



Natural
Resources
Conservation
Service

Arizona

Basin Outlook Report

March 15, 2007



ARIZONA

Water Supply Outlook Report as of March 15, 2007

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/Statistics_by_State/Arizona/Publications/Crop_Progress_&_Condition/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, College of Agriculture.

SUMMARY

The remaining Arizona snowpack is melting rapidly, while much below median runoff is forecast for the period March 15-May. Cumulative precipitation for the water year remains well below normal in all basins ranging from 53% to 72% of average, while the weather outlook calls for increasing temperatures and below average precipitation through June. In-state reservoir storage is still fairly good considering the drought; however there is significant concern that drought conditions will intensify and worsen in the coming months.

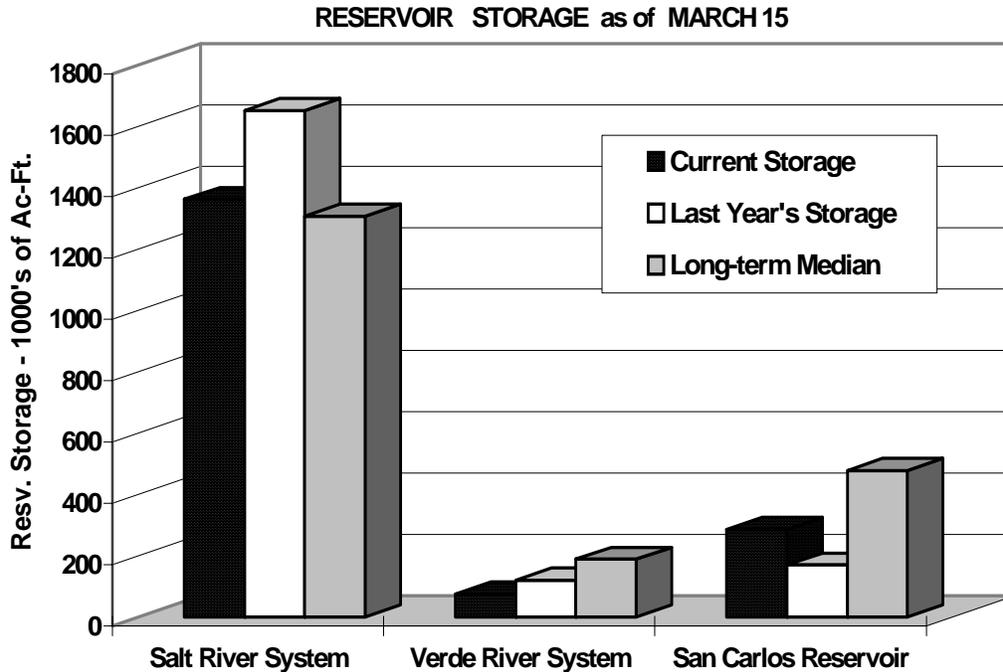
SNOWPACK

Watershed	Percent (%) of 30-Yr. Average Snowpack Levels as of March 15
Salt River Basin	44%
Verde River Basin	26%
Little Colorado River Basin	40%
San Francisco-Upper Gila River Basin	55%
Other Points of Interest	
Chuska Mountains	64%
Central Mogollon Rim	37%
Grand Canyon	6%
San Francisco Peaks	42%
Statewide Snowpack	42%

PRECIPITATION

Cumulative precipitation for the water year (Oct. 1-March 15) remains very low in all basins, with little hope for any significant improvement since the dry season of May and June is fast approaching. In that regard, river basin precipitation amounts for the month of March will be illustrated in the next report, which will be the final release for the 2007 snow survey season.

RESERVOIR



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

RESERVOIR	CURRENT STORAGE	LAST YEAR STORAGE	30-YEAR AVERAGE
Lyman Lake	8.0	8.1	16.2
Lake Pleasant	729.2	763.4	----
Lake Havasu	552.8	570.0	552.6
Lake Mohave	1650.6	1660.6	1694.0
Lake Mead	14148.0	15414.0	22090.0
Lake Powell	11506.0	10763.0	18366.0
Salt River System	1361.4	1651.2	1306.3
Verde River System	74.2	119.9	187.9
San Carlos Reservoir	285.0	168.8	476.9

