



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

# Division 7 Annual Report

Water Year 2023  
(November 1, 2022 - October 31, 2023)

by  
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May 2024

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## 1 Water Supply

Snowpack in the San Juan and Dolores River Basins during the winter of 2022-2023 (Water Year 2023) was excellent, approaching the maximum recorded snow water equivalent for the San Miguel-Dolores-Animas-San Juan drainage basin.



**Figure 1: Snowpack in La Plata Basin**

There was concern that the high snow pack, combined with a wet fall in 2022, would cause flooding during spring runoff. However, the temperatures in May and June were relatively cool, which allowed for a long and gradual run-off. Although snowfall levels were at near records, none of the rivers came close to experiencing peak flowrates. The total volume of water was impressive, but it did not cause unusual damage.

Most of the major reservoirs made releases prior to the peak runoff. Due to a wet fall of 2022, many reservoirs started relatively full, therefore there was not sufficient space to attenuate peak flows. Vallecito Reservoir, for example, started releasing stored water in March to make space for peak flows later in the year.

Although there was a great snowpack, the summer and fall rainfall was not impressive. There were some storms in August, but very little in June and July. In addition, the summer flowrates were generally below average due to a lack of precipitation. The low soil moisture at the end of 2023 may cause reduced flowrates in 2024. However, many reservoirs are carrying over a large volume of water due to the good winter of 2022-23.



## **2 Surface Water Issues**

2023 was about as close to “average” as there has been in many years. The peak flowrates went slightly above average, but not significantly. Full reservoirs and rains that began in August provided a good source of water.

However, the year was not without challenges. Although a large volume of water was measured in the rivers, a large volume of runoff occurred in the spring and even in the winter, in order to make space in reservoirs for flood attenuation. Water in the river during the winter and spring is not diverted for irrigation. As an example of the challenges this year, on the La Plata River, the river priority went to 0; this meant that there was no water being diverted in priority for several weeks in August.



**Figure 2: Gage at Cherry Creek showing flood water in spring**

There were 84 administrative calls placed on 12 different stream systems in Division 7. From this total, two of the calls were on Cherry Creek, two calls were on Chicken Creek, one was on Coal Creek, one on Devil Creek, one on Dry Creek, 15 of the calls were on the Florida River, one was on Fourmile Creek, two of the calls were on Junction Creek, 29 of the calls were on the La Plata River, 21 were on the Los Pinos River, 8 were on the Mancos River, and one of the calls was on the Rito Blanco.

McPhee Reservoir, with a capacity of approximately 381,000 acre-feet (AF) contained 184,000 AF at the start of the water year, which is more than the prior year carryover of 161,000 AF. The reservoir attenuated flows downstream, which provided recreational opportunities downstream on the Dolores River. Releases made to the Dolores River from early April through late June created additional storage and recreational opportunities among other benefits. A peak release of 4,000 cfs was made on May 20, 2023. A total of 268,000 AF was measured at the gauge on the Dolores River below McPhee Reservoir. On June 16, 2023, the reservoir reached capacity, and at the end of the 2023 water year, McPhee contained 298,900 AF, which means McPhee will likely fill again in water year 2024. The amount of diverted water from the Dolores River basin into the McElmo Creek Basin totaled 180,400 AF, which is slightly below the 200,000 AF average.

Vallecito Reservoir, with a capacity of 126,000 +/- AF, filled to capacity, allowing for a productive irrigation season. The reservoir attenuated flood flows downstream by releasing water starting in February. The peak flowrate was 1500 cfs, well below the flowrate that would cause damage. A total of 311,000 AF was measured at the gauge below Vallecito, which is significantly more than a normal year of approximately 200,000. The reservoir contained 56,685 AF at the start of the water year. Vallecito Reservoir completely filled to a volume of 125,400 AF on June 28, 2022. The reservoir could have filled much earlier, however space was created in the reservoir for flood storage. The reservoir dropped to a low of 53,260 AF on October 16. Ending the 2023 water year and heading into the 2023 water year, Vallecito contained 55,000 AF.

