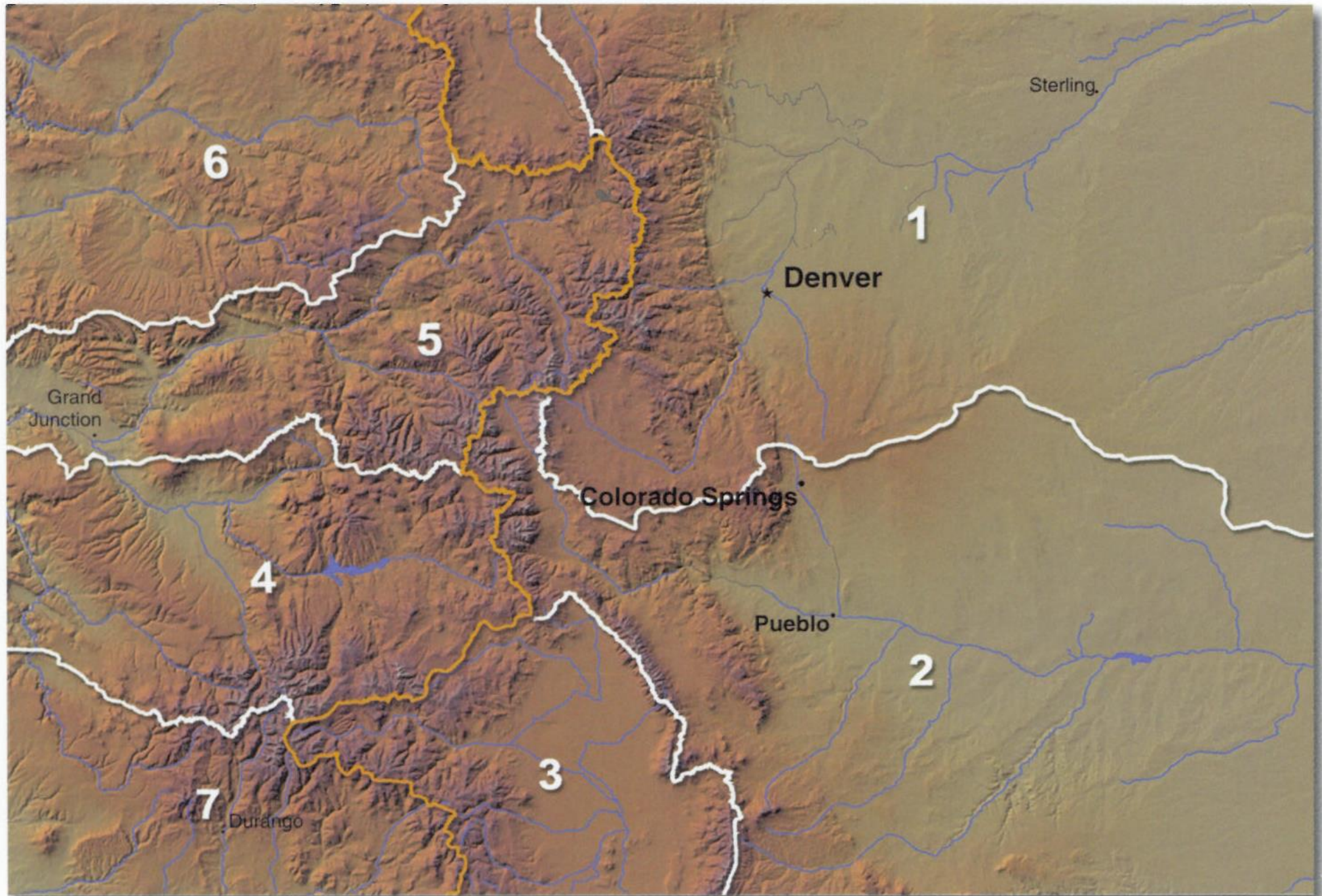


2018 Division 7 Update

Water Availability Task Force Meeting
July 24, 2018

Robert Genualdi, P.E.
Division Engineer



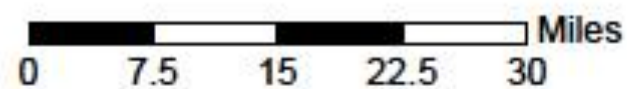
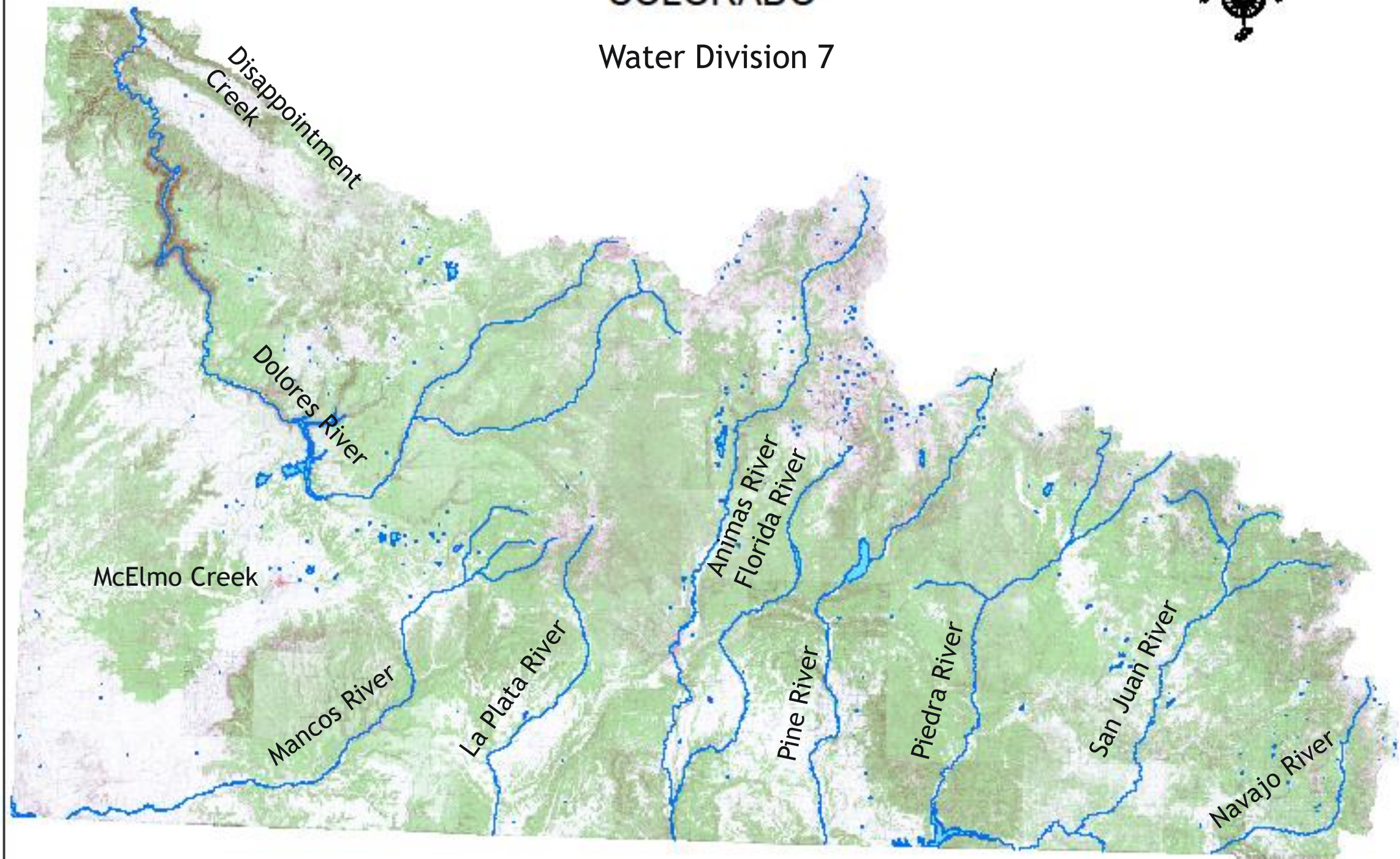
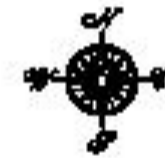
Colorado Water Divisions



