

Natural Resources Conservation Service

New Mexico Basin Outlook Report January 1, 2013



Whitewater Aerial Marker $- \frac{1}{6}{13}$ – Showing the effects of the Whitewater-Baldy Complex Fire during Summer 2012 – Photo Courtesy of Larry Frost, Blue Sky Aviation

Basin Outlook Reports and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact: Your Local Natural Resources Conservation Service Office

or Wayne Sleep Snow Survey Hydrologic Technician Natural Resources Conservation Service 6200 Jefferson, NE Albuquerque, NM 87109 (505) 761-4431

How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snowcourses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

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New Mexico Water Supply Outlook Report as of January 1, 2013

The National Water and Climate Center (NWCC) is providing Snow Survey and Water Supply Forecasting products on the INTERNET. A few of our more popular products (SNOTEL Update Reports, State Basin Outlook Reports, and products previously published in the Water Supply Outlook for the Western United States) are now accessible via our Home Page and our Anonymous FTP server.

The Universal Resources Locator (URL) for the home page is: http://www.wcc.nrcs.usda.gov/

The address for the Anonymous FTP server is: ftp.wcc.nrcs.usda.gov

You can access the Anonymous FTP server using your INTERNET browser (Netscape, Mosaic, etc.) by changing the URL to: ftp://ftp.wcc.nrcs.usda.gov/

We will continue to add more products to the Home Page and Anonymous FTP server and welcome any comments and suggestions you might have.

Questions and comments should be directed to the NRCS Snow Survey and Water Supply Forecasting contact in your state:

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Summary

First and foremost, as another water supply forecasting year rolls around for New Mexico, users of this report need to be aware of some changes that have been made. This year represents the transition to a new set of "normals," replacing the 1971-2000 averages with updated 1981-2010 normals. This change allows us to better reflect current conditions in relation to more recent trends. In addition, Snow Water Equivalent is now calculated as a percent of median value rather than a percent of average since this provides a better representation of "normal" with less influence from outlier years.

After a near record dry 2011, 2012 proved to be another very warm and dry year for most of New Mexico. Most parts of the state saw well below average precipitation, and for much of New Mexico, 2012 set records as the warmest year since measurements began. This one-two punch has left much of the state in very poor condition, both from water supply and vegetation condition standpoints. Outlooks for this snow season seem to favor a continuation of the warmer and drier conditions, so the hope for a good snowpack does not look overly promising. It is still early in the snow accumulation season, so there is a chance that the state could still pick up significant snowpack in the next few months if the storm track moves our direction and carries any moisture with it. Water managers need to be preparing for another year of well below average runoff if this does not happen.

Snowpack

New Mexico has experienced a very slow start to the snow season this year. Most basins in the state had little to no snow prior to December. Although the storm track did move across New Mexico during December, most of the storms which passed through were somewhat moisture starved, so the snowpack did not build as much as hoped. For January 1, many basins in the state are still recording less than 70 percent of normal snowpack. Basins along the western side of the state are the exception, reporting slightly above normal snowpack levels. Given the dry conditions over the last couple years, the prospects for a below average snowpack for 2013 are very concerning. Water users and managers need to be aware of the current conditions throughout this snow season as it will have a major impact on water supply this year.

Basin	Percent	of	Last	Year	Percent	of Normal
Canadian River Basin Pecos River Basin Rio Grande Basin Mimbres River Basin San Francisco/Upper Gila		· · ·	55 . 54 . 68 . 29 .	 	· · · · · · · · · · · · · · · · · · ·	61 62 71 105
River Basin Zuni/Bluewater Basin San Juan River Basin Chuska Mountains Rio Hondo Basin		1	60 . 85 . 80 . 58 . 66 .	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	119 113 66 115 206

Precipitation

High elevation precipitation in October ranged from 0 percent of average in the Mimbres and Zuni/Bluewater River Basins to 43 percent of average in the Pecos River Basin. The whole state was well below normal, with several basins seeing little to no precipitation for the month. November remained drier than average across all of New Mexico, ranging from 29 percent of normal in the Mimbres Basin up to 90 percent of normal in the Rio Hondo Basin. December brought a series of storms through New Mexico, finally dropping some much needed precipitation. High elevation precipitation ranged from 136 percent of normal in the Canadian Basin to 65 percent of normal in the Mimbres River Basin. As of December 31, year to date averages are generally well below normal for the state, ranging from 70 percent of normal in the Animas/San Juan River Basin to 36 percent of normal in the Mimbres River Basin.