Lemon Reservoir, with a capacity of approximately 40,000 AF, contained 16,200 AF to start the 2023 water year. To create space to attenuate flood flows, the reservoir elevation was dropped to a low of 13,360 AF on April 28, 2023. The peak inflow was 738 cfs on April 23, 2023. Lemon reached a maximum volume of 40,077 AF on June 29, 2023, and the elevation began to drop in July as water was provided to irrigators. On October 4, 2023, reservoir releases dropped to 40 cfs, marking the end of the irrigation season. At the end of water year 2023, Lemon Reservoir was at 16,140 AF. A total of 77,000 AF was measured at the gauge below Lemon, which is much higher than the 42,300 AF measured in 2022.

Long Hollow Reservoir, with a capacity of 5,300 AF, was dry at the start of the 2023 water year. The reservoir filled to a volume of 2,740 AF on June 15, 2023, and dropped to a low of 1,119 AF at the end of the water year.

The San Juan-Chama Project, which diverts water from Colorado into New Mexico, diverted 142,193 AF during the year. This is significantly more than the 65,835 AF diverted the prior year and 156% of the average since diversions started in 1971.

### **3 Ground Water Issues**

There were 236 well permits issued in Division 7 during water year 2023. Of these 166 residential well permits, 12 general purpose well permits, two geoexchange system loops, one dewatering well, 52 monitoring/observation well, and two rooftop precipitation collection systems were permitted.

There are currently over 3,900 coal bed methane (CBM) wells in Division 7, 90% of which lie within the Southern Ute Indian Reservation boundary. The Colorado Supreme Court upheld the question of the State's authority to administer non-tributary groundwater within the Ute Reservation. Stayed applications pending a Supreme Court decision resumed, and consultation with the Attorney General's Office continued in 2023 to address these wells and associated applications for water rights and plans for augmentation.

## **4 Compact Issues**

### **4.1 La Plata River Compact**

The 2023 water year commenced with above average snowpack. In April, the snowpack reached 152% of average. However, a lack of spring and summer precipitation resulted in difficult administration on the La Plata later in the summer.

New Mexico placed a call under the Compact on June 14 for half the flow as measured at the La Plata River at the Hesperus gauge, up to maximum of 75 cfs. The Colorado priority was set to number 65 on the La Plata River in order to satisfy Compact requirements. Due to the high spring runoff, which peaked at 464 cfs on May 17, the riverbed was saturated, and the river responded well to administrative changes. This is compared to a year earlier when a dry riverbed took many days to fully saturate before water arrived at the state line.

Again this year, the drastic measure of curtailing all Colorado water right holders occurred; only water users that received direct deliveries from Long Hollow Reservoir or water users that could divert water by exchange from water released from Long Hollow Reservoir were allowed to put water to beneficial use. The curtailment of all Colorado water rights occurred from August 14 through August 22. On August 22, a futile call was placed on both the main stem of the La Plata River and Cherry Creek. The basis for the call was a lack of rain in the forecast coupled with a dry stretch above the LAPCHECO gauge. The futile call remained in effect for the duration of the water year.

Releases from the 300 AF compact pool in Long Hollow aided in meeting Colorado's compact obligation. The compact pool was used in its entirety, with a total of 265 AF released for delivery to New Mexico, and the remainder lost as evaporation in the reservoir prior to release.

### **4.2 Animas - La Plata Compact**

#### *4.2.1 A-LP Release and Diversion*

Lake Nighthorse Reservoir (aka Ridges Basin Reservoir), the main feature of the Animas-La Plata Project, remained full or near full throughout the year. No water was release into Basin Creek from Lake Nighthorse for delivery downstream, and only 55 AF of water was pumped from Lake Nighthorse to Johnson Reservoir (aka Lake Durango). Additionally, no deliveries were made to beneficiaries of the Project from non-stored allocations.

Localized runoff from the Basin Creek drainage refilled a large portion of the storage space made available by diversions and evaporative losses. Pumping from the Animas River restored the balance of the storage.

The Animas-La Plata Operations, Maintenance and Replacement Association filed an application in Water Court to make absolute a portion of their right to store Basin Creek flows in Lake Nighthorse. The result of the application was a granting of continued diligence.

