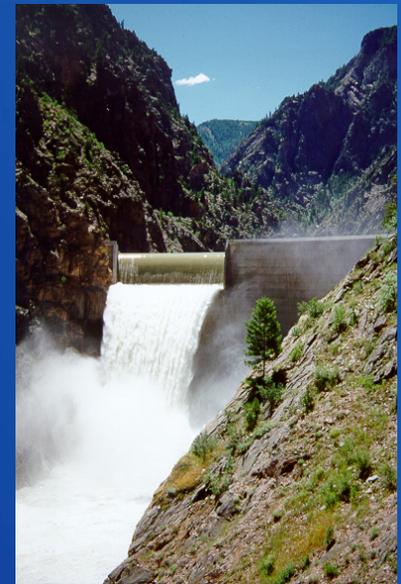
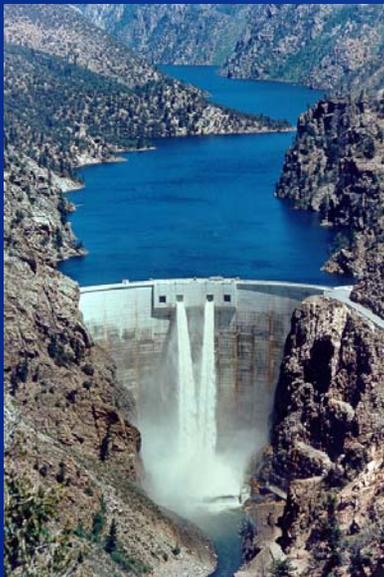