STREAMFLOW

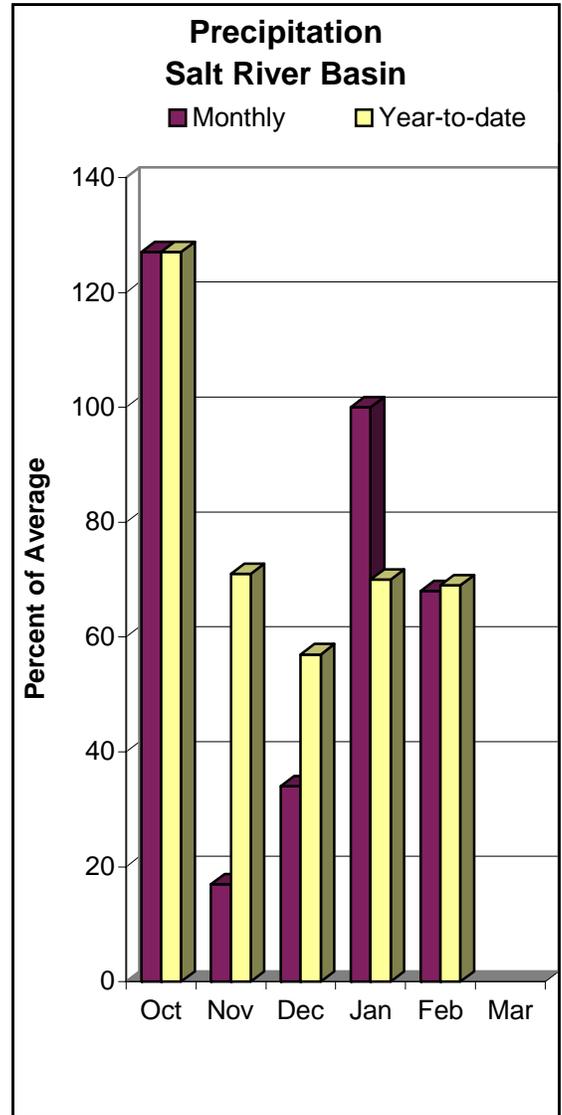
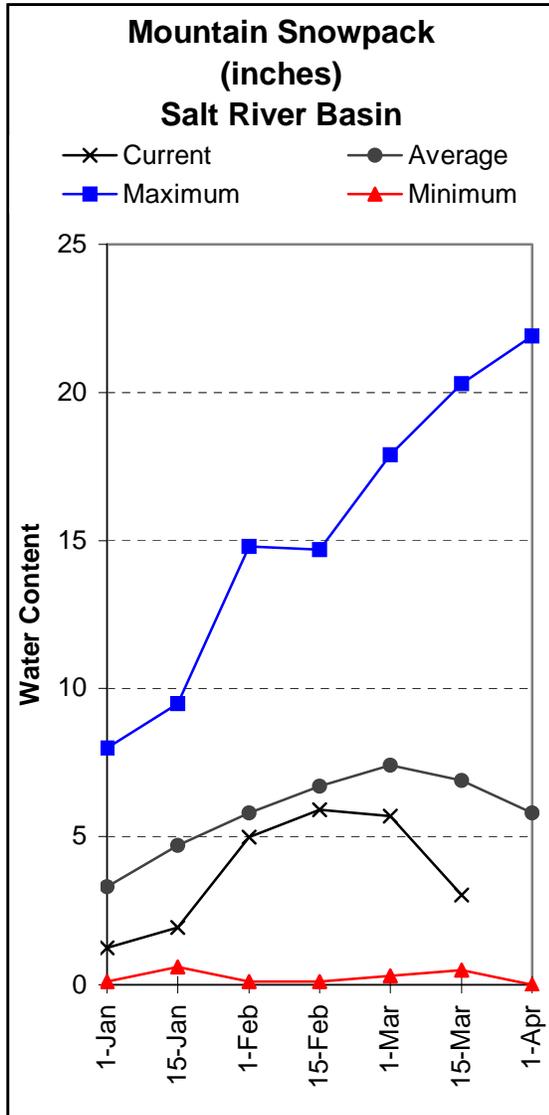
Much below median streamflow is forecast for all streams monitored in this report. For more information regarding seasonal water supplies, please refer to the forecast tables in the report.



SALT RIVER BASIN as of March 15, 2007

Much below median runoff is forecast for the basin. In the Salt River, near Roosevelt, the forecast calls for 20% of median flows from March 15-May, while at Tonto Creek, the forecast calls for 18% of median flows from March 15-May.

Snow survey measurements show the basin snowpack to be at 44% of the 30-year average, while combined reservoir storage in the Salt River system stands at 1,361,414 acre-feet.



