

Attachment 4: Topeka Regional Irrigation Assessment for the 2005 Crop Year

In accordance with the Loss Adjustment Manual Standards Handbook (FCIC-25010), which directs the Regional Office (RO) to provide a regional assessment in order to identify areas and water districts where inadequate irrigation water supply is suspected, the following is the list of counties from the Topeka RO:

Kansas:

Originally announced on January 12, and continuing through April 25, 2005, the following irrigation districts are expected to deliver less than their normal supply. The irrigation districts and their expected delivery amounts along with the percentage of the full supply are as follows:

<u>Irr District</u>	<u>Est. Farm Delivery (Ac. Inches as of 04/25/05)</u>	<u>% of Normal Supply</u>
Almena	2.5"	50%
Kansas-Bostwick		
Upper Courtland	0.5"	3%
Lower Courtland	6.0"	40%
Kirwin	1.5"	13%
Webster	1.5"	13%

The counties affected by the above allocations are: Norton, Phillips, Osborne, Republic, Rooks, and Smith. The crops affected are Barley, Corn, Grain Sorghum, Soybeans, Oats, and Sunflowers.

Nebraska:

Southwest and Central and Sheridan County, Nebraska:

The following information was received from the Bureau of Reclamation in McCook, Nebraska. The irrigation districts with estimated water allocations are shown below, with the percent change based on a comparison to a full supply.

<u>Irr District</u>	<u>Est. Farm Delivery (Ac.Inches as of 04/25/2005)</u>	<u>% of Normal Supply</u>
Mirage Flats	4.5"	64%
Frenchman Valley and H & RW	.5"	13%
Frenchman-Cambridge		
Meeker, Red Willow & Bartley	5.0"	42%
Cambridge Canal	8.0"	67%
Bostwick In Nebraska	.5"	4%

Counties affected by the above allocations are Franklin, Furnas, Harlan, Hayes, Hitchcock, Nuckolls, Red Willow, Sheridan, and Webster.

Central Nebraska Public Power and Irrigation and Nebraska Public Power Districts:

The Central Nebraska Public Power and Irrigation District that stores water in Lake McConaughy has announced that they be providing a reduced supply of 6.7 acre-inches to its irrigators. This is down from their normal supply of 18 acre-inches. They indicated they will also have a shorter irrigation season. They will begin the season on June 28th and end on August 23rd. There will be 4 runs instead of the normal 6 runs with half the normal volume per run. The districts feels, however, that by allowing irrigators to transfer surface water shares in conjunction with use of supplemental wells, that most acreage could be properly irrigated. It is important to emphasize that each irrigators water situation could be different depending on the availability of supplemental irrigation sources. CNPPI will unlikely be able to supply additional water to the Paxton-Hershey, Suburban, Keith-Lincoln, Lisco, and Platte Valley Districts as it does not look as though Lake McConaughy will reach the 800,000 acre/ft level by April 1st of this year.

Nebraska Public Power District has indicated that it expects to deliver a full supply of stored water to its irrigators, and will also be able to provide stored water to the Cozad, 30 Mile, 6 Mile and Orchard-Alfalfa canals as they have in past years. These irrigation districts rely on stored water for only about 1/3 of their irrigation water needs. The remaining two thirds of their water comes from direct stream flow which remains uncertain at this time.

Counties affected by the above irrigation districts are Buffalo, Deuel, Dawson, Garden, Gosper, Phelps, Kearney, and Lincoln.

Nebraska Panhandle:

Currently the outlook for water supplies for Irrigation Districts in the North Platte River Valley points to a high probability of less than normal allocations. The ownership of stored water for these districts is 42 to 50% of normal as of the end of March. Projections are that irrigation water deliveries will be similar to last year which was around 55% of the full supply. This could change by planting time, as the month April is critical month for snow pack. The timing of the snowmelt is also critical as to the amount of water available.

The Pumpkin Creek Groundwater Management Sub-Area will have the same allocation as last year which was 14" per acre.

Counties affected include Banner, Scotts Bluff, and Morrill. The affected crops in Nebraska are Barley, Corn, Dry Beans, Grain Sorghum, Oats, Potatoes, Soybeans, Sugar Beets, Sunflowers.

Colorado:

South Platte Basin (Northeast Colorado)

Based on present conditions, it appears that all the main plains reservoirs will fill this year in contrast to last year. Surface Water Supply Index (SWSI) value was reported at -0.3 at the end of March. This SWSI value would indicate that water supplies are near normal. Reservoir storage, the major component in computing the SWSI value, was 105% of normal as of the end of March. The Natural Resources Conservation Service reported that April 1 snow pack is 84% of normal.

Arkansas Basin (Southeast Colorado):

The Arkansas basin Surface Water Supply Index (SWSI) value of -1.3 as of the end of March indicates water supplies are below normal. The Natural Resources Conservation Service reported that as of March 1 snow pack is 112% of normal. Storage in Turquoise, Twin Lakes, Pueblo and John Martin reservoirs total 69% of normal as of April 1. Snow pack and resulting stream flows from snowmelt account for most of the irrigation supply with storage amounting to around 25 percent of the irrigation supply in the area.

