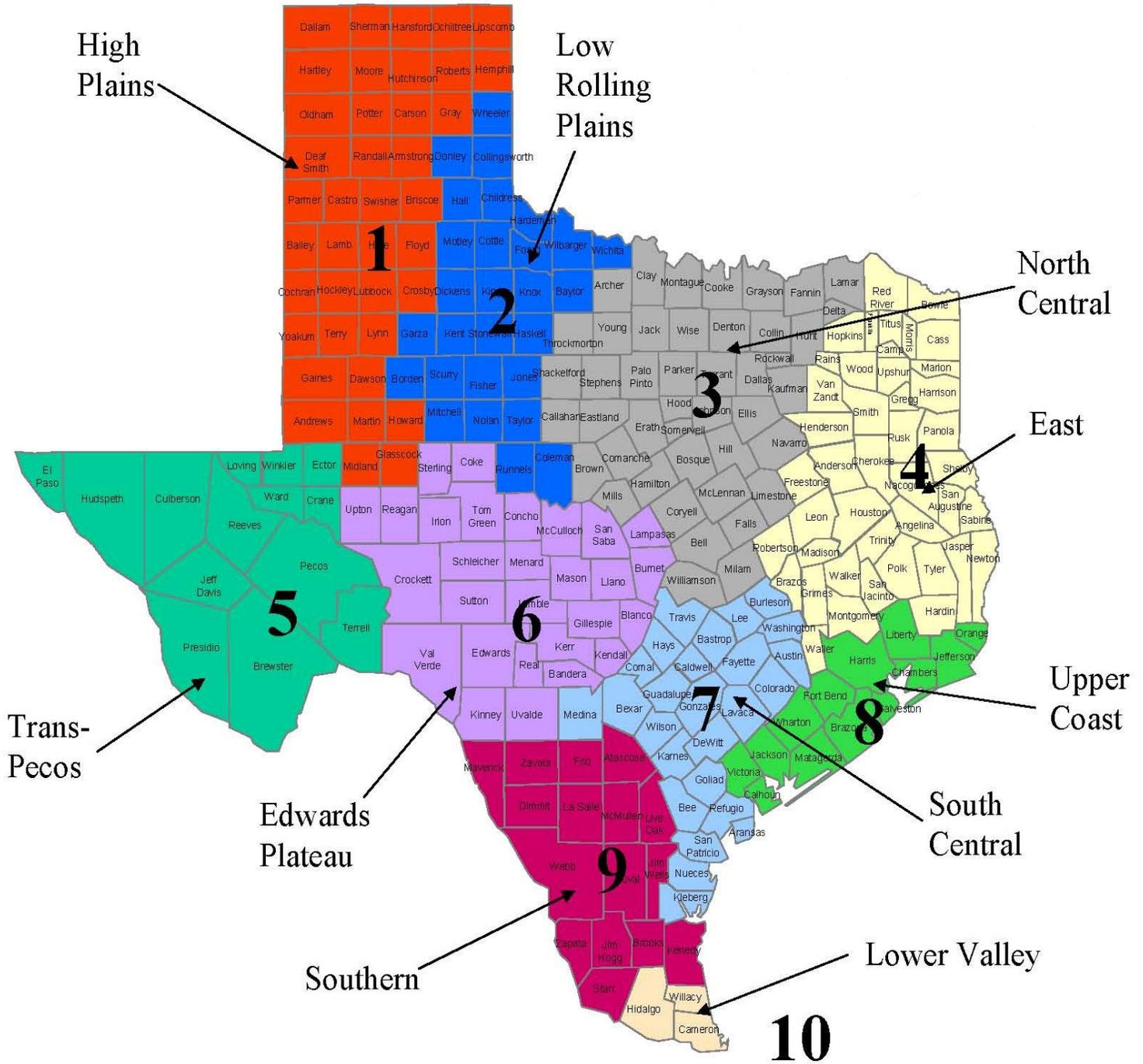
Marisa Callan, Texas Department of Housing and Community Affairs, (512) 475-3964, website: <http://www.tdhca.state.tx.us>

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Jim Terrell, Committee Clerk, House Agriculture and Livestock Committee
Andrew Cates, Committee Clerk, House Criminal Jurisprudence Committee
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Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor's Policy Office
Carmen Cernosek, Lt. Governor's Natural Resources Policy Analyst
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Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin,
Texas

Attachment 1 Climatic Regions



Attachment 2

Counties with Extreme to High Fire Danger