#### *4.2.2 La Plata West Water Authority*

La Plata West Water Authority continues to construct infrastructure in the western part of La Plata County to expand the delivery of water for domestic use. A portion of water used to supply the system comes from the Animas-La Plata Project's Lake Nighthorse via Johnson Reservoir.

## 5 Problems Solved

### 5.1 Pioneer Ditch

The Pioneer Ditch diverts from the La Plata River in Colorado but exclusively serves water users in New Mexico. The gauge on the ditch serves as one of three gauges that comprise the “Lower Index” requiring Colorado’s administration under the La Plata River Compact. In April, DWR staff relocated the gauge from a location adjacent to Highway 140 very near the state line to a safer location just north of the state line.



Figure 3: DWR staff installing new Pioneer Ditch Gauge.



Figure 4: Completed new Pioneer Ditch Gauge.

## **6 Community Involvement**

Water year 2022-2023 was a year that finally felt distant from the Corona Virus Disease 2019 (COVID-19). The result has been employees working both in the office and at home. Meetings were held both in person and virtually.

Division 7 attended local and statewide conferences. Division 7 attended meetings with Southwester Water Conservation District; Animas-La Plata Operation, Maintenance, and Replacement Association; Animas-La Plata Water Conservancy District; Dolores Water Conservancy District; San Juan Water Conservancy District; Montezuma Valley Irrigation Company; Pagosa Water and Sanitation District; Fort Lewis College; and other water user group meetings they were invited to attend.

The Division also made efforts to keep the public at large informed of water issues by participating in interviews for articles in the local newspapers and television stations. The Division worked closely with local, city and county governments on water issues.

## **7 Highlights**

### **7.1 2020 Abandonment**

Division 7 staff assisted to complete the 2020 abandonment process. As required by statute, the Division Engineer’s abandonment list was published, and notices were mailed to all water right holders on the abandonment list.

A total of 1,497 water rights were initially identified as being subject to abandonment. Of the total, 621 were identified as “post-compact” and subject to abandonment. Follow a review by Water Commissioners and DWR Staff, a total of 182 water rights were added to the Division Engineer’s abandonment list. DWR staff worked with those water users who contacted the Division Office to request that their water right be removed from the abandonment list. A total of 134 water rights were included on the final abandonment list that was included in the abandonment court case in 2022. There were three protests to the abandonment case. All three cases were resolved by stipulation without a court trial.

### **7.2 Rulemaking Process**

The State Engineer began the rulemaking process for Division 7 Measurement Rules. Public comment was solicited at meetings held in Dove Creek, Cortez, Bayfield, Pagosa Springs and virtually. The rules are currently in the draft stage.



**Figure 5: Headgate at La Plata Irrigating Ditch, the Number 1 Priority on the La Plata River.**

### **7.3 Important Court Cases**

No court cases went to trial this year in Division 7.

#### *7.3.1 15CW3017 - Town of Bayfield*

The town of Bayfield filed a change of use of senior irrigation water rights. The town proposed to change the use to municipal use. A ruling of the referee was entered in this case. Pine River Irrigation District then filed a protest to the ruling of the referee, objecting to the

use of Vallecito Reservoir as a source of augmentation. Near the end of the water year, all parties had stipulated and an unopposed decree is planned to be entered early in water year 2024.

### *7.3.2 18CW3052 - Montezuma Valley Irrigation Company (Change of Use)*

Montezuma Valley Irrigation Company filed an application for change of water right and for confirmation of relocated points of diversion. The Applicant seeks a change of their 87.3 cfs conditional water right from a direct flow right on the Dolores River to a storage right that may be stored in either McPhee Reservoir and/or Narraguinnep Reservoir, for subsequent irrigation. As part of the change of this conditional water right, the Applicant submitted an analysis of the “contemplated draft” on the Dolores River. The Applicant requests to store a maximum of 22,755 AF in any calendar year, with maximum monthly volumetric diversion limits. As an alternative claim, the applicant seeks judicial confirmation that relocation of the points of diversion to the Great Cut Dike and the Dolores Tunnel Inlet is consistent with C.R.S. § 37-86-111 because the decreed points of diversion were inundated by McPhee Reservoir.

