Weather Update for Santa Cruz County

Santa Cruz County Local Drought Impact Group

Thursday, September 28, 2006
Santa Cruz County Board of Supervisors Hearing Room
2150 North Congress Drive
Nogales, Arizona

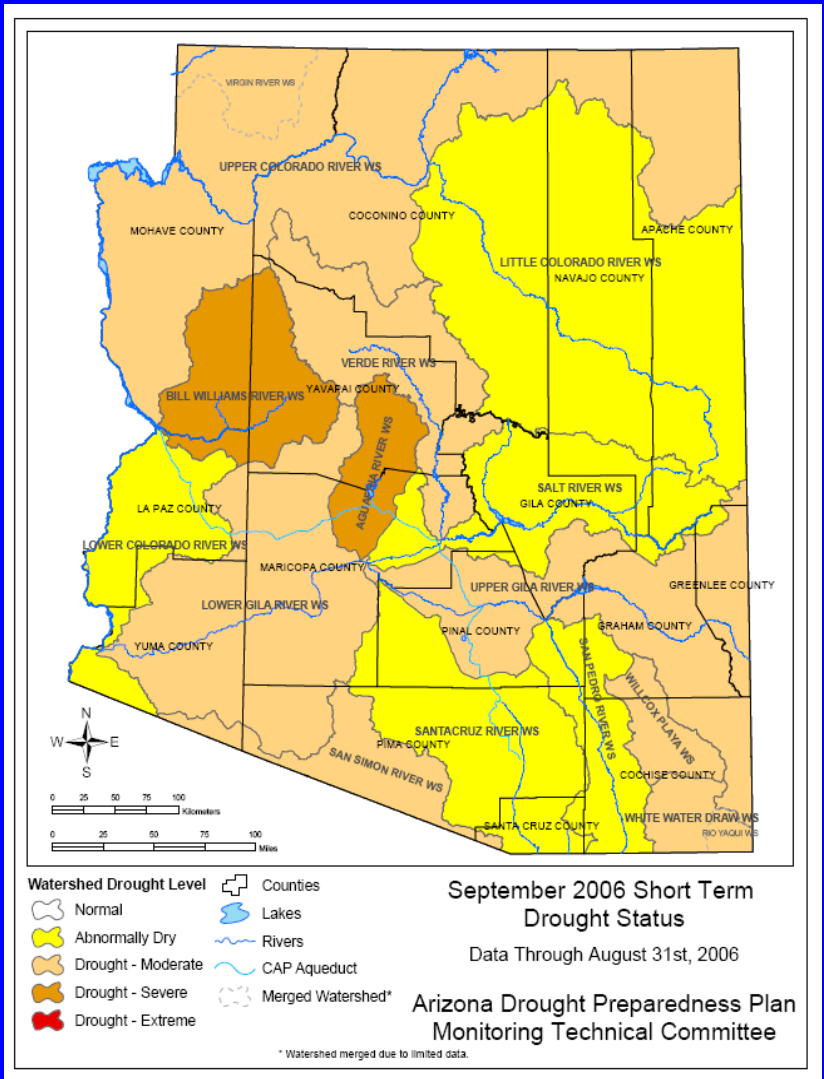
Gregg Garfin, *Program Manager*
CLIMAS/ISPE
University of Arizona

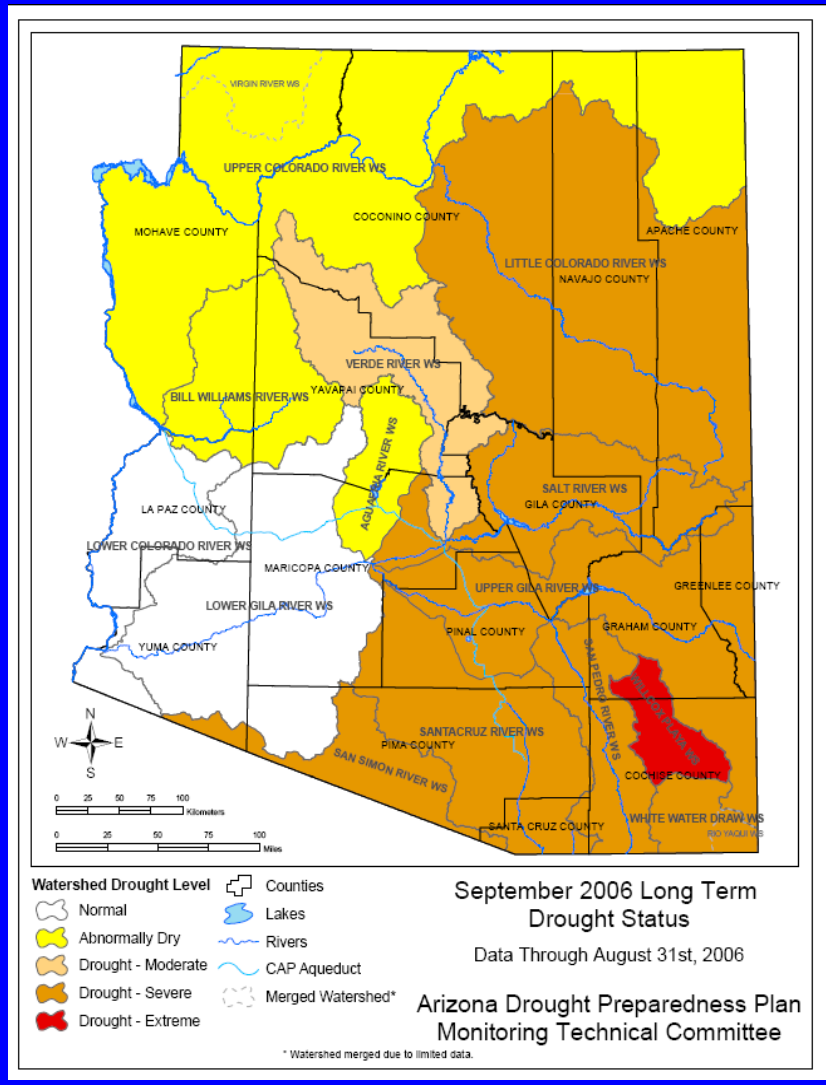
Institute for the Study of Planet Earth

CLIMAS
Climate Assessment Project for the Southwest

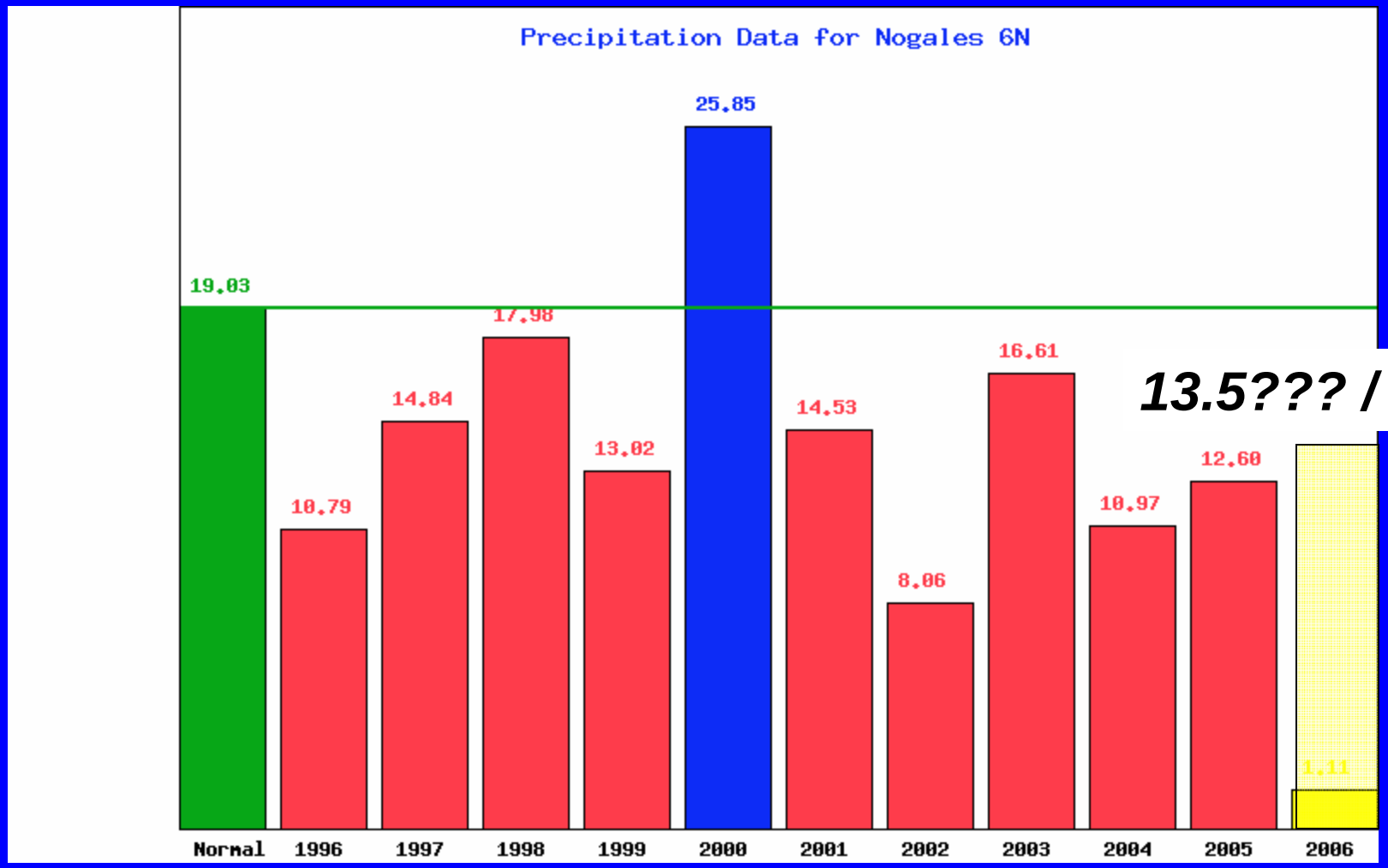
NOAA

September 2006 Status Maps*





*DRAFT Courtesy of Andy Fisher, Arizona Department of Water Resources

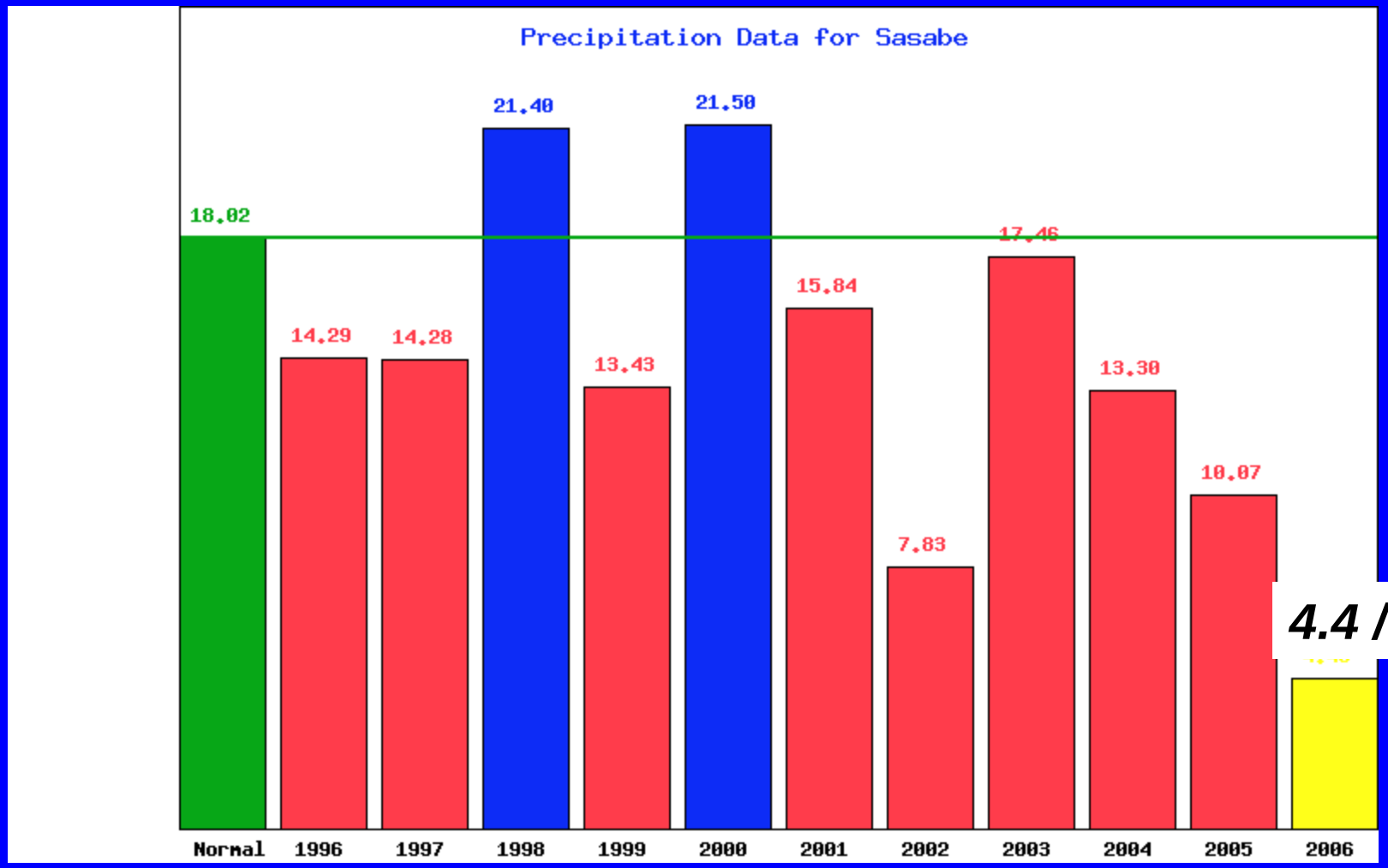


13.5??? / 13.3

Since 1999: -?”