COLORADO
Division of Water Resources
Department of Natural Resources

COLORADO

Water Division 7



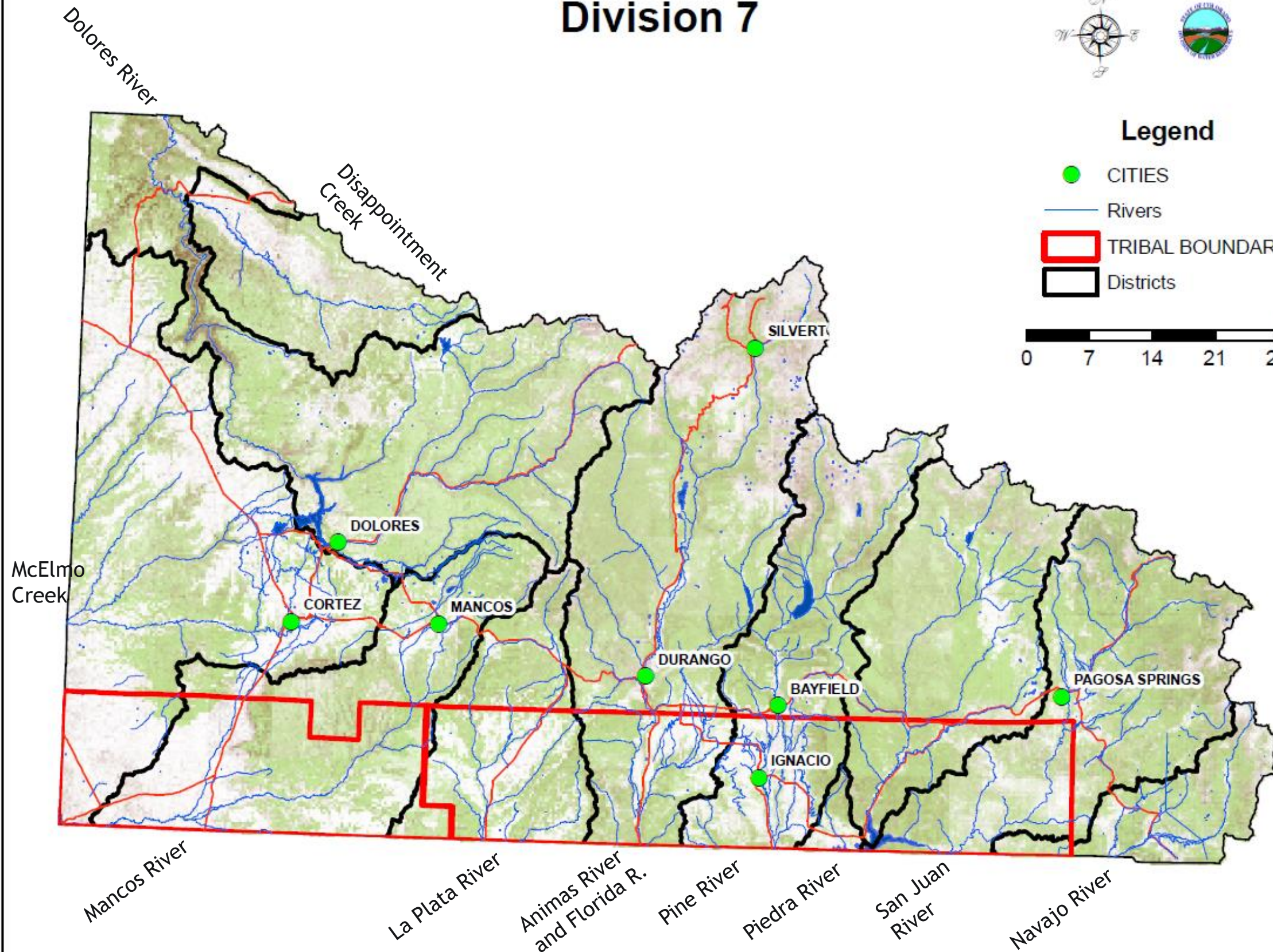
Division 7



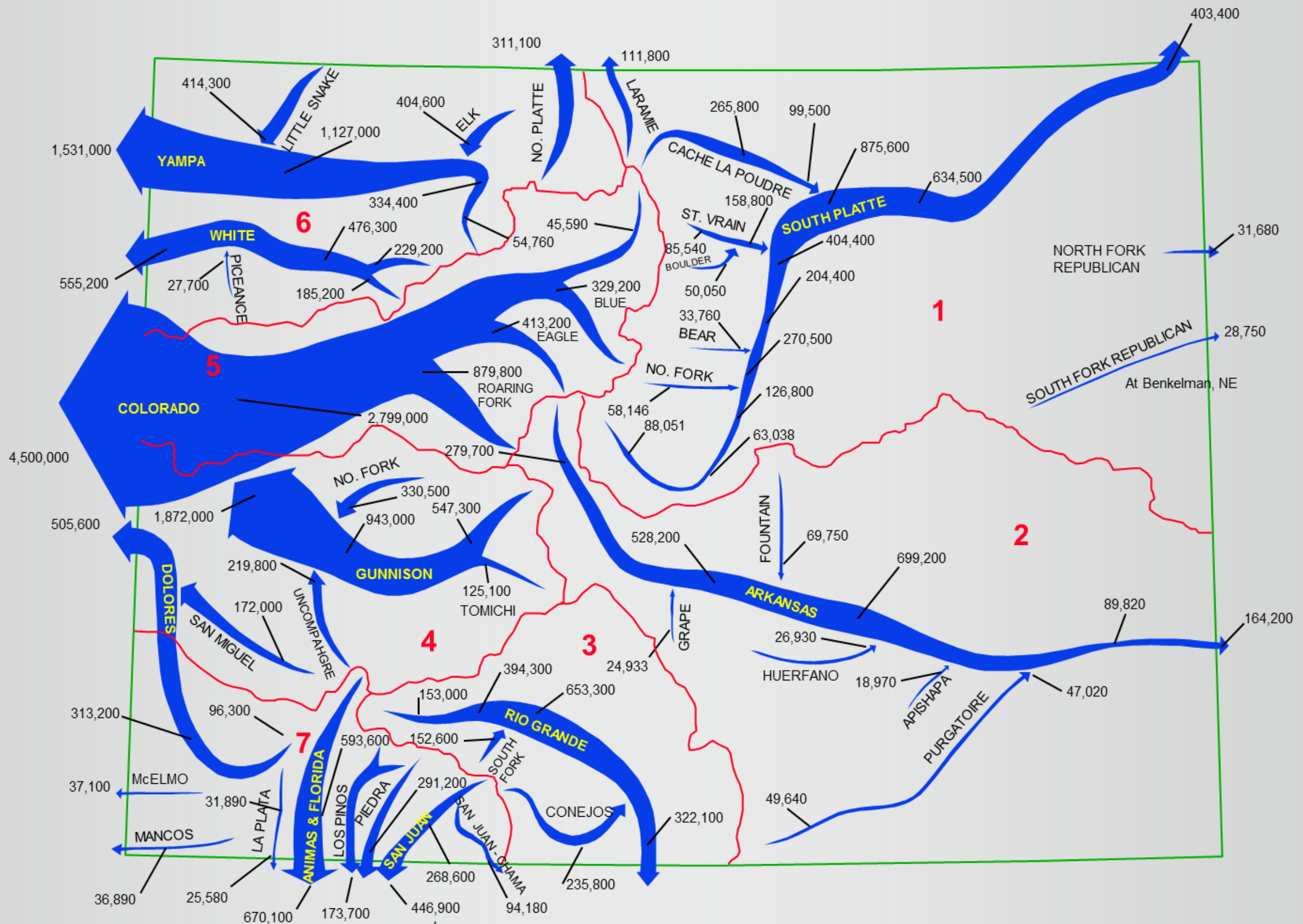
Legend

- CITIES
- Rivers
- TRIBAL BOUNDARY
- Districts

0 7 14 21 28 Miles



CO AVERAGE ANNUAL STREAM FLOWS (AF)



