Attachment 3: Oklahoma City Regional Irrigation Assessment for the 2006 Crop Year

As required by FCIC-25010 at section 6, Paragraph 40, part E., <u>Regional Irrigation</u>
<u>Assessments</u>, the following information reflects conditions as of mid to late April 2006.
Conditions could improve before the actual planting and acreage reporting dates from May - July in any of the areas identified in this report with an expected water shortage.
Most Texas and New Mexico spring crop acreage reports occur from July 1 – July 30.

<u>Devers Canal Rice Producers Association, Inc.</u>: (Liberty, Jefferson, and Chambers Counties, Texas)

Devers Canal Rice Producers Association provides water obtained from the Trinity River to rice producers in Liberty, Jefferson, and Chambers Counties Texas. The flume that provides access to the water experienced significant structural damage from hurricane Rita in the fall of 2005. The Association began efforts to repair the damage shortly thereafter but progress has been interrupted several times due to inclement weather. The Association hopes to have the system fully operational by late April, 2006. The final planting date for rice in this area is May 31.

The Canal provides water for irrigation to about 30 – 40 rice producers in Liberty, Chambers and a small portion of Jefferson Counties. It provides water for about 9,000 – 10,000 acres of rice annually in all of these counties. In order to plan and arrange for water delivery, producers are required to sign up for water at the Association's District Office in Devers, Texas, before planting begins.

For the 2006 crop year, Devers Canal has been able to arrange for the delivery of water to some of its members from a neighboring Irrigation Canal in Jefferson County, the Lower Neuches Valley Authority. These arrangements are restricted to fields that border or are accessible by that canal's system. As of April 10, 2006, water was being applied to about 1200 acres of rice for producers under this arrangement.

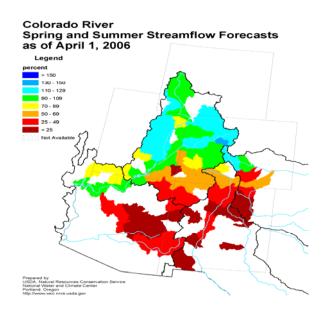
Producers who have or intend to use Devers Canal for watering rice should contact their District office in Devers for details on operational progress and anticipated water delivery dates.

Conchas Reservoir: (Quay County New Mexico) –

Conchas Reservoir will **remain** on our list of areas suspect of water shortages for the 2006 crop year. Crops for which insurance is provided within the 41,000 acre crop land district include **barley, corn, cotton, grain sorghum** and **wheat**. Last year the Conservancy issued an initial allocation of 3 inches and anticipated being able to increase that to 9" later in the year but was ultimately able to revise that to a full 18 inch allocation after the May – July inflows finally reached the reservoir.

The water elevation in the Reservoir as of April 10, 2006, was 4,179 ft. (157,932 ac. ft.). In order to allow for a full water allocation of 18 inches, at the current delivery efficiency rate of 30% – 40% the water elevation would have to be at 4,191 ft. (59,094 ac. ft.). When the water elevation reaches 4,162 ft (83,206 ac. ft.) there is not enough head pressure in the reservoir to push the water the distance required to reach the delivery points within the water district and water is no longer available for irrigation.

Although the irrigation district was ultimately able to release a full allocation of 18 inches last year, the lack of any appreciable mountain snow pack in this water shed for this year and the absence of any winter or spring recharge from the water shed has caused the district to cut back to 1/3 of a normal allocation (6 inches) as an initial allocation for the current crop year. The Corps of Engineers web-site for monitoring water levels in the Lake is; http://www.spa.usace.army.mil/wc/adbb/default.htm



Elephant Butte Reservoir: (New Mexico - Dona Ana County; Texas - El Paso and Hudspeth Counties) - Elephant Butte Reservoir provides water for irrigation districts in Dona Ana County New Mexico and the adjoining counties of El Paso and Hudspeth in Texas. The principal source of water for Elephant Butte Reservoir comes from snow-pack runoff from the southern Rocky Mountains in Colorado and New Mexico. Winter snow-pack normally occurs from November – January. Reservoir recharge from runoff occurs from March – May. A normal run-off would contribute about 937,000 acre-feet of water annually and it is usually the first of June before any of that runoff actually reaches Elephant Butte Reservoir.