Reservoirs

With 2011 and 2012 registering as two of the driest years in New Mexico history, reservoir storage has again dropped considerably state wide. Demand for water stored in New Mexico reservoirs exceeded supply by a substantial margin. Reservoir storage statewide is now only 43 percent of normal as of the end of December 2012. Given the relatively low current storage, the only way to possibly meet user demands is a much higher than normal spring runoff from snowpack. Early indications are not looking very promising again this year, but with the majority of the snow season ahead of us, there is still quite a bit of uncertainty. The early snow season has been below normal, and if this pattern continues, there is no way the state will see even near normal runoff. At this point it is still very difficult to make an accurate prediction of what this year will bring, but water users and managers need to be prepared for very low runoff again this year.

RESERVOIR	Percent	of	Last	Year	Percent	of	Average
ABIQUIU		•	86 .				102
BLUEWATER LAKE		•	74 .				29
BRANTLEY		•	41 .				27
CABALLO		•	55 .				11
COCHITI		. 1	04 .				. 84
CONCHAS		•	12 .				1
COSTILLA		•	88 .				38
EAGLE NEST		•	76 .				55
EL VADO		•	12 .				10
ELEPHANT BUTTE		•	55 .				13
HERON		•	73 .				54
LAKE AVALON		. 1	04 .				120
NAVAJO		•	73 .				71
SANTA ROSA		•	48 .				9
SUMNER		. 1	.00 .				33

Streamflow

Streamflow conditions across the state are generally at or below normal for this time of year statewide. The January 1, 2013 forecast numbers from NRCS show the majority of New Mexico is on track for a significantly lower than normal runoff season at this point. Virtually all forecast points in the state are currently expecting less than 70 percent of normal runoff, with many expecting less than 50 percent. It is important to remember that it is still early enough in the snow season that things could easily change depending on the moisture/snow patterns in coming months, but most predictions call for warmer and drier than average conditions through the spring. Water users and managers need to be prepared for well below normal runoff this year.

New Mexico Snowpack as of January 1, 2013



New Mexico Surface Water Supply Index as of January 1, 2013



Canadian River Basin Water Supply Outlook Report as of January 1, 2013



Streamflow forecasts for the Canadian River Basin range from 49 percent of normal for the Mora River near Golondrinas to 64 percent of normal for Rayado Creek near Cimarron. October started out the water year very dry, with 23 percent of normal precipitation received. November remained dry, recording 44 percent of normal. December picked up somewhat and 136 percent of normal was received in the Basin. Year-to-date high elevation precipitation in the Canadian River Basin is currently 68 percent or normal. The basin has been well below average since this water year started on October 1. Snowpack in the basin is well below normal for this time of year at 61 percent of median, compared to last year's 113 percent. Total reservoir storage in the basin is 31,000 acre-feet or 12 percent of normal, down substantially from last year's 24 percent or 54,700 acre-feet at this time.