National Weather Service Phoenix

http://www.wrh.noaa.gov/psr/DroughtPage.php?data=ALLDATA

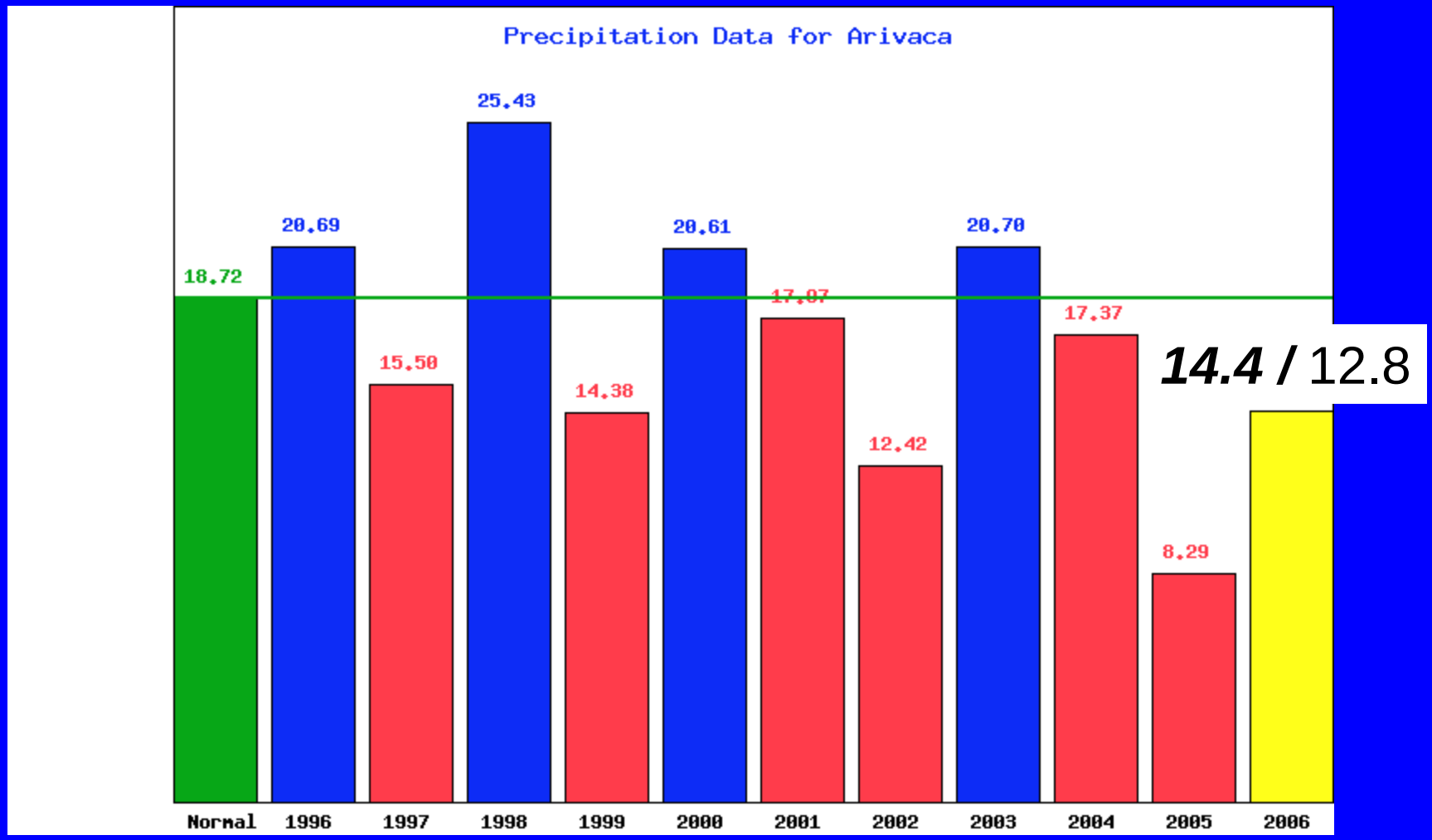


4.4 **/** 12.1

Since 1999: -34”

National Weather Service Phoenix

http://www.wrh.noaa.gov/psr/DroughtPage.php?data=ALLDATA

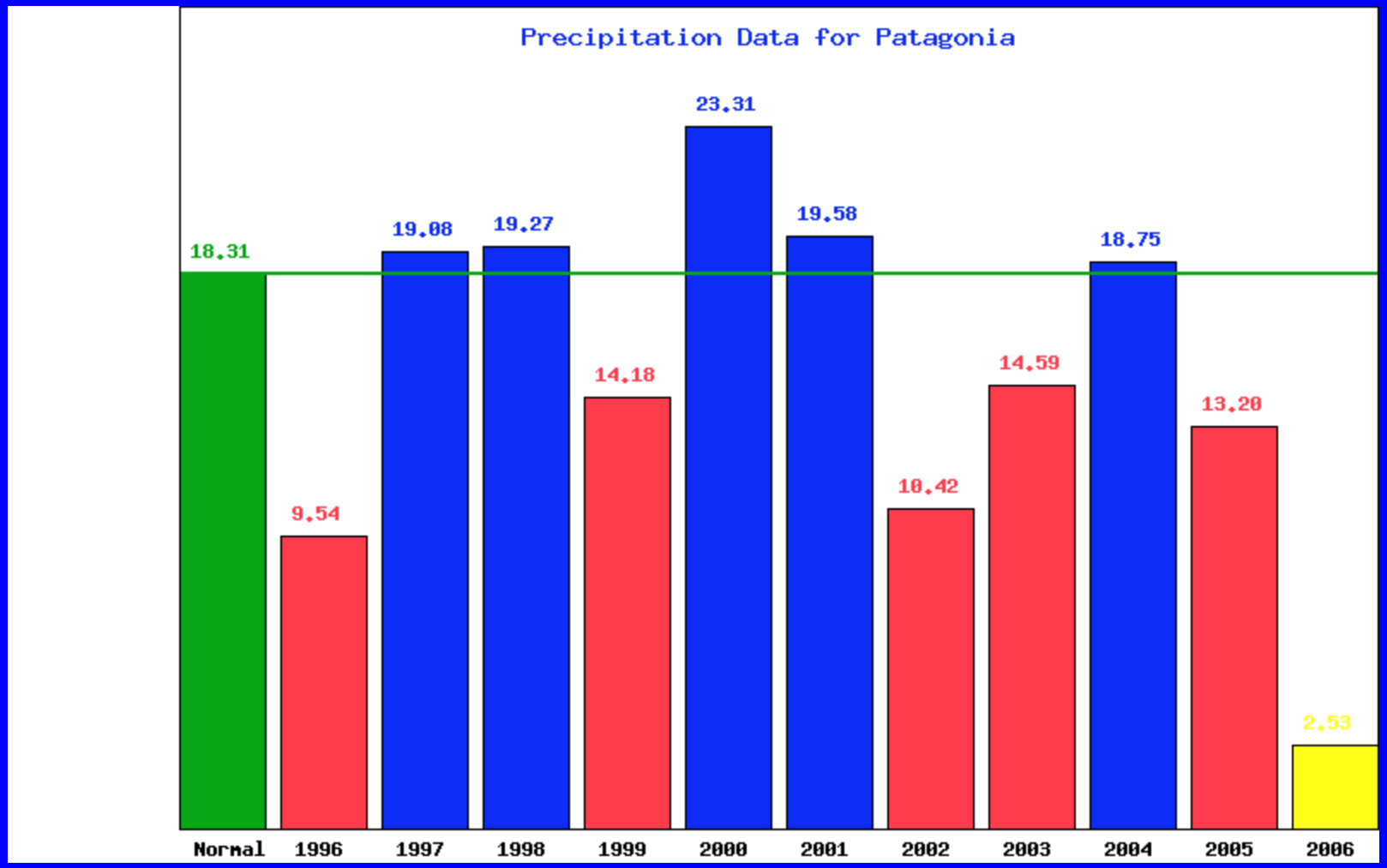


14.4 **/** 12.8

Since 1999: -17”

National Weather Service Phoenix

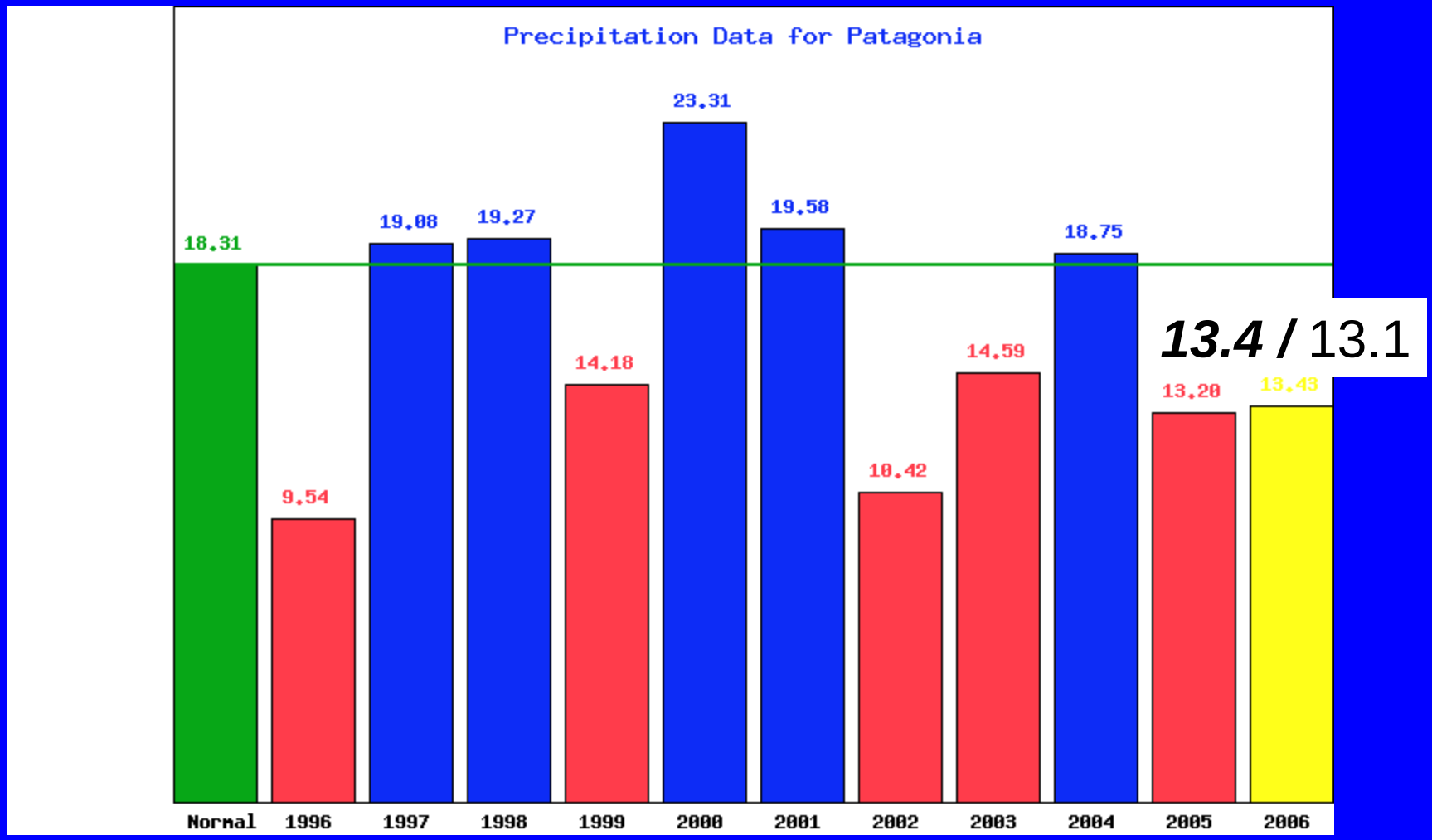
http://www.wrh.noaa.gov/psr/DroughtPage.php?data=ALLDATA



Since 1999: -16”