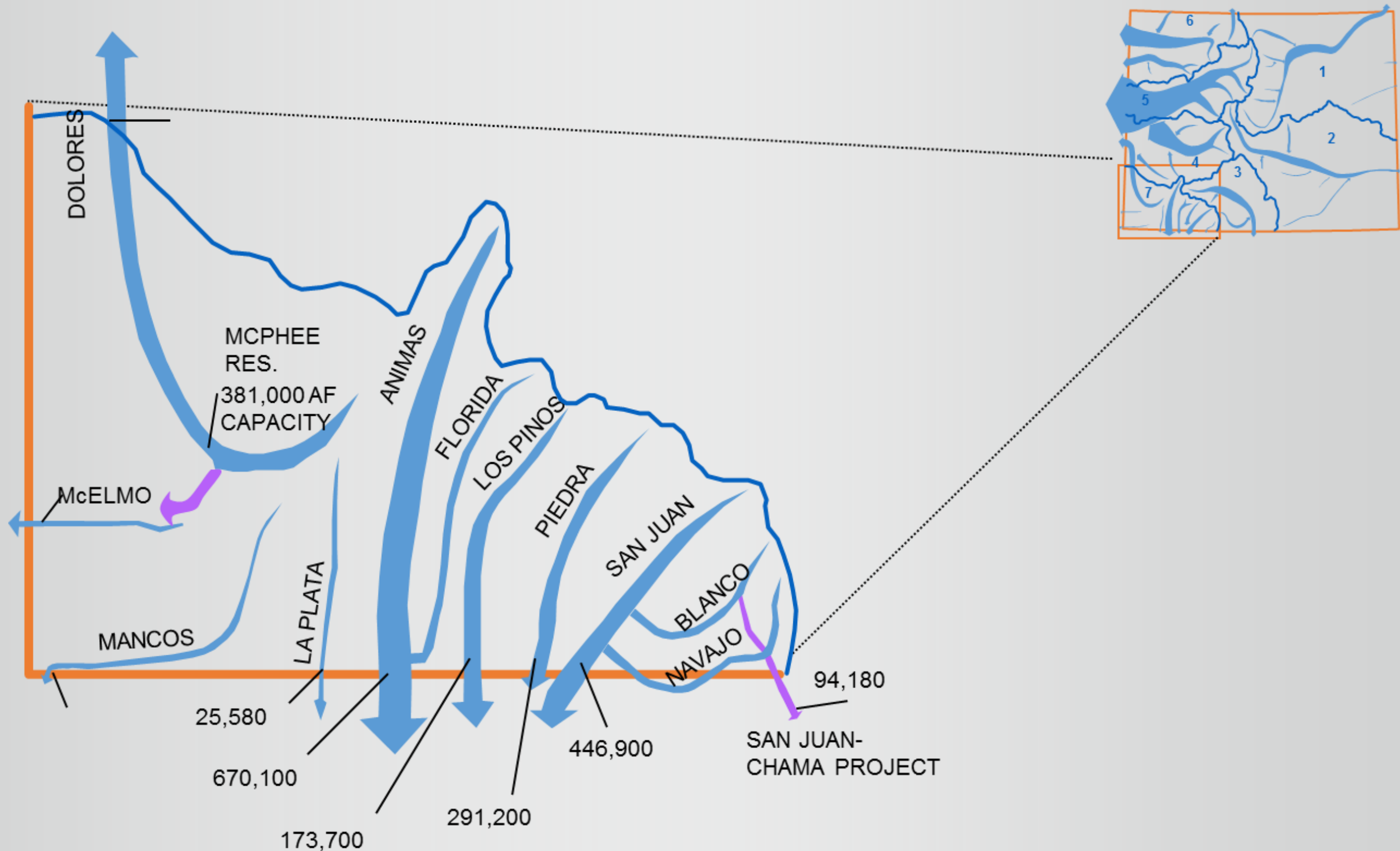
Colorado River Basin



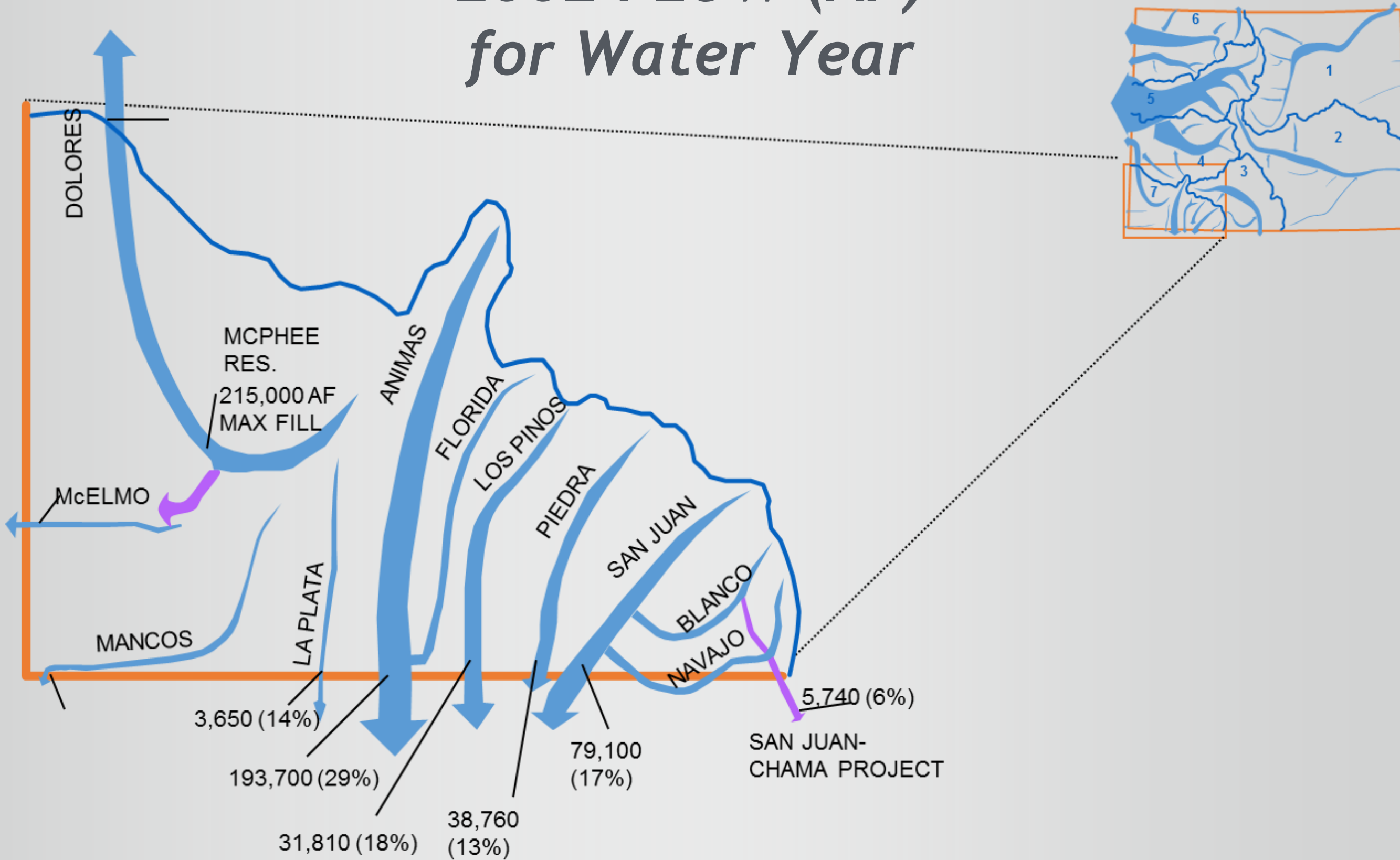
The San Juan and Dolores River Basins contribute almost 2,500,000 AF-yr which is 28% of Colorado's contributions to the Colorado River system.

Estimate uses in Division 7 to be 325,000 AF/yr (CU)

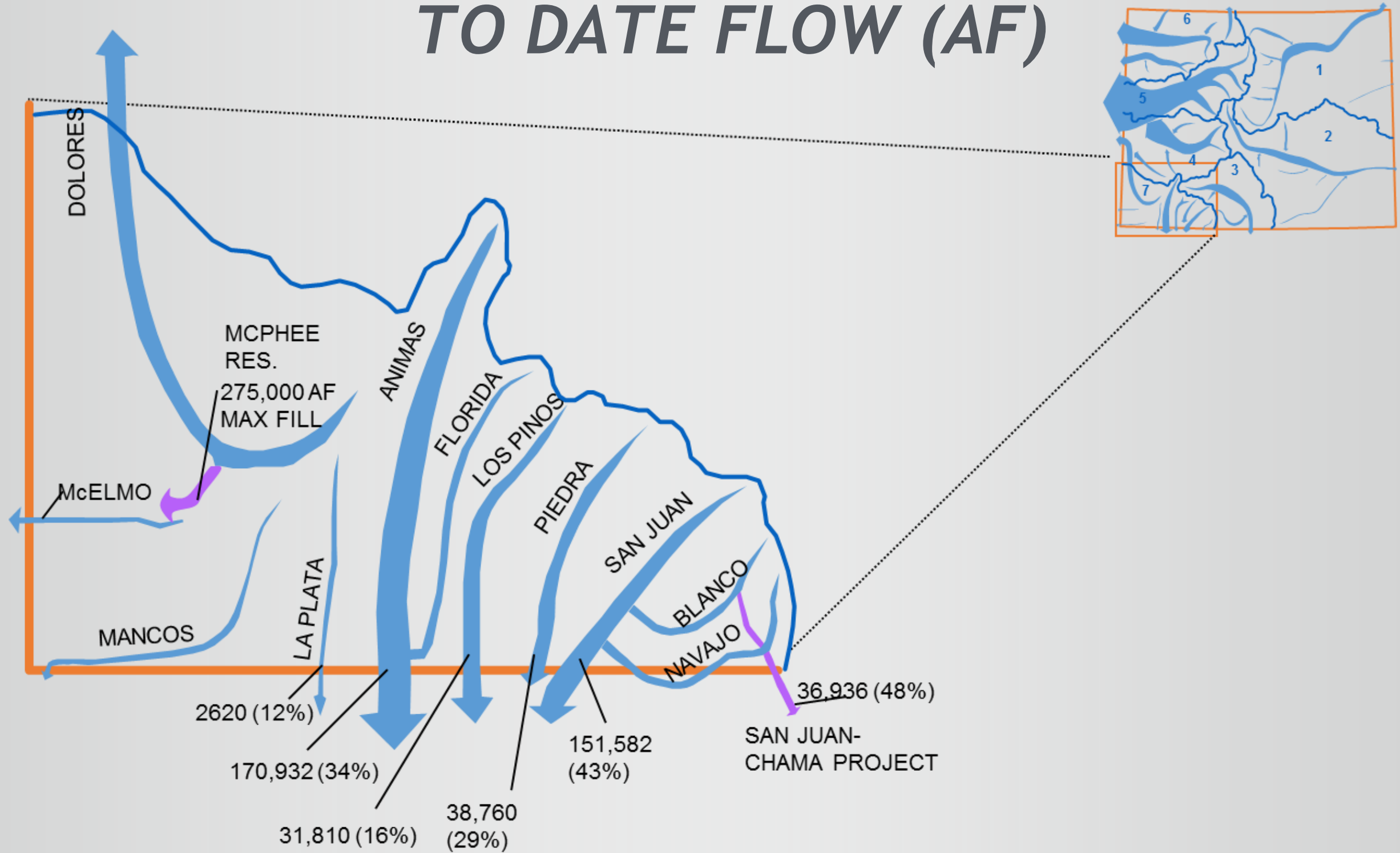
DIVISION 7 AVERAGE FLOWS (AF)