SALT RIVER BASIN
Streamflow Forecasts - March 15, 2007

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							
MAR15-MAY	20	33	45	20	59	84	225
MARCH	22	26	30	23	43	63	131
Tonto Creek ab Gun Creek nr Roosevelt							
MAR15-MAY	0.8	1.7	3.0	18	5.7	12.2	16.6
MARCH	1.4	1.7	2.0	12	6.8	16.9	16.9

* 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-March

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
SALT RIVER RES SYSTEM	2025.8	1361.4	1651.2	1306.3

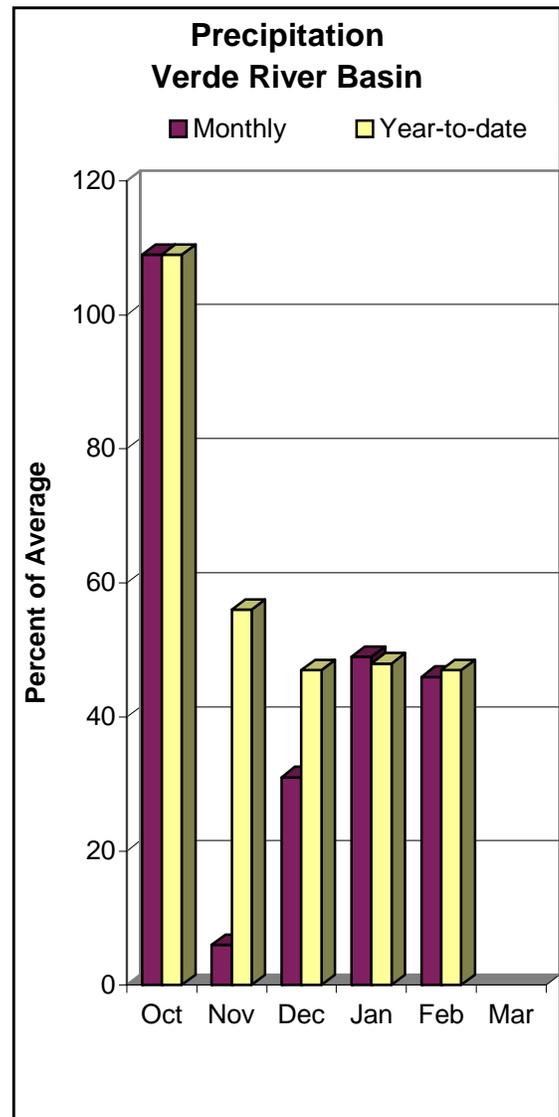
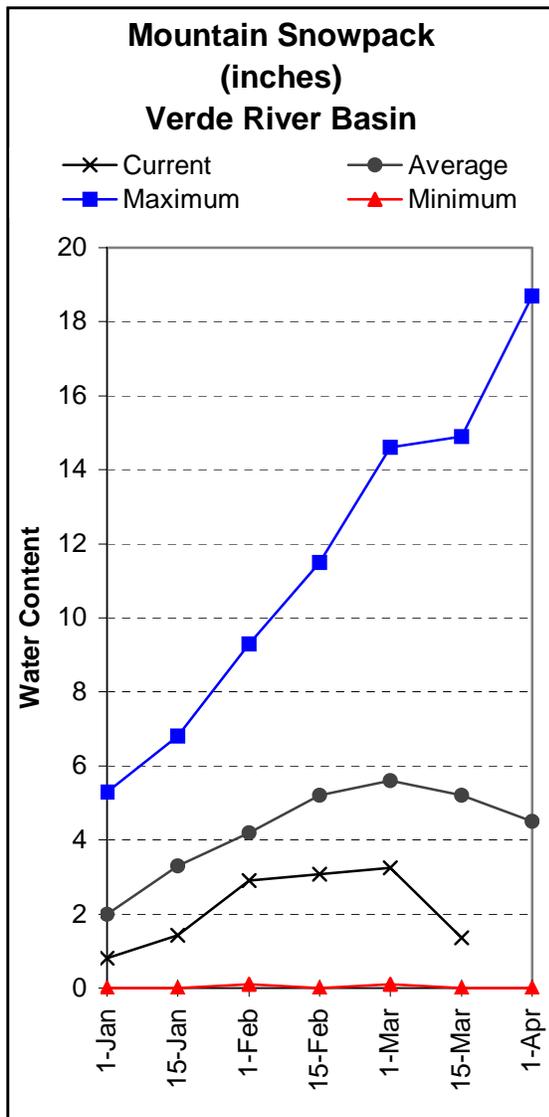
SALT RIVER BASIN
Watershed Snowpack Analysis - March 15, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SALT RIVER BASIN	8	78	44

VERDE RIVER BASIN as of March 15, 2007

Much below median runoff is forecast for the basin. In the Verde River, at Horseshoe Dam, the forecast calls for 27% of median flows from March 15-May.