National Weather Service Phoenix

http://www.wrh.noaa.gov/psr/DroughtPage.php?data=ALLDATA

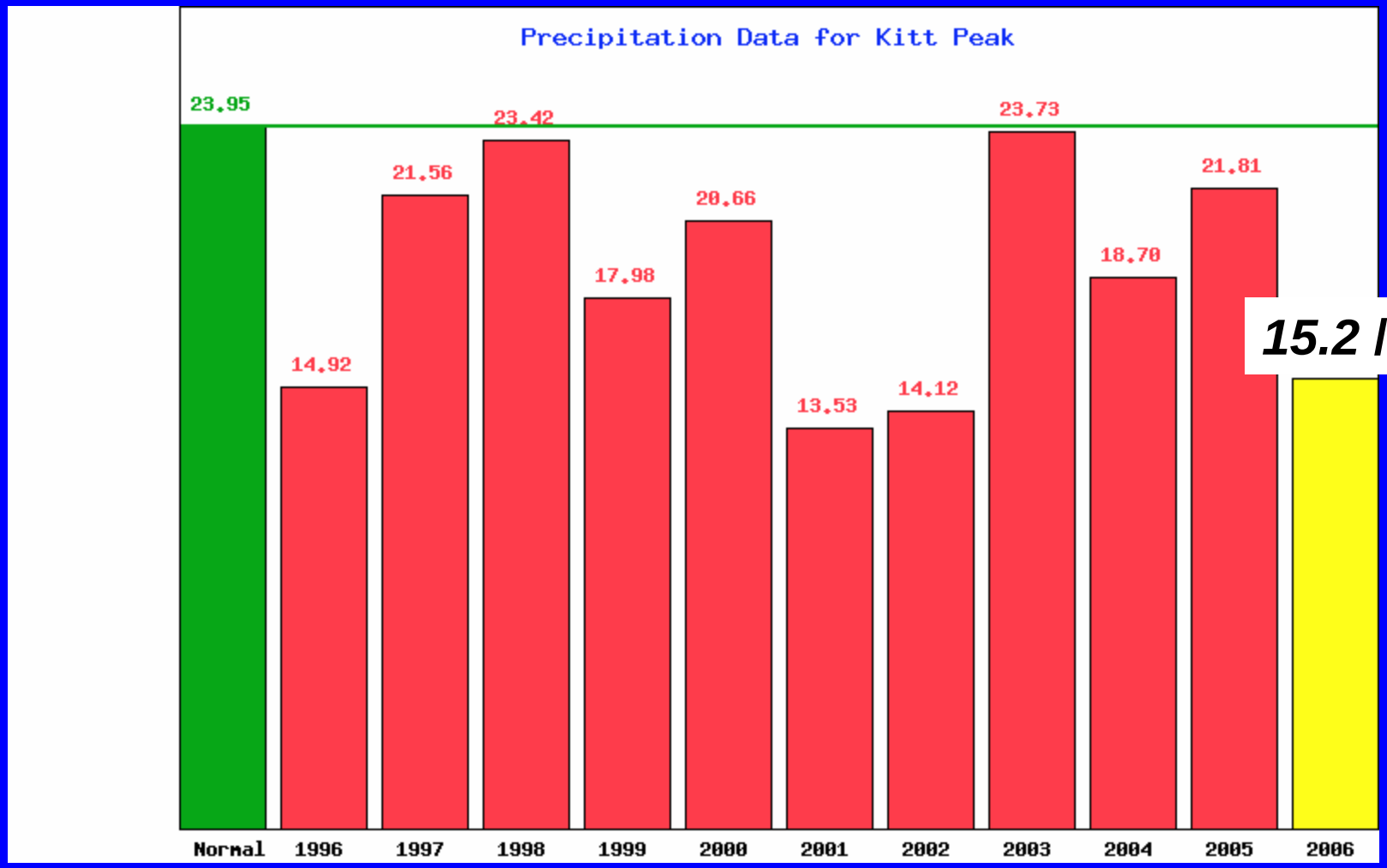


13.4 **/** 13.1

Since 1999: -7”

National Weather Service Phoenix

http://www.wrh.noaa.gov/psr/DroughtPage.php?data=ALLDATA

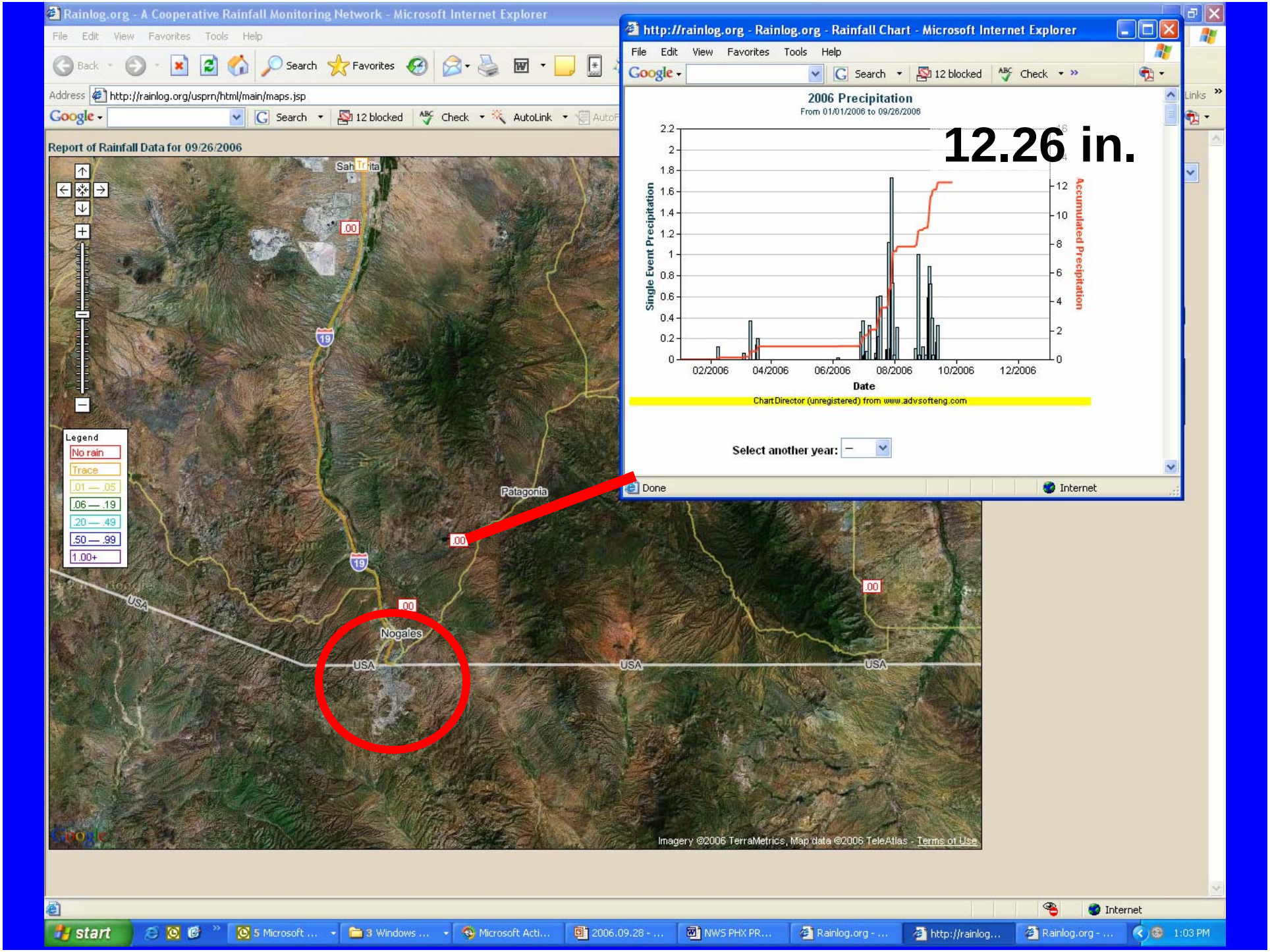


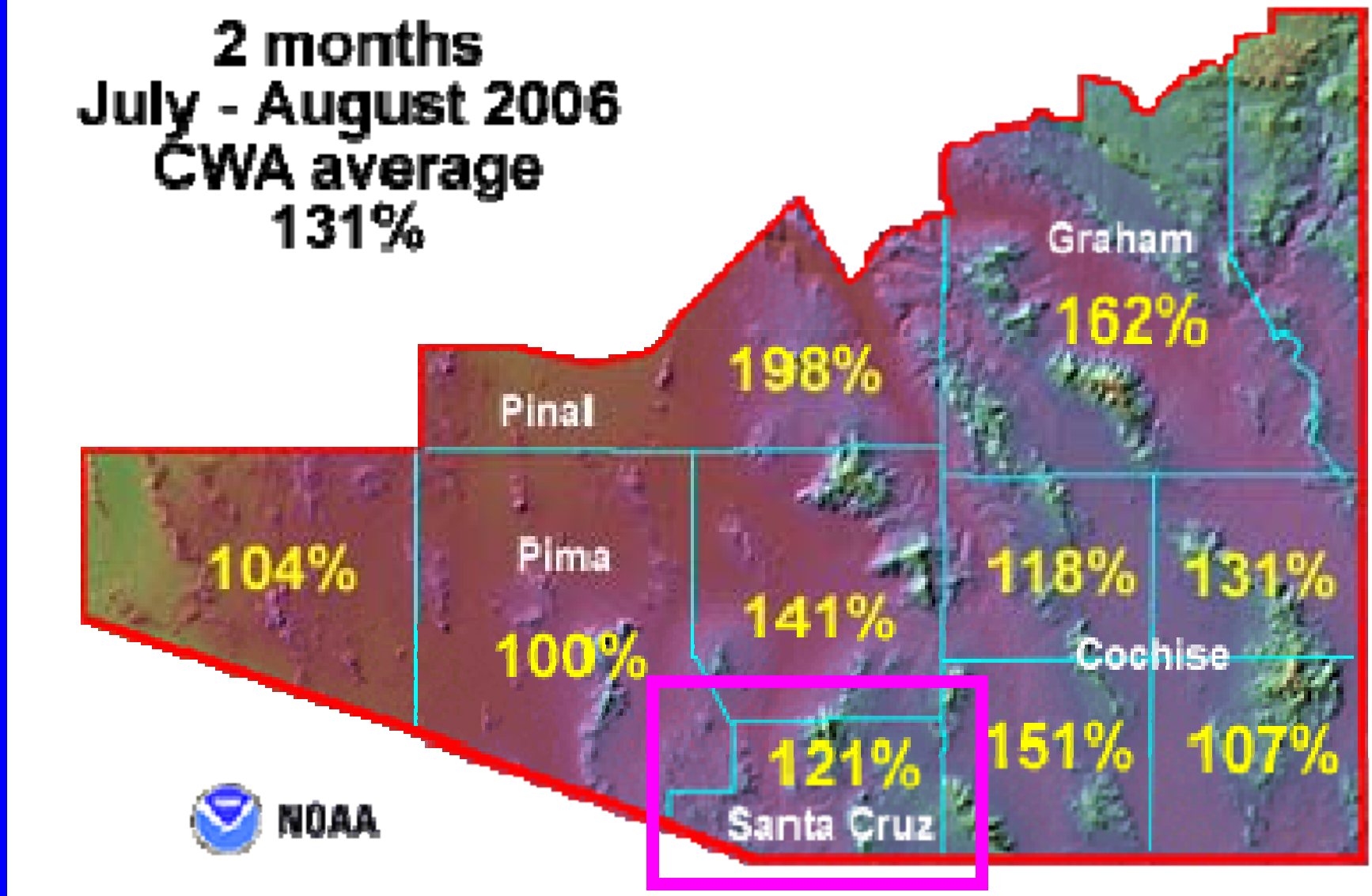
15.2 / 16.2

Since 1999: -32”