Aspinall Operations Meeting

August 27, 2009



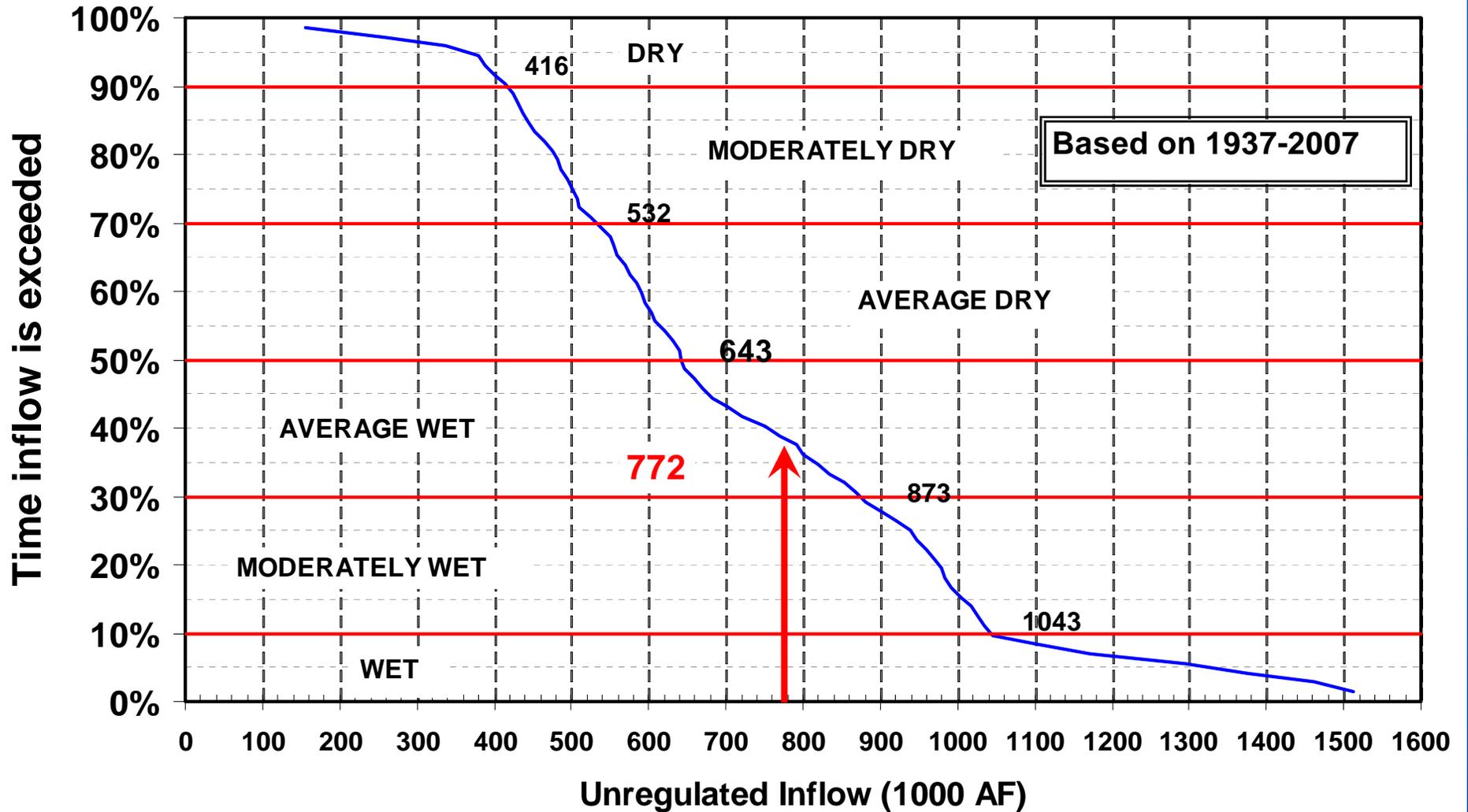
RECLAMATION

PAST OPERATIONS

RECLAMATION

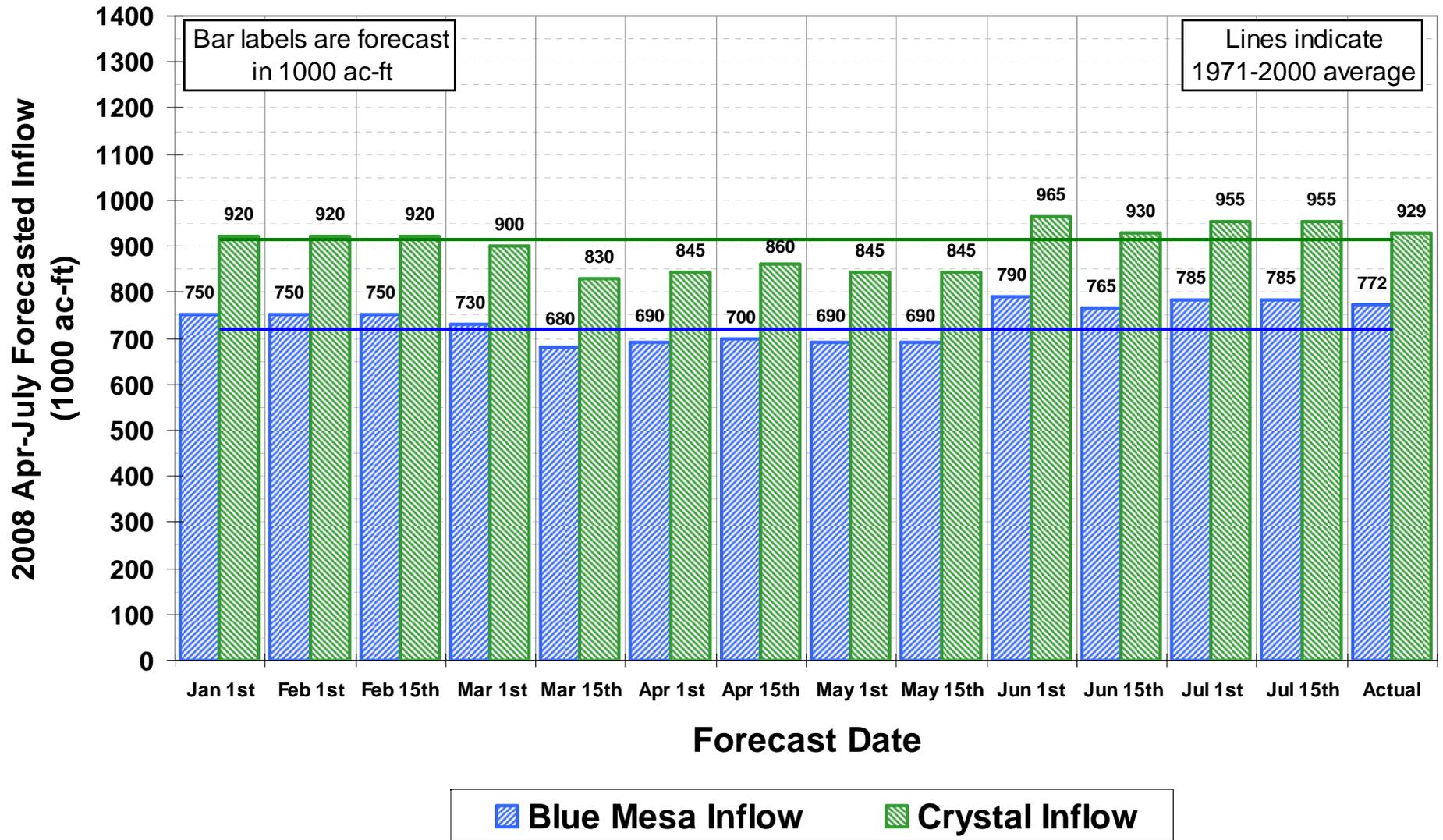
Blue Mesa Reservoir

April - July Unregulated Inflow



RECLAMATION

Aspinall Unit Forecasted Unregulated Inflow