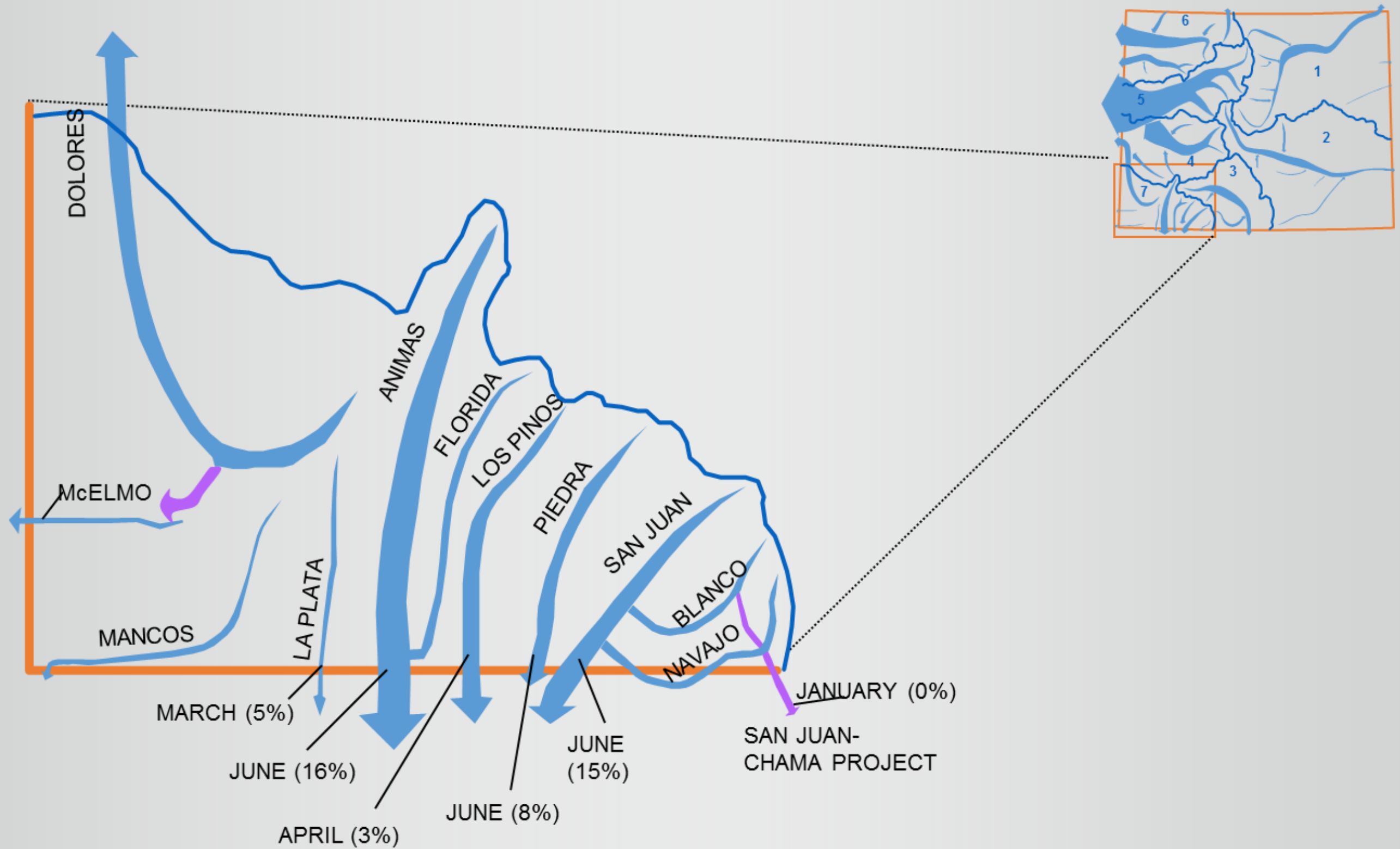
2002 FLOW (AF) for Water Year



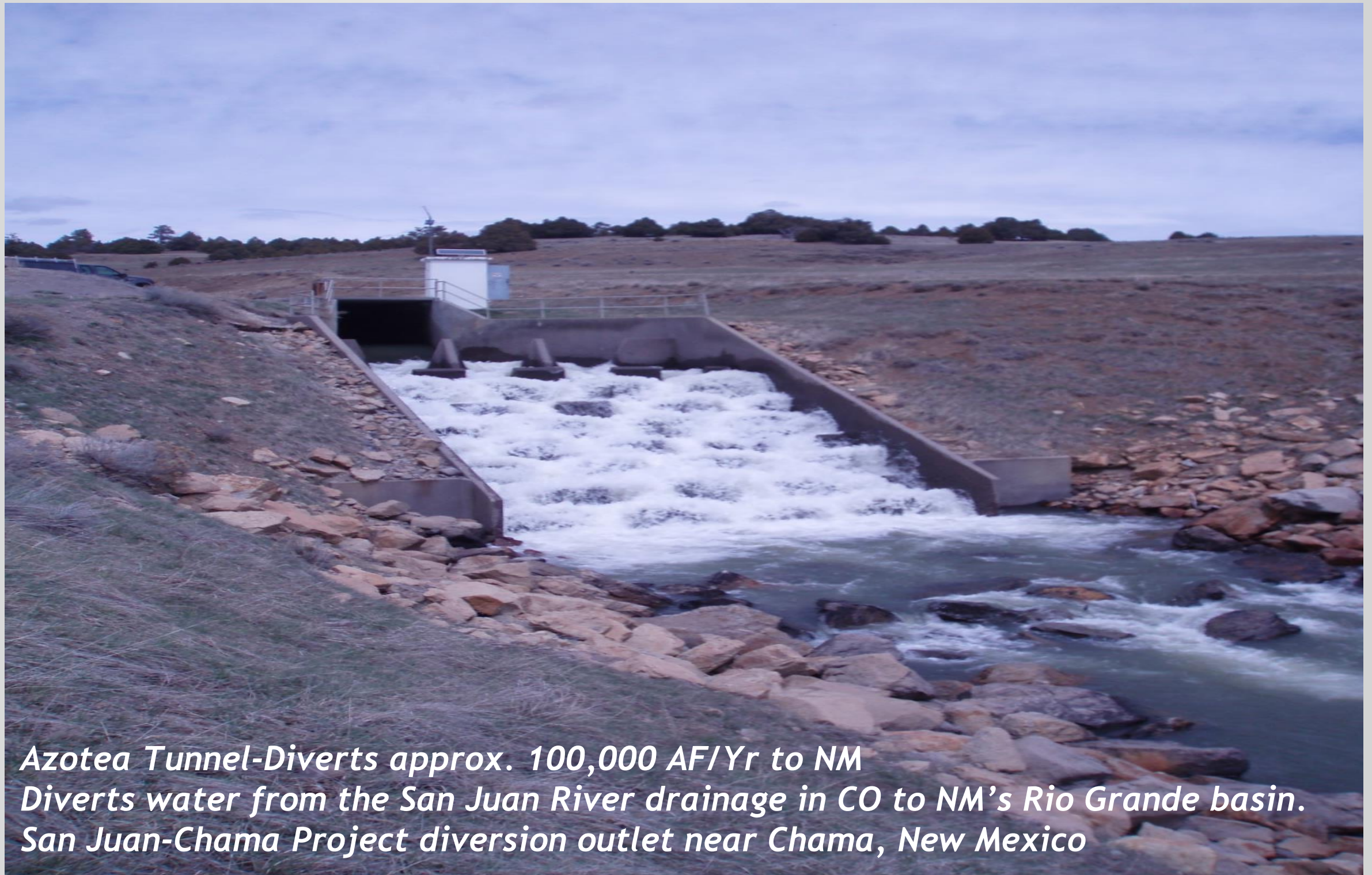
2018 WATER YEAR TO DATE FLOW (AF)



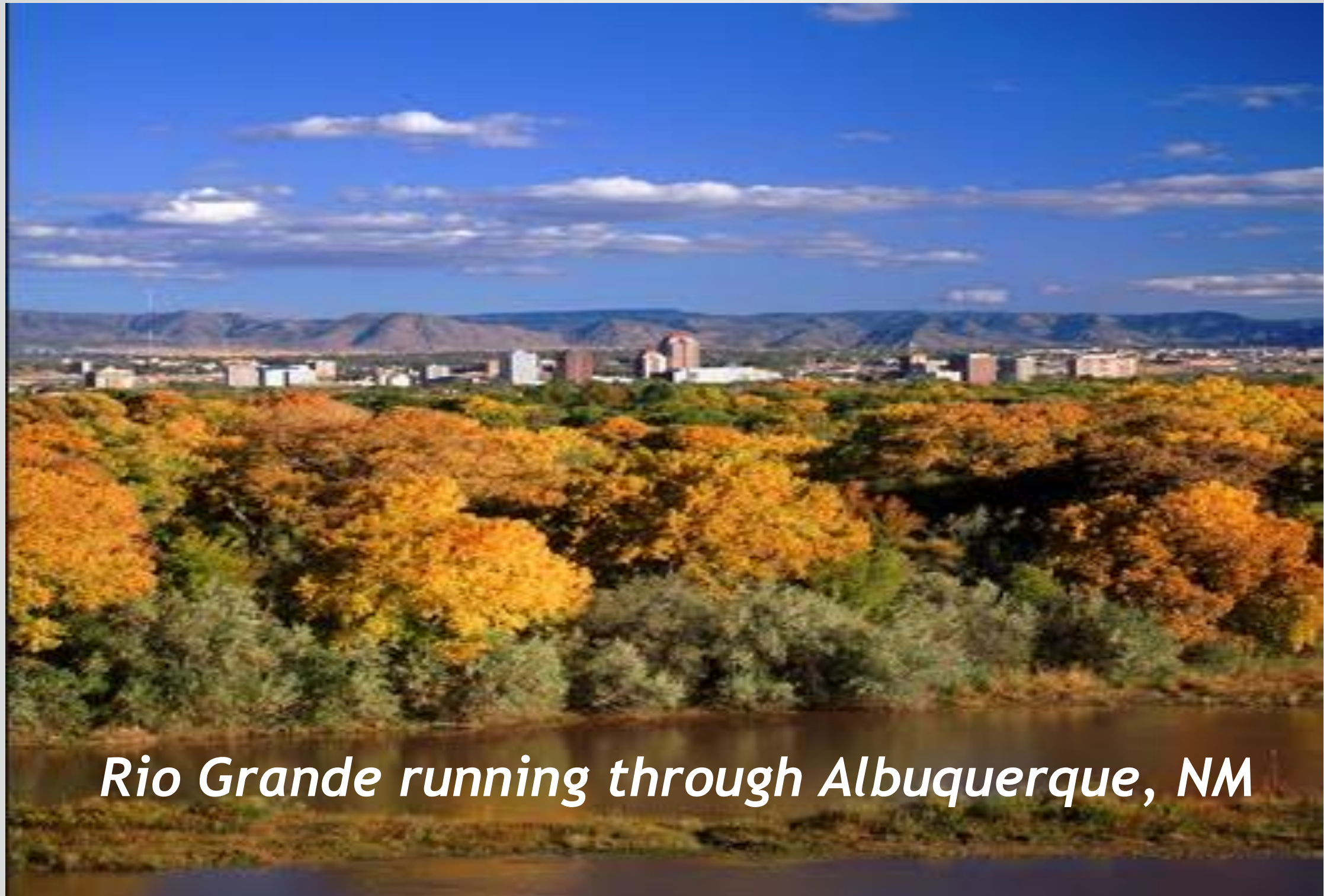
LOWEST MONTH IN 2018



San Juan-Chama Trans-mountain/Trans-state Diversion



Where does San Juan-Chama Project water go?

