

Attachment 5 : Oklahoma City Irrigation Assessment for the 2005 Crop Year

As required in FCIC-25010 at section 6, Paragraph 40 part E., Regional Irrigation Assessments, the following information reflects conditions as of mid to late April 2005. 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 are due from July 1 – July 30

Conchas Reservoir: (Quay County New Mexico) –

Conchas Reservoir will **remain** on our list of areas suspect of water shortages for the 2005 crop year even though the Reservoir has received significant amounts of inflows over the past two months. Crops for which insurance is provided within the water district include barley, corn, cotton, grain sorghum and wheat. Last year the Conservancy could not release any water as an initial or subsequent allocation for irrigation

The elevation of water in the Reservoir would need to be at 4,187' for a normal allocation of 18". The elevation is currently at 4,179'. The Corps of Engineers web-site for monitoring water levels in the Lake is;

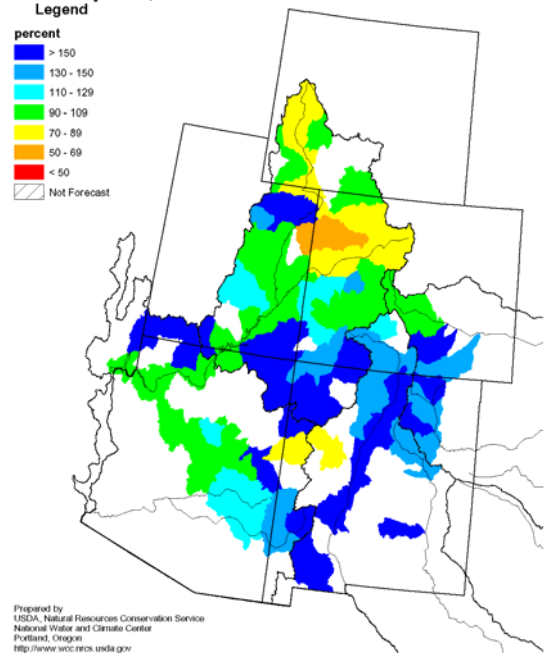
<http://www.spa.usace.army.mil/wc/adbb/default.htm>

The Reservoir currently has over 160, 000 acre feet of water compared to 75,000 acre feet last year and inflows continue to add to that figure. However, the Conservancy is still being cautious in trying to make estimates of allocations for the entire growing season (180 days) and is currently allowing an initial allocation of only 3" in June. They anticipate being able to make an additional allocation of 6" later in the season for a total allotment of about 9". If inflows continue, additional allocations may result.

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.

Hudspeth County Texas:

**Spring and Summer Streamflow Forecasts
as of April 1, 2005**



Hudspeth County will **remain** on our watch list for the 2005 crop year but will be re-evaluated in 2006. 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 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

Ogallala Aquifer: (Andrews, Gaines, and Yoakum Counties in 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.

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.

Dona Ana County New Mexico:

The water situation has improved significantly in Dona Ana County since last year and we are **removing** Dona Ana County from our list of areas suspect of a water shortage for the 2005 crop year or until notified otherwise

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. The reservoir currently has 310,270 acre –feet of water and currently anticipates that inflows will approach normal levels this year based on mountain snow pack. In addition, the district anticipates, based on current expectations for inflows to Elephant Butte, being able to provide a full 2 acre-foot allocation to each water user in the district, a return to normal.

El Paso County Texas:

We are **removing** the El Paso Water district from our watch list for the 2005 crop year but will reevaluate the situation in 2006. The district's current allotment is the same as last year at 90,000 acre-feet. Last years initial allocation was 8 acre inches and this year's initial allocation is up significantly at 22 acre inches. The expected overall allocation is anticipated to be 2.75 acre feet or 33". Additional allotments will be determined in June. Any additional allotment will depend upon actual inflows to Elephant Butte from this spring's snow-melt in May - June or intermittent spring/summer storms.

Lower Rio Grande Valley: (Cameron, Hidalgo, Willacy, and Starr Counties, Texas)

We are **removing** the Lower Rio Grande Valley from our list of areas suspect of a water shortage for 2005 and subsequent years until notified otherwise.

The available water situation has returned to normal allowing full water allocations to each of the water districts servicing growers in the counties listed above. In addition, Mexico has agreed to deliver 578,000 acre feet of water to the United States by September 30, 2005 and 470,000 acre feet a year over the next three years to keep current with the 1944 treaty between the U.S. and Mexico.

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

The water situation at Red Bluff has improved significantly over last year and we are **removing** Red Bluff from our list of areas suspect of a water shortage for the 2005 crop year or until notified otherwise

As of April 12th, the reservoir had about 130,000 acre-feet in storage compared to 89,000 acre-feet last year. In addition the reservoir anticipates full allocations from New Mexico for the remainder of their water needs during the 2005 crop year. Letters were 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 season. Red Bluff does not anticipate a water shortage for this year