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Compact Facts

Colorado River Compact of 1922

Allocates 7.5 million AF of consumptive use annually to (1) the Upper Colorado River Basin (those parts of Arizona, Colorado, New Mexico, Utah, and Wyoming above Lee Ferry, Arizona), and (2) the Lower Colorado River Basin (those parts of Arizona, California, and Nevada below Lee Ferry, Arizona). This Compact requires the Upper Colorado River Basin to deliver an average of 75 million AF to the Lower Basin during any consecutive 10-year period. The Lower Basin is allowed an additional 1.0 million AF of consumptive use from the Colorado River system.

Rio Grande, Colorado, and Tijuana Treaty of 1944 between the United States and Mexico

Guarantees delivery of 1.5 million AF of Colorado River water per year to Mexico. If there is not adequate surplus water to satisfy the obligation, the Upper and Lower Basins are to equally share the burden of reducing uses to make up any deficiencies.

Upper Colorado River Basin Compact of 1948

Allocates the 7.5 million AF apportionment of consumptive uses available to the Upper Basin as follows:

Arizona	50,000 AF/year
Colorado	51.75%
Utah	23%
Wyoming	14%
New Mexico	11.25%

Additionally, the State of Colorado may not deplete the flow in the Yampa River below an aggregate of 5 million AF over any 10-year period.

La Plata River Compact of 1922

Apportions the La Plata River between Colorado and New Mexico. Each state has unrestricted use between December 1 and February 15. Outside that period, each state can use the flow of the river if the flow is in excess of 100 cfs at the state line. At the state line, if the flow is less than 100 cfs, Colorado must ensure delivery of an amount of flow equal to one-half the flow of the river at Hesperus, Colorado.

Animas-La Plata Project Compact of 1968

The right to store and divert water for use in New Mexico under this project shall be of equal priority to rights granted under Colorado Court Decree for uses in Colorado from the project.

The Colorado Ute Indian Water Rights Settlement Act of 1988

Settles the reserved water right claims of the Southern Ute and Ute Mountain Tribes on all streams that cross the Reservations of the two tribes, with respect to quantity, priority, and administration. Claims on the Animas and La Plata Rivers are dependent on construction of the Animas-La Plata Project. Colorado Court Decrees establish the rights of the Tribes within the priority system. The settlement established a Tribal Development Fund, and Colorado's cost share commitment to both the Development Fund and the Animas-La Plata Project.

Major Storage Projects

Reservoir	Normal Storage (AF)
McPhee Reservoir	381,100
Vallecito Reservoir	129,700
Lemon Reservoir	40,100
Cascade Reservoir	23,254
Groundhog Reservoir	21,710
Narraguinnep Reservoir	18,960
Williams Creek Reservoir	10,084
Jackson Gulch Reservoir	9,980
Summit Reservoir	5,954
Red Mesa Ward Reservoir	1,100

Source: Colorado Division of Water Resources Office of Dam Safety Database

Major Imports into the Basin

None

Major Exports from the Basin

Name	Average Annual Diversions (AF)
1 San Juan-Chama Project	89,832
2 Other	1,873
TOTAL	91,705

Source: Division 7 1998 Annual Report, 10-year average
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Dolores/San Juan/ San Miguel Basin



Dolores/San Juan/San Miguel Basin Overview

The Dolores/San Juan/San Miguel Basin is located in the southwest corner of Colorado. It covers an area of approximately 10,169 square miles. The largest cities within the basin are Durango (population 15,213) and Cortez (population 8,328). The Upper San Juan River and its tributaries also flow through two Native American reservations in the southern portion of the basin:

- Ute Mountain Ute Reservation
- Southern Ute Indian Reservation

Elevations in the San Juan River system range from greater than 14,000 feet in headwater areas of the Animas and Los Piños Rivers down to 4,500 feet, where the Mancos River exits the state just east of the Four Corners. The San Juan Basin is characterized by rugged terrain, including mesas, terraces, escarpments, canyons, dry washes (arroyos), and mountains.

(continued on page 3)

Conservation and Conservancy Districts

Water Conservation Districts	
Southwestern	Colorado River
Water Conservancy Districts	
Animas-La Plata	Florida La Plata
San Miguel	Dolores Mancos
San Juan	Paradox Valley

Dolores/San Juan/San Miguel Basin Water Management Issues

The Dolores/San Juan/San Miguel Basin will face several key points and challenges with respect to water management issues and needs over the next 30 years. The following provides an overview of some of the points and challenges that have been identified.