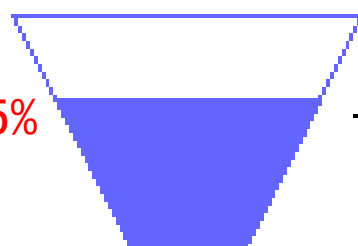


Rio Grande running through Albuquerque, NM

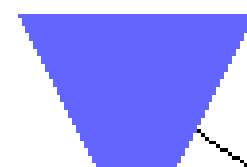
Data Current as of:
07/23/2018

San Juan River Basin

2018 Supply = 75%



McPhee
200366/381100
53% Full

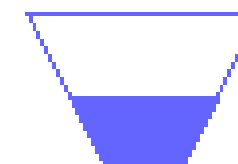


Lake Nighthorse
114242/115075
99% Full



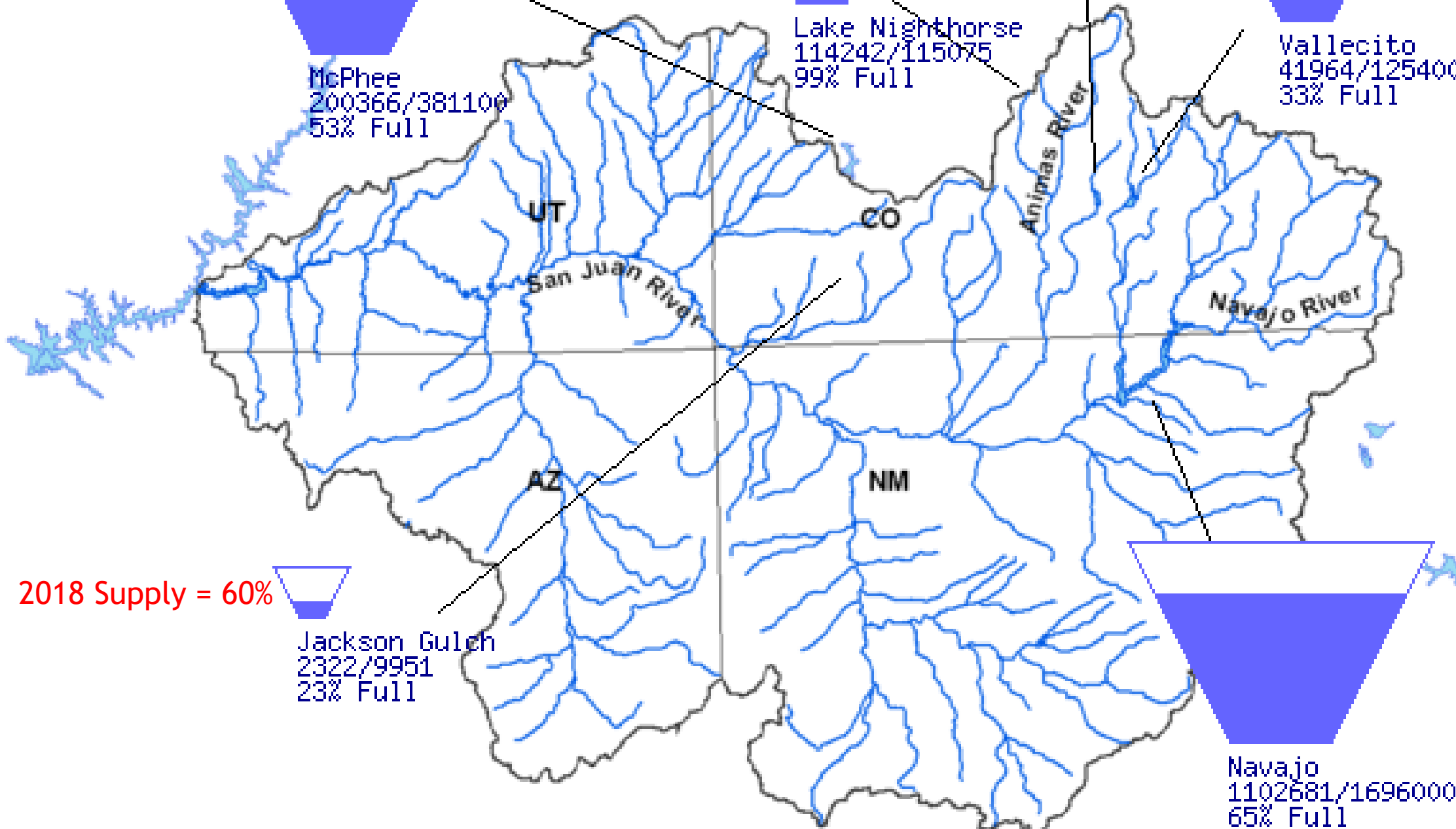
Lemon
6525/39792
16% Full

2018 Supply = 53%



2018 Supply
= 72%

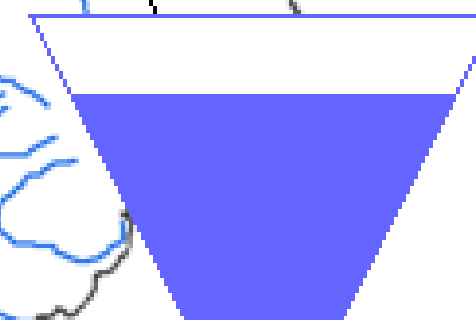
Vallecito
41964/125400
33% Full



2018 Supply = 60%



Jackson Gulch
2322/9951
23% Full



Navajo
1102681/1696000
65% Full



COLORADO
Division of Water Resources
Department of Natural Resources

Division 7 Conditions as of June 30

CURRENT DIVISION 7 WATER CONDITIONS AS OF 30-June-2018

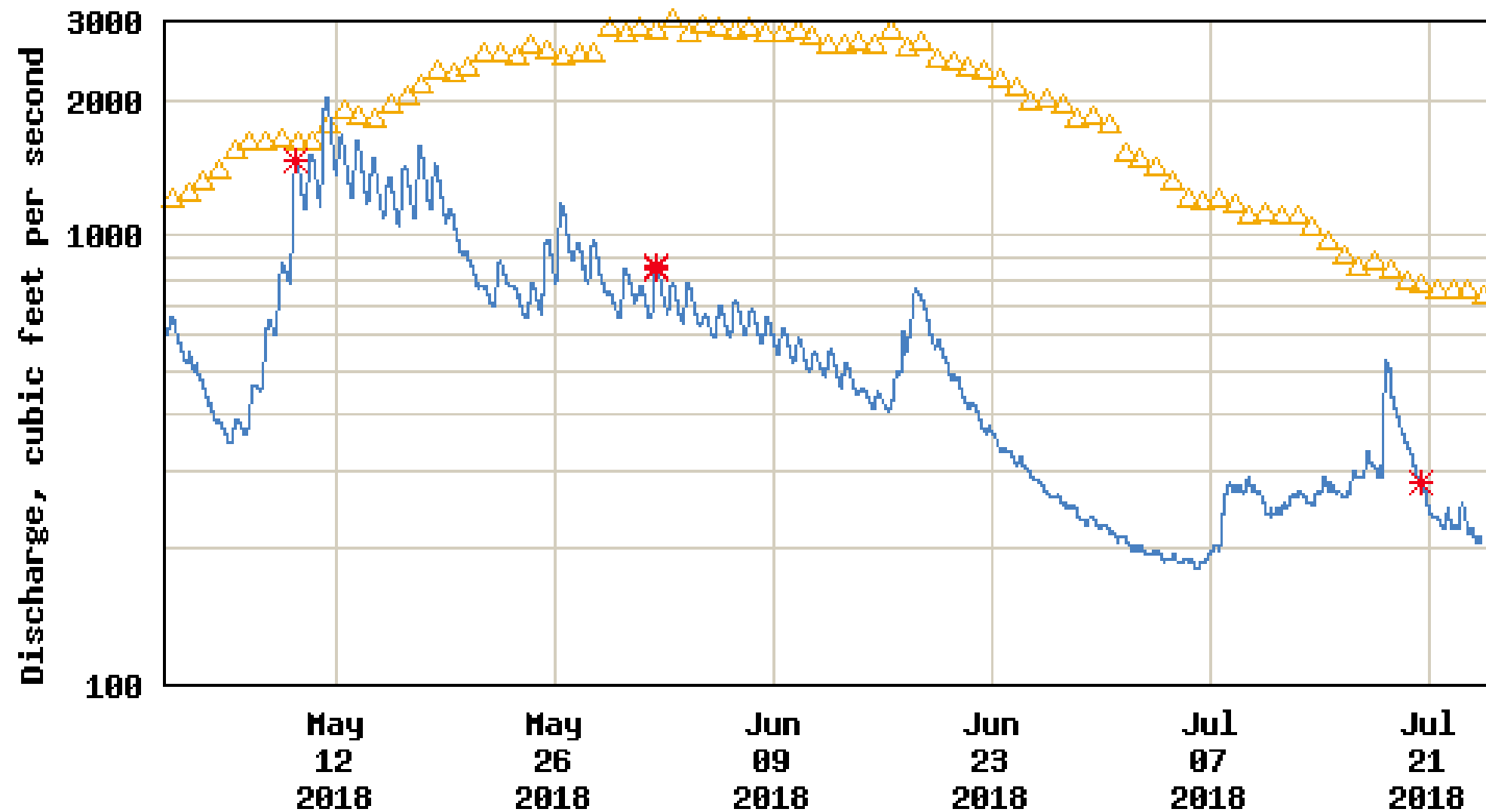
RESERVOIR STORAGE		STORAGE ON LAST DAY OF MONTH	AVERAGE STORAGE ON LAST DAY OF MONTH	% OF AVERAGE	CAPACITY	PERCENT FULL	2018 RANK	Out Of Years	
LEMON		9,150	33,287	27%	39,792	23%	52	55	
VALLECITO		63,485	105,398	60%	125,400	51%	75	78	
McPHEE		225,079	337,814	67%	381,100	59%	31	35	
NAVAJO		1,159,334	1,331,448	87%	1,696,000	68%	40	56	
RIVER FLOWS		CURRENT FLOW (cfs) (Last Day of Mo.)	MONTHLY AVERAGE DAILY (cfs)	HISTORIC AVERAGE DAILY	% OF HISTORIC AVERAGE	2018 AVE DAILY PEAK VALUE	PEAK DATE	MONTHLY TOTAL FLOW 2018 RANK	Out Of Years
ANIMAS/DURANGO		221	489	2,768	18%	761	6/1	105	107
DOLORES/DOLORES		34.7	82	1,301	6%	169	6/18	106	107
LA PLATA/HESPERUS		5.54	11.8	124	10%	22.1	6/17	100	101
DURANGO WEATHER		CURRENT MONTH	30-YEAR MONTHLY AVERAGE	THIS MONTH AS % OF 30 YR AVERAGE	WATER YEAR TO DATE	% OF AVG WTR YEAR TO DATE	MONTHLY PRECIP 2018 RANK	Out Of Years	
PRECIP		1.33	0.61	217.0%	5.46	41%	23	124	
TEMPS		HIGH	DATE	MONTHLY AVG.	30 YR AVG	100 YR AVG	MONTHLY AVG. RANK	OUT OF YEARS	
		96	6/27	87.2	82.6	81.2	5	116	
LOW		39	6/2	46.4	46.4	42.9	20	116	
SNOW		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	
Snow Water Equivalent Pct of Median		20%	29%	25%	37%	55%	52%	14%	



Discharge, cubic feet per second

Most recent instantaneous value: 213 07-24-2018 08:30 MDT

USGS 09361500 ANIMAS RIVER AT DURANGO, CO



---- Provisional Data Subject to Revision ----

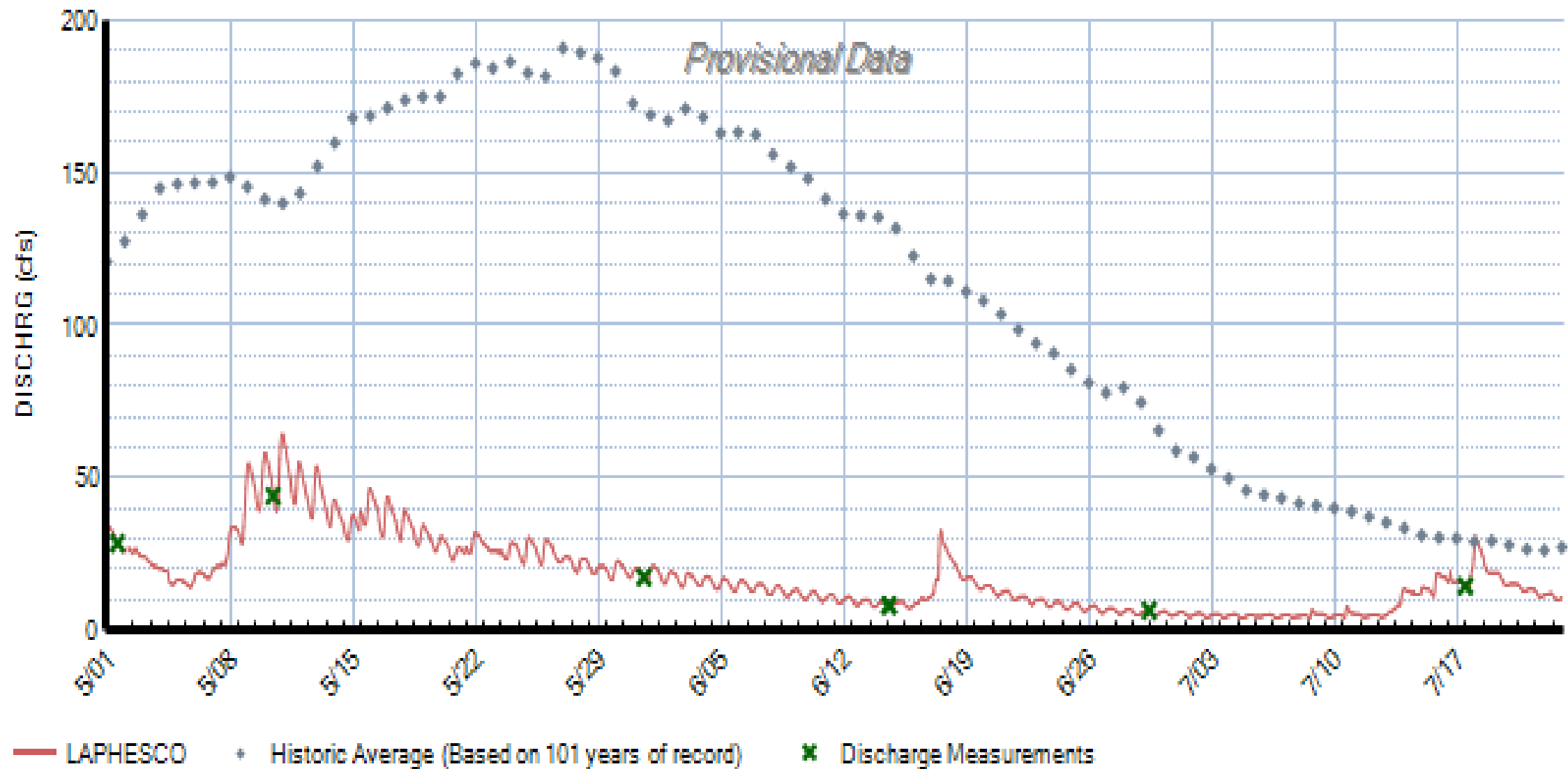
△ Median daily statistic (106 years) * Measured discharge
— Discharge