CANADIAN RIVER BASIN
Streamflow Forecasts - January 1, 2013

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		<<=====	Drier ====	== Future	Conditions		Wetter	====>>		
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FOIECast FOIIIC	FOLECast				I Exceeding					
	Period	90%	70%		50%		30%	10%	30-7	ír Avg.
		(1000AF)	(1000AF)	(1000A	F) (% AVG.)	(1000AF)	(1000AF)	(1	1000AF)
				=========		== =====				
Vermejo R nr Dawson	MAR-JUN	2.2	4.4	6.5	59		9.2	14.6		11.1
Cimarron R bl Eagle Nest Dam (2)	MAR-JUN	2.8	5.0	7.1	63		9.7	14.4		11.2
Cimarron R nr Cimarron (2)	MAR-JUN	0.5	3.2	9.8	62		16.4	26		15.8
				İ		i				
Ponil Ck nr Cimarron	MAR-JUN	1.37	2.90	4.40	61		6.40	10.20		7.20
Rayado Ck nr Cimarron	MAR-JUN	1.14	2.80	4.50	64		6.80	11.50		7.00
Mora R nr Golondrinas (2)	MAR - JUIN	1 0	2 5	63	49		14 7	27		12.8
Nora R III Goronarinas (2)	THE CON	1.0	2.5	0.5	19		11.7	27		12.0
Conchas Reservoir Inflow (3)	MAR-JUN	1.0	6.6	15.0	50		28	60		30
				 ============		 ========				
CANADIAN	I RIVER BASIN					CANADIA	N RIVER	BASIN		
Reservoir Storage (10	000 AF) - End	of Decembe	r		Watershed	Snowpac	k Analys	is - Janu	ary 1, 2	2013
	IIcahle	*** IIcabl	e Storage *	**			Numbe	r Thi	g Vear a	as % of
Degenerative	Generation	Thia	Teat	We	towahod		Numbe		B ICAL C	45 8 01
RESELVOIL	Capacity	11115	Last	wa.	Leisneu					
		Year	Year A	va			Data Si	tes Las	t Yr 4	Average
			16 6 10							
CONCHAS	254.2	2.0	10.6 19	/.9 CA	NADIAN RIVER	BASIN	4	55		θТ
EAGLE NEST	79.0	29.0	38.1 53	3.0						
				1						

The average is computed for the 1981-2010 base period.

Pecos River Basin Water Supply Outlook Report as of January 1, 2013



Streamflow forecasts for the Pecos River Basin are well below normal at this time, ranging from 37 percent of normal for the Pecos River near Anton Chico to 51 percent of normal for Gallinas Creek near Montezuma. High elevation precipitation for October and November came in about 40 percent of normal. December precipitation was somewhat better, with 100 percent of normal received. Year-to-date precipitation is well below normal at 61 percent for the water year so far. Snowpack in the Pecos River Basin is also well below normal this year, at 62 percent of median, down from last year's 111 percent. January 1 reservoir storage in the basin is 20,600 acre-feet, down from last year's 32,300 acre-feet. Compared to the average of 100,200 acre-feet, current storage is only 21 percent.





		P	ECOS RIVER	BASIN					
		Streamflow	Forecasts	- Jan	uary 1,	2013			
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		~~~~~	Drier	F	uture co	JIGICIOUS ==	Welle	/	
Forecast Point	Forecast			== Chai	nce Of E	Exceeding * =			
	Period	90%	70%		5	50%	30%	10%	30-Yr Avg.
		(1000AF)	(1000AF)	(	1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
		0 41		=   == = = :	========			14 70	
Gallinas CK nr Montezuma	MAR-JUL	0.41	2.50		5.00	51	8.30	14.70	9.80
Pecos R nr Pecos	MAR-JUIL	8.9	19.0	1	28	49	39	58	57
				i i					
Pecos R nr Anton Chico	MAR-JUL	0.7	10.3	ĺ	23	37	41	76	63
				ļ					
Pecos R ab Santa Rosa Lk	MAR-JUL	1.2	10.4		22	39	38	69	56
PECOS R	VER BASIN						PECOS RIVER	BASIN	
Reservoir Storage (100	) AF) - End	of Decembe:	r	ĺ		Watershed Sn	owpack Analy	sis - Janua	ry 1, 2013
	Usable	*** Usabl	e Storage '	***			Numb	er This	Year as % of
Reservoir	Capacity	This	Last		Water	rshed	of	====	
		rear	iear P	4vg			Data S	ites Last	ir Average
LAKE AVALON	4.0	2.4	2.3	2.0	PECOS	S RIVER BASIN	3	54	62
							-		
BRANTLEY	1008.2	4.6	11.1 1	17.1					
SANTA ROSA	438.3	4.8	10.1 5	54.4					
CUMNED	102 0	8 8	88 7	26 7					
DONINER	102.0	0.0	0.0 2						

The average is computed for the 1981-2010 base period.