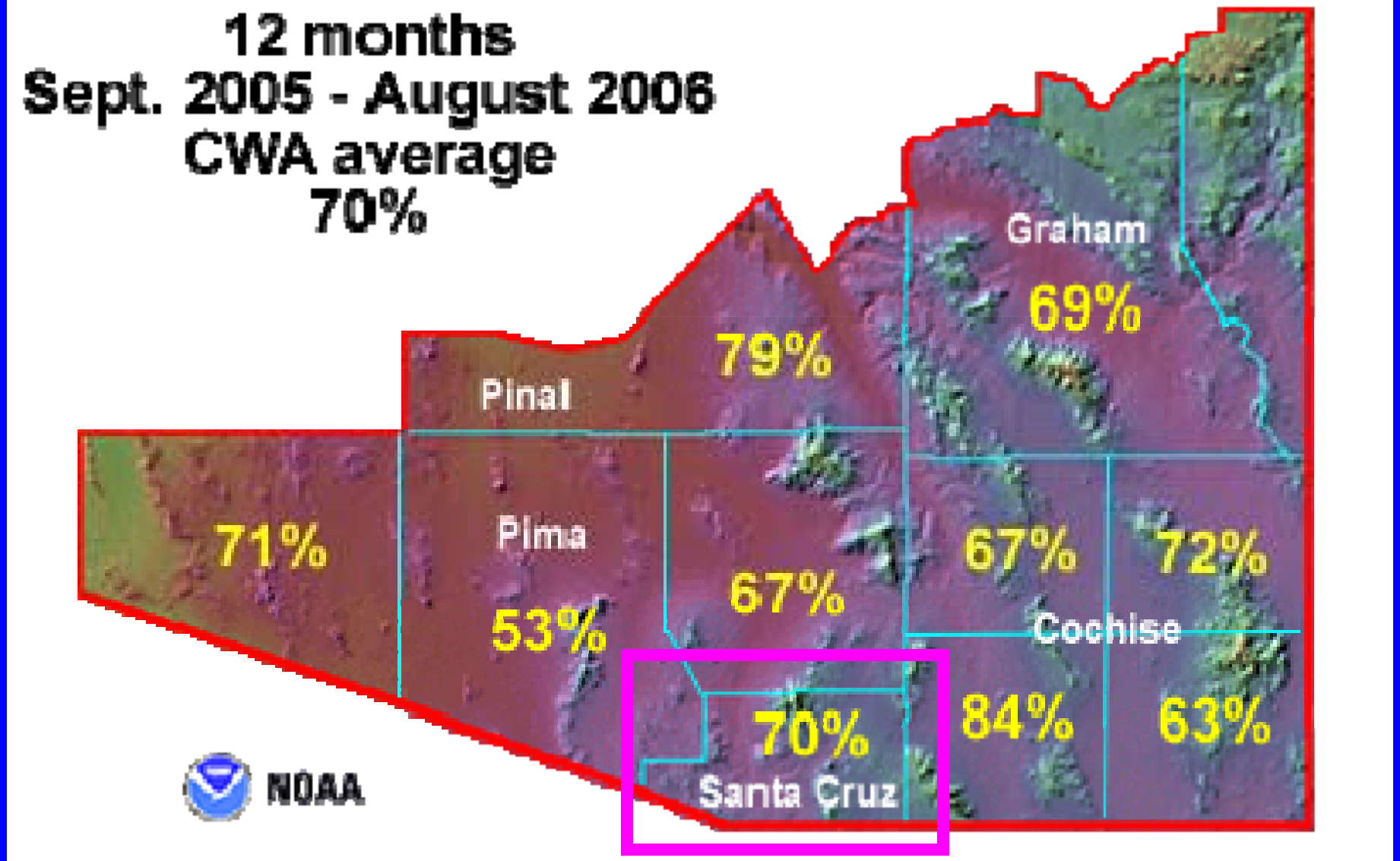
National Weather Service Phoenix

http://www.wrh.noaa.gov/psr/DroughtPage.php?data=ALLDATA


Rainlog.org - A Cooperative Rainfall Monitoring Network - Microsoft Internet Explorer
http://rainlog.org - Rainlog.org - Rainfall Chart - Microsoft Internet Explorer
2006 Precipitation
From 01/01/2006 to 09/26/2006
12.26 in.
Single Event Precipitation
Accumulated Precipitation
02/2006
04/2006
06/2006
08/2006
10/2006
12/2006
Date
Chart Director (unregistered) from www.advsofteng.com
Select another year:
Report of Rainfall Data for 09/26/2006
Legend
No rain
Trace
.01 — .05
.06 — .19
.20 — .49
.50 — .99
1.00+
Patagonia
Nogales
USA
Imagery ©2006 TerraMetrics, Map data ©2006 TeleAtlas - Terms of Use



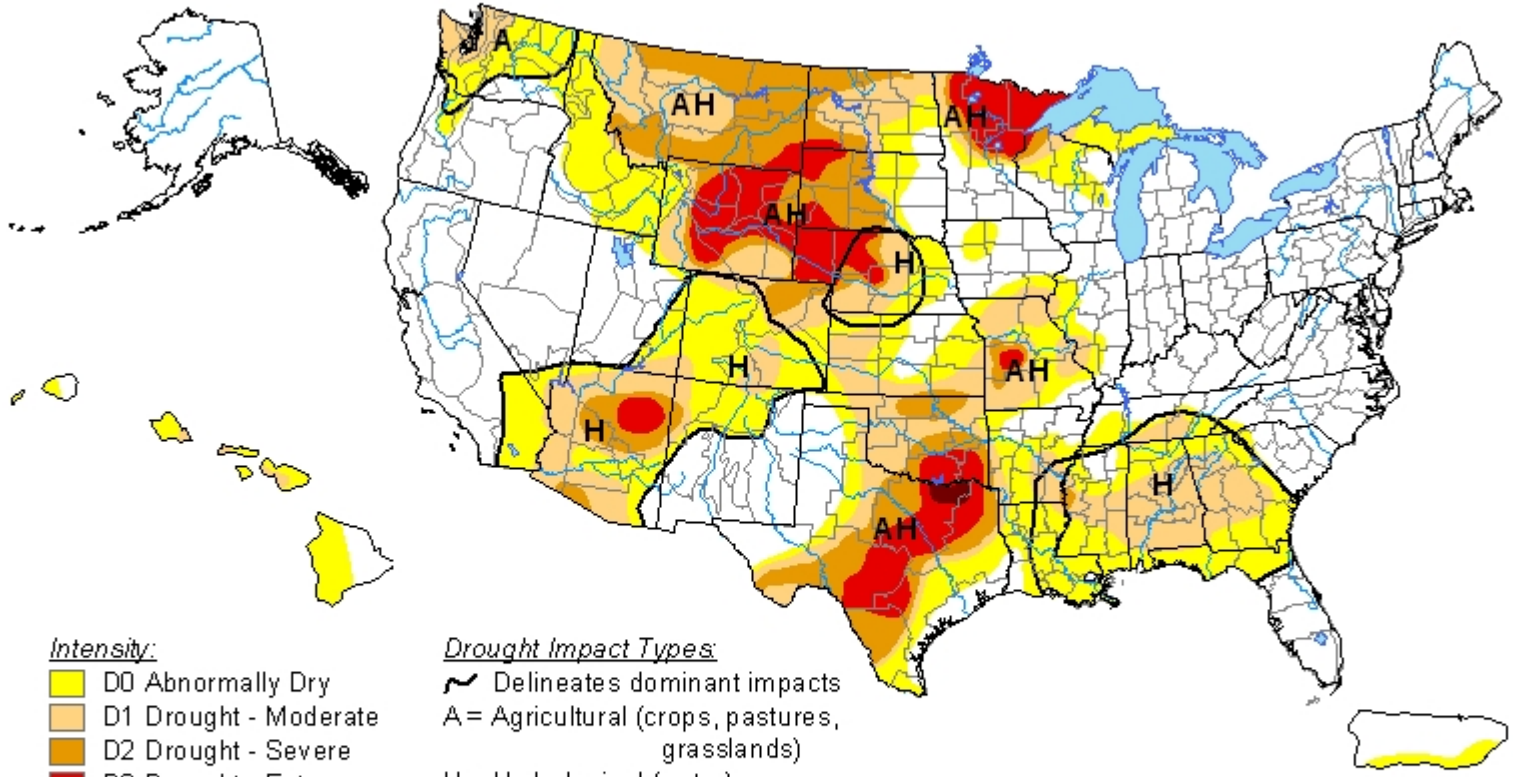
http://www.wrh.noaa.gov/tws



http://www.wrh.noaa.gov/tws

U.S. Drought Monitor

September 26, 2006
Valid 8 a.m. EDT



Intensity:
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:
- ~ Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

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

http://drought.unl.edu/dm

USDA National Drought Mitigation Center

Released Thursday, September 28, 2006

Author: Ned Guttman/Liz Love-Brotak, NOAA/NESDIS/NCDC

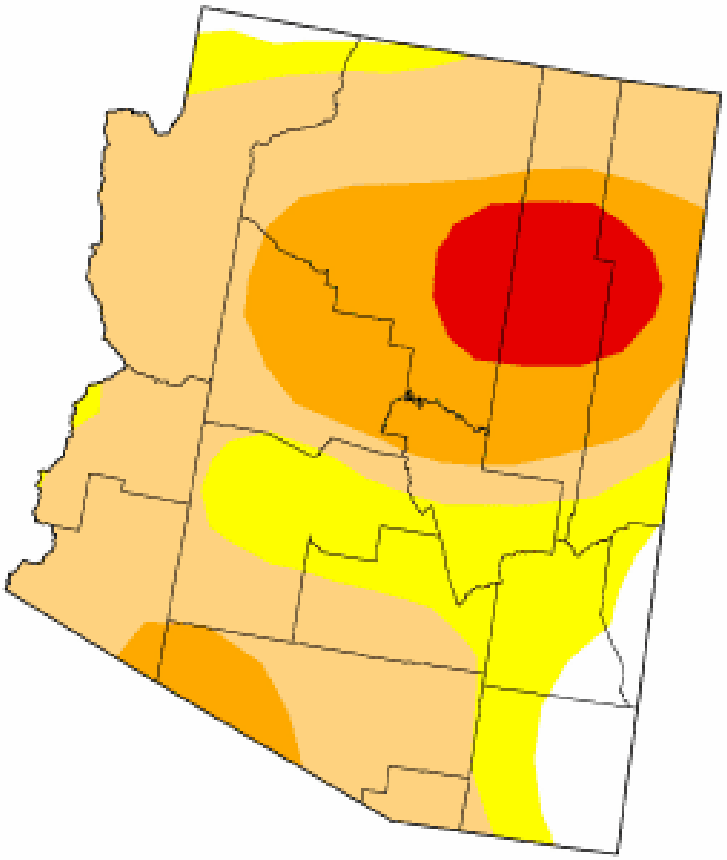
U.S. Drought Monitor

Arizona

September 19, 2006
Valid 8 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5.6	94.4	75.9	28.5	7.3	0.0
Last Week (9/12/2006 map)	1.2	98.8	87.3	40.2	10.2	0.0
3 Months Ago (6/13/2006 map)	0.0	100.0	97.2	84.2	51.2	14.5
Start of Calendar Year (1/3/2006 map)	2.8	97.2	40.4	0.0	0.0	0.0
Start of Water Year (10/4/2005 map)	66.7	33.3	11.7	0.0	0.0	0.0
One Year Ago (9/20/2005 map)	66.4	33.6	11.7	0.0	0.0	0.0



Intensity:

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

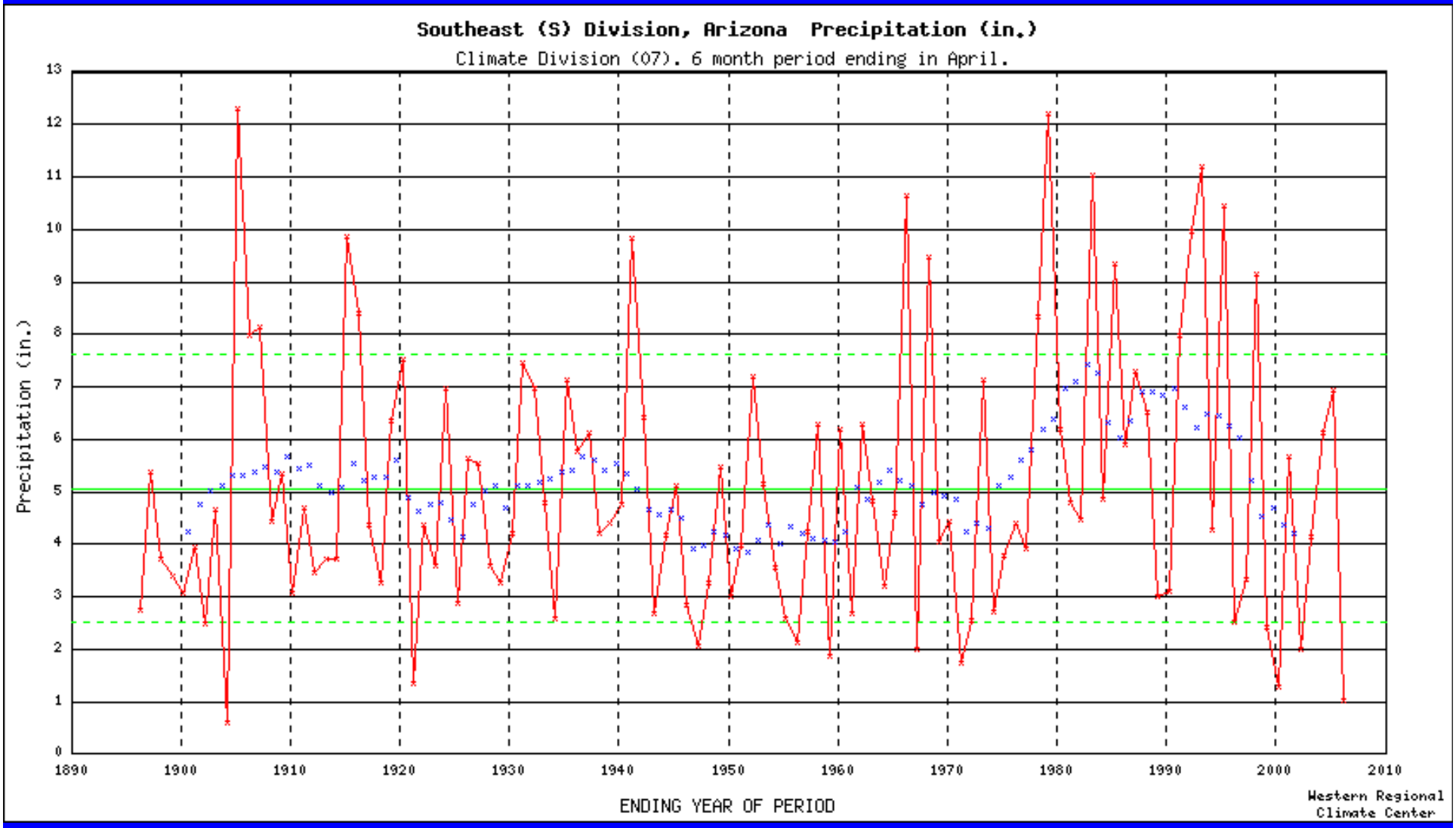
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://drought.unl.edu/dm