The State Engineer and Division Engineer filed a Statement of opposition, requesting that the proposed change be held to strict proof of the contemplated draft to ensure the change does not result in expansion of the original water right. The State and Division Engineer ask to consider whether this water right has been abandoned as it has not been used for over 100 years. Additionally, the State and Division Engineer ask that the Applicant be held to show they can and will beneficially use the changed conditional water for the decreed purposes.

### *7.3.3 19CW3005 - Montezuma Valley Irrigation Company (Diligence)*

Montezuma Valley Irrigation Company filed an application for finding of reasonable diligence for the Main No. 1 Canal and the Main No. 2 Canal. The Applicant owns 87.3 cfs of an irrigation water right on the Dolores River with an appropriation date of November 25, 1885.

The State and Division Engineer filed a Statement of Opposition, indicating that the Applicant needs to demonstrate the water right has not become speculative over time. This water right is the same water right in Case No. 18CW3052, in which the State and Division Engineer have filed a Statement of Opposition.

### *7.3.4 17CW3036 - Pine River Irrigation District Basin Wide Augmentation Plan*

Pine River Irrigation District filed for a basin wide augmentation plan. Division staff continues to work through the Attorney General’s Office to conclude this case.

### *7.3.5 07CW89 - Pine River Irrigation District 2<sup>nd</sup> Fill of Vallecito Reservoir*

Pine River Irrigation District (PRID) filed for a second fill of Vallecito Reservoir. Division staff has worked with PRID to include terms and conditions that will address the claim for flood control and the amount of water.

### *7.3.6 21CW3002 - United States of America*

The United States Bureau of Reclamation (BOR) filed a change of point of diversion and place of use for the Earl Hart Ditch. The BOR desires to use the senior water at the Simons Wetlands. DWR filed a statement of opposition and worked through Attorney General’s Office to conclude this case. The Earl Hart Ditch was also listed for abandonment in the 2020 abandonment list. This case was resolved without trial and a stipulation reached during the abandonment process.

### 7.3.7 22CW3016, 22CW3027 and 22CW3030 - Canyon Springs Ranch Association of Owners

The Canyon Springs Ranch Association of Owners filed multiple court cases regarding their water right, which states it may be used for 10 acres of irrigation and the means of diversion is gravity flow.

In case 22CW3016, the plaintiff claims for relief include: violation of due process, a declaratory judgment that the plaintiff can use water on the land anywhere within the subdivision, a declaratory judgment that any call must be substantiated by a measuring device, permanent injunctive relief allowing the plaintiff to use the water anywhere within the subdivision, and permanent injunctive relief allowing the use of a pump.

In case 22CW3027, the plaintiff filed an application for determination of water rights, confirming that the applicant may use the water anywhere within the subdivision.

In case 22CW3030, the plaintiff claims for relief include: violation of due process, a declaratory judgment that any call by an owner of a water right must be substantiated by a measuring device, a permanent injunction from honoring a call where the owner does not have a measuring device, and declaratory judgement that shutting down a pump.

The Division Engineer worked through the Attorney General's Office to obtain a ruling in favor of the Division Engineer in 22CW3027, a stipulated dismissal in 22CW3016, and an unopposed dismissal in 22CW3030.

## 7.4 Hydrography

Division 7 Hydrography staff operated and maintained 66 telemetry monitored gauges and 12 non-telemetry gauges during the water year.

### 7.4.1 *Jackson Canal*

The Jackson Canal conveys water released from Jackson Reservoir to downstream users. The canal is part of the Mancos Project that was built by the federal government to serve domestic water to Mesa Verde National Park and irrigation water to surrounding landowners. It is operated by the Mancos Water Conservancy District. Division 7 Hydrographers shut down the lower (redundant) Jackson Canal gauge and relocated the telemetry to a 10-ft flume below Jackson Reservoir.