## Rio Grande Basin Water Supply Outlook Report as of January 1, 2013



Streamflow forecasts for the Rio Grande Basin are significantly below normal for the most part, ranging from 64 percent of normal for the El Vado Reservoir Inflow, to 36 percent of normal for the Rio Pueblo de Taos below Los Cordovas. The current forecast for the Rio Grande at San Marcial is only 38 percent of normal or 191,000 acre-feet. Year-to-date precipitation is well below normal at 60 percent, much drier than last year at this time. Snowpack in the basin is only 71 percent of median – well below last year's 98 percent. This trend continues into southern Colorado, where many sites are recording well below normal snowpack, which further impacts runoff forecasts for the Rio Grande Basin. Total reservoir storage in the basin is 559,000 acre-feet, down significantly from last year's 860,800 acre-feet. This is only 28 percent of the average of 1,979,300 acre-feet. Abiquiu, is the only reservoir in the basin with above average storage levels for December at 102 percent of normal. Elephant Butte levels continue to decline with current storage of 161,100 acre-feet; compared to 294,500 acre-feet at this time last year or the 30 year average of 1,267,000 acre feet.





RIO GRANDE BASIN Streamflow Forecasts - January 1, 2013										
			- Drier -		Euture Co	nditions	Wetter	>		
Foregoet Doint	Foregoat		- Dilei -	Cl	hange Of E	vacodina * -	Wetter			
Forecast Point	Period	90% (1000AF)	70% (1000AE	CI F)	(1000AF)	0%   (% AVG.)	30% (1000AF)	10%   (1000AF)	30-Yr Avg. (1000AF)	
Rio Grande nr Del Norte (2)	APR-SEP	195	275	==== ==:	340	66	410	525	515	
Platoro Reservoir Inflow (2)	APR-JUL APR-SEP	27 29	36 40		43 47	77 76	50 54	59 65	56 62	
Conejos R nr Mogote (2)	APR-SEP	83	119	ļ	144	74	169	205	194	
Costilla Reservoir Inflow (2)	MAR-JUL	3.7	5.5	ļ	7.0	63	8.6	11.4	11.1	
Costilla Ck nr Costilla (2)	MAR-JUL	6.1	10.5		14.1	54	18.3	25	26	
Red R bl Fish Hatchery nr Questa	MAR-JUL	8.6	13.3		17.0	50	21	28	34	
Rio Hondo nr Valdez	MAR-JUL	4.0	7.2		9.9	54	13.0	18.4	18.4	
Rio Lucero nr Arroyo Seco	MAR-JUL	2.6	4.5		6.1	56	7.9	11.1	10.9	
Rio Pueblo de Taos nr Taos	MAR-JUL	2.8	6.1		9.1	54	12.7	19.1	17.0	
Rio Pueblo de Taos bl Los Cordovas	MAR-JUL	2.3	7.6		12.9	36	19.7	32	36	
Embudo Ck at Dixon	MAR-JUL	5.6	14.1	ļ	22	46	32	49	48	
El Vado Reservoir Inflow (2)	MAR-JUL APR-JUL	56 49	103 93		144 130	64 63	191 174	275 250	225 205	
Santa Cruz R at Cundiyo	MAR-JUL	3.7	7.0		9.8	54	13.1	18.9	18.3	
Nambe Falls Reservoir Inflow (2)	MAR-JUL	1.23	2.30		3.30	51	4.40	6.40	6.50	
Tesuque Ck ab diversions	MAR-JUL	0.13	0.40	ļ	0.67	50	1.00	1.62	1.34	
Rio Grande at Otowi Bridge (2)	MAR-JUL	146	250	ļ	340	47	440	615	720	
Santa Fe R nr Santa Fe (2)	MAR-JUL	0.37	1.11	ļ	1.85	43	2.80	4.50	4.30	
Jemez R nr Jemez	MAR-JUL	7.3	14.1	ļ	20	48	27	39	42	
Jemez R bl Jemez Canyon Dam	MAR-JUL	3.1	8.6	ļ	14.0	41	21	33	34	
Rio Grande at San Marcial (2)	MAR-JUL	36	114		191	38	290	465	510	
RIO GRAN	====== DE BASIN					 	RIO GRANDE BAS	======================================		
Reservoir Storage (1000	AF) - End ============	of Decemb	er ======		 ==========	Watershed Sr	nowpack Analysi	s - Januar	y 1, 2013	
Reservoir	Usable Capacity	*** Usab This Year	le Storag Last Year	ge *** Avg	Water	shed	Number of Data Sit	This ===== es Last	Year as % of Yr Average	
ABIQUIU	1192.8	155.9	======= 181.6	152.7	= =======   RIO G	RANDE BASIN	12	 68	71	
BLUEWATER LAKE	38.5	3.4	4.6	11.7						
CABALLO	332.0	7.5	13.6	68.0						
COCHITI	491.0	52.9	50.8	63.1						
COSTILLA	16.0	2.3	2.6	6.0						
EL VADO	190.3	10.0	86.2	102.8						
ELEPHANT BUTTE	2195.0	161.1	294.5	1267.0						
HERON	400.0	165.9	226.9	308.0						

* 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 1981-2010 base period.

