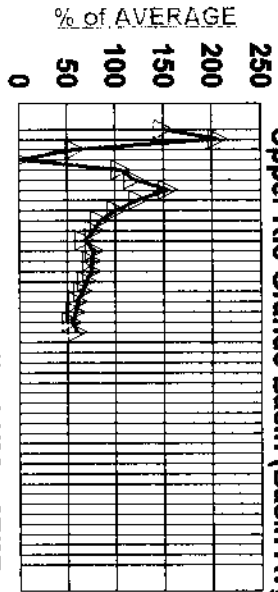


**% OF AVG. SNOW WATER EQUIVALENT VS TIME**

Upper Rio Grande Basin (Basin Avg.)

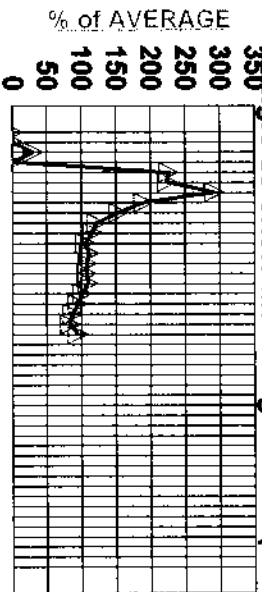


Avg = Avg of 9 SNOTEL Sites

OCT. 01, 2002 to FEB. 17, 2003

**% OF AVG. SNOW WATER EQUIVALENT VS TIME**

Sangre de Cristo Mtn Range Basins (Basin Avg.)

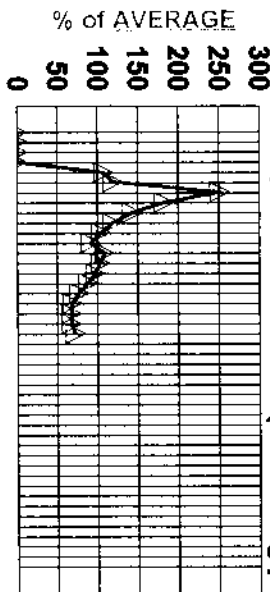


Avg = Avg of 9 SNOTEL Sites

OCT. 01, 2002 to FEB. 17, 2003

**% OF AVG. SNOW WATER EQUIVALENT VS TIME**

Rio Chama Basin (Basin Avg.)

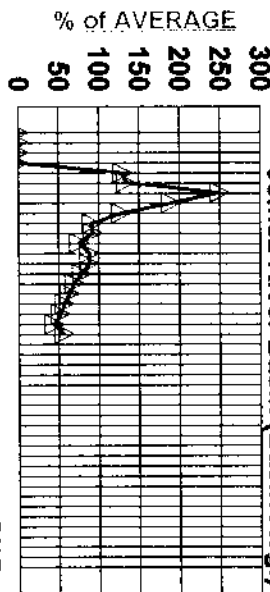


Avg = Avg of 4 SNOTEL Sites

OCT. 01, 2002 to FEB. 17, 2003

**% OF AVG. SNOW WATER EQUIVALENT VS TIME**

Jemez River Basin (Basin Avg.)

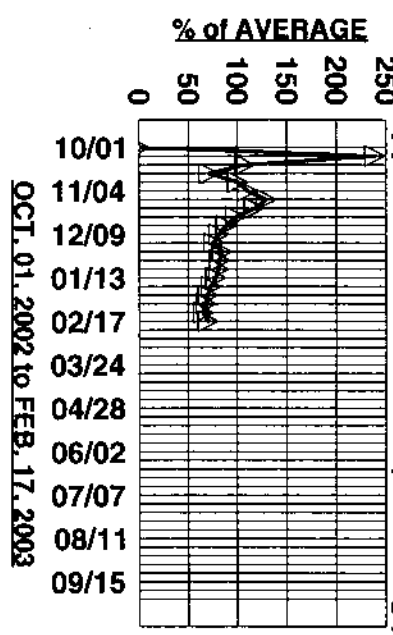


Avg = Avg of 3 SNOTEL Sites

OCT. 01, 2002 to FEB. 17, 2003

**% OF AVG. TOTAL PRECIPITATION VS TIME**

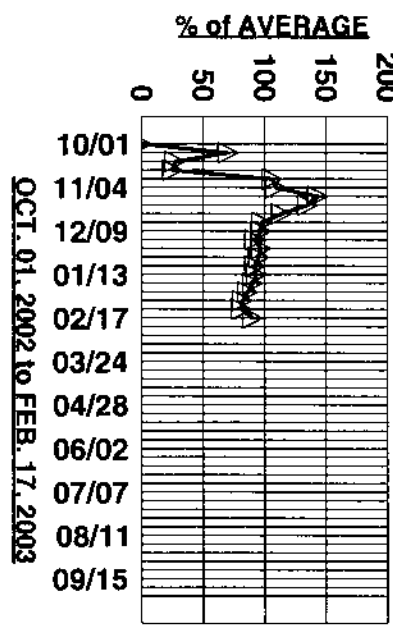
Upper Rio Grande Basin (Basin Avg.)