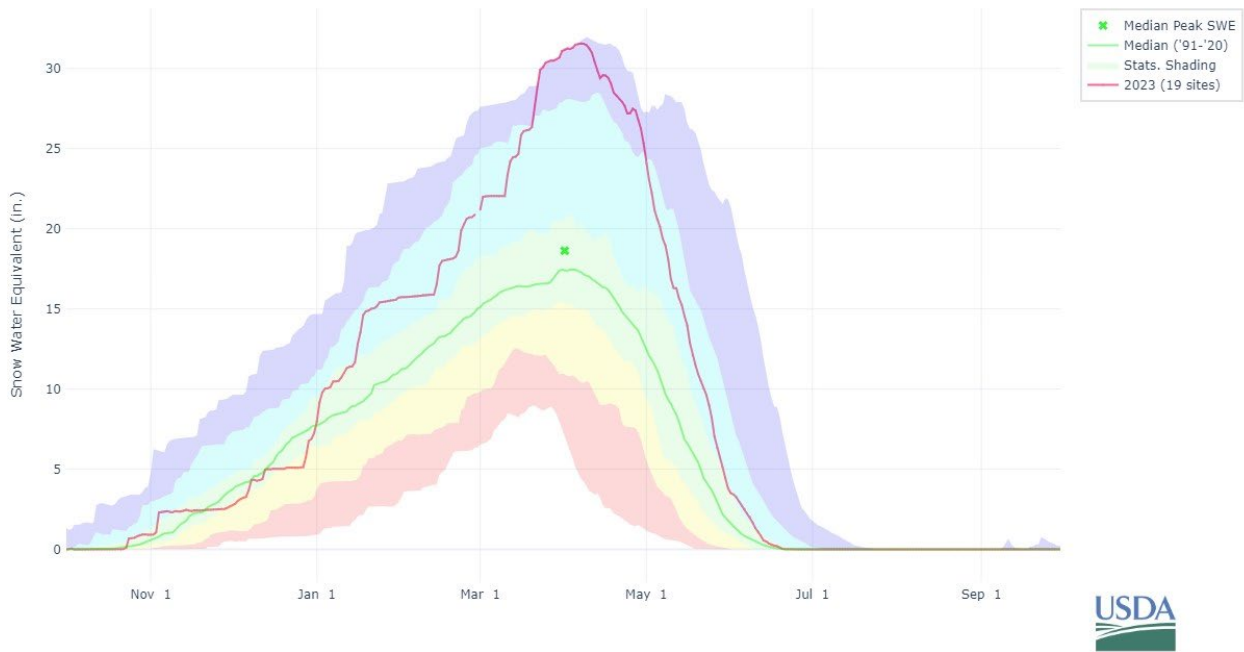


**Figure 6: Jackson Parshall Flume to the West Mancos River**

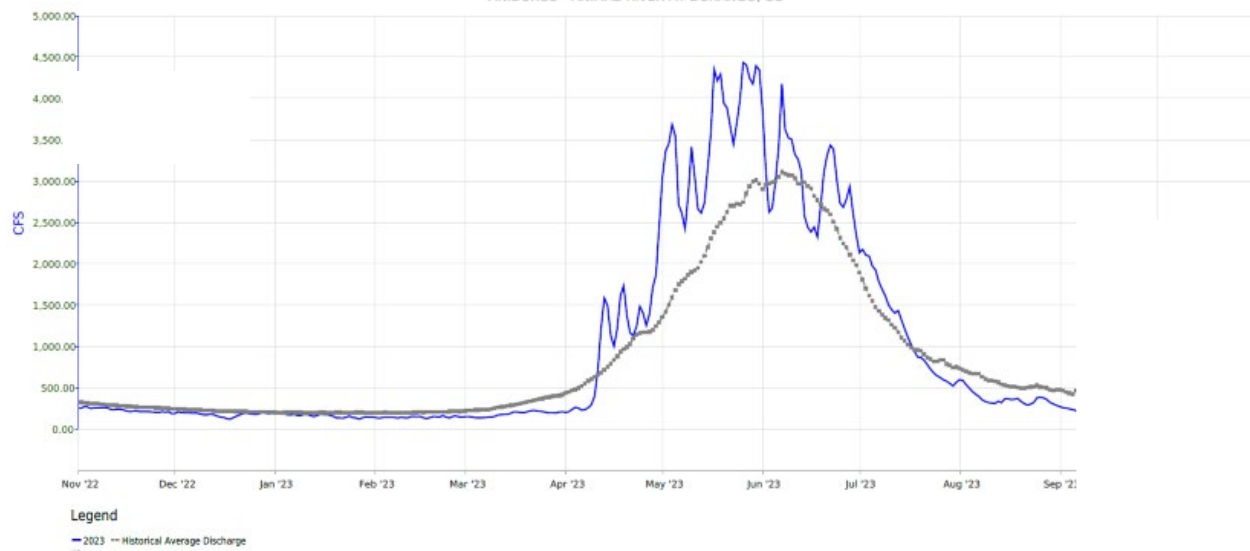
**Reservoir Outlet - 10'**

## 8 Appendix

SNOW WATER EQUIVALENT IN SAN MIGUEL-DOLORES-ANIMAS-SAN JUAN



ANIDURCO - ANIMAS RIVER AT DURANGO, CO



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**Basinwide Summary: June 1, 2023**  
 (Medians based On 1991-2020 reference period)

Snowpack Summary For June 1, 2023
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San Miguel-Dolores-Animas-San Juan Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median	
Groundhog	SC	8940						
Lemon Reservoir	SC	8700						
Telluride	SC	8800						
Trout Lake #2	SC	9780						
Upper San Juan	SC	10200						
Beartown	SNOTEL	11600	1	0.5	0.1	500%	0.0	0%
Black Mesa	SNOTEL	11564	62	32.0			6.2	
Cascade #2	SNOTEL	9012	0	0.0	0.0		0.0	
Columbine Pass	SNOTEL	9171	0	0.0	0.0		0.0	
Columbus Basin	SNOTEL	10781	39	14.3	0.5	2860%	0.0	0%
El Diente Peak	SNOTEL	10217	0	0.0	0.0		0.0	
Lizard Head Pass	SNOTEL	10193	0	0.0	0.0		0.0	
Lone Cone	SNOTEL	9755	0	0.0	0.0		0.0	
Mancos	SNOTEL	10044	0	0.0	0.0		0.0	
Mineral Creek	SNOTEL	10046	0	0.0	0.0		0.0	
Molas Lake	SNOTEL	10631	0	0.0	0.0		0.0	
Red Mountain Pass	SNOTEL	11080	29	13.2	7.1	186%	0.0	0%