Snow survey measurements show the basin snowpack to be 26% of the 30-year average, while reservoir storage for the Verde River system stands at 74,256 acre-feet.



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VERDE RIVER BASIN
Streamflow Forecasts - March 15, 2007

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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							
MAR15-MAY	23	25	27	27	40	66	100
MARCH	13.0	13.5	14.0	28	30	53	50

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

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

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Reservoir	Usable Capacity	***** Usable Storage *****		
		This Year	Last Year	Average
VERDE RIVER RES SYSTEM	287.4	74.2	119.9	187.9

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VERDE RIVER BASIN
Watershed Snowpack Analysis - March 15, 2007

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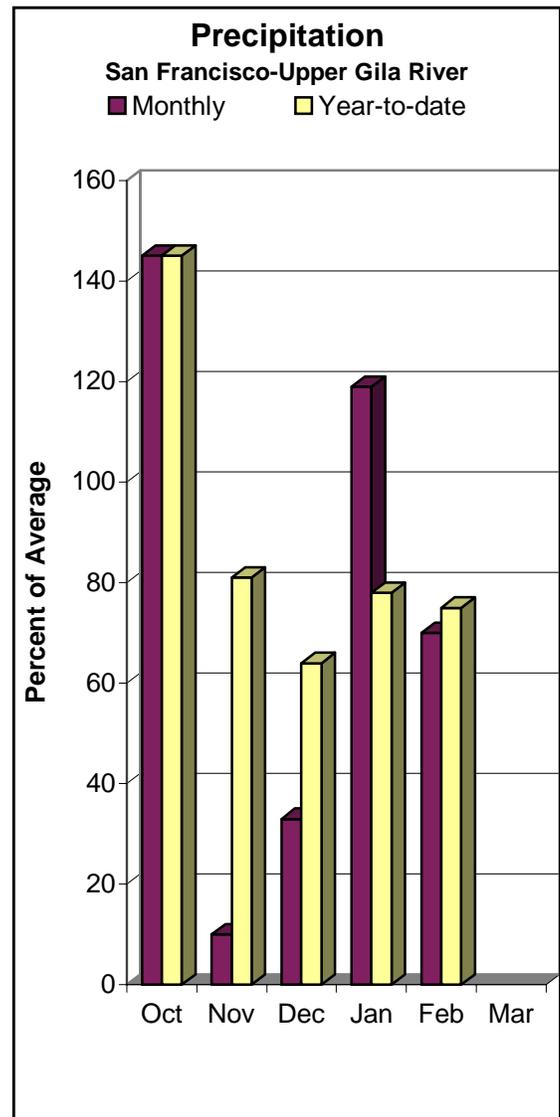
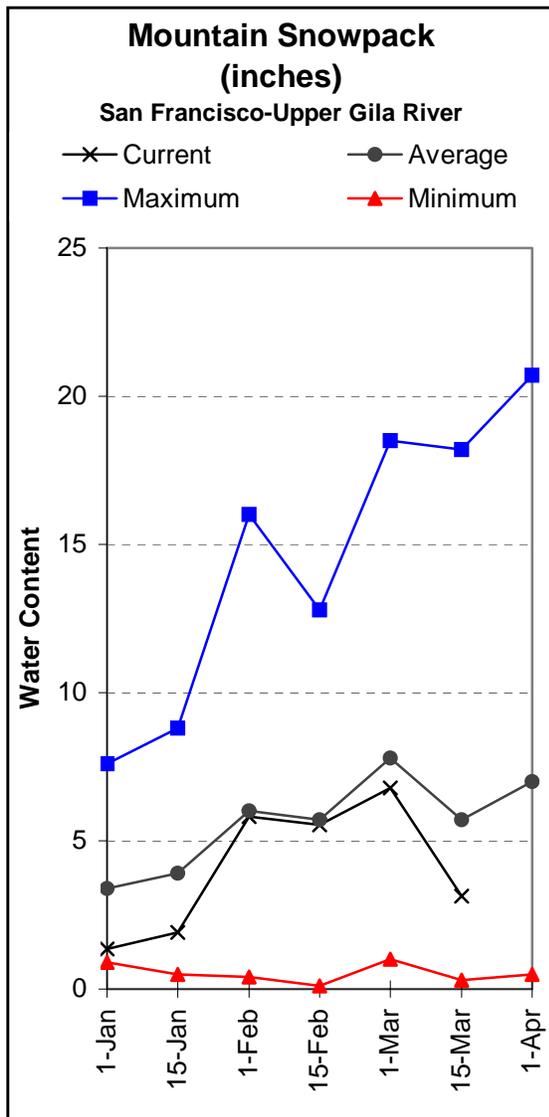
Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
VERDE RIVER BASIN	7	84	33
SAN FRANCISCO PEAKS	3	154	42

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SAN FRANCISCO-UPPER GILA RIVER BASIN as of March 15, 2007

Much below median runoff is forecast for the basin. In the San Francisco River, at Clifton, the forecast calls for 63% of median flows from March 15-May, while in the Gila River, near Solomon, the forecast calls for 62% of median flows from March 15-May. At San Carlos Reservoir, inflow volume to the lake is forecast at 52% of median for the forecast period March 15-May.

