

USDA United States
Department of
Agriculture

**Natural
Resources
Conservation
Service**

Arizona

Basin Outlook Report

February 15, 2006



Issued by

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ARIZONA

Water Supply Outlook Report as of February 15, 2006

A full range of Snow Survey and Water Supply Forecasting products is available on the Arizona NRCS Home Page:

Snow Survey Program

<http://www.az.nrcs.usda.gov/snow/index.html>

Helpful Internet Sites

Defending Against Drought – NRCS

<http://www.nrcs.usda.gov/feature/highlights/drought.html>

- Ideas on water, land, and crop management for you to consider while creating your drought plan.

Arizona Agri-Weekly

<http://www.nass.usda.gov/az/cur-agwk.pdf>

- Provides an overview of Arizona’s crop, livestock, range and pasture conditions as reported by local staffs of the USDA’s Agricultural Statistic Service and University of Arizona’s College of Agriculture.

SUMMARY

Snow measurements conducted at mid month show very little snow exists across the mountain watersheds of north-central Arizona, while high elevation precipitation amounts range from 0.20 to 0.30 inches for the first fifteen days of the month. As a result of these poor moisture conditions, near minimum runoff can be expected this season.

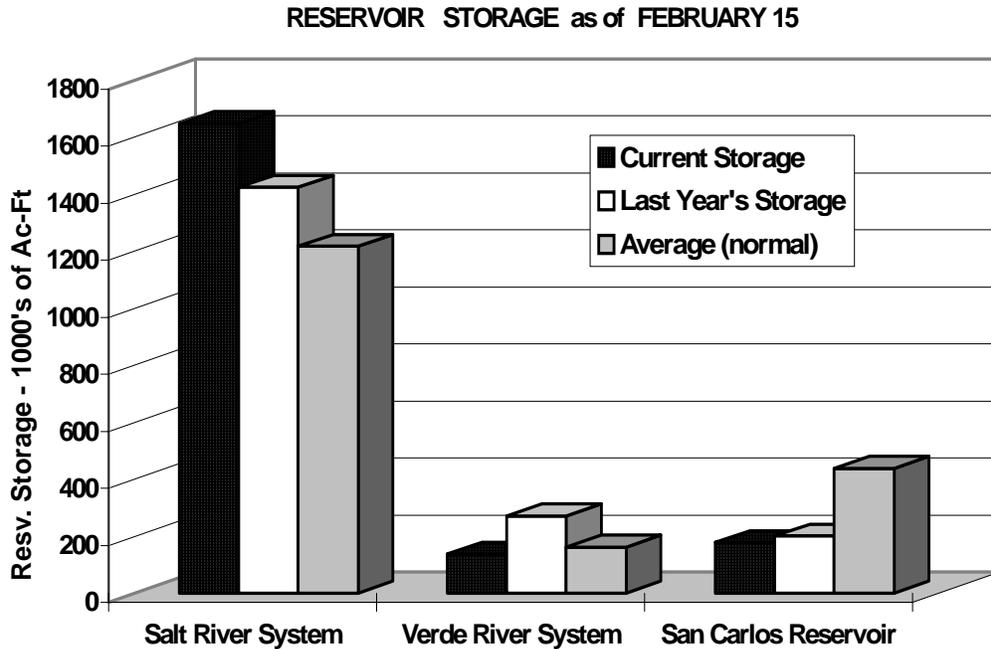
SNOWPACK

Watershed	Percent (%) of 30-Yr. Average Snowpack Levels as of February 15
Salt River Basin	7%
Verde River Basin	1%
Little Colorado River Basin	3%
San Francisco-Upper Gila River Basin	8%
Other Points of Interest	
Chuska Mountains	15%
Central Mogollon Rim	1%
Grand Canyon	0%
San Francisco Peaks	13%
Statewide Snowpack	7%

PRECIPITATION

Precipitation amounts were light across the mountain watersheds of north-central Arizona for the period February 1-15. In that regard, river basin precipitation totals for February 2006 will be illustrated in the next report.

RESERVOIR



Key storage volumes displayed in thousands of acre-feet (1000 x):

RESERVOIR	CURRENT STORAGE	LAST YEAR STORAGE	30-YEAR AVERAGE
Salt River System	1646.8	1423.7	1216.3
Verde River System	137.6	271.1	161.9
San Carlos Reservoir	178.1	201.1	438.3
Lyman Lake	7.9	4.2	14.8
Show Low Lake	---	6.2	2.9
Lake Pleasant	727.0	793.0	----
Lake Havasu	560.2	587.2	553.6
Lake Mohave	1648.7	1656.0	1685.2
Lake Mead	15440.0	15338.0	22072.0
Lake Powell	10987.0	8343.0	18448.0