## Mimbres River Basin Water Supply Outlook Report as of January 1, 2013



The streamflow forecast for the January to May period for the Mimbres River Basin is 1,430 acre-feet or 60 percent of the median runoff. October started off the water year with no measurable precipitation received. November precipitation was also very low with only 29 percent of normal measured. December precipitation picked up somewhat, with 65 percent of normal recorded. Year-to-date precipitation is around 36 percent of normal since October 1, a very dry start to the water year. Snowpack in the basin is near normal at 105 percent of median, compared to last year's 253 percent at this time.

Users of NRCS Snow Survey data should be aware, due to reduced budget allocations, the manual snow course at McKnight Cabin has been discontinued, and Emory Pass #2 is being considered for discontinuation. Data from the automated SNOTEL at McKnight continues, but Emory Pass #2 will cease to report if discontinued.





		MI	MBRES RIVE	ER BAS	IN								
		Streamflow	Forecasts	a – Jai	nuary 1.	2013							
		1	Devidence					Mada &					
		<<======	Drier ===		Future Co	naitions =		wetter	====>>				
				-	_								
Forecast Point	Forecast	=======		=== Cha	ance Of E	xceeding *	======						
	Period	90%	70%		50	0%		30%	10%	30-Yr Med.			
		(1000AF)	(1000AF)	İ	(1000AF)	(% MED.)	(1	1000AF)	(1000AF)	(1000AF)			
				==   ====:			=   ======						
Mimbres R at Mimbres (3)	JAN-MAY	0.22	0.77	i	1.43	60	i	2.40	4.50	2.40			
							1						
MIMPDEC	DIVED DAGIN						MIMDDE	DIVED I	DAGIN				
MIMBRES (100	AIVER DAGIN	6 m 1					MINDRE	S KIVEK I	DADIN	1 0010			
Reservoir Storage (100	U AF) - Ena	or Decembe	r		1 1	watershed S	snowpaci	( Analysi	ls - Januar	Y I, 2013			
	Usable	*** Usabl	e Storage	* * *				Number	r This	Year as % of			
Reservoir	Capacity	This	Last		Waters	shed		of	=====				
		Year	Year	Avq	i			Data Sit	es Last	Yr Average			
						הם הדוזהם הא	STN	3	29	105			
						LO KIVER DA	10 TIN	5	20	105			
					1								

The average and median are computed for the 1981-2010 base period.

## San Francisco / Upper Gila River Basin Water Supply Outlook Report as of January 1, 2013



Streamflow forecasts for the San Francisco/Upper Gila River Basin range from 49 percent of normal for the Gila River below Blue Creek near Virden, to 95 percent of normal on the San Francisco River at Glenwood. Precipitation for the month of October was almost non-existent, with 3 percent of normal received. November saw a slight upswing in moisture, with 64 percent of normal precipitation. As has been the case for the last few years, December precipitation picked back up somewhat, with 105 percent of normal recorded. Year-to-date precipitation is hovering around 60 percent of average as of January 1. Snowpack in the basin is at 119 percent of median, compared to last year's 150 percent at this time.