At San Carlos, reservoir storage stands at 285,000 acre-feet, while snow survey measurements show the basin snowpack to be at 55% of the 30-year average.



SAN FRANCISCO - UPPER GILA RIVER BASIN
Streamflow Forecasts - March 15, 2007

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 MAR15-MAY	12.5	17.5	21	84	25	32	25
Gila River nr Virden MAR15-MAY	12.8	16.0	25	78	36	52	32
San Francisco River at Glenwood MAR15-MAY	3.1	5.5	7.5	61	10.0	14.5	12.3
San Francisco River at Clifton MAR15-MAY	9.0	12.0	19.0	63	31	48	30
Gila River nr Solomon MAR15-MAY	22	29	45	62	73	115	73
	MARCH		29	55			53
San Carlos Reservoir inflow MAR15-MAY	9.6	14.4	25	52	43	68	48

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

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
SAN CARLOS	875.0	285.0	168.8	476.9

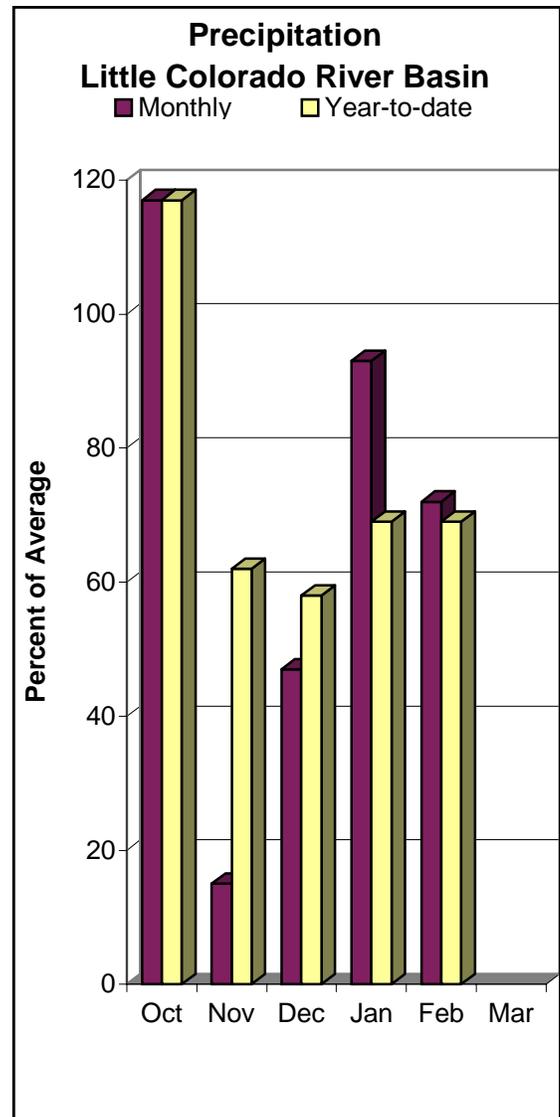
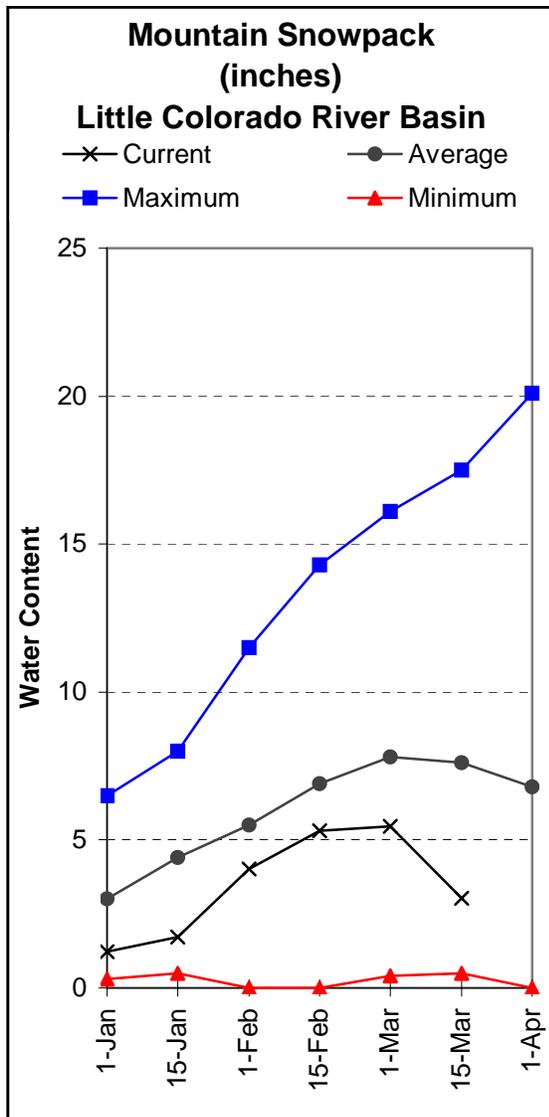
SAN FRANCISCO - UPPER GILA RIVER BASIN
Watershed Snowpack Analysis - March 15, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SAN FRANCISCO - UPPER GILA R	8	150	58