STREAMFLOW

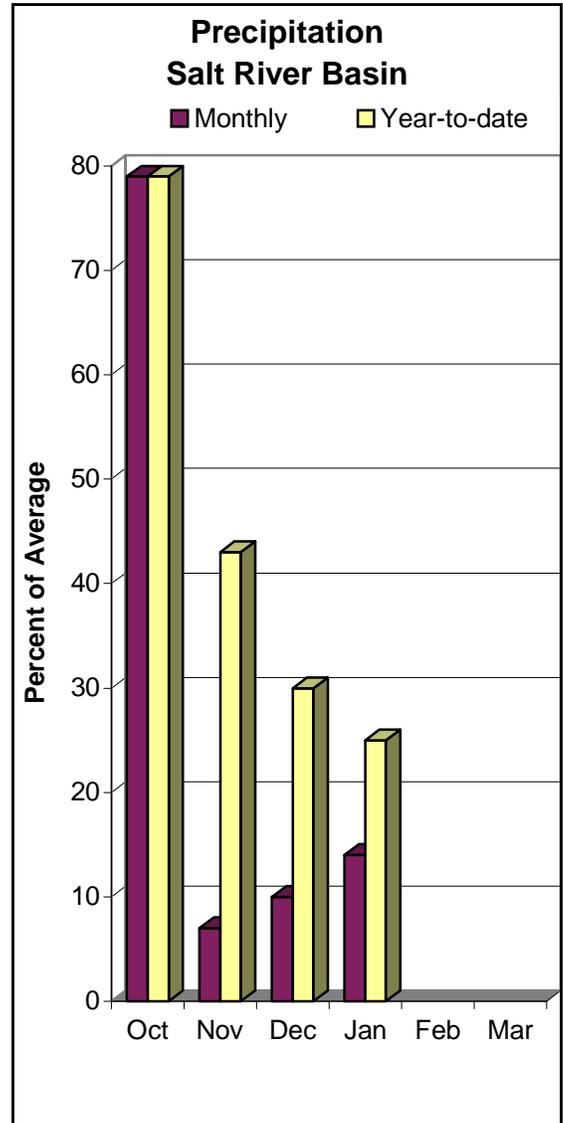
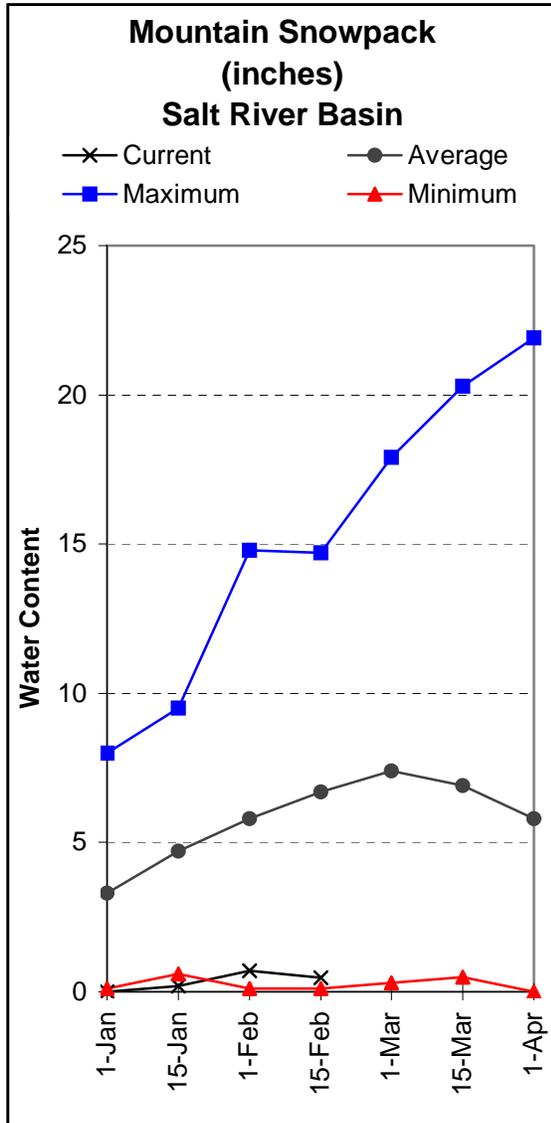
This year much below median stream flow volumes are forecast through the spring runoff season. For more information regarding this year's surface water supplies, readers should refer to the basin forecast tables found in this report.



SALT RIVER BASIN as of February 15, 2006

Much below median stream flow volumes are forecast for the basin. In the Salt River, near Roosevelt, the forecast calls for 13 % of median stream flow volume February 15-May, while at Tonto Creek, the forecast calls for 9 % of median stream flow volume February 15-May.

Snow survey measurements show the Salt snowpack to be 7 % of the 30-year average, while combined reservoir storage in the Salt River system is reported at 1,646,805 acre-feet.



SALT RIVER BASIN
Streamflow Forecasts - February 15, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% MED.)	30% (1000AF)	10% (1000AF)		
Salt River nr Roosevelt							
FEB15-MAY	32	35	40	13	63	112	315
FEBRUARY	3.2	3.7	9.5	21	14.3	23	46
Tonto Creek ab Gun Creek nr Roosevelt							
FEB15-MAY	1.2	1.7	2.5	9	6.3	17.1	29
FEBRUARY	0.5	0.6	0.9	7	3.5	10.4	12.6

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average and median are computed for the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

SALT RIVER BASIN
Reservoir Storage (1000AF) Mid-February

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
SALT RIVER RES SYSTEM	2025.8	1646.8	1423.7	1216.3