Avg = Avg of 9 Precip. Sites

**% OF AVG. TOTAL PRECIPITATION VS TIME**

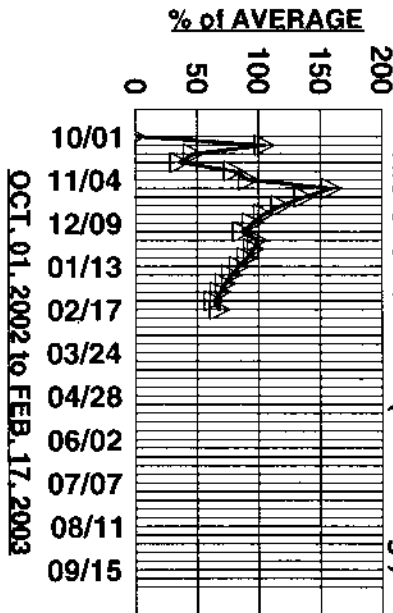
Sangre de Cristo Mtn Range Basins (Basin Avg.)



Avg = Avg of 9 Precip. Sites

**% OF AVG. TOTAL PRECIPITATION VS TIME**

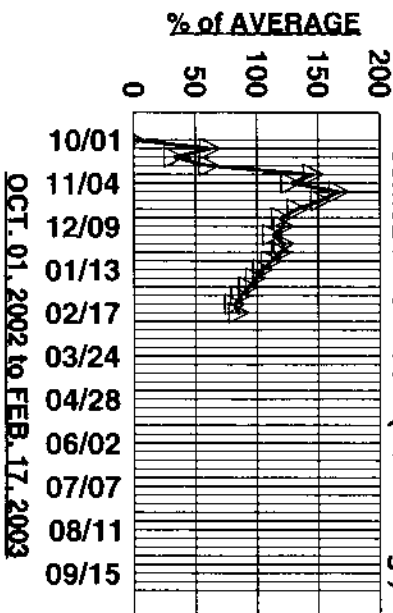
Rio Chama Basin (Basin Avg.)



Avg = Avg of 4 Precip. Sites

**% OF AVG. TOTAL PRECIPITATION VS TIME**

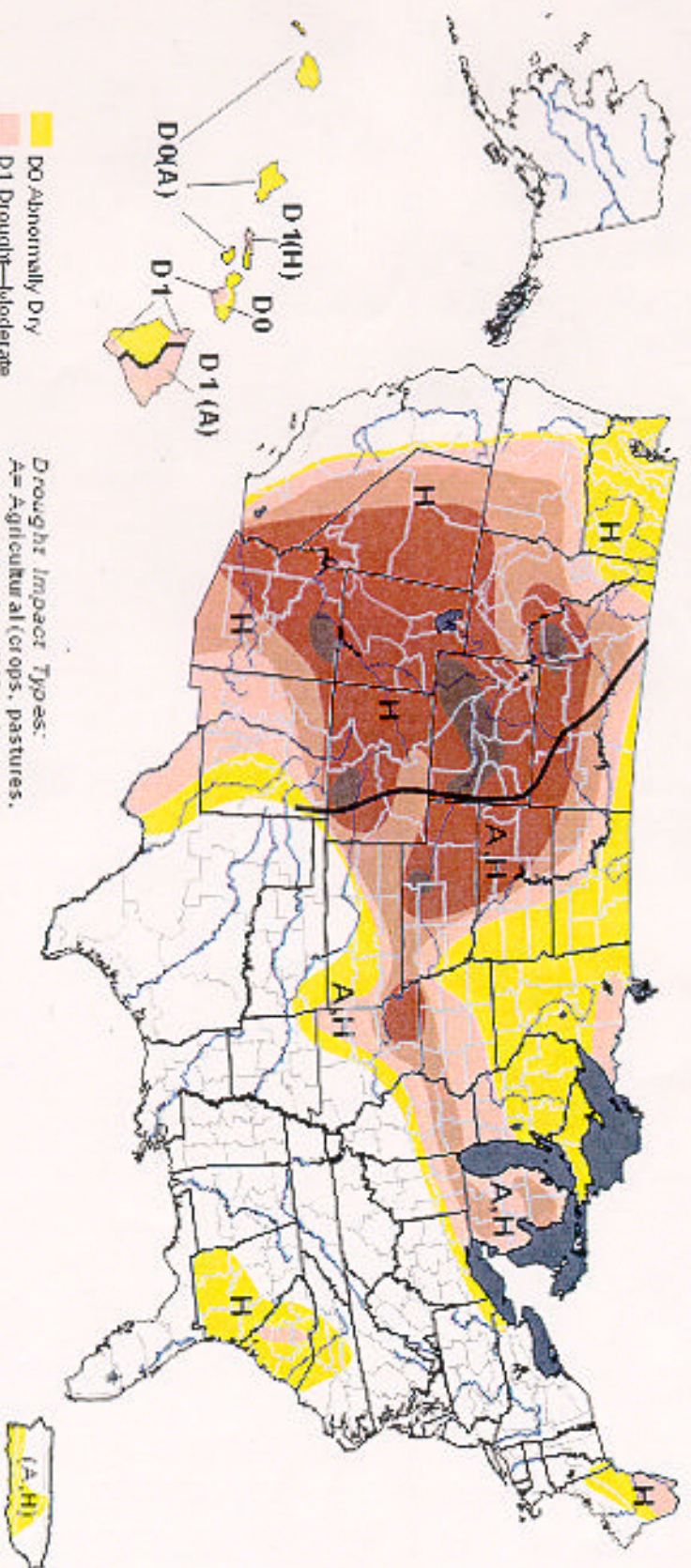
Jemez River Basin (Basin Avg.)