Released Thursday, September 21, 2006

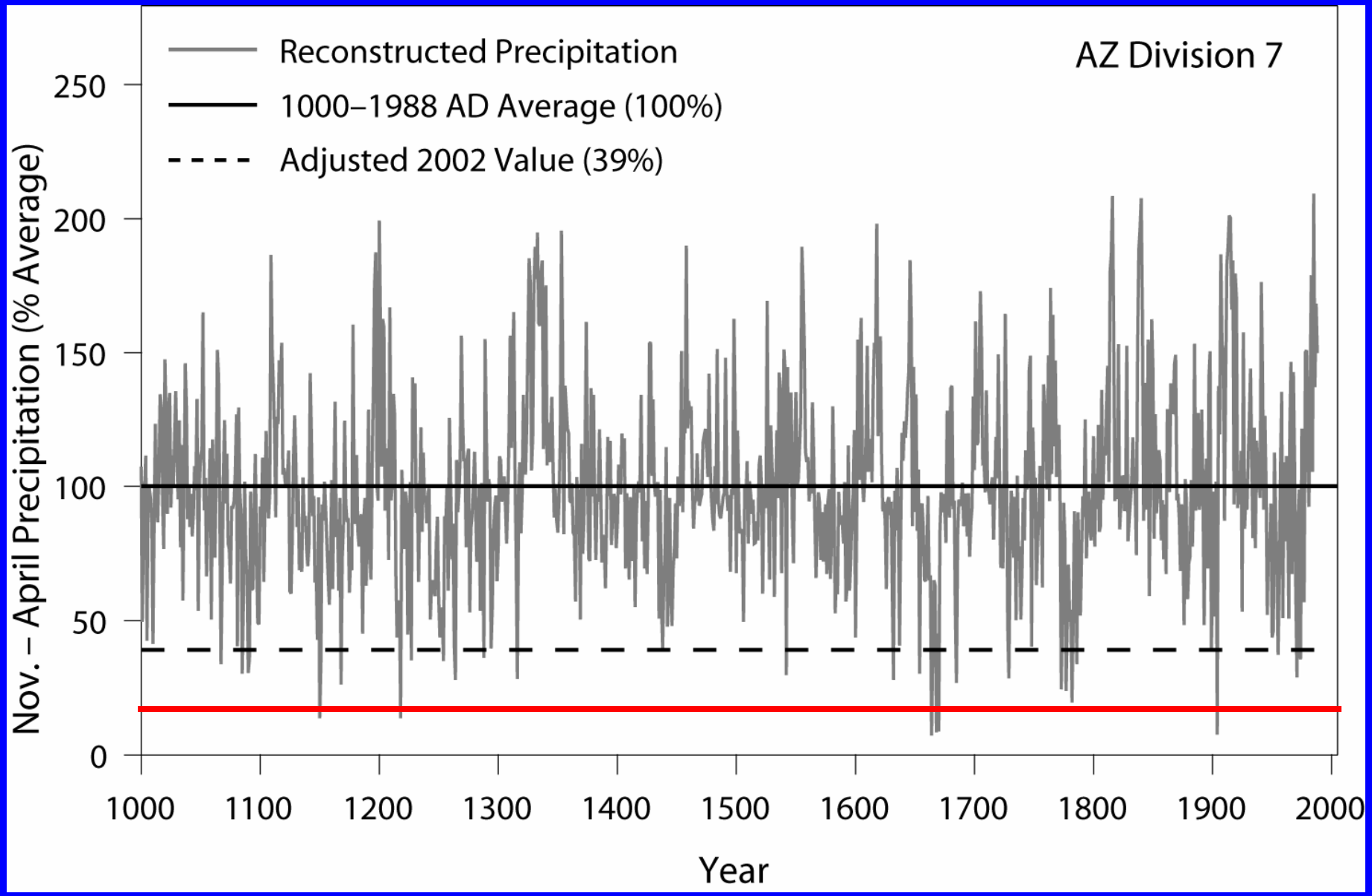
Author: Ned Guttman/Liz Love-Brotak, NOAA/NESDIS/NCDC

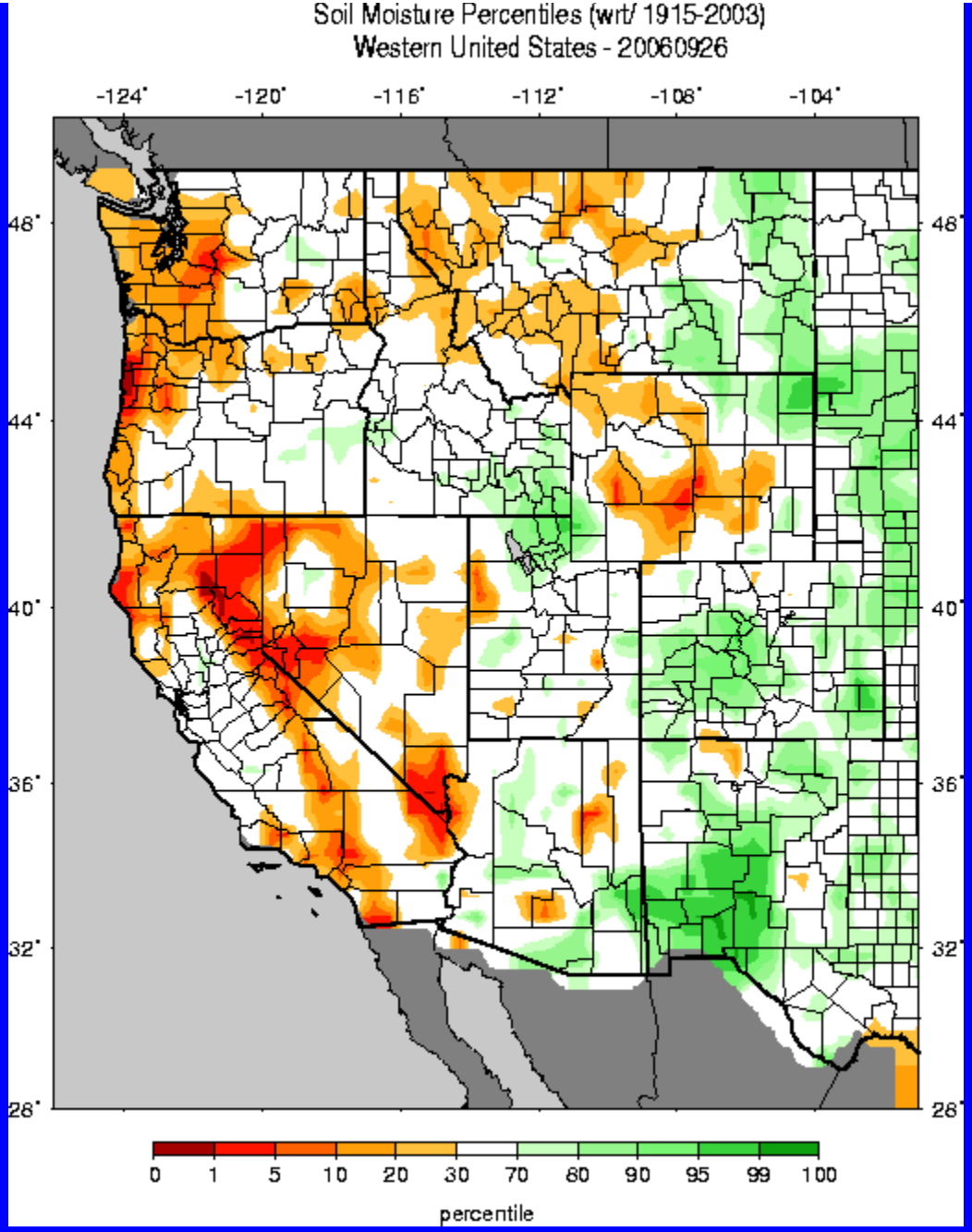
Nov.-Apr. Precipitation 1895-2006



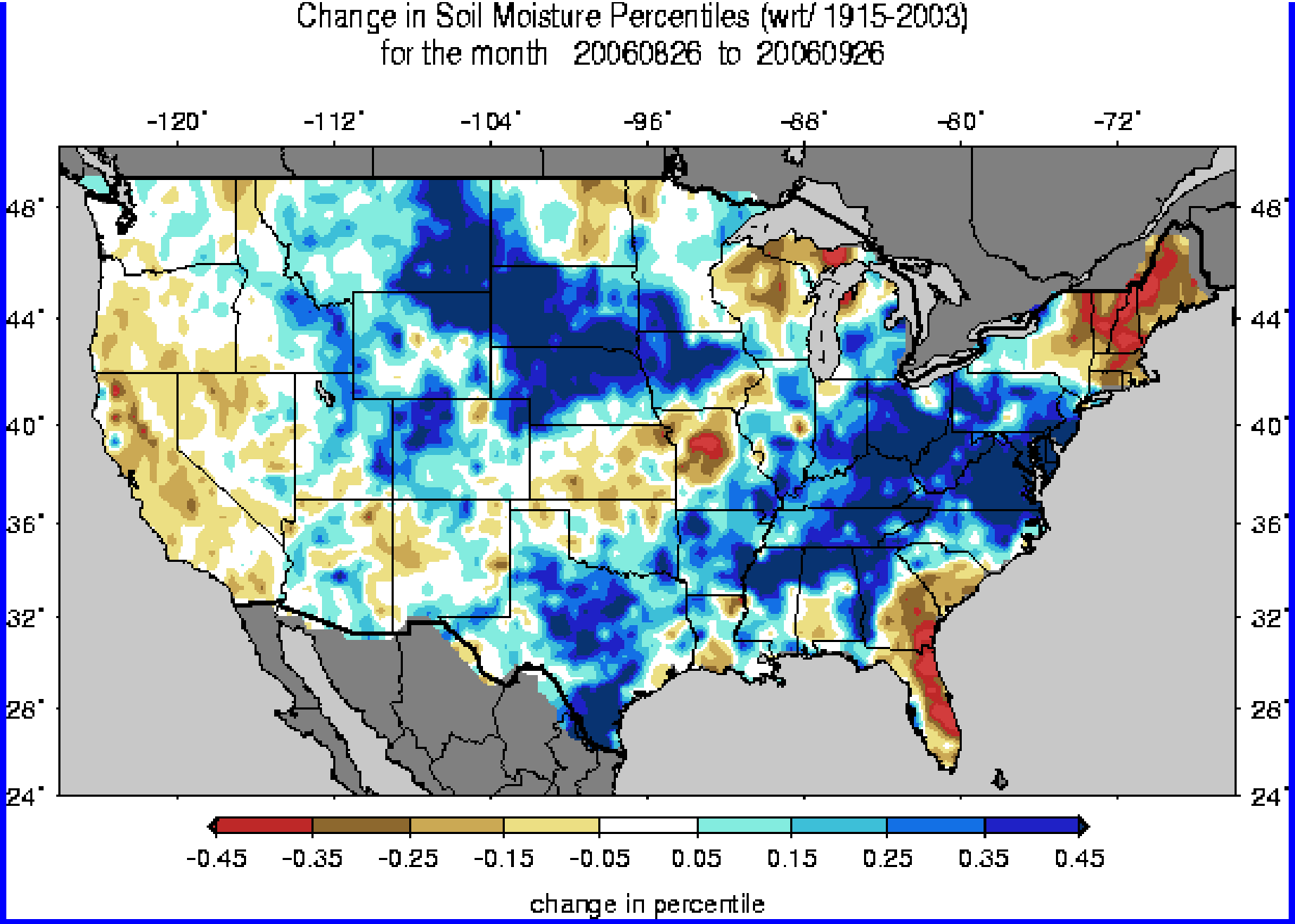
Western Regional Climate Center
http://www.wrcc.dri.edu

Adjusted 2006 Nov-Apr (20%)