- This multiple basin area of the state is extremely diverse with changing demographics—
 - The Pagosa Springs-Bayfield-Durango corridor is rapidly growing, has areas of localized water shortages, and is transitioning from mining/agricultural to tourism, recreation, and a retirement/second home area.
 - The Cortez area remains strongly agricultural but is also seeing rapid growth with retirees moving to the area.
 - The San Miguel area is a mix of recreation and tourism along with a strong desire to maintain agriculture.
- The Recovery Implementation Program is designed to address the recovery needs of the Colorado River endangered fish while protecting existing water uses and allowing for the future use of Colorado River water in compliance with Interstate Compacts, Treaties, and applicable federal and state law “the Law of the Colorado River.”
- Overall water supply is available but getting sufficient infrastructure and water distribution will be a key challenge.
- The Colorado River Compact places pressure on uses of the San Juan River because New Mexico's primary source of supply for its upper Colorado River Basin Compact apportionment is the San Juan River.



Animas River (photo courtesy of James Page)

Dolores/San Juan/San Miguel Basin Growth

The Dolores/San Juan/San Miguel Basin is comprised of all or part of seven counties. Changes in population from 2000 to 2030, including percent annual growth rate on a county level, are shown in the table here. During that time, the population in the basin is expected to grow by 80,700 people, or 89 percent.

Dolores/San Juan/San Miguel Basin Population Projections

County	2000 Population	2030 Population	Increase in Population 2000 to 2030	Percent Change 2000 to 2030	Percent Annual Growth Rate
Archuleta	10,000	27,000	17,000	170	3.4
Dolores	1,800	2,800	1,000	56	1.5
La Plata	44,600	80,600	36,000	81	2.0
Montezuma	23,900	40,100	16,200	68	1.7
Montrose	3,400	6,800	3,400	100	2.3
San Juan	500	700	200	40	1.1
San Miguel	6,700	13,600	6,900	103	2.4
TOTAL	90,900	171,600	80,700	89	2.1

Dolores/San Juan/San Miguel Basin Water Demands

The Dolores/San Juan/San Miguel Basin is projected to increase in municipal and industrial (M&I) and self-supplied industrial (SSI) water demand by 18,800 acre-feet (AF) by 2030. M&I is defined as all of the water use of a typical municipal system, including residential, commercial, industrial, irrigation, and firefighting. Large industrial water users that have their own water supplies or lease raw water from others are described as SSI water users. M&I and SSI water demand forecasts for the Dolores/San Juan/San Miguel Basin are shown in the table above.

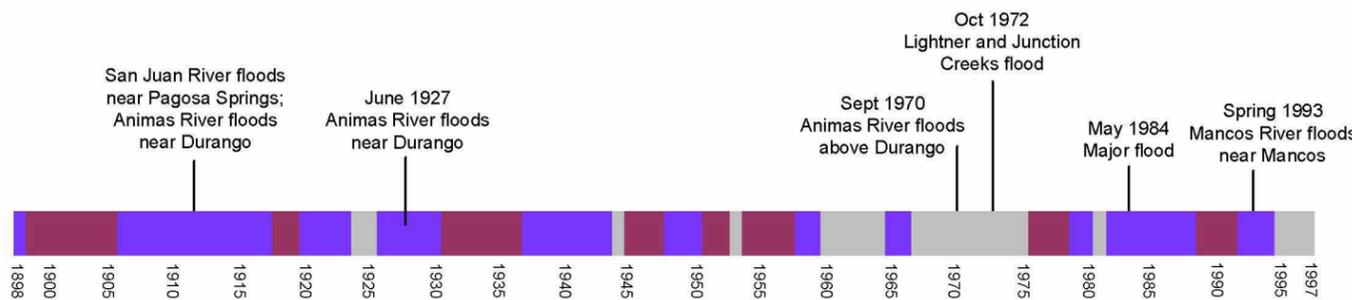
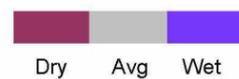
Dolores/San Juan/San Miguel Basin Demand Projections

Subbasin Designation	2000 Gross Demand (AF)	2030 Gross Demand (AF)	Projected Conservation Savings (AF)	Increase in Gross Demand (AF)	Identified Gross Demand Shortfall (AF)
Archuleta	2,400	6,400	300	3,700	400
Dolores	400	600	—	200	—
La Plata	9,600	18,000	1,100	6,900	1,000
Montezuma	5,800	9,700	600	3,300	200
Montrose	800	5,500	<100	2,800	2,100
San Juan	100	200	<100	—	—
San Miguel	1,900	4,400	200	1,900	1,200
TOTAL	21,000	44,800	2,400	18,800	4,900