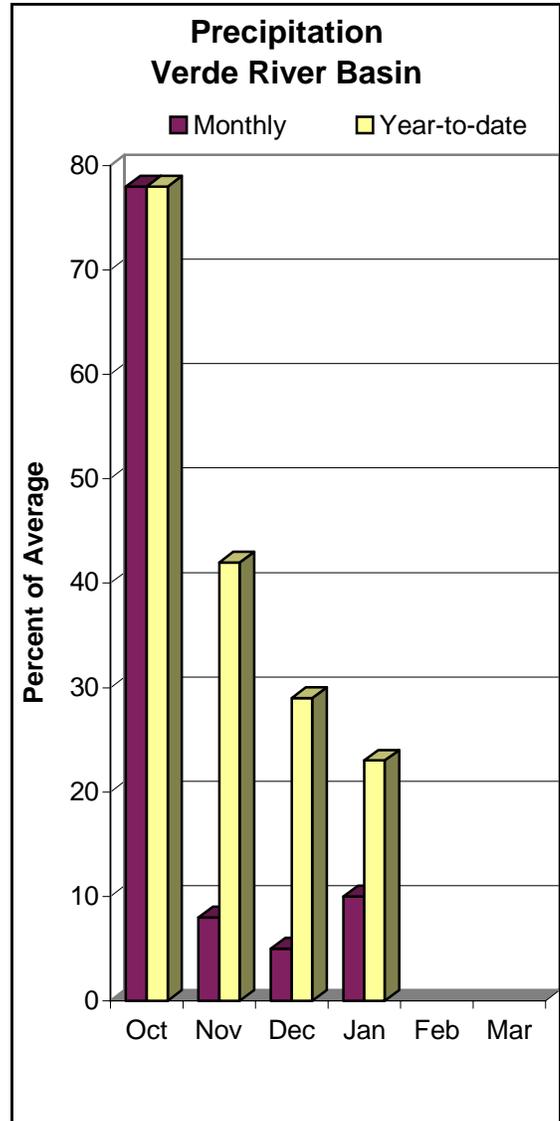
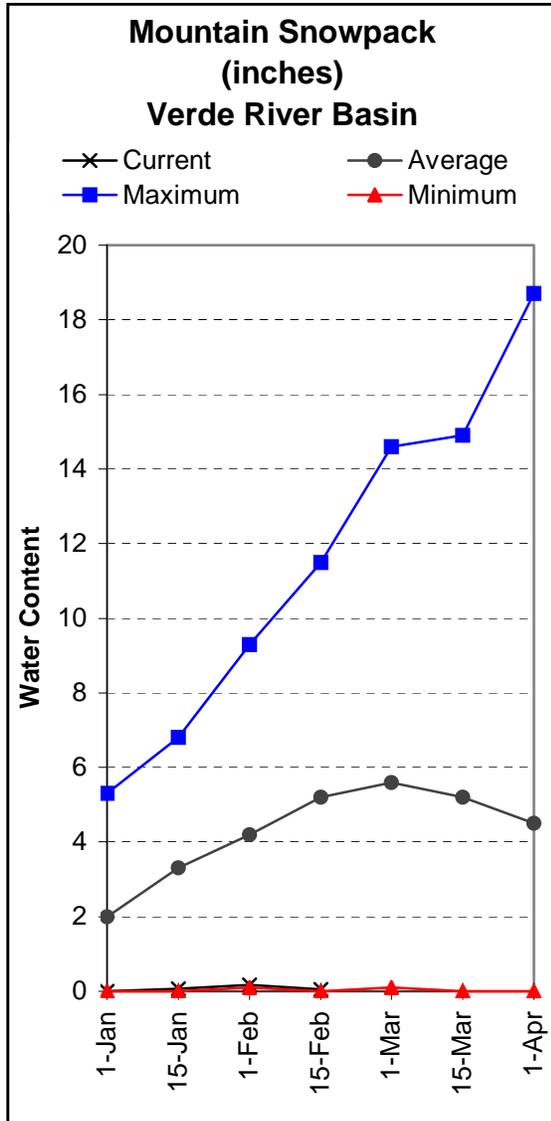
SALT RIVER BASIN
Watershed Snowpack Analysis - February 15, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SALT RIVER BASIN	8	6	7

VERDE RIVER BASIN as of February 15, 2006

Much below median stream flow volume is forecast for the basin. In the Verde River, at Horseshoe Dam, the forecast calls for 30 % of median stream flow volume February 15-May.

Snow survey measurements show the Verde snowpack to be 1 % of the 30-year average, while combined reservoir storage in the Verde River system is reported at 137,651 acre-feet.