			==============					
		SAN FRANCI	SCO/UPPER G	ILA RIVER BA	SIN			
		Streamflow	Forecasts ·	- January 1,	2013			
		<<======	Drier =====	== Future C	onditions =:	===== Wetter	=====>>	
		ĺ						
Forecast Point	Forecast	========		= Chance Of	Exceeding * :		=======	
	Period	90%	70%		50%	30%	10%	30-Yr Med.
		(1000AF)	(1000AF)	(1000AF)	(% MED.)	(1000AF)	(1000AF)	(1000AF)
				==============		======================================		
Gila R at Gila (3)	JAN-MAY	17.0	21	30	54	42	65	56
Gila R bl Blue Ck nr Virden (3)	JAN-MAY	16.0	21	37	49	58	97	76
San Francisco R at Glenwood (3)	JAN-MAY	5.9	13.0	20	95	29	47	21
San Francisco R at Clifton (3)	JAN-MAY	13.0	29	47	.7.7	70	112	61
SAN FRANCISCO/UP	PER GILA RIV	ER BASIN			SAN FRANC.	ISCO/UPPER GIL	A RIVER BAS	51N
Reservoir Storage (10	00 AF) - End	or Decembe	r		watershed Si	nowpack Analys	is - Januar	Y I, 2013
	TTl-l-	+++ TTl-1	+					
Degeneration	Osable	mbia	e storage *	Wete	wahod	Numbe	er This	iear as % oi
Reservoir	Capacity	This	Last	wate	rsnea	OI Data Gi	=====	
	I	iear	IEAL A	/9   		Data Si	.tes Last	11 Average
								110
				SAN	FRANCISCO/ UP	PER GILLA IU	60	119

The average and median are computed for the 1981-2010 base period.

## Zuni / Bluewater Basins Water Supply Outlook Report as of January 1, 2013



Streamflow forecasts for the Zuni/Bluewater Basins range from 92 percent of normal for the Rio Nutria near Ramah to 61 percent of normal for the Bluewater Lake Inflow. October started off the water year with no measureable precipitation received. November precipitation was up somewhat with 71 percent of normal being recorded. December was 100 percent of normal, much drier than the last few years. Year-to-date precipitation is well below normal, at 63 percent. Snowpack in the basin is slightly above normal, with 113 percent of median, down from last year's 169 percent of average. Storage in Bluewater Lake is 3,400 acre-feet or 29 percent of normal, down somewhat from last year's 4,600 acre-feet at the end of December.





		ZUN	I/BLUEWATER	BASINS						
		Streamflow	Forecasts -	January 1	2013					
		Dereamine	TOLCCUBCD	oundary r	2015					
		<<=====	Drier =====	= Future (	conditions		wetter	====>>		
Forecast Point	Forecast	========		Chance Of	Exceeding '	· =======				
	Period	90%	70%		50%		30%	10%	30-	Yr Med.
		(1000AF)	(1000AF)	(1000AF)	(% MED.)	(1	.000AF)	(1000AF)	(	1000AF)
	==========			================					======	
Bluewater Lake Inflow (2,3)	JAN-MAY	0.00	0.50	2.00	61	i	7.60	15.70		3.30
						i				
Rio Nutria nr Ramah (3)	.ΤΔΝ-ΜΔΥ	0 07	0 54	1 30	92		2 60	5 60		1 42
Rio Nucliu III Ruman (5)	OTHN PHIL	0.07	0.51	1.50	22		2.00	5.00		1.12
Bamah Bagarrair Inflow (2)	TAN MAY	0 01	0.20	0 71	00		1 2 2	2 60		0 00
Raman Reservoir inflow (3)	UAN-MAI	0.01	0.29	0.71	09		1.32	2.00		0.80
		0 00	0.05	0.00	0.1		1 07	4 00		0 45
Zuni River ab Black Rock Reservoir (	JAN-MAY	0.00	0.05	0.38	81		1.27	4.20		0.47
						1				
ZUNI/BLUEW.	ATER BASINS	5				ZUNI/BLU	JEWATER H	BASINS		
Reservoir Storage (1000	AF) - End	of December	r		Watershed	Snowpack	Analys:	is - Janua	cy 1,	2013
	Usable	*** Usabl	e Storage **	**			Number	r This	Year	as % of
Reservoir	Capacity	This	Last	Wate	ershed		of			
	capacity	Vear	Vear N	70	- bried		Data Sit	ee Last	Vr	Average
	ا ا	1Ca1	ICAL AV	'9   			Data SI	Les Last	±±	Average
										110
BLUEWATER LAKE	38.5	3.4	4.6 11	L.7   ZUNI	/BLUEWATER	BASÍNS	4	85		113

The average and median are computed for the 1981-2010 base period.