LITTLE COLORADO RIVER BASIN as of March 15, 2007

Much below median runoff is forecast for the basin. In the Little Colorado River, at Lyman Lake, the forecast calls for 38% of median flows from March-June, while at Woodruff, the forecast calls for 35% of median flows from March-May.

Snowpack levels at the southern headwaters of the Little Colorado River and along the central Mogollon Rim were measured at 40% and 37% of the 30-year average, respectively.



LITTLE COLORADO RIVER BASIN
Streamflow Forecasts - March 15, 2007

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							
MAR-JUN	0.88	1.51	2.40	38	3.58	5.95	6.30
Little Colorado River at Woodruff							
MAR-MAY	0.18	0.44	0.76	35	1.82	3.36	2.20
Blue Ridge Reservoir inflow							
MAR-MAY	1.6	3.5	4.8	38	6.4	9.1	12.8
Lake Mary inflow							
MAR-MAY	0.26	0.64	1.03	25	1.56	2.62	4.10

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

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

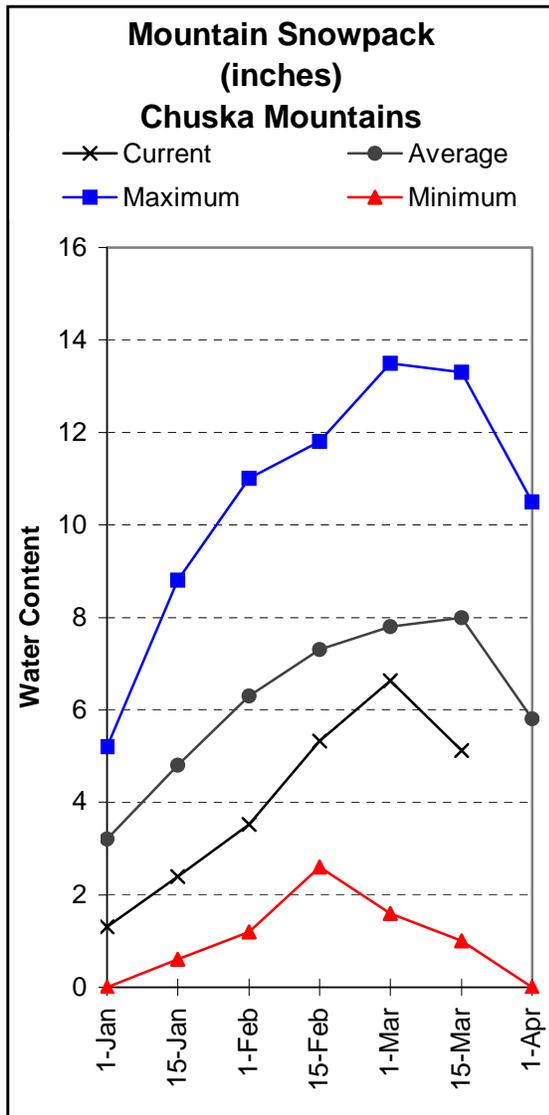
Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
LYMAN RESERVOIR	30.0	8.0	8.1	16.2

LITTLE COLORADO RIVER BASIN
Watershed Snowpack Analysis - March 15, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
LITTLE COLORADO - SOUTHERN H	9	86	40
CENTRAL MOGOLLON RIM	4	98	38

CHUSKA MOUNTAINS and DEFIANCE PLATEAU as of March 15, 2007

Snow survey measurements conducted by staff of the Navajo Water Management Branch show the Chuska and Defiance Plateau snowpacks to be 64% and 29% of the 30-year average, respectively, while much below average runoff is forecast for Captain Tom Wash, Wheatfields Creek, Bowl Canyon Creek, and Kinlichee Creek for the forecast period March-May.