Dona Ana County, New Mexico:

I. Current Assessment:

Winter Snow pack for the watershed is currently at about 63% of normal and the reservoir currently contains about 437,000 ac. ft. of water as of April 24, 2006 compared to 320,760 ac. ft. this time last year. Last year, the initial allocation was a full 2 acre feet (a normal allocation) in anticipation of above average inflows from the favorable mountain snow pack. This year, the initial allocation is being set at 14 inches and this may be the entire allocation for the 2006 season. Crops grown within the region include **corn, cotton, grain sorghum, pecans** and **wheat**.

El Paso County, Texas:

The El Paso County Water District provides irrigation to approximately 69,000 acres in El Paso County. Crops grown within the district include cotton, grain sorghum, onions, and pecans. The districts normal allotment from Elephant Butte is around 376,000 acrefeet with a normal allocation of 48 acre-inches.

<u>Current assessment</u>: For the 2006 crop year, the water district is being allotted 187,510 acre feet of water with an initial allocation of 24 acre-inches. Last year the District was allotted about 90,000 acre-feet of water with an initial allocation of only 18 acre-inches.

The District's Board of Directors meets the second week of each month (May 10th) to reevaluate current water allocation/allotments. Additional allotments could be instituted based on the past month's water usage and possible increased inflows into Elephant Butte. Mountain snow pack is currently at about 65% of normal and conditions currently look favorable for some additional inflow and subsequent additional allocation later in the year but that will not be known until the snow melt actually reaches the reservoir typically from May through July.

Hudspeth County, Texas:

Hudspeth County will **remain** on our watch list for the 2006 crop year but will be reevaluated in 2007. The only crop grown in Hudspeth County for which insurance is provided is **cotton**.

Unchanged from last year, HCCRD anticipates they will be able to provide one (1) inch or about 25 per cent of the water they would receive in a normal irrigation season, and have notified all irrigators in the district by letter. Individually owned wells may still provide a reliable source of water in the upper one-third of the county at the current time. But, due to the high salinity content of groundwater in this area the water should be tested and deemed appropriate for crop use before applying it to insured crops.

HCCRD will issue monthly advisories to water users as a method of notification for any changes to the current status of water in the district.

Red Bluff Reservoir: (Reeves, Pecos, and Ward Counties, Texas) –

The water situation at Red Bluff is still much improved over our pre-2005 crop year irrigation status. For the 2006 crop year the water district will maintain last year's removal status but will be reevaluated for 2007 or until notified otherwise.

Crops being grown within the district include **barley, oats, wheat, cotton, grain sorghum, grapes, onions, and pecans**. As of April 24th, the reservoir had about 128,000 acre-feet in storage compared to 130,000 acre-feet last year. In addition the reservoir anticipates full allocations from New Mexico for the remainder of their water needs during the 2006 crop year. Letters were issued to water users within the district in March notifying them of the initial allocation for 25,000 acre-feet of water and that they were to notify the water district by April 15th of the amount of water they would be purchasing for the remainder of the season. Red Bluff does not anticipate a water shortage for this year

Ogallala Aquifer: (Andrews, Gaines, and Yoakum Counties, Texas)

Andrews, Gaines, and Yoakum Counties in Texas have been reported as counties suspected of having inadequate irrigation water supply. Crops grown in this area for which insurance is provided are cotton, grain sorghum, peanuts, and wheat. All of the water used for irrigation in these counties comes from the Ogallala Aquifer, one of the largest aquifer systems in the world, extending from southern South Dakota and eastern Wyoming through Colorado, Nebraska, Kansas, Oklahoma, New Mexico, and Texas.

Andrews, Gaines, and Yoakum Counties are on the extreme southern edge of this aquifer and changes in climatic conditions over geologic time have resulted in changes in erosion patterns within the aquifer itself, causing the Ogallala to be cut off from its original supply of water and formation materials. The southern portion of the formation in Texas and New Mexico is now a plateau, cut off on all sides. The saturated thickness of the aquifer does vary throughout the formation and can be as shallow as 20 feet in some areas.

I. Current Assessment:

Some but not all of the wells pumping water for irrigation in this area of the aquifer have experienced water supply problems in various degrees for the past several years. Unlike surface water situations where water district allocations form the basis for the amount of water available for the season, groundwater shortages tend to be more dependent upon individual well location and pumping ability as a basis for water availability.

As such, adequacy of water determinations in these situations must be made on an individual, case by case basis. Please refer to the Irrigated Practice Guidelines in the NCIS, M-901 LAM or the FCIC –25010-1 as to adequacy of water for irrigation determinations for policyholders in these three counties who experienced water availability or delivery problems last year.