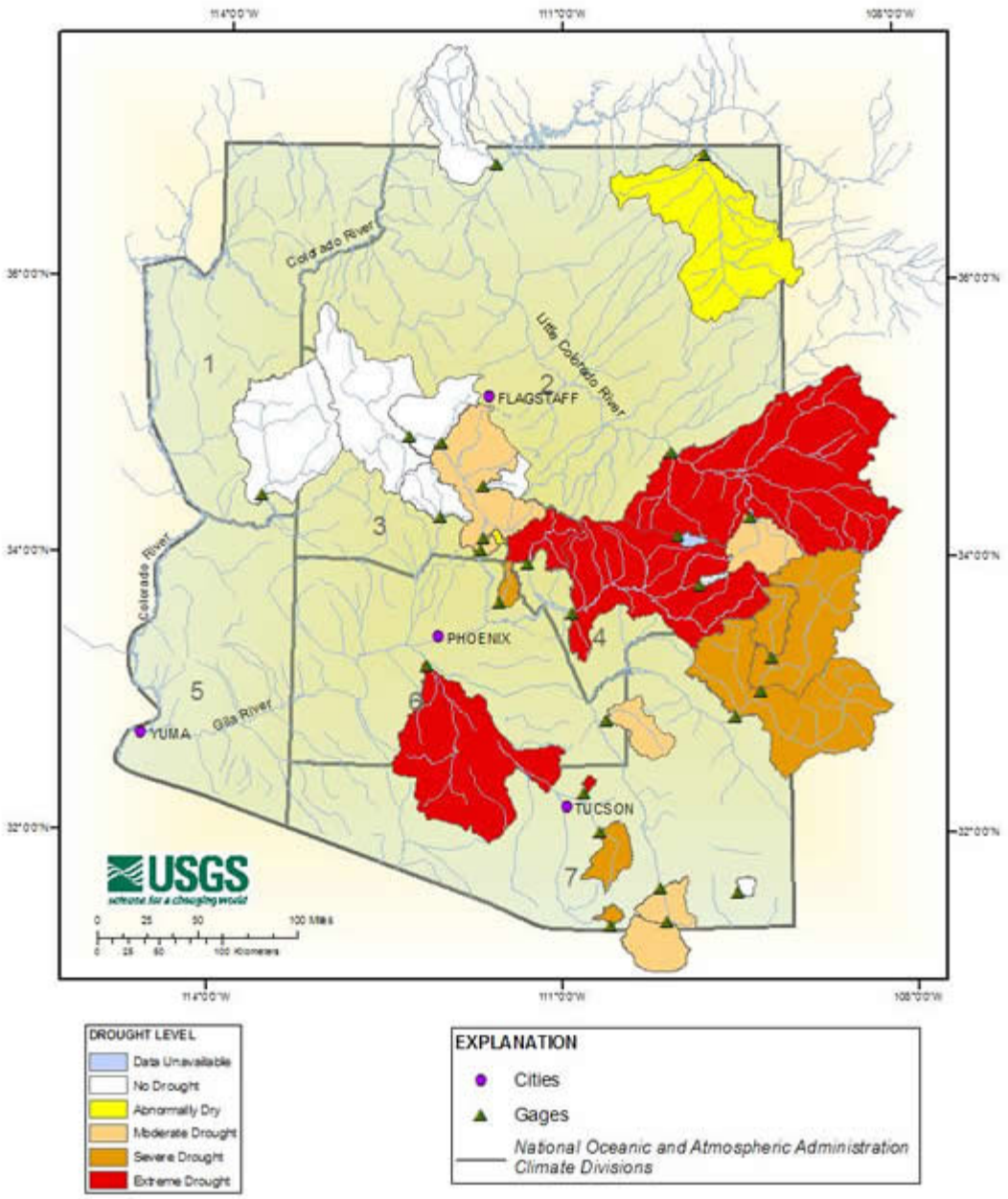
http://www.hydro.washington.edu/forecast/monitor/index.shtml



http://www.hydro.washington.edu/forecast/monitor/index.shtml

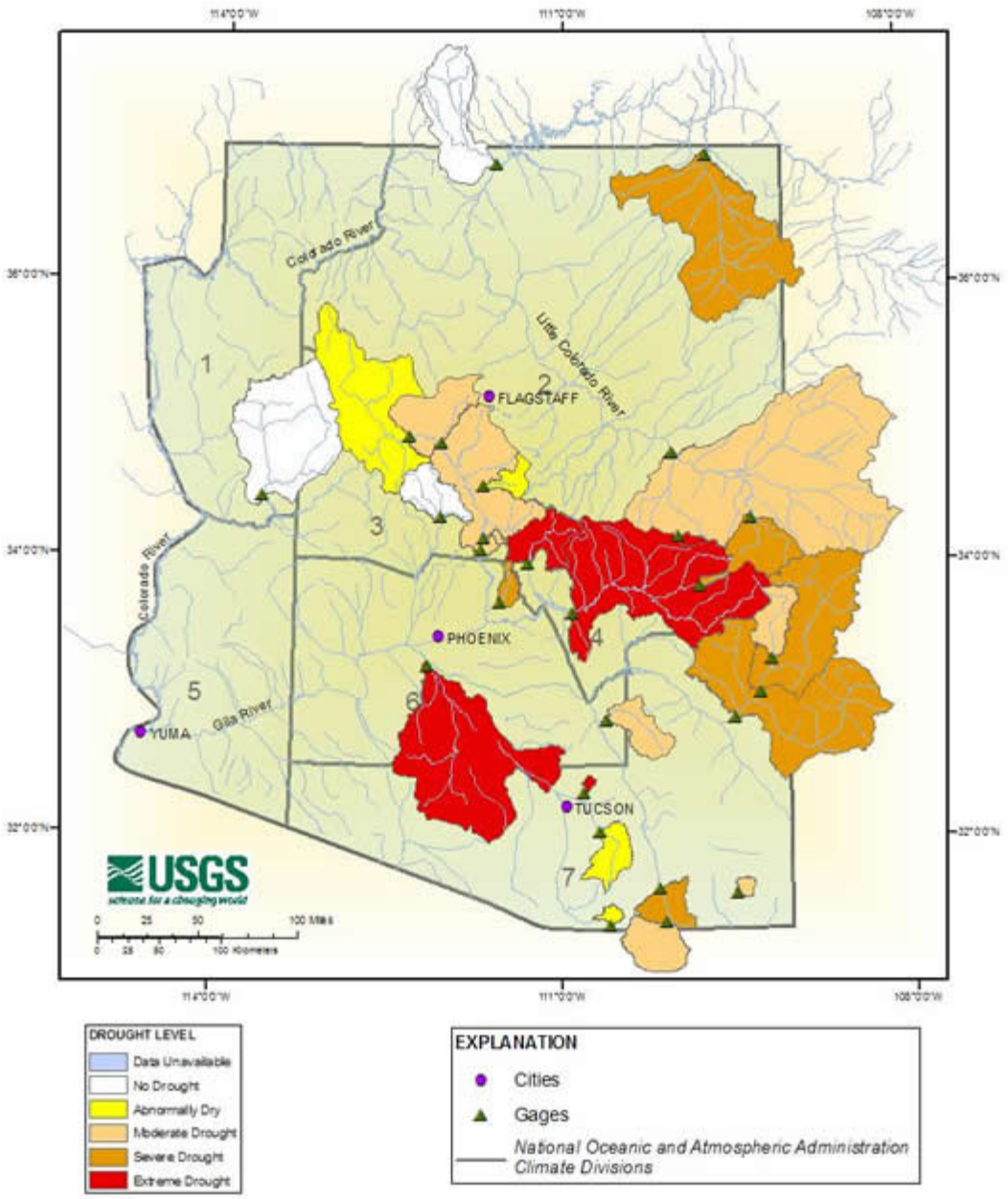
Drought Levels Based on Monthly Streamflow Discharge

January 2006



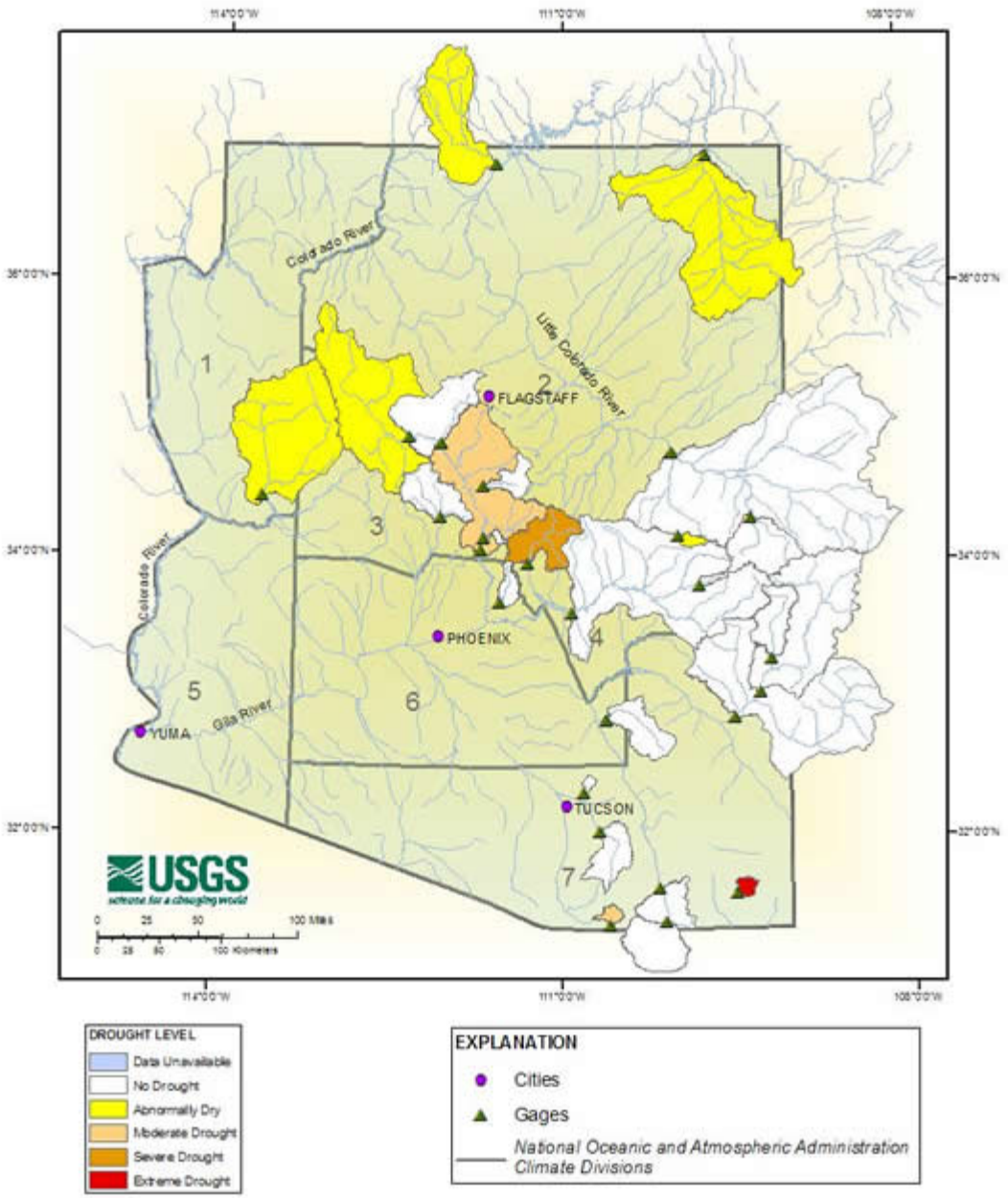
Drought Levels Based on Monthly Streamflow Discharge