CHUSKA MOUNTAINS and DEFIANCE PLATEAU
Streamflow Forecasts - March 15, 2007

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	0.37	0.65	1.00	35	1.25	1.90	2.83
Wheatfields Creek Nr Wheatfields							
MAR-MAY	0.58	0.84	1.05	36	1.29	1.72	2.90
Bowl Canyon Creek Abv Asaayi Lake							
MAR-MAY	0.21	0.33	0.43	43	0.55	0.77	1.00
Kinlichee Creek							
MAR-MAY	0.11	0.30	0.50	29	0.78	1.34	1.70

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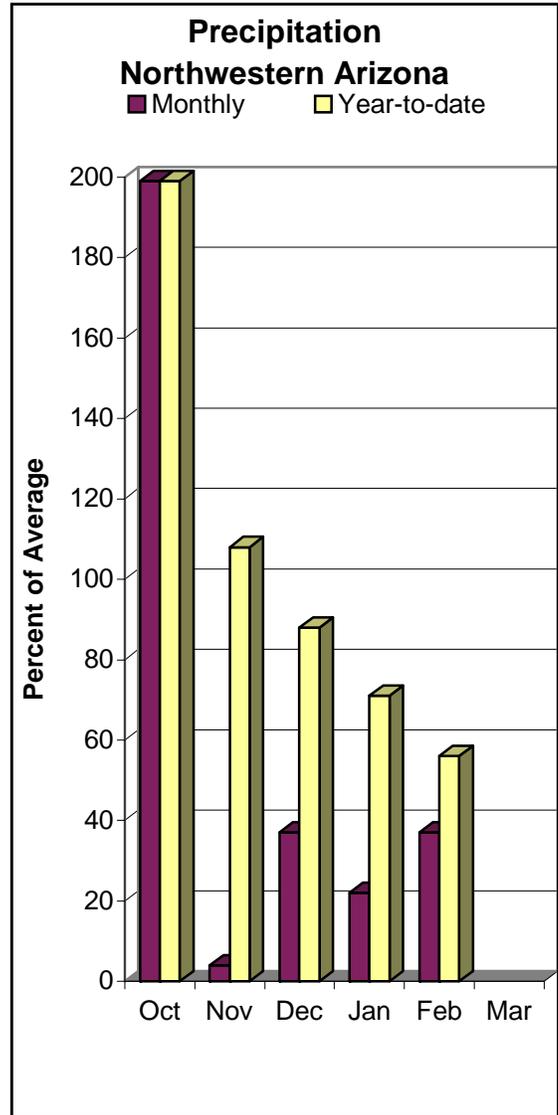
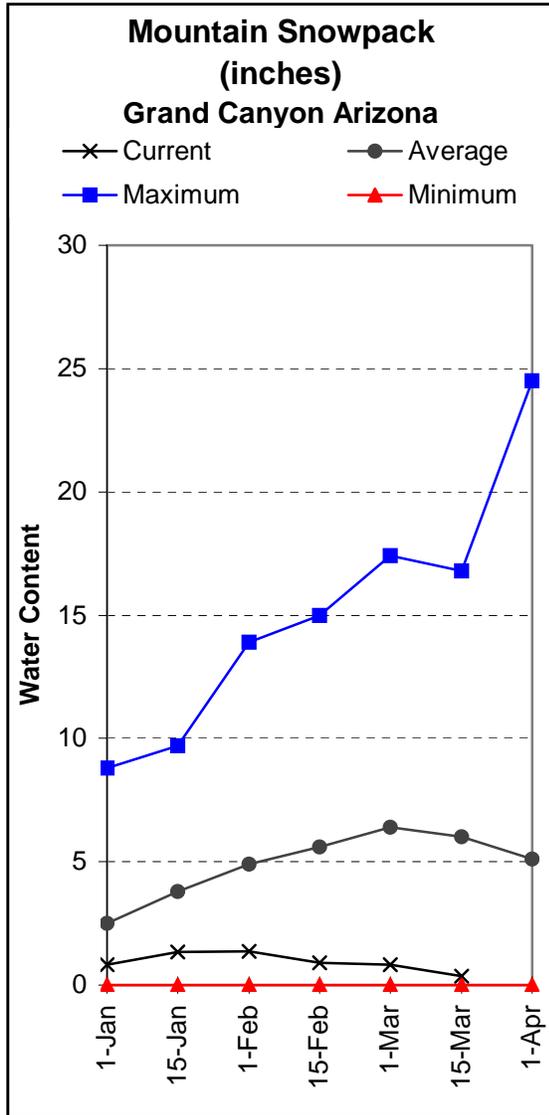
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- (2) - The value is natural volume - actual volume may be affected by upstream water management.