Scotch Creek	SNOTEL	9195	0	0.0	0.0		0.0	
Sharkstooth	SNOTEL	10747	16	7.6	0.0		0.0	
Spud Mountain	SNOTEL	10674	27	11.8	0.0		0.0	
Stump Lakes	SNOTEL	11248	0	0.0	3.1	0%	0.0	0%
Upper San Juan	SNOTEL	10140	6	2.6	0.0		0.0	
Vallecito	SNOTEL	10782	0	0.0	0.0		0.0	
Weminuche Creek	SNOTEL	10749	0	0.0	0.0		0.0	
Wolf Creek Summit	SNOTEL	10957	33	16.6	20.3	82%	0.0	0%
<b>Basin Index</b>						<b>214%</b>		<b>0%</b>
# of sites						19		19

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**Basinwide Summary: June 1, 2023**  
 (Medians based On 1991-2020 reference period)

Reservoir Storage Summary For the End of May 2023
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San Miguel-Dolores-Animas-San Juan	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Lemon Reservoir	32.2	26.3	33.7	40.0	80%	66%	84%	95%	78%
Trout Lake Reservoir	2.9	3.1	2.3	3.2	92%	97%	72%	128%	135%
Groundhog Reservoir	18.2	10.8	20.2	26.3	69%	41%	77%	90%	53%
Mcphee Reservoir	366.2	257.3	359.2	381.0	96%	68%	94%	102%	72%
Vallecito Reservoir	90.7	92.1	111.0	126.0	72%	73%	88%	82%	83%
Jackson Gulch Reservoir	9.9	9.5	10.0	10.0	99%	95%	100%	99%	95%
Navajo Reservoir	1340.3	953.6	1485.0	1696.0	79%	56%	88%	90%	64%
<b>Basin Index</b>					<b>82%</b>	<b>59%</b>	<b>89%</b>	<b>92%</b>	<b>67%</b>
# of reservoirs					7	7	7	7	7