COLORADO
Division of Water Resources
Department of Natural Resources

LA PLATA RIVER AT HESPERUS (LAPHESCO)

Data Source: Co. Division of Water Resources



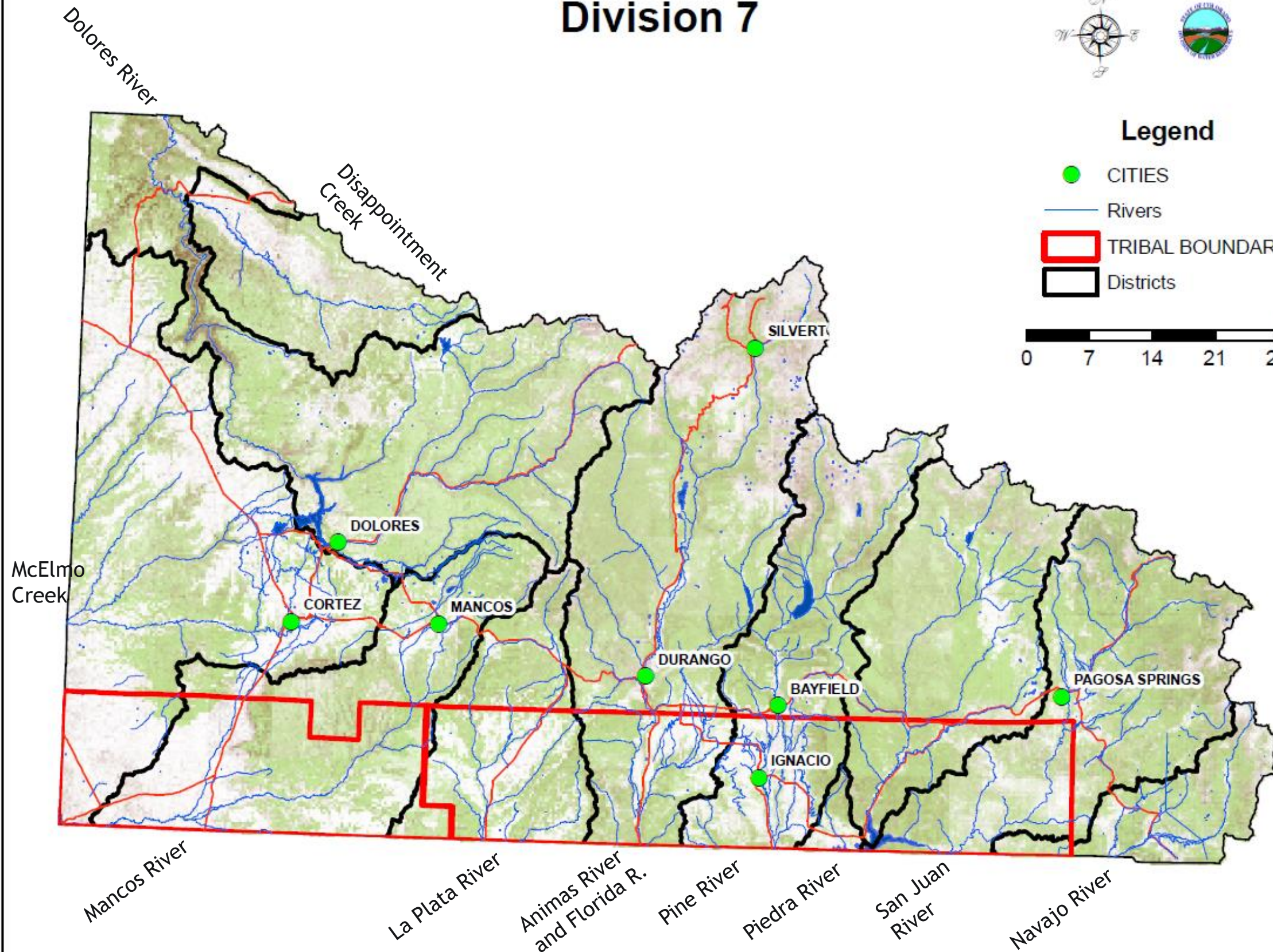
Division 7



Legend

- CITIES
- Rivers
- TRIBAL BOUNDARY
- Districts

0 7 14 21 28 Miles



Questions





COLORADO
Division of Water Resources
Department of Natural Resources



COLORADO
Division of Water Resources
Department of Natural Resources



COLORADO
Division of Water Resources
Department of Natural Resources



COLORADO
Division of Water Resources
Department of Natural Resources

Dolores River

- Primarily diverted into McElmo Creek basin (Cortez area)
- On-stream use occurs mainly upstream of McPhee Reservoir
- Administered without a valid call most of the time
- Exchanges from Groundhog Reservoir allow junior users to divert

MUNICIPAL USE	IRRIGATION USE
Town of Dolores <ul style="list-style-type: none">• Surface diversion - full supply	Surface diversion in river bottoms



Dolores River



Dolores



COLORADO
Division of Water Resources
Department of Natural Resources

McElmo Creek

- Transbasin water from McPhee Reservoir and Dolores River feed this basin
- Call on McElmo was removed once return flows from irrigation made it into McElmo Creek

MUNICIPAL USE	IRRIGATION USE
Cortez <ul style="list-style-type: none">• Transbasin from Dolores - full supply• Storage water available from McPhee	Large scale irrigation from McPhee Reservoir and Dolores River <ul style="list-style-type: none">• Good carryover in McPhee was critical this year• Approximately 75% of full delivery to users
Towaoc <ul style="list-style-type: none">• Transbasin from Dolores - full supply	Summit Reservoir only supplied 14 days of water
Montezuma Water Company <ul style="list-style-type: none">• Transbasin from Dolores - full supply	Ute Mountain Ute Farm supplied from McPhee



McElmo Creek



Cortez



COLORADO
Division of Water Resources
Department of Natural Resources

Mancos River

- Jackson Reservoir provides critical storage
- Heavily Administered
 - Mancos #2 priority at times

MUNICIPAL USE	IRRIGATION USE
Town of Mancos <ul style="list-style-type: none">• Senior water usually available from Mancos River• Storage water available from Jackson	Only senior irrigators allowed to divert
Mesa Verde National Park <ul style="list-style-type: none">• Senior water available from Mancos River• Storage water available from Jackson	Jackson Reservoir provides supplemental water
Mancos Rural Water <ul style="list-style-type: none">• Senior water available from Mancos River• Storage water available from Jackson	



Mancos River



Mancos

*Jackson Gulch
Reservoir*



COLORADO
Division of Water Resources
Department of Natural Resources

La Plata River

- Red Mesa Ward Reservoir provides storage water
- Long Hollow Reservoir exchanges to irrigators and Compact deliveries
- Very water short
- Compact Issues

MUNICIPAL USE	IRRIGATION USE
None	Only senior irrigators typically receive river water
	Long Hollow Reservoir extended the season for many irrigators this year



La Plata River



Long Hollow Reservoir



COLORADO
Division of Water Resources
Department of Natural Resources

Animas River

- Operates as free river
- Reservoirs are minimally used

MUNICIPAL USE	IRRIGATION USE
<p>City of Durango</p> <ul style="list-style-type: none"> Animas provides supplemental supply to Florida River Durango owns most senior rights on Florida River Water quality issues on Animas last week following 416 Fire Water restrictions put in place in 2018 <ul style="list-style-type: none"> No bulk sales to new users starting in May No storage water available in Lemon Reservoir Storage water available by exchange in Lake Nighthorse 	Free river allows for extensive irrigation in river bottoms
<p>Town of Silverton</p> <ul style="list-style-type: none"> Surface diversions on tributaries on Animas 	
<p>Animas Water Company</p> <ul style="list-style-type: none"> Groundwater source 	



Animas River



Durango



COLORADO
Division of Water Resources
Department of Natural Resources

Florida River

- Lemon Reservoir provides critical supplemental water
- Administered daily
 - #17 Florida priority at times this year
- Lemon Reservoir did not fill
 - Irrigation deliveries stopped July 8

MUNICIPAL USE	IRRIGATION USE
Durango has most senior rights	Heavily reliant upon reservoir deliveries
	Extensive agriculture on Florida Mesa



Florida River



Lemon Dam



COLORADO
Division of Water Resources
Department of Natural Resources

Pine River

- Vallecito Reservoir provides critical supplemental water
- Vallecito Reservoir did not fill in 2018
 - Irrigation deliveries are still occurring
 - Carryover into 2019 will be minimal

MUNICIPAL USE	IRRIGATION USE
Town of Bayfield <ul style="list-style-type: none">• Surface water rights from Pine River subject to curtailment• Water Conservation Schedule implemented<ul style="list-style-type: none">• Odd/even address number watering• No daytime watering	Heavily reliant upon reservoir deliveries
La Plata Archuleta Water District <ul style="list-style-type: none">• Rural district• Gradually expanding	Extensive agriculture on Florida Mesa
Town of Ignacio <ul style="list-style-type: none">• Surface water diversions	