## San Juan River Basin Water Supply Outlook Report as of January 1, 2013



Streamflow forecasts for the San Juan River Basin range from 62 percent of normal for the Navajo Reservoir Inflow, to 72 percent of normal for the Rio Blanco at Blanco Diversion and the Navajo River at the Oso Diversion. October started the water year out dry, with 19 percent of normal precipitation received. November precipitation was only 61 percent of normal. Like other northern basins in New Mexico, December precipitation was slightly above average in the basin, with 128 percent of normal received. Year-to-date precipitation reflects the dry start to the water year, recording only 70 percent of normal as of January 1. Snowpack in the basin is 66 percent of median, even lower than last year's 75 percent at this time. Navajo reservoir storage is 956,300 acre-feet or 71 percent of normal, down significantly from last year's 1,310,900 acre-feet at the end of December.





		:	SAN JUAN RIVE	ER BAS	SIN						
		Streamflo	ow Forecasts	- Jan	uary 1,	2013					
		<<=====	== Drier ====	=== F	uture Co	onditions		Wetter	====>>		
		i								İ	
Forecast Point	Forecast	======		== Cha	nce Of I	Exceeding *				İ	
	Period	90%	70%		1	50%		30%	10%	30-Y	r Avg.
		(1000AF	) (1000AF)	(	1000AF)	(% AVG.)	(1	L000AF)	(1000AF)	(1	000AF)
				=   = = = =			= ======				
Rio Blanco at Blanco Diversion (2)	APR-JUL	22	32	Í	39	72	İ	47	60		54
				1							
Navajo R at Oso Diversion (2)	APR-JUL	26	38		47	72		57	74		65
Navajo Reservoir Inflow (2)	APR-JUL	245	360		455	62		560	735		735
				1							
Animas R at Durango	APR-JUL	153	220		275	66		335	435		415
To Dista Dist Hamman	3.DD TIT	6.0	10 7		14 5	62		10.0	26		22
La Plata R at Hesperus	APR-JUL	6.2	10.7		14.5	63		18.9	20		23
SAN JUAN I	DIVED BACIN						CAN JULAN	 ז סד <i>וו</i> דס ז	DAGIN		
Recervoir Storage (100	(IVER DASIN	of Decem	Der			Waterched	Shi UUhi Shownad	Analve	ic - Tanua	raz 1 2	013
Reservoir Scorage (100		OI Decem				water sned	=========	Anarys			=======
	Usable	*** []sa]	hle Storage '	***				Numbe	r This	Year a	s % of
Reservoir	Capacity	This	Last	ł	Water	rshed		of	====		======
	capacity	Year	Year A	Ava	nace.	Direa		Data Si	tes Last	Yr A	verage
	ا ==============			=====	=======			=======	============		=======
NAVAJO	1696.0	956.3	1310.9 134	41.0	SAN J	JUAN RIVER	BASIN	11	80		66

The average is computed for the 1981-2010 base period.

## Rio Hondo Basin Water Supply Outlook Report as of January 1, 2013



The streamflow forecast for the March to June period for the Rio Hondo Basin is 3,300 acre-feet or 49 percent of normal for the Rio Ruidoso at Hollywood. Similar to the rest of New Mexico, October precipitation in the Rio Hondo Basin was very low, with only 16 percent of normal received. November precipitation picked up somewhat, with 90 percent of normal recorded for the month. December precipitation continued near average, with 103 percent of normal received. Year-to-date precipitation is 66 percent of normal, reflecting the dry start to the water year. The snowpack in the Rio Hondo Basin is 206 percent of median, with 6.6 inches of SWE present on January 1.

It should be noted that the switch to using median snowpack values this year has had a significant influence on the "average" calculations for the Rio Hondo Basin. Using the old system of computing averages based on the 1971-2000 period, 6.7 inches of SWE was considered normal for January 1. Using the new median calculations based on the 1981-2010 period, 3.2 inches of SWE is now normal. For this reason, comparisons of "percent of average" from year to year will be limited in this basin to minimize confusion.