CHUSKA MOUNTAINS and DEFIANCE PLATEAU
Watershed Snowpack Analysis - March 15, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
CHUSKA MOUNTAINS	7	170	64
DEFIANCE PLATEAU	2	35	29

NORTHWESTERN ARIZONA as of March 15, 2007

On the Colorado River, inflow to Lake Powell is forecast at 59% of the 30-year average for the forecast period April-July, while at the Grand Canyon, snow survey measurements conducted by Park rangers show the snowpack to be 6% of the 30-year average.



NORTHWESTERN ARIZONA
Streamflow Forecasts - March 15, 2007

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	2338	3744	4700	59	5654	7059	7930

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NORTHWESTERN ARIZONA
Reservoir Storage (1000AF) Mid-March

Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
LAKE HAVASU	619.0	552.8	570.0	552.6
LAKE MOHAVE	1810.0	1650.6	1660.6	1694.0
LAKE MEAD	26159.0	14148.0	15414.0	22090.0
LAKE POWELL	24322.0	11506.0	10763.0	18366.0

NORTHWESTERN ARIZONA
Watershed Snowpack Analysis - March 15, 2007

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
GRAND CANYON	2	22	6

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

MARCH 15, 2007

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
ARBABS FOREST (AK)	7680	3/14	0	.0	1.8	1.3
BAKER BUTTE SNOTEL	7330	3/15	0	.1	2.4	5.6
BAKER BUTTE #2	7700	3/13	19	8.0	3.4	13.7
BALDY SNOTEL	9220	3/15	8	2.5	3.4	8.1
BEAVER HEAD	8000	3/16	0	0.0	1.6	2.1
BEAVER HEAD SNOTEL	7990	3/15	5	3.9	2.3	2.6
BEAVER SPRING	9220	3/13	18	6.4	3.7	9.9
BRIGHT ANGEL	8400	3/13	3	0.8	3.7	11.3
BUCK SPRING	7400	3/14	0	0.0	3.1	3.1
CHALENDER	7100	3/14	0	0.0	1.2	2.8
CHEESE SPRINGS	8600	3/14	14	4.3	3.4	5.8
CORONADO TRL SNOTEL	8400	3/15	1	.1	2.1	2.2
CORONADO TRAIL	8400	3/16	0	0.0	1.4	2.3
FLUTED ROCK	7800	3/14	4	1.2	1.6	2.8
FORT APACHE	9160	3/14	14	4.4	3.6	8.1
FORT VALLEY	7350	3/14	0	0.0	1.6	1.9
FRY SNOTEL	7220	3/15	0	.3	2.1	5.5
GRAND CANYON	7500	3/14	0	0.0	-	1.3
HANNAGAN MDWS SNOTEL	9020	3/15	17	6.9	3.3	12.3
HAPPY JACK	7630	3/12	3	0.8	2.0	4.4
HAPPY JACK SNOTEL	7630	3/15	10	4.4	2.3	6.3
HEBER SNOTEL	7640	3/15	-	.0	3.8	4.1
LAKE MARY	6970	3/13	1	0.5	2.1	1.4
MAVERICK FORK SNOTEL	9200	3/15	11	4.4	3.5	9.5
MORMON MTN SNOTEL	7500	3/15	0	1.1	2.5	6.4
MORMON MT. SUMMIT #2	8470	3/13	21	7.8	3.6	15.0
NEWMAN PARK	6750	3/14	0	0.0	1.9	1.2
NUTRIOSO	8500	3/16	0	0.0	1.6	1.2
PROMONTORY SNOTEL	7900	3/15	12	5.5	4.4	12.9
SNOW BOWL #1 ALT.	10260	3/12	16	3.2	3.2	16.1
SNOW BOWL #2	11000	3/12	26	6.6	3.4	20.5
SNOWSLIDE CYN SNTL	9750	3/15	20	11.1	7.0	13.5
TSAILE CANYON #1	8160	3/13	9	3.6	2.5	6.2
TSAILE CANYON #3	8920	3/13	18	6.5	3.1	9.5
WHITE HORSE SNOTEL	7180	3/15	0	.0	1.6	4.6
WILDCAT SNOTEL	7850	3/15	1	.2	2.3	3.7
WILLIAMS SKI RUN	7720	3/16	6	1.6	3.0	9.9
WORKMAN CREEK SNOTEL	6900	3/15	3	.1	5.3	4.2

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