Avg = Avg of 3 Precip. Sites

# U.S. Drought Monitor

February 18, 2003  
Valid 7 a.m. EST



D0 Abnormally Dry  
 D1 Drought—Moderate  
 D2 Drought—Severe  
 D3 Drought—Extreme  
 D4 Drought—Exceptional

**Drought Impact Types:**  
 A= Agricultural (crops, pastures, grass lands, wildfire danger)  
 H= Hydrological (water)  
 D delineates dominant impacts (No type = both impacts)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

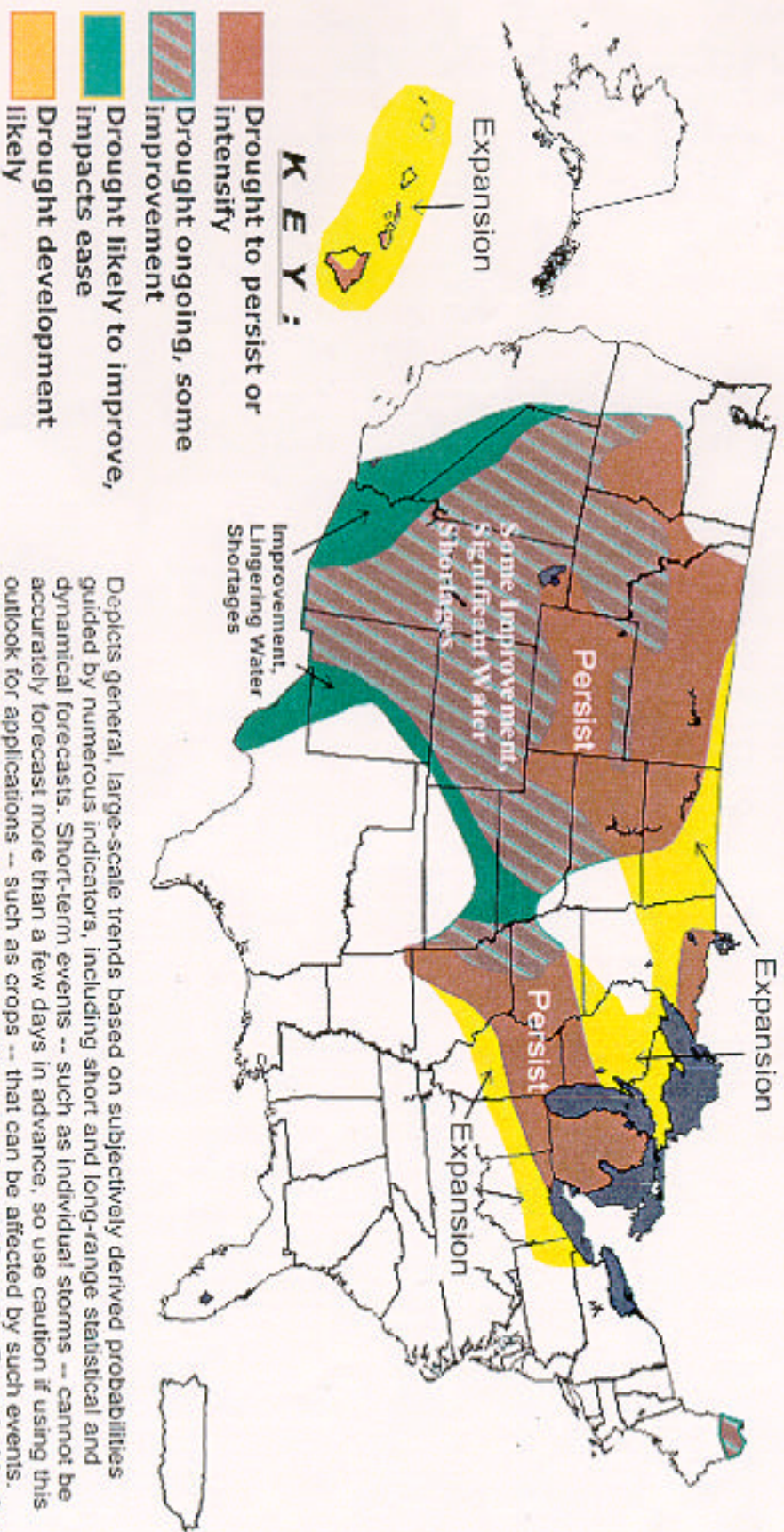
<http://drought.mt.edu/dm>



Released Thursday, February 20, 2003  
Author: Mark Svoboda and Mike Hayes, NDMC



# U. S. Seasonal Drought Outlook Through May 2003 Released February 20, 2003



Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are schematically approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text.

**SPRING RUNOFF FORECASTS**

2003

**R I O G R A N D E B A S I N**

| <b>FORECAST POINT</b>               | <b>Rio Grande<br/>nr Del Norte</b> | <b>Rio Chama<br/>at El Vado<br/>Reservoir</b> | <b>Rio Grande<br/>at Otowi<br/>Bridge</b> | <b>Jemez River<br/>nr Jemez</b> | <b>Rio Grande<br/>at San<br/>Marcial</b> |
|-------------------------------------|------------------------------------|---|---|---------------------------------|--|
| <b>FORECAST PERIOD</b>              | APR-SEP                            | MAR-JUL                                       | MAR-JUL                                   | MAR-JUL                         | MAR-JUL                                  |
| <b>30-YEAR AVERAGE<br/>RUNOFF *</b> | 531,000 AF                         | 237,000 AF                                    | 757,000 AF                                | 47,000 AF                       | 573,000 AF                               |
| JANUARY 1<br>FORECAST               | 372,000<br>(70% of avg.)           | 182,000<br>(77%)                              | 533,000<br>(70%)                          | 40,000<br>(85%)                 | 370,000<br>(65%)                         |
| FEBRUARY 1<br>FORECAST              | 290,000<br>(55%)                   | 142,000<br>(60%)                              | 415,000<br>(55%)                          | 25,000<br>(53%)                 | 260,000<br>(45%)                         |