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VERDE RIVER BASIN
Streamflow Forecasts - February 15, 2006

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Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding *						
	90%	70%	50%	30%	10%		
	(1000AF)	(1000AF)	(1000AF) (% MED.)	(1000AF)	(1000AF)	(1000AF)	
Verde River abv Horseshoe Dam							
FEB15-MAY	30	38	50	30	77	131	165
FEBRUARY	11.9	12.9	14.3	41	19.2	28	35

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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VERDE RIVER BASIN
Reservoir Storage (1000AF) Mid-February

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
VERDE RIVER RES SYSTEM	287.4	137.6	271.1	161.9

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VERDE RIVER BASIN
Watershed Snowpack Analysis - February 15, 2006

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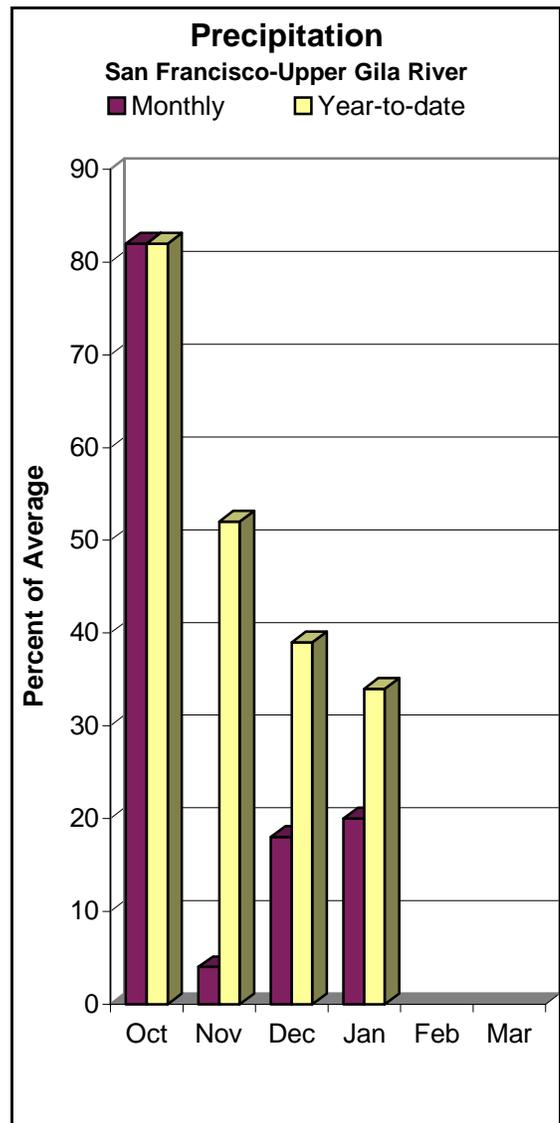
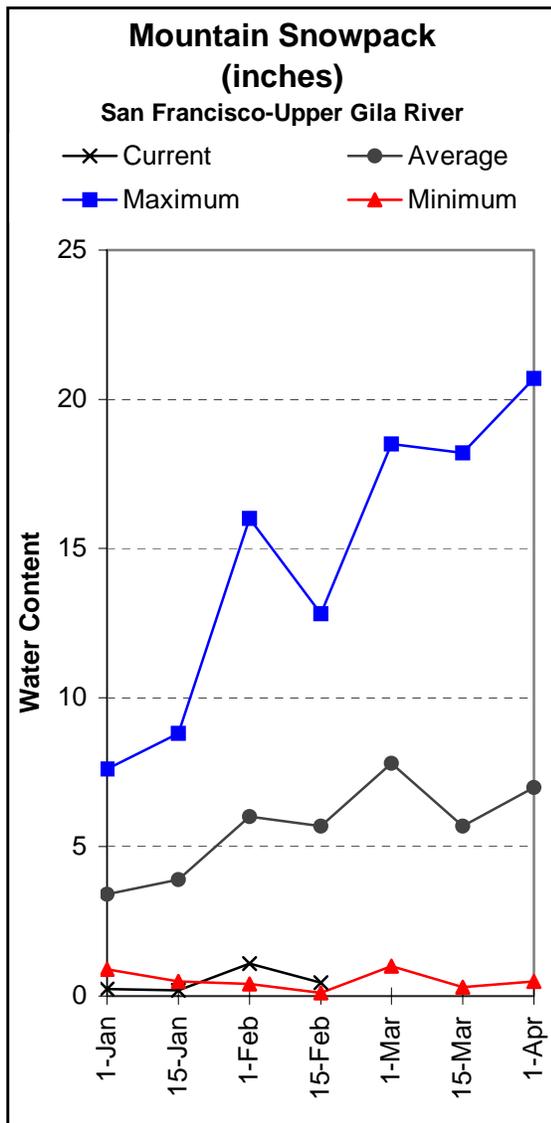
Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
VERDE RIVER BASIN	10	1	1
SAN FRANCISCO PEAKS	3	5	13

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SAN FRANCISCO-UPPER GILA RIVER BASIN as of February 15, 2006

Much below median stream flow volumes are forecast for the basin. In the San Francisco River, at Clifton, the forecast calls for 19 % of median stream flow volume February 15-May, while in the Gila River, near Solomon, the forecast calls for 14 % of median stream flow volume February 15-May. At San Carlos Reservoir, inflow to the lake is forecast at 10 % of median February 15-May.

At San Carlos, reservoir storage was recorded at 178,100 acre-feet at mid month, while snow survey measurements show the basin snowpack to be 8 % of the 30-year average.