May 2006



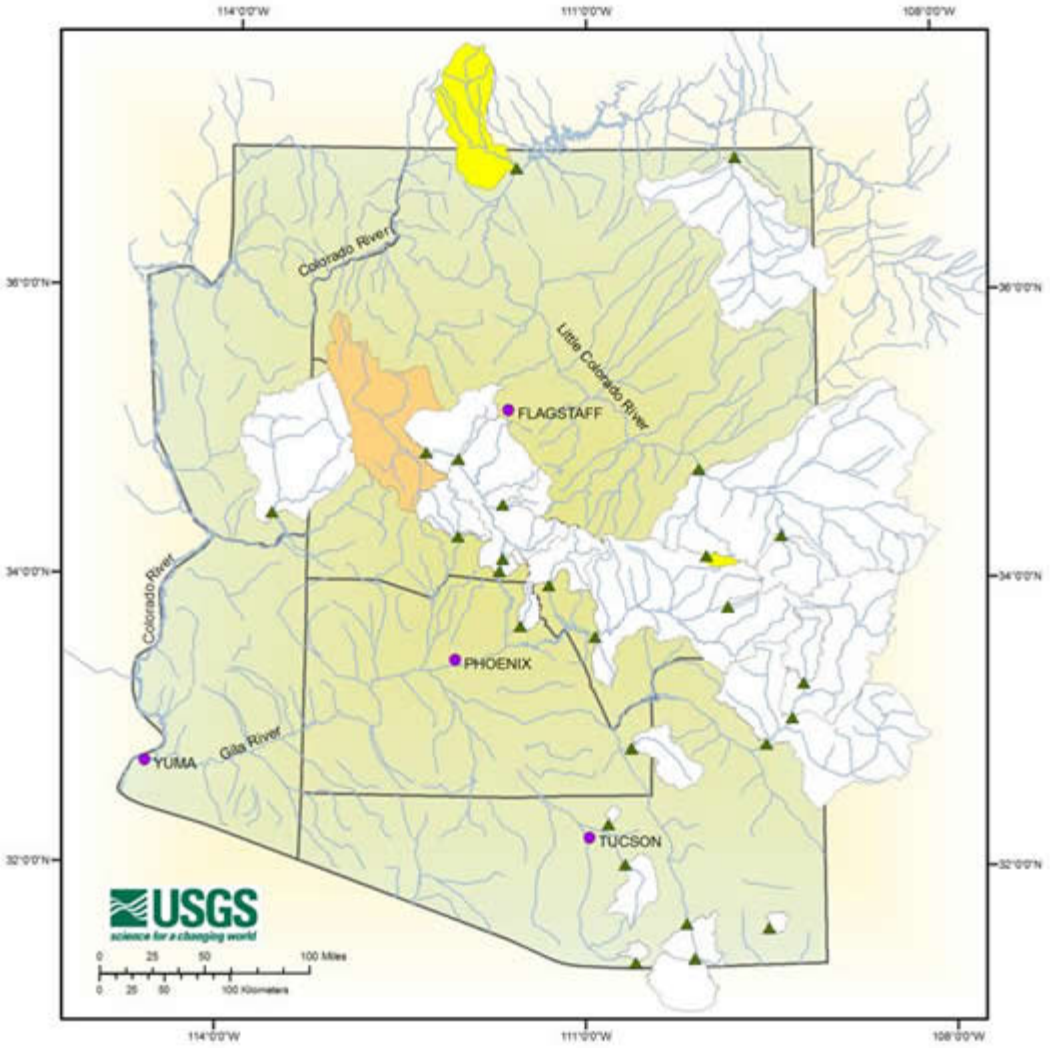
Drought Levels Based on Monthly Streamflow Discharge

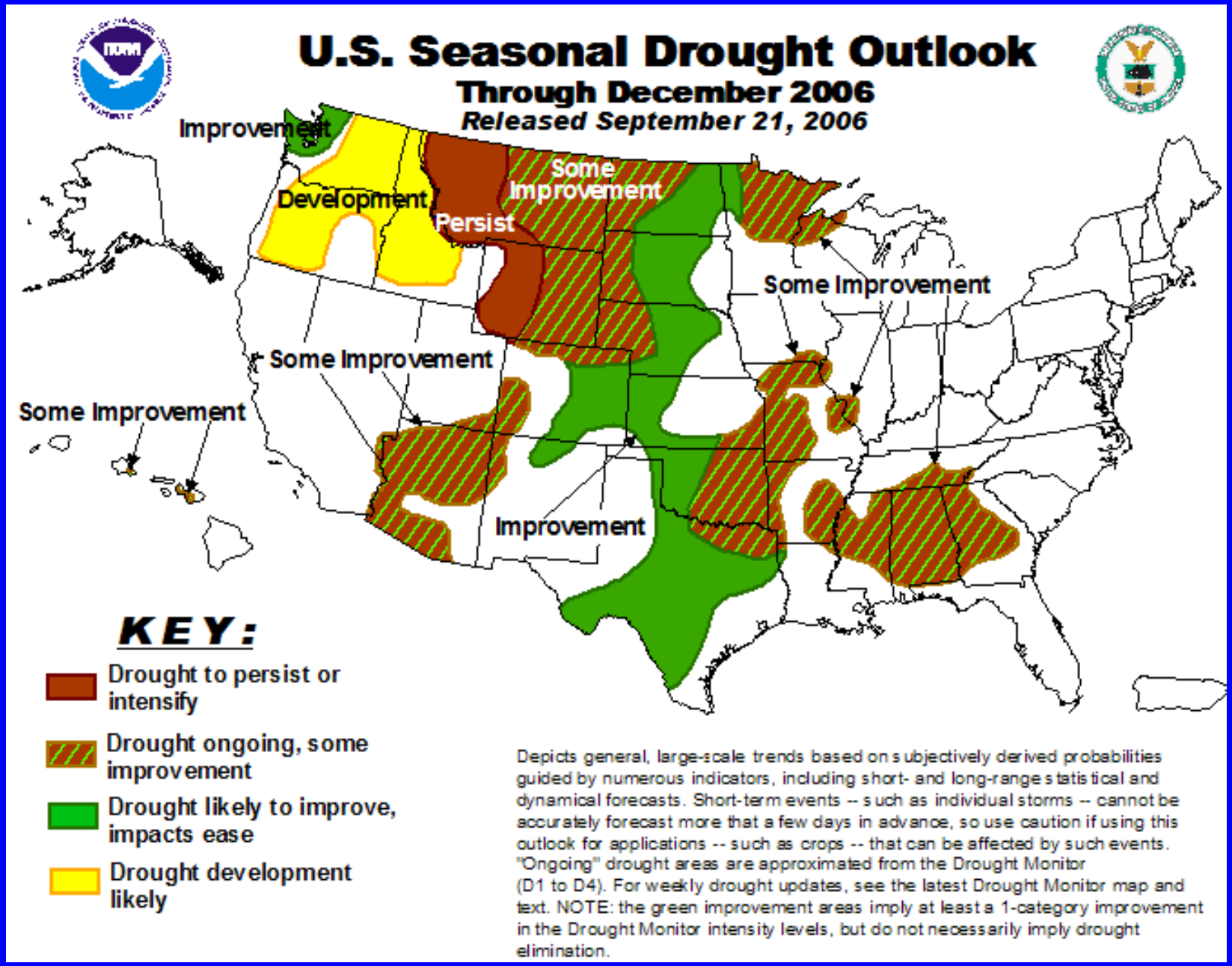
July 2006



Drought Levels Based on Monthly Streamflow Discharge

August 2006

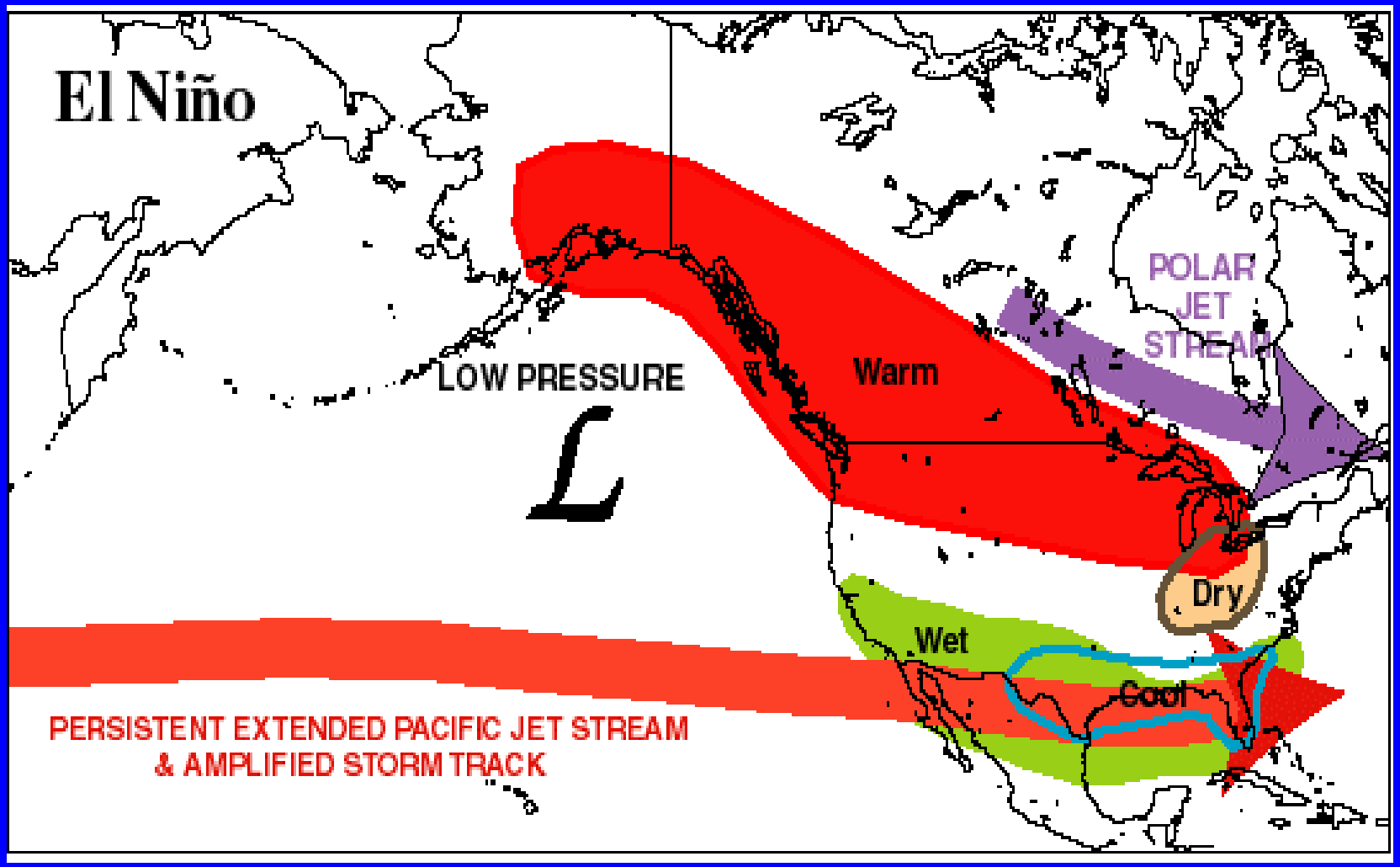




http://www.drought.noaa.gov/

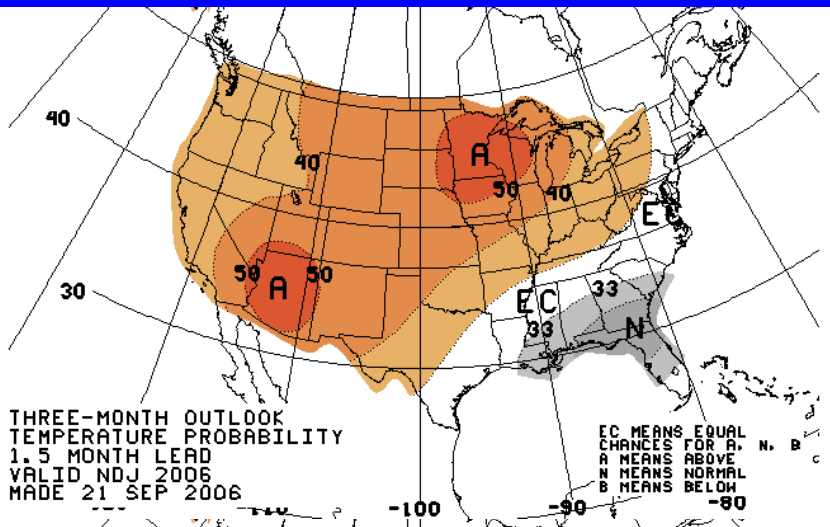
El Niño: Winter Effects U.S.