Rio Grande Basin (The San Luis Valley):

The Rio Grande basin SWSI value of $+3.2$ indicates that for March the basin water supplies were well above normal. April 1 snow pack is reported at 140% of normal. Storage in Platoro, Rio Grande, and Santa Maria reservoirs totaled 77% as of April 1. NRCS forecasts are now predicting runoff to be 145% of average for the Rio Grande near Del Norte and 135% of average for the Conejos near Mogote.

Even though the surface water irrigation outlook is good this year, there still are suspected shortages of irrigation water being pumped from deeper wells in the confined aquifer areas in the Valley. It is not expected that the above normal surface water conditions will recharge this aquifer in time for this year's irrigation season. This may affect about 40% of the irrigated acreage in the Valley.

Gunnison Basin (West Central Colorado):

The Gunnison Basin Surface Water Supply Index (SWSI) value of $+2.6$ at the end of March indicates basin water supplies were above normal. The NRCS reported that April 1 snow pack was 127% of normal. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 104% of normal as of April 1. Irrigators are looking forward to a full supply this year.

Colorado Basin (Northwest Colorado):

The Colorado Basin had a SWSI value of -0.4, which indicated that, for February, the basin water supplies were near normal. The NRCS reported April 1 snow pack was 98% of normal. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 110% of normal as of the end of March. Snowpack for the entire Colorado Basin is near normal.

Yampa/White Basin (Northwest Colorado):

The Yampa/White Basin SWSI value of - 2.2, indicates, for March, the basin water supplies were below normal. The NRCS reported that April 1 snow pack was 89% of normal. The April 1st runoff forecast prepared by the Natural Resources Conservation Service is predicting below-normal spring runoff for much of the drainage. The percent of average runoff under the most probable forecast is 63% for the North Platte River near Northgate, 75% for the Yampa River near Maybell, 91% for the Little Snake River near Dixon and 68% for the White River near Meeker. These forecasts are all about the same as the previous month except the North Platte River with is 12% lower.

San Juan/Dolores Basin (Southwest Colorado):

The San Juan/Delores Basin had a SWSI value of +2.3 at the end of March indicating water supplies were above normal. Snow pack was 138% of normal as of April 1. Reservoirs are predicted to fill everywhere and efforts were made to release water from Lemon and Vallecito reservoirs to make room for the runoff.

The Colorado counties most critically affected by potential irrigation water shortages at this time are in the Yampa/White and Arkansas Basins. They are:

Moffat, Rio Blanco, and Routt in the Yampa/White and Bent, Crowley, Otero, Prowers, and Pueblo in the Arkansas River Basin.

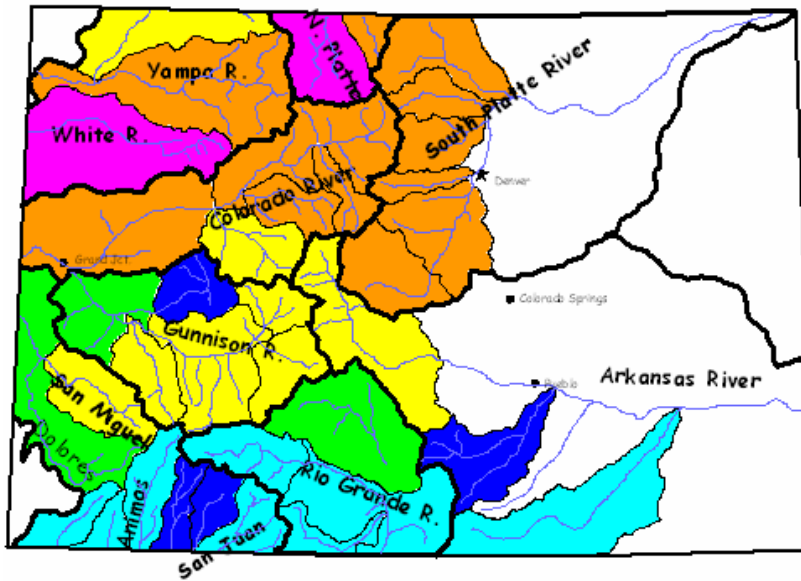
The counties that could be moderately affected by potential irrigation water shortages at this time are in the South Platte and Rio Grande Basins (deeper wells). They are:

The counties in the South Platte are Adams, Arapahoe, Boulder, Larimer, Logan, Morgan, Phillips, Sedgwick, Washington, Weld, and Yuma, and the Rio Grande are Alamosa, Conejos, Costilla, Rio Grande and Saguache. The affected crops in Colorado are Barley, Corn, Sweet Corn, Dry Beans, Grain Sorghum, Oats, Onions, Potatoes, Soybeans, Sorghum Silage, Sugar Beets, Sunflowers, and Wheat.

If you have any questions or need further assistance, please contact our office.

Streamflow Forecasts

April 1, 2005



Legend

- > 150% of Average
- 130 - 150% of Average
- 110 - 129% of Average
- 90 - 109% of Average
- 70 - 89% of Average
- 50 - 69% of Average
- < 50% of Average
- Not Forecast
- Major Basin Boundary
- Watershed Boundary

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

Legend

Percent of Average