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SAN FRANCISCO - UPPER GILA RIVER BASIN
Streamflow Forecasts - February 15, 2006

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Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% MED.)	30% (1000AF)	10% (1000AF)		
=====							
Gila River at Gila							
FEB15-MAY	7.2	9.0	10.0	22	15.3	25	45
Gila River nr Virden							
FEB15-MAY	6.6	9.2	11.0	17	19.8	26	66
San Francisco River at Glenwood							
FEB15-MAY	2.2	2.6	3.2	15	5.6	11.0	22
San Francisco River at Clifton							
FEB15-MAY	5.8	7.9	10.0	19	17.0	23	53
Gila River nr Solomon							
FEB15-MAY	12.0	14.0	17.0	14	35	59	122
FEBRUARY			7.0	29			24
San Carlos Reservoir inflow							
FEB15-MAY	2.4	3.2	8.0	10	15.8	40	79

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(2) - The value is natural volume - actual volume may be affected by upstream water management.

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SAN FRANCISCO - UPPER GILA RIVER BASIN
Reservoir Storage (1000AF) Mid-February

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Reservoir	Usable Capacity	***** Usable Storage *****		
		This Year	Last Year	Average
SAN CARLOS	875.0	178.1	201.1	438.3

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SAN FRANCISCO - UPPER GILA RIVER BASIN
Watershed Snowpack Analysis - February 15, 2006

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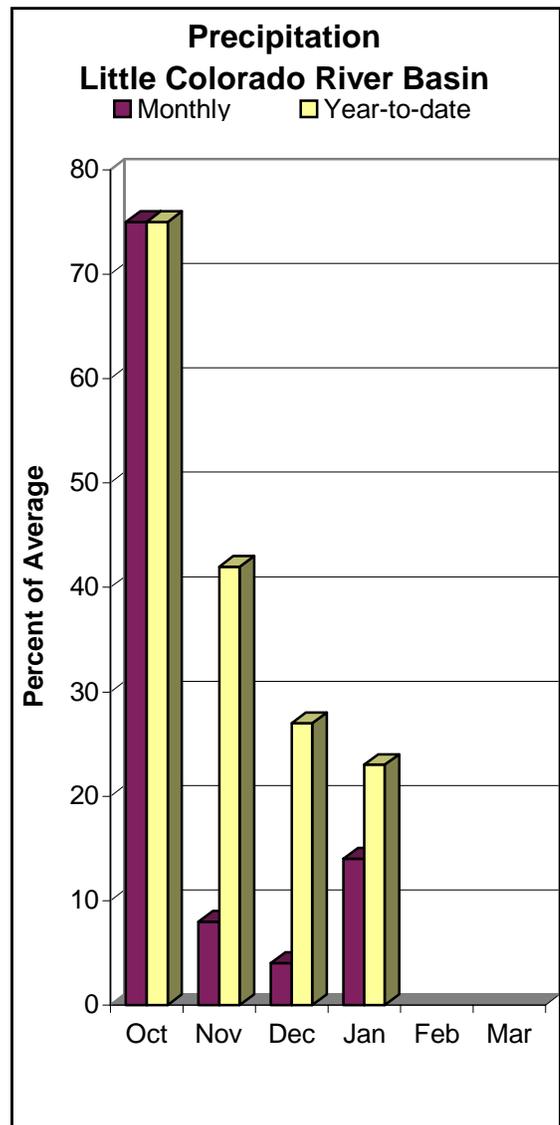
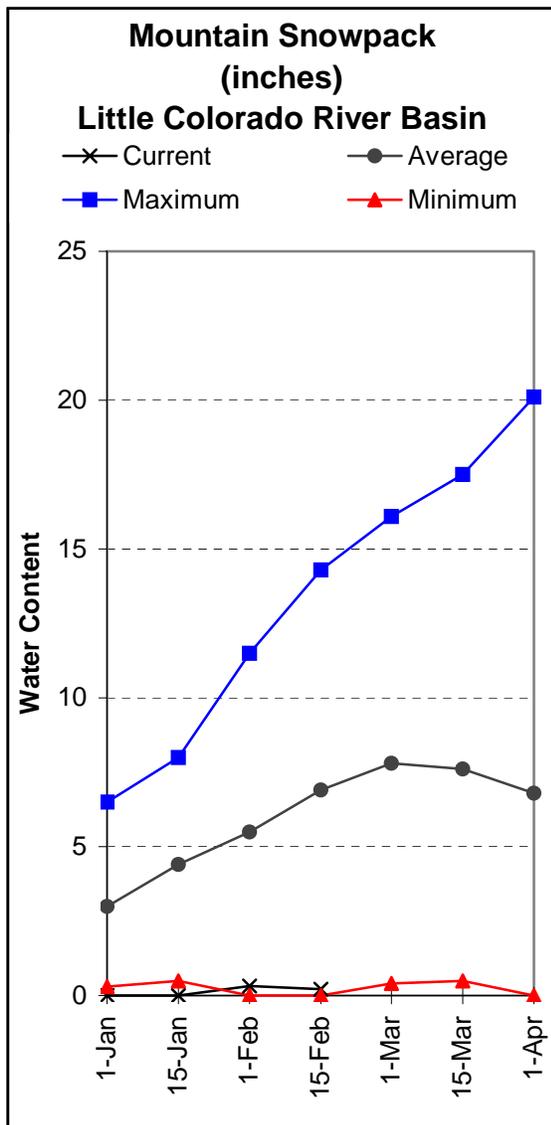
Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
SAN FRANCISCO - UPPER GILA R	9	7	8

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LITTLE COLORADO RIVER BASIN as of February 15, 2006

Much below median stream flow volumes are forecast for the basin. In the Little Colorado River, at Lyman Lake, the forecast calls for 10 % of median stream flow volume February 15-May, while at Woodruff, the forecast calls for 6 % of median stream flow volume February 15-May.