| FEBRUARY 15<br>FORECAST             |                                    |   |   |                                 |  |
| MARCH 1<br>FORECAST                 |                                    |   |   |                                 |  |
| MARCH 15<br>FORECAST                |                                    |   |   |                                 |  |
| APRIL 1<br>FORECAST                 |                                    |   |   |                                 |  |
| APRIL 15<br>FORECAST                |                                    |   |   |                                 |  |
| MAY 1<br>FORECAST **                |                                    |   |   |                                 |  |
| MAY 15<br>FORECAST                  |                                    |   |   |                                 |  |

\* based on 1971-2000 runoff data.

\*\* last official forecast for 2003 spring runoff.



# 2003 Rio Grande Project Allocation

## Initial Allocation - End of November, 2002

(letter issued Dec. 10, 2002)

|   |             |
|---|-------------|
| Mexico  | 6,548 AF    |
| Elephant Butte Irrigation District            | 38,783 AF   |
| El Paso County Water Improvement District # 1 | 29,529 AF   |
|   | <hr/>       |
| [8.03% of a full supply]                      | 74,860 AF * |

## Updated Allocation - End of December, 2002

(letter issued Jan. 17, 2003)

|   |             |
|---|-------------|
| Mexico  | 7,612 AF    |
| Elephant Butte Irrigation District            | 50,698 AF   |
| El Paso County Water Improvement District # 1 | 38,600 AF   |
|   | <hr/>       |
| [10.40% of a full supply]                     | 96,910 AF * |

## Updated Allocation - End of January, 2003

(letter issued Feb. 14, 2003)

|   |              |
|---|--------------|
| Mexico  | 7,978 AF     |
| Elephant Butte Irrigation District            | 53,131 AF    |
| El Paso County Water Improvement District # 1 | 40,453 AF    |
|   | <hr/>        |
| [10.90% of a full supply]                     | 101,562 AF * |

\* Project water supply available for diversion at the authorized canal headings.