- **Increased groundwater, less pumpage**

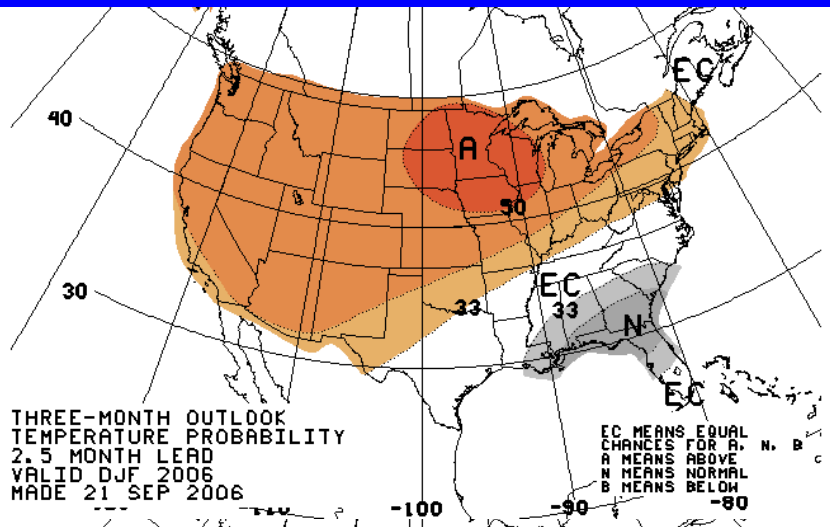


Source: NOAA Climate Prediction Center
http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/winter25%25.gif

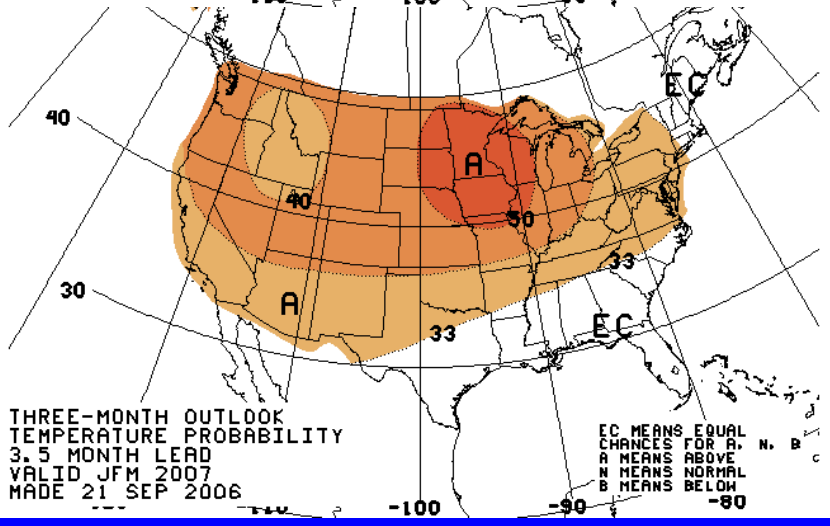
November-January



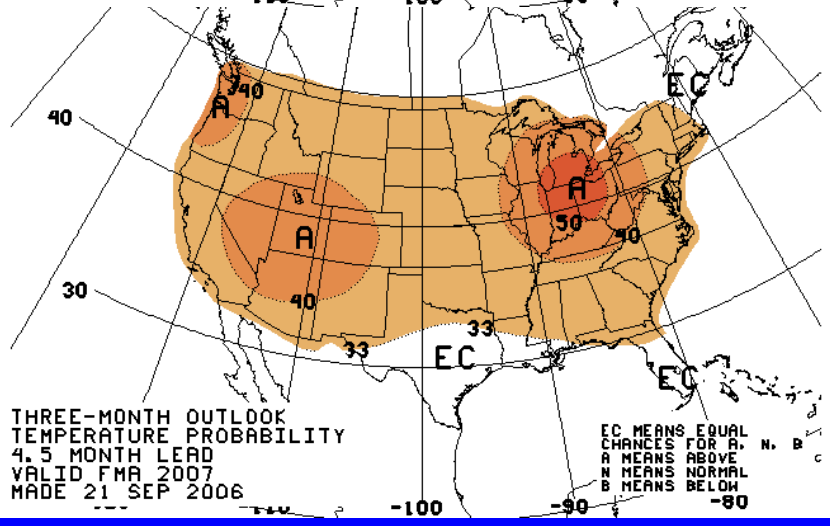
December-February



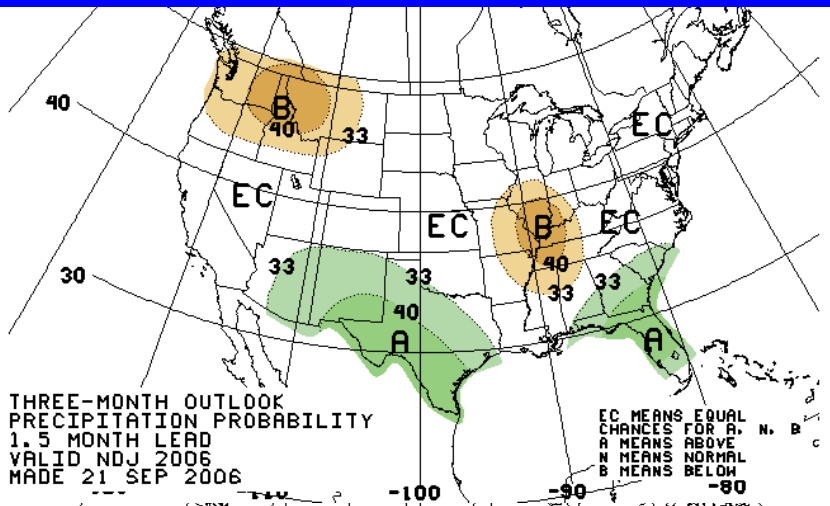
January-March



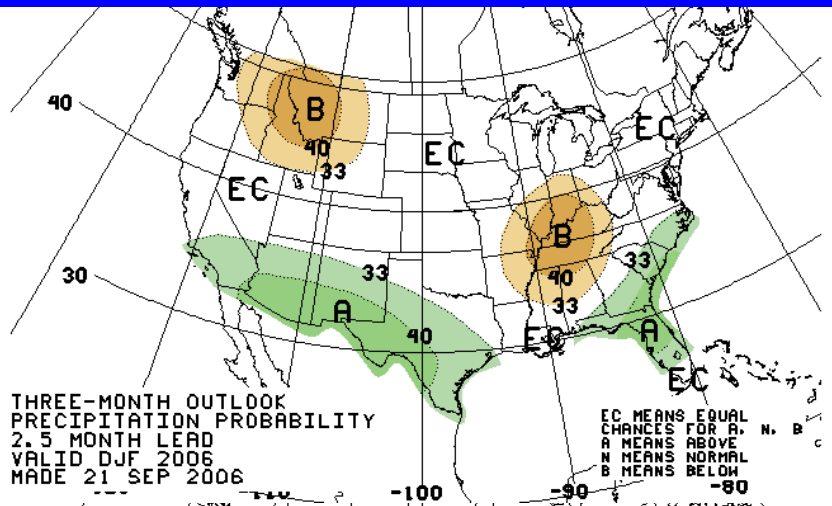
February-April

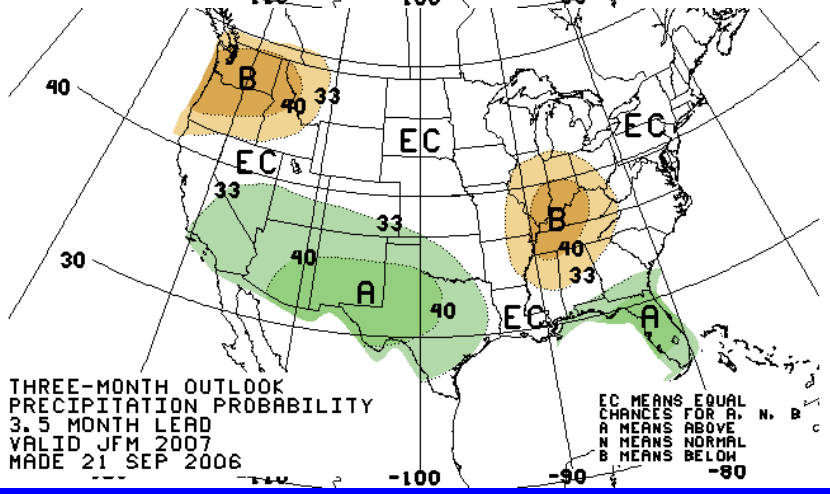


November-January

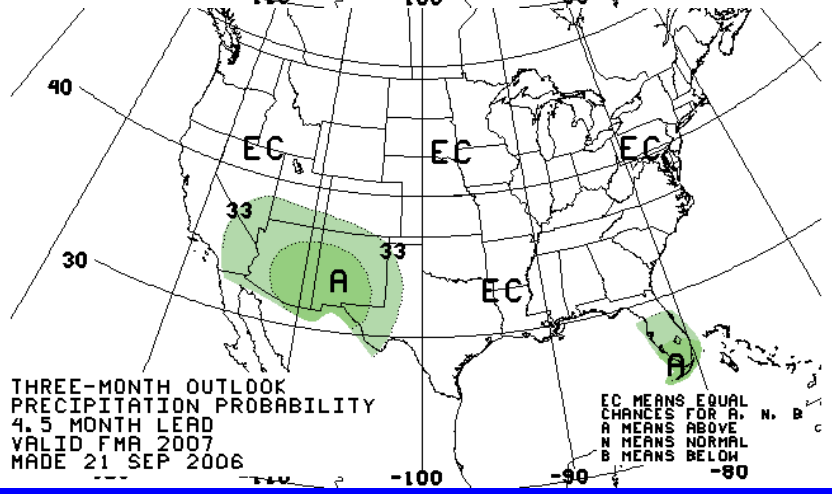


December-February

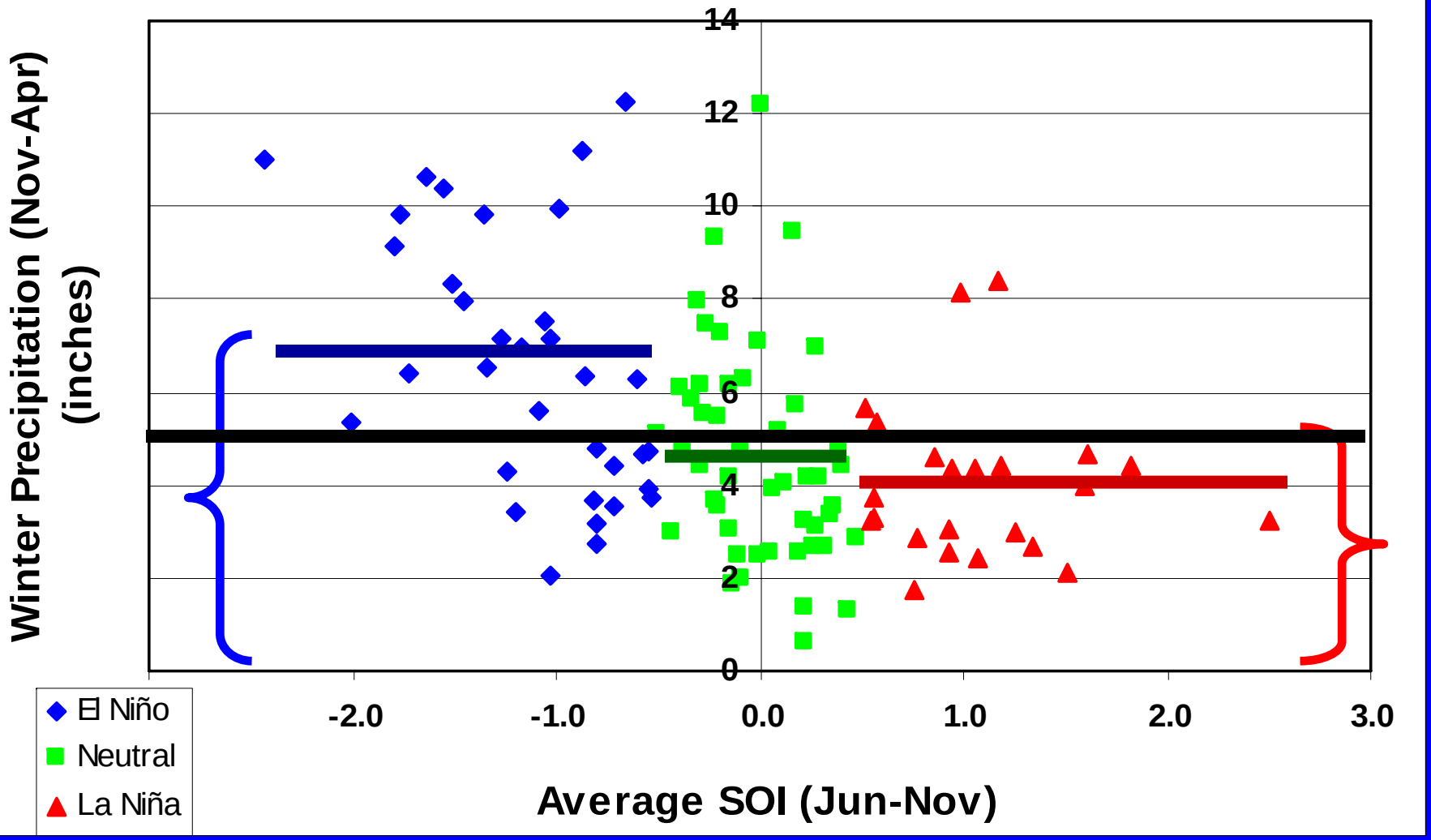




January-March



February-April



Climate Division 7
Southeastern Arizona
1895-2002

Percent of Dry vs. Wet El Nino events							
75-125%	CD 1	CD 2	CD 3	CD 4	CD 5	CD 6	CD 7
Dry	21%	18%	18%	15%	24%	18%	21%
Wet	44%	41%	47%	41%	53%	47%	53%
85-115%							
Dry	29%	24%	29%	24%	24%	26%	26%
Wet	53%	44%	47%	47%	59%	53%	56%
100%							
Dry	35%	41%	41%	38%	35%	38%	38%
Wet	65%	59%	59%	62%	65%	62%	62%
Winter Avg (in)	5.26	6.70	7.84	10.15	2.50	5.37	5.12

On Behalf of the
Arizona Drought Monitoring Technical Committee

Gregg Garfin, Program Manager
Climate Assessment for the Southwest
gmgarfin@email.arizona.edu
520-622-9016