Snowpack along the southern headwaters of the Little Colorado River, and along the central Mogollon Rim, was monitored at 3 % and 1 % of the 30-year average, respectively.



LITTLE COLORADO RIVER BASIN
Streamflow Forecasts - February 15, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% MED.)	30% (1000AF)	10% (1000AF)		
Little Colorado River abv Lyman Lake							
FEB-JUN	0.26	0.41	0.69	10	1.33	2.86	7.10
Little Colorado River at Woodruff							
FEB-MAY	0.10	0.13	0.18	6	1.90	4.38	2.80
Blue Ridge Reservoir inflow							
FEB-MAY	0.3	0.5	1.0	6	1.9	3.8	16.3
Lake Mary inflow							
FEB-MAY	0.00	0.13	0.30	6	0.57	1.21	4.80

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LITTLE COLORADO RIVER BASIN
Reservoir Storage (1000AF) Mid-February

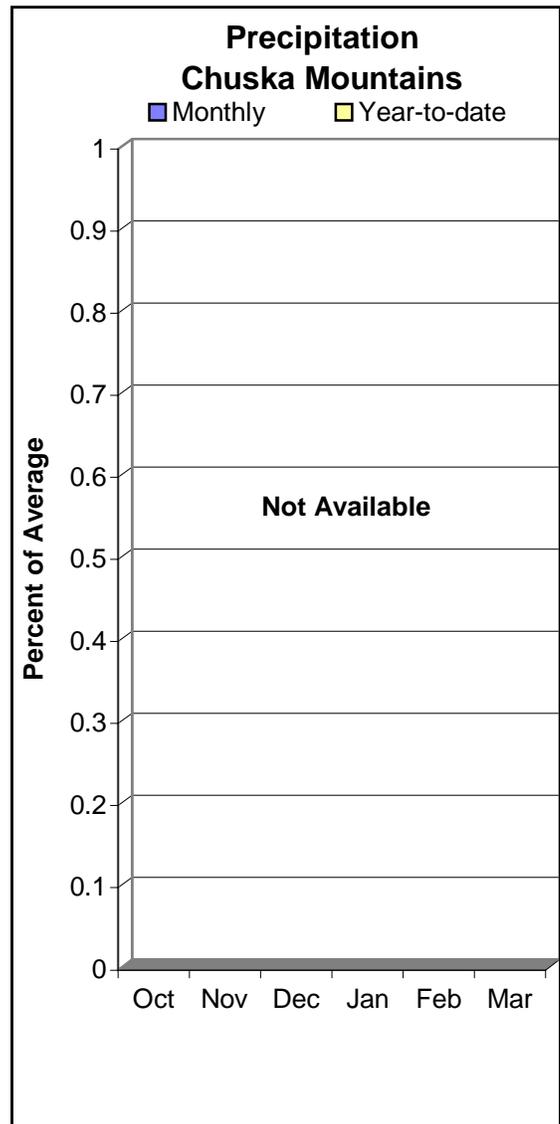
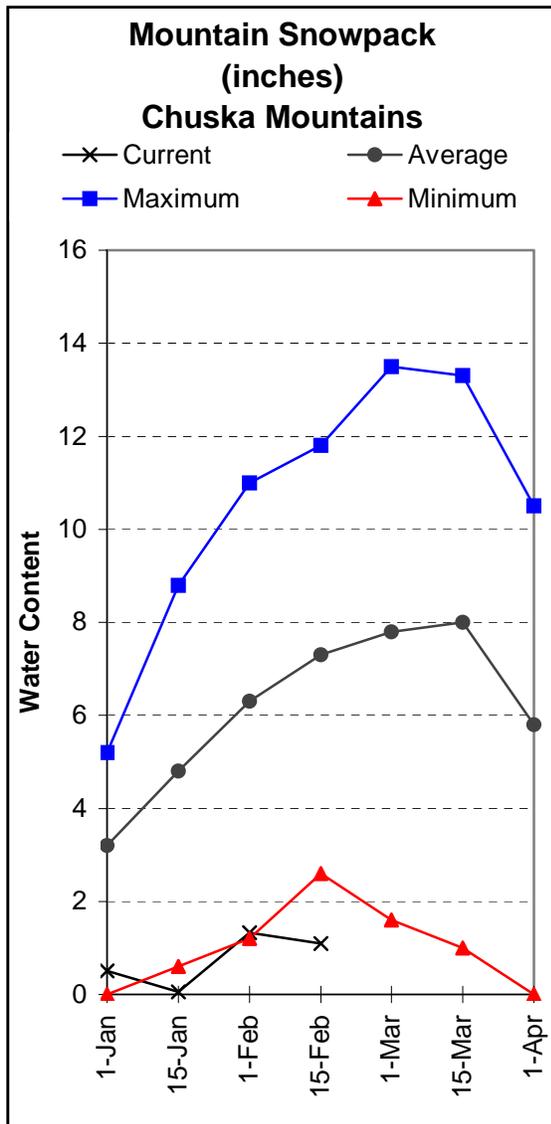
Reservoir	Usable Capacity	***** Usable Storage *****		
		This Year	Last Year	Average
LYMAN RESERVOIR	30.0	7.9	4.2	14.8
SHOW LOW	0.0	5.1	6.2	2.9