**WORKSHEET OF STATUS OF RIO GRANDE COMPACT  
CREDIT WATERS AND DELIVERIES**

WTreeers  
2/20/2003

**2002**

**ELEPHANT BUTTE RESERVOIR**

|   | Rio Grande Compact<br>Credit Waters |                    | San Juan-<br>Chama<br>Pool<br>(AF) |
|---|-------------------------------------|--------------------|------------------------------------|
|   | Colorado<br>(AF)                    | New Mexico<br>(AF) |                                    |
| Beginning of 2002 (derived from 2001<br>RGC Accounting)   | 10,100                              | 155,700            | 9,494                              |
| Evaporation from Jan. 1 to Dec. 31, 2002<br>(derived from actual data)  | 1,918                               | 29,565             | 1,287                              |
| Status of RGC Credit Waters and<br>SJ-C Water to Dec. 31, 2002  | 8,182                               | 126,135            | 8,207                              |
| Final Status of 2002 Deliveries under<br>Rio Grande Compact Regulations:<br>( to Dec. 31, 2002 for CO and NM;<br>to Dec. 31, 2002 for SJ-C) | 34,618                              | 138,865            | 0                                  |
| Final Status of Deliveries and Credit<br>Waters for End of Year 2002  | 42,800                              | 265,000            | 8,207                              |

**SUMMARY TABLE OF PROJECTED ALLOTMENTS FOR 2003**  
(Based Upon Various Runoff Scenarios at San Marcial Gauges)

WTTrears  
2/11/2002

**NO RELINQUISHMENT OF RIO GRANDE COMPACT CREDIT WATERS  
IN ELEPHANT BUTTE RESERVOIR**

| 2003<br>RUNOFF<br>(Mar.-Jul)<br>at SAN<br>MARCIAL<br>GAUGES | 2003  |   |   |   |   |         | Estimated<br>Remaining<br>Credit Waters<br>in Elephant<br>Butte<br>Reservoir<br>(AF) | 2003<br>Estimated<br>Irrigation<br>Season<br>Release<br>from Caballo<br>Dam<br>(AF) |
|---|---|---|---|---|---|---------|--|---|
|   | EO February<br>Est. Allotments<br>(based on<br>EO February<br>est. storage) | EO March<br>Est. Allotments<br>(based on<br>EO March<br>est. storage) | EO May<br>Est. Allotments<br>(based on<br>EO May<br>est. storage) | EO June<br>Est. Allotments<br>(based on<br>EO June<br>est. storage) | EO September<br>Est. Allotments<br>(based on<br>EO September<br>est. storage) |         |  |   |
| 50%   | 13.5% of full supply  | 16.0% of full supply  | 36.5% of full supply  | 50.2% of full supply  | 65.7% of full supply  | 246,280 | 499,000  |   |
| 36%   | 13.4% of full supply  | 17.5% of full supply  | 34.4% of full supply  | 39.4% of full supply  | 50.9% of full supply  | 248,060 | 401,000  |   |
| 25%   | 13.4% of full supply  | 15.2% of full supply  | 25.8% of full supply  | 30.3% of full supply  | 41.5% of full supply  | 245,160 | 340,000  |   |
| 15%   | 13.2% of full supply  | 15.7% of full supply  | 21.8% of full supply  | 23.5% of full supply  | 33.2% of full supply  | 245,550 | 279,000  |   |

\* Normal (average) runoff volume at San Marcial gauging stations (Mar.-Jul) is 573,000 AF.

\*\* EO month storage figures based on Reclamation's Rio Grande Project reservoirs operational plans developed on Feb. 10, 2003. Allotments are estimated for an entire irrigation season, and the allotments are made to the Rio Grande Project canal headings.

A full supply allotment for an irrigation season is: 494,979 AF to EBD canal headings; 376,862 AF to EP#1 headings; and, 60,000 AF to Mexico's Acequia Madre heading under the 1906 Treaty.