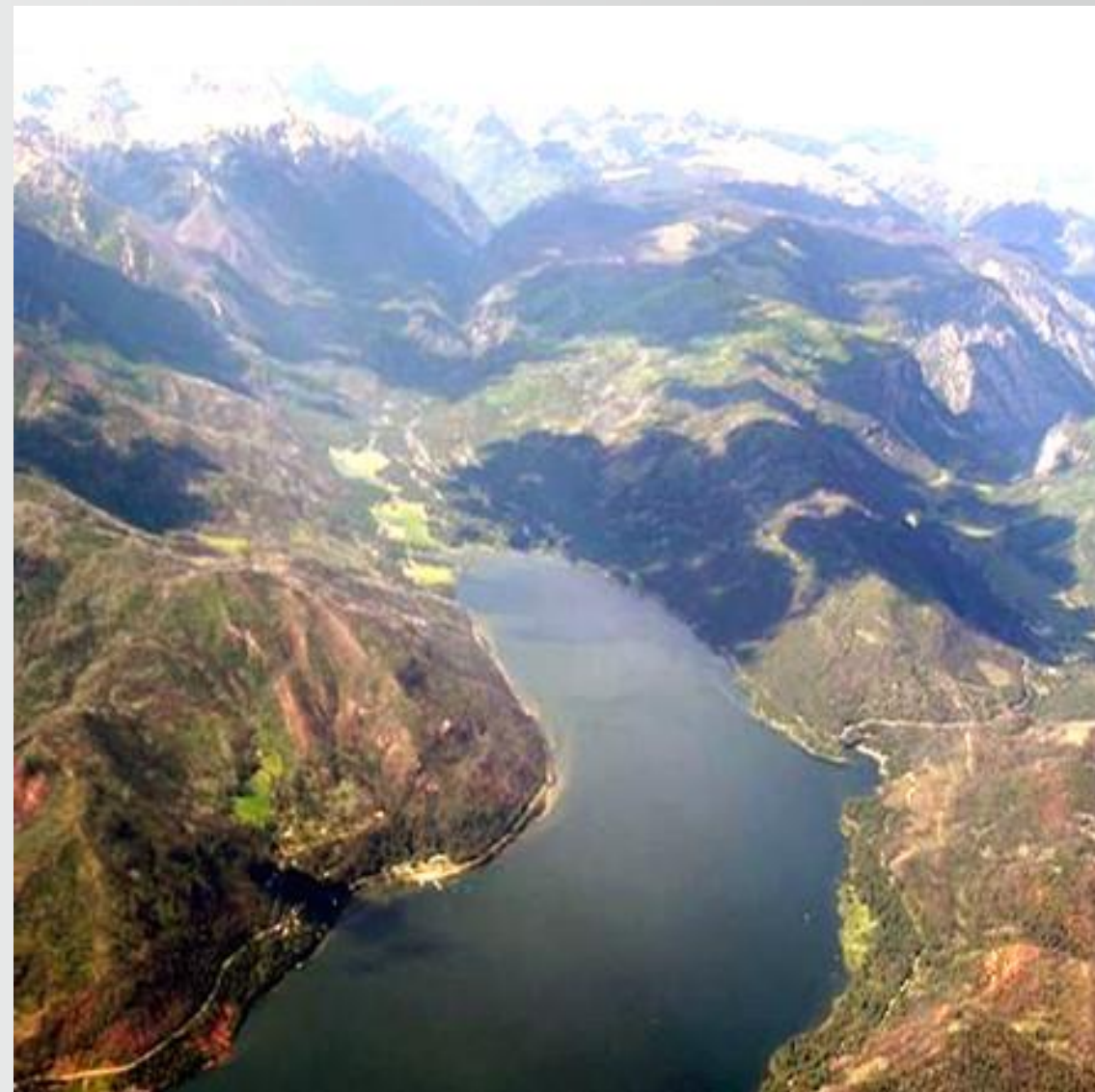


Pine River



Bayfield

Vallecito Reservoir



COLORADO
Division of Water Resources
Department of Natural Resources

Piedra River

- No reservoirs on main stem
- Generally, operates as free river

MUNICIPAL USE	IRRIGATION
Pagosa Springs Area Water and Sanitation District <ul style="list-style-type: none">• Surface water rights tributary to Piedra River	Minimal irrigation
Aspen Springs Metro District	



Piedra River



San Juan River

- No reservoirs on main stem until Navajo Reservoir
- Free river

MUNICIPAL USE	IRRIGATION
Pagosa Springs Area Water and Sanitation District <ul style="list-style-type: none">• Surface water rights	Irrigation mainly along river bottoms



San Juan River



Pagosa Springs



COLORADO
Division of Water Resources
Department of Natural Resources

Navajo River

- No reservoirs on main stem
- Generally, operates as free river
- Major contributor to San Juan-Chama Project

MUNICIPAL USE	IRRIGATION
None	Irrigation within river bottoms



Navajo River





COLORADO
Division of Water Resources
Department of Natural Resources



COLORADO
Division of Water Resources
Department of Natural Resources



COLORADO
Division of Water Resources
Department of Natural Resources

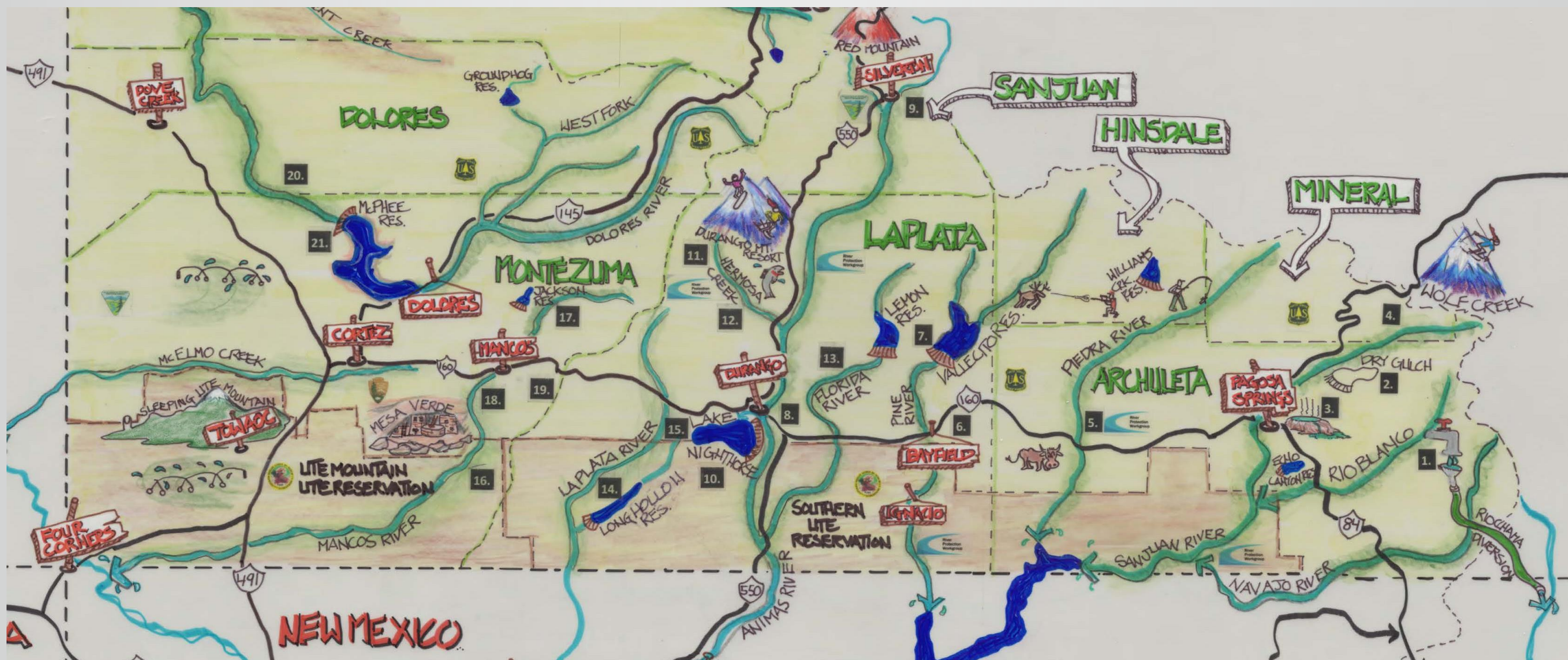


COLORADO
Division of Water Resources
Department of Natural Resources

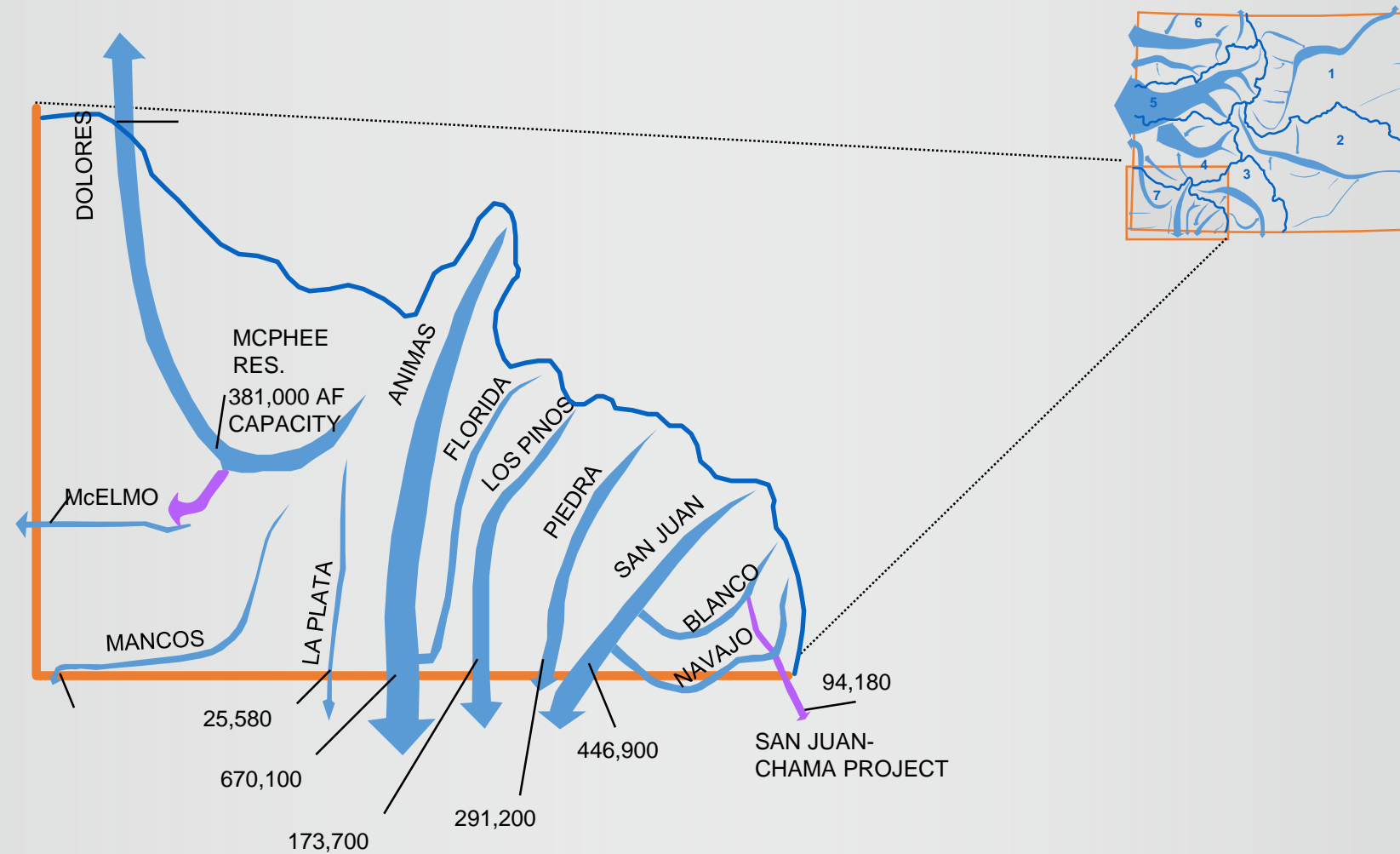
A hand-drawn map of Colorado with the following features:

- State Name:** "COLORADO" written in large, bold, blue capital letters at the top center.
- Neighboring States:**
 - "UTAH" in red capital letters to the northwest.
 - "ARIZONA" in red capital letters to the southwest.
 - "NEW MEXICO" in red capital letters to the south.
- Major River:** "COLORADO RIVER" written in blue, following the river's path from the north to the southwest.
- Mountain Ranges:**
 - "WESTSLOPE" written in black capital letters in the central-north area.
 - "FRONT RANGE" written in black capital letters to the east of the center.
 - A series of purple mountain peaks drawn along the eastern border.
- Denver:** A signpost with the word "DENVER" in red capital letters, located near the Front Range mountains.
- Internal Regions:** Several regions within Colorado are labeled with dashed lines: "SANTO MIGUEL", "COLORADO", "FUELMO", "MANITO", "JACINTO", "ANIHAS", "FINCH", and "BERRY".
- San Juan River:** Labeled "SAN JUAN" at the bottom, flowing into the Gulf of California.
- Orientation:** A north arrow pointing upwards, labeled "NORTH" in black capital letters.

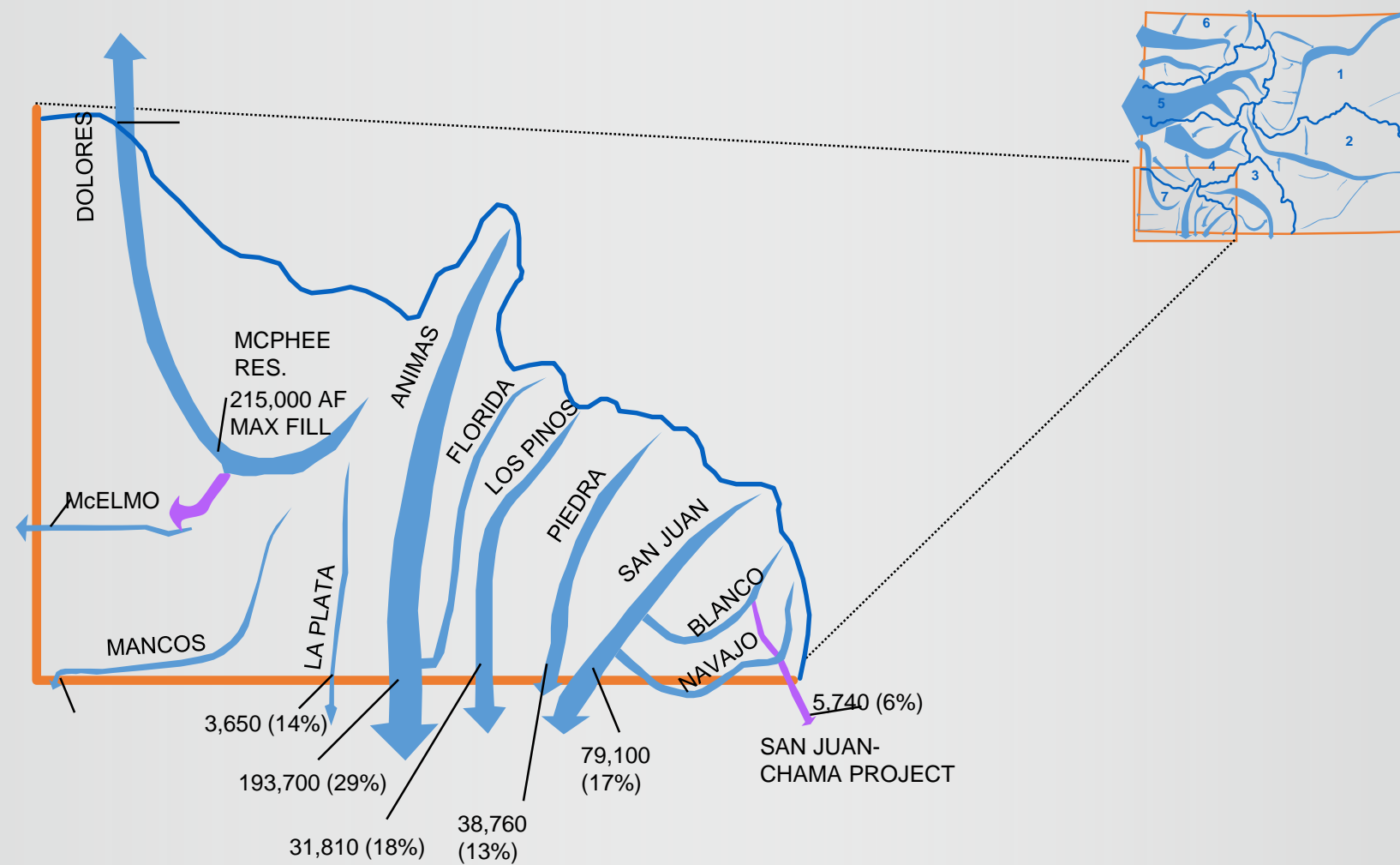




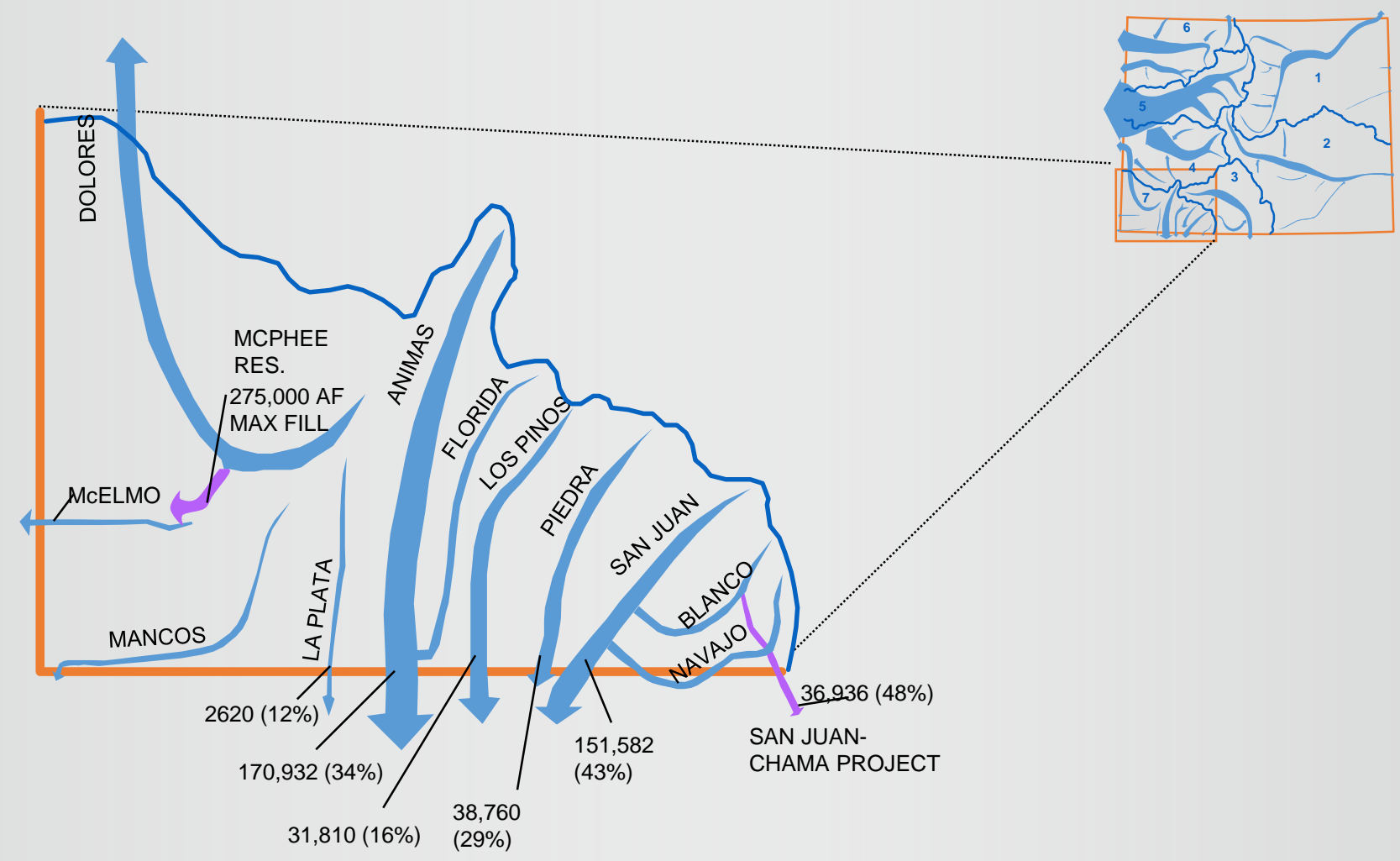
USE THIS PAGE TO ADJUST AVERAGE TEXT, THEN COPY and PASTE AS PICTURE TO MAKE IT LARGER ON OTHER SLIDE



USE THIS PAGE TO ADJUST 2002 TEXT, THEN COPY and PASTE AS PICTURE TO MAKE IT LARGER ON OTHER SLIDE



USE THIS PAGE TO ADJUST 2018 WATER (OCT-JUNE) YEAR TEXT,
THEN COPY and PASTE AS PICTURE TO MAKE IT LARGER ON OTHER
SLIDE



USE THIS PAGE TO ADJUST Worst Month 2018 TEXT, THEN COPY and PASTE AS PICTURE TO MAKE IT LARGER ON OTHER SLIDE