LITTLE COLORADO RIVER BASIN
Watershed Snowpack Analysis - February 15, 2006

Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
LITTLE COLORADO - SOUTHERN H	9	3	3
CENTRAL MOGOLLON RIM	4	1	1

CHUSKA MOUNTAINS as of February 15, 2006

Snow survey measurements conducted by staff of the Navajo Tribe show the Chuska snowpack to be 15 % of average, while much below average stream flow volumes are forecast at Captain Tom Wash, Wheatfields Creek, and Bowl Canyon Creek.



CHUSKA MOUNTAINS
Streamflow Forecasts - February 15, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
Captain Tom Wash nr Two Gray Hills							
MAR-MAY	0.03	0.28	0.54	19	1.85	3.80	2.83
Wheatfields Creek nr Wheatfields							
MAR-MAY	0.03	0.29	0.55	19	1.93	3.83	2.90
Bowl Canyon Creek abv Assayi Lake							
MAR-MAY	0.01	0.09	0.20	20	0.66	1.34	1.00

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

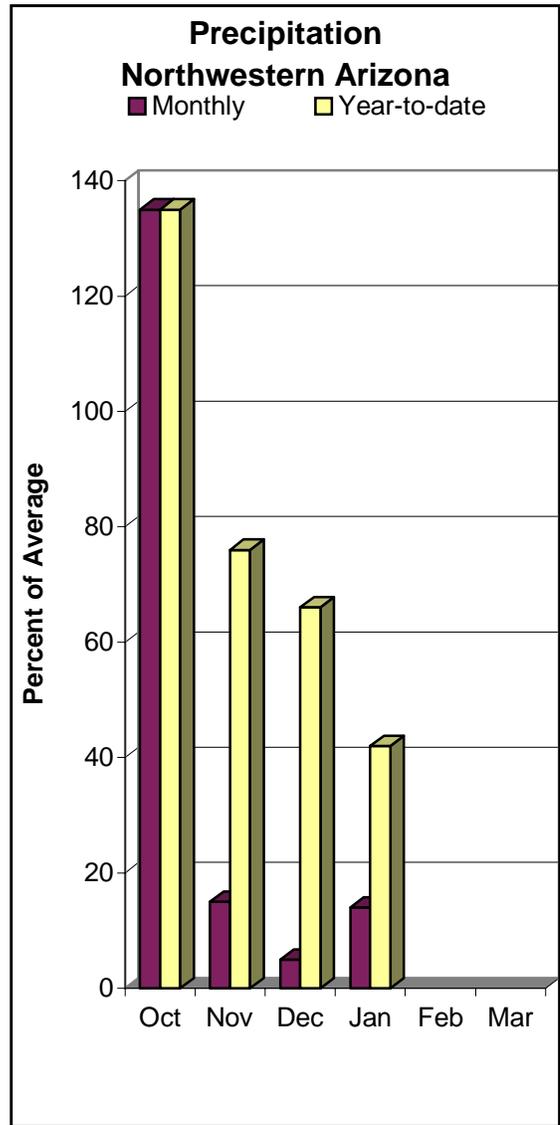
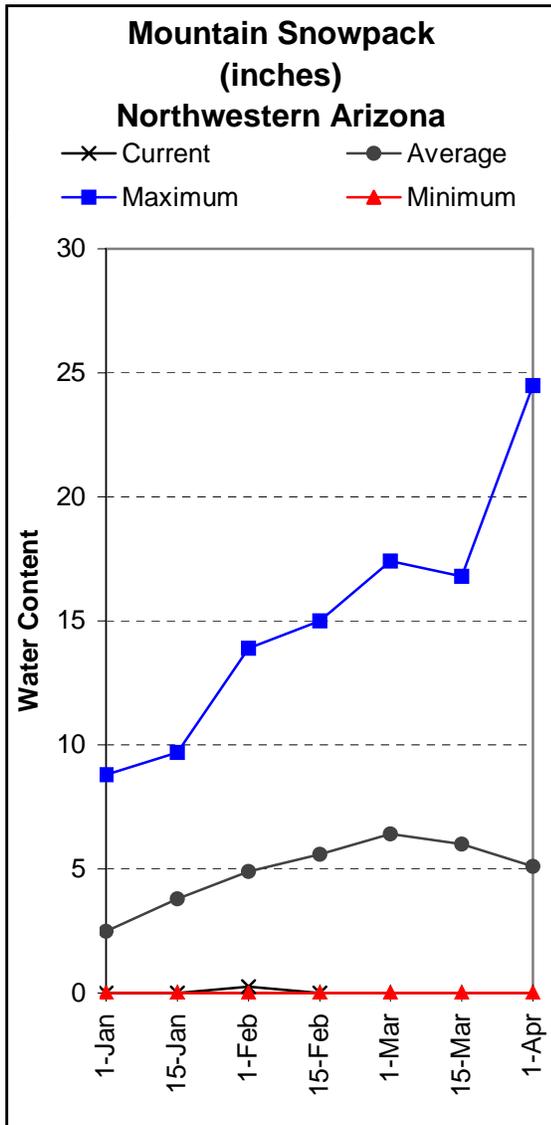
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- (2) - The value is natural volume - actual volume may be affected by upstream water management.