The 2000 and 2030 gross demands are also presented in the table along with the projected conservation savings. Conservation practices include ordinances and standards that improve the overall efficiency of water use, such as installation of low water-use plumbing fixtures. As the table indicates, the Dolores/San Juan/San Miguel Basin will need an additional 18,800 AF to meet the increased demands of M&I water use. The majority of the demand is expected to be met through existing supplies and water rights and through the implementation of various projects and processes. However, there are still some anticipated shortfalls expected in certain portions of the basin. This is also shown in the table.

Wet and Dry Periods

Every year, there is at least one 100-year flood somewhere in the state. Colorado's total estimated flood losses to date are \$4.9 billion. The Dolores/San Juan/San Miguel Basin's most recent flood event was Spring of 1993. The estimated total historic flood damages for this basin are \$14.5 million to date.



Source: Colorado Water Conservation Board and Division 7 staff

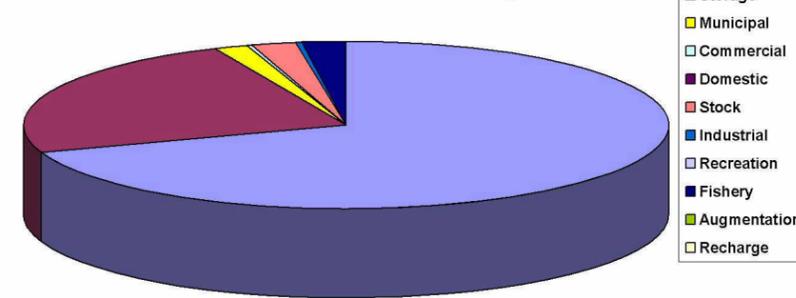
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Elevations in the Dolores Basin range from about 14,200 feet near the Dolores River headwaters, to 4,100 feet at its confluence with the Colorado River in Utah. The terrain of the Dolores Basin consists of high plateaus with deeply incised canyons and dry arroyos.

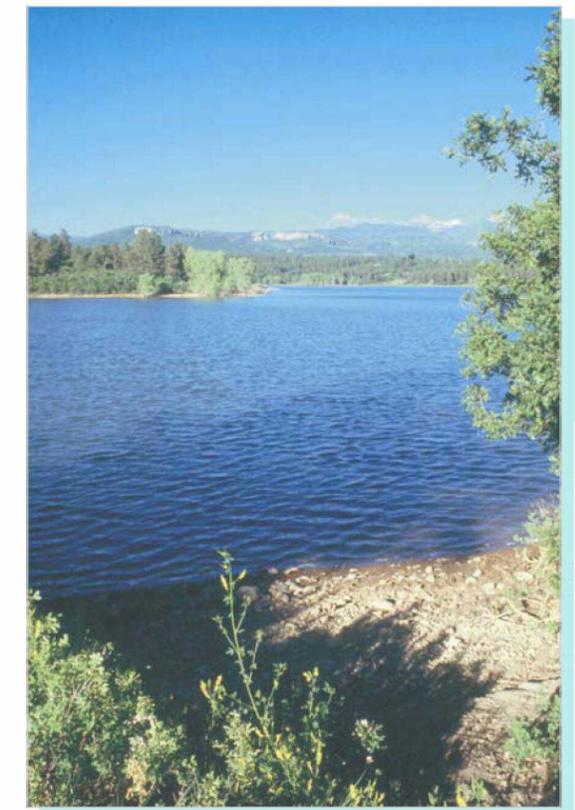
Land use in the region is highly variable and often reflects a conflict between historic and modern uses, although three-quarters of the basin consists of forest and shrubland. Agriculture and ranching predominate in the lower elevations of Dolores, San Miguel, and Montrose Counties as they have for many generations. Tourism and recreation have become more prevalent in the region as the Animas, Piedra, Dolores, and San Miguel Rivers offer both fishing and rafting opportunities. Montezuma and La Plata Counties are dominated by agriculture, grassland, and forested land use types.



Surface Water Diversions in Acre-feet by Use



Source: Colorado Division of Water Resources, Cumulative Yearly Statistics of the Colorado Division of Water Resources, 1999-2004



Mancos River (photo courtesy of Colorado State Parks)