			===========						
			RIO HONDO	BASIN					
		Streamflow	Forecast	s – Jan	nuary 1	2013			
		1	Duitau						
		<<======	Drier ==		Future Co	naitions =	====== wetter	====>>	
					_				
Forecast Point	Forecast	=======		=== Cha	ance Of E	xceeding * :		=======	
	Period	90%	70%		5	08	30%	10%	30-Yr Avg.
		(1000AF)	(1000AF)	i	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
				== ====				===========	
Rio Ruidoso at Hollywood	MAR-JUIN	0 17	1 56		3 30	49	5 70	10 40	6 70
RIO RAIGOBO AL HOILYWOOD	FILL OUN	0.17	1.50		5.50	15	5.70	10.10	0.70
				1					
RIO HOI	NDO BASIN						RIO HONDO BA	SIN	
Reservoir Storage (100)	) AF) - End	of Decembe	r			Watershed S	nowpack Analys:	is - Januar	ry 1, 2013
						==============			
	Usable	*** Usabl	e Storage	* * *			Number	r This	Year as % of
Reservoir	Capacity	This	Last		Water	shed	of		
	0.010.000.01	Vear	Vear	Δνα			Data Si	teg Lagt	Vr Average
	I		icui	1109			Data Di	<u></u>	II AVCIUGO
					I RIO H	IONDO BASIN	1	66	206

The average is computed for the 1981-2010 base period.

#### BASIN SUMMARY OF SNOW COURSE DATA

#### JANUARY 2013

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 81-10
NEW MEXICO						
BATEMAN SNOTEL	9800	1/01/13	22	3.6	4.1	4.3
BOON	8140	12/26/12	8	1.6	2.2	1.4
BOWL CANYON	8980	12/27/12	17	3.0	3.4	3.5
CHAMITA SNOTEL	8500	1/01/13	16	2.2	4.0	4.0
DAN VALLEY	7640	12/26/12	7	1.2	1.4	1.2
ELK CABIN SNOTEL	8250	1/01/13	11	1.6	2.9	1.8
EMORY PASS #2	7800	1/02/13	4	.5	2.7	.6
FRISCO DIVIDE SNOTEI	8000	1/01/13	10	2.0	2.7	1.5
GALLEGOS PEAK SNOTEI	9500	1/01/13	25	4.1	4.6	4.1
HIDDEN VALLEY	8480	12/26/12	13	2.7	2.2	
HOPEWELL SNOTEL	10000	1/01/13	30	5.8	6.3	7.1
HUMMINGBIRD	10550	1/06/13	20	4.8	11.0	4.4
LOOKOUT MTN SNOTEL	8150	1/01/13	2	.8	3.5	1.4
MCGAFFEY	8120	12/26/12	6	1.4	1.2	1.0
MCKNIGHT CABIN SNTL	9240	1/01/13	11	1.8	5.8	1.6
MISSIONARY SPRING	7840	12/29/12	12	2.2	1.4	1.1
NORTH COSTILLA SNTL	10600	1/01/13	8	1.8	1.7	2.6
QUEMAZON SNOTEL	9300	1/01/13	13	2.0	4.5	4.6
RED R PASS #2 SNOTEI	9800	1/01/13	16	2.3	3.9	3.6
RICE PARK SNOTEL	8500	1/01/13		2.7	3.3	2.5
SANTA FE SNOTEL	11500	1/01/13	28	4.5	6.7	6.5
SENORITA DVD #2 SNTI	L 8600	1/01/13	20	2.7	4.5	2.8
SIERRA BLANCA SNTL	10280	1/01/13	33	6.6	10.0	3.2
SIGNAL PEAK SNOTEL	8360	1/01/13	12	2.0	6.3	1.9
SILVER CREEK SNOTEL	9070	1/01/13	15	3.1	5.5	3.5
STATE LINE	8000	12/29/12	9	1.6	1.7	.6
TAOS POWDERHORN	11250	12/29/12	29	4.8	11.6	12.0
TOLBY SNOTEL	10180	1/01/13	16	2.9	5.1	3.8
VACAS LOCAS SNOTEL	9310	1/01/13	28	3.7	6.5	4.8
WESNER SPGS SNOTEL	11120	1/01/13	17	3.2	7.7	6.8
WHISKEY CREEK	9050	12/26/12	17	3.7		3.5
WHITEWATER	10750	1/06/13	43	10.3	12.8	9.5

(d) denotes discontinued site.

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Dave White Chief Natural Resources Conservation Service U.S. Department of Agriculture

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