CHUSKA MOUNTAINS
Watershed Snowpack Analysis - February 15, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
CHUSKA MOUNTAINS	7	13	15
DEFIANCE PLATEAU	2	0	0

NORTHWESTERN ARIZONA as of February 15, 2006

On the Colorado River, inflow to Lake Powell is forecast to be 102 % of the 30-year average for the forecast period April-July, while at the Grand Canyon, snow measurements conducted by staff from the National Park Service show the snowpack to be 0 % of average. In the upper Colorado River basin, SNOTEL readings show the winter snowpack to be 100 % of the 30-year average.



NORTHWESTERN ARIZONA
Streamflow Forecasts - February 15, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	Chance of Exceeding *						
	90%	70%	50%	30%	10%		
	(1000AF)	(1000AF)	(1000AF) (% AVG.)	(1000AF)	(1000AF)	(1000AF)	
Lake Powell inflow							
APR-JUL	5595	7087	8100	102	9109	10609	7930

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- (2) - The value is natural volume - actual volume may be affected by upstream water management.

NORTHWESTERN ARIZONA
Reservoir Storage (1000AF) Mid-February

Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
LAKE HAVASU	619.0	560.2	587.2	553.6
LAKE MOHAVE	1810.0	1648.7	1656.0	1685.2
LAKE MEAD	26159.0	15440.0	15338.0	22072.0
LAKE POWELL	24322.0	10987.0	8343.0	18448.0

NORTHWESTERN ARIZONA
Watershed Snowpack Analysis - February 15, 2006

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
GRAND CANYON	2	0	0

S N O W S U R V E Y D A T A

FEBRUARY 15, 2006

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
ARBABS FOREST (AK)	7680	2/15	0	.0	0.4	2.7
BAKER BUTTE SNOTEL	7330	2/15	-	.1	6.6	5.7
BAKER BUTTE #2	7700	2/14	1	0.1	14.4	10.7
BALDY SNOTEL	9220	2/15	-	.2	8.8	7.0
BEAVER HEAD	8000	2/14	0	.0	3.0	2.9
BEAVER HEAD SNOTEL	7990	2/15	-	.3	6.2	3.3
BEAVER SPRING	9220	2/14	6	1.5	11.4	8.7
BRIGHT ANGEL	8400	2/14	0	.0	16.1	8.7
BUCK SPRING	7400	2/14	0	.0	1.0	4.3
CHALENDER	7100	2/14	0	.0	1.0	3.1
CHEESE SPRINGS	8600	2/14	3	0.5	5.3	5.0
CORONADO TRL SNOTEL	8400	2/15	-	.3	6.3	3.4
CORONADO TRAIL	8400	2/14	0	.0	5.0	2.9
FLUTED ROCK	7800	2/14	0	.0	2.8	3.4
FORT APACHE	9160	2/14	4	0.9	8.8	6.8
FORT VALLEY	7350	2/14	0	.0	4.1	2.7
FRY SNOTEL	7220	2/15	0	.0	13.4	7.0
GRAND CANYON	7500	2/14	0	.0	1.6	2.6
HANNAGAN MDWS SNOTEL	9020	2/15	4	1.3	16.1	10.2
HAPPY JACK	7630	2/14	0	.0	5.9	4.8
HAPPY JACK SNOTEL	7630	2/15	-	.1	10.2	4.6
HEBER SNOTEL	7640	2/15	0	.0	5.3	5.5
LAKE MARY	6970	2/14	0	.0	5.3	3.2
MAVERICK FORK SNOTEL	9200	2/15	-	.2	11.5	8.3
MORMON MTN SNOTEL	7500	2/15	-	.2	10.3	6.2
MORMON MT. SUMMIT #2	8470	2/14	1	0.2	18.6	10.8
NEWMAN PARK	6750	2/14	0	.0	5.1	3.0
NUTRIOSO	8500	2/14	0	.0	.9	1.7
PROMONTORY SNOTEL	7900	2/15	-	.1	14.2	11.5
SNOW BOWL #1 ALT.	10260	2/13	2	0.4	25.8	10.6
SNOW BOWL #2	11000	2/13	4	0.8	31.8	14.6
SNOWSLIDE CYN SNTL	9750	2/15	-	3.2	31.1	10.0
TSAILE CANYON #1	8160	2/14	6	1.2	7.4	6.4
TSAILE CANYON #3	8920	2/14	6	1.4	10.5	8.5
WHITE HORSE SNOTEL	7180	2/15	0	.0	5.2	5.1
WILDCAT SNOTEL	7850	2/15	-	.2	3.0	4.1
WILLIAMS SKI RUN	7720	2/14	0	.0	11.0	7.8
WORKMAN CREEK SNOTEL	6900	2/15	-	.2	4.9	5.9