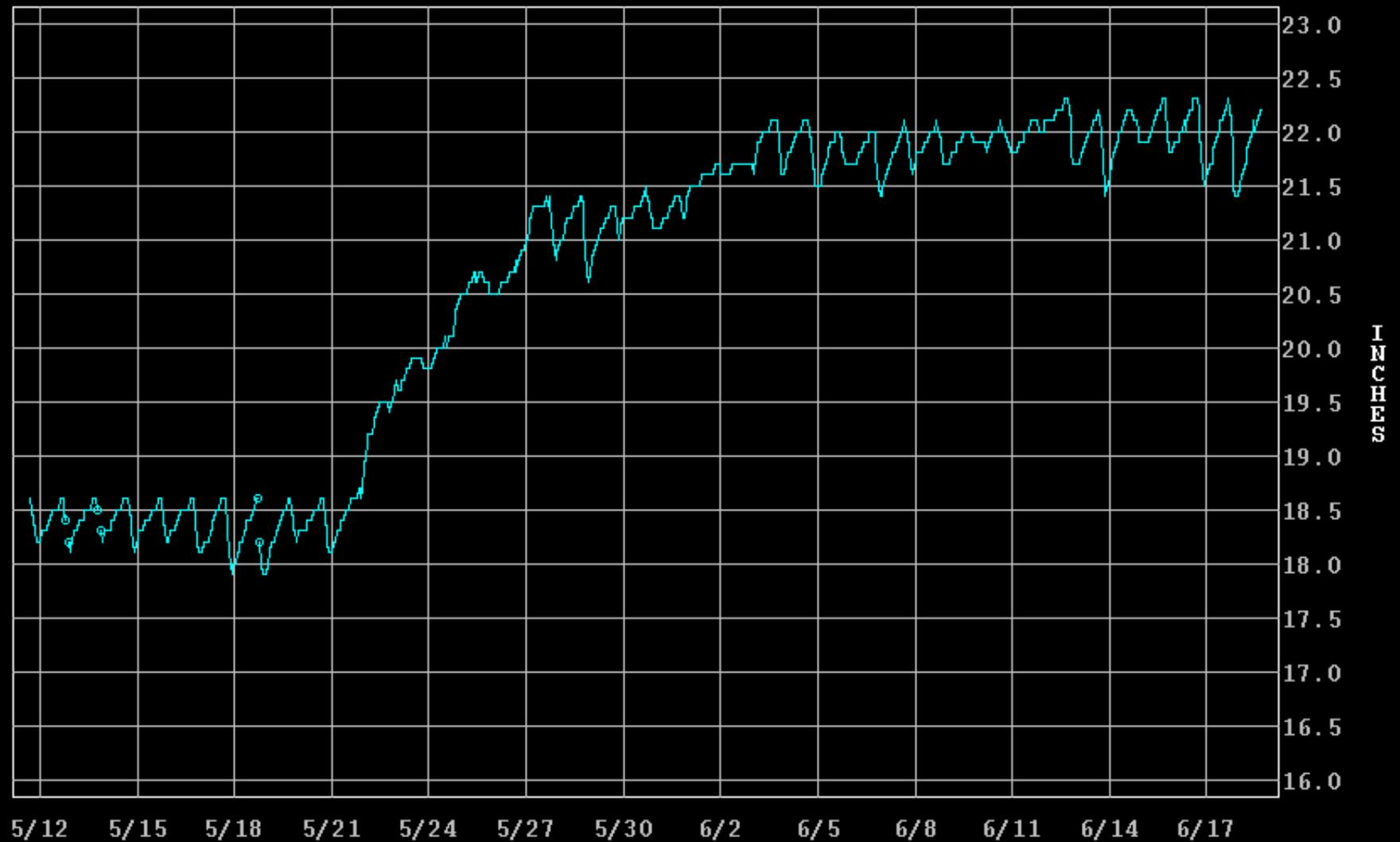


CBRFC FORECAST DISCUSSION

RECLAMATION

File Options

PORPHYRY CREEK
PRPC2 PCIRMZZ PRECIPITATION ACCUMULATION, INSTANTANEOUS, OBSERVED, METEOR
Max= 22.3 at 06/17/2009 16Z
Min= 17.9 at 05/19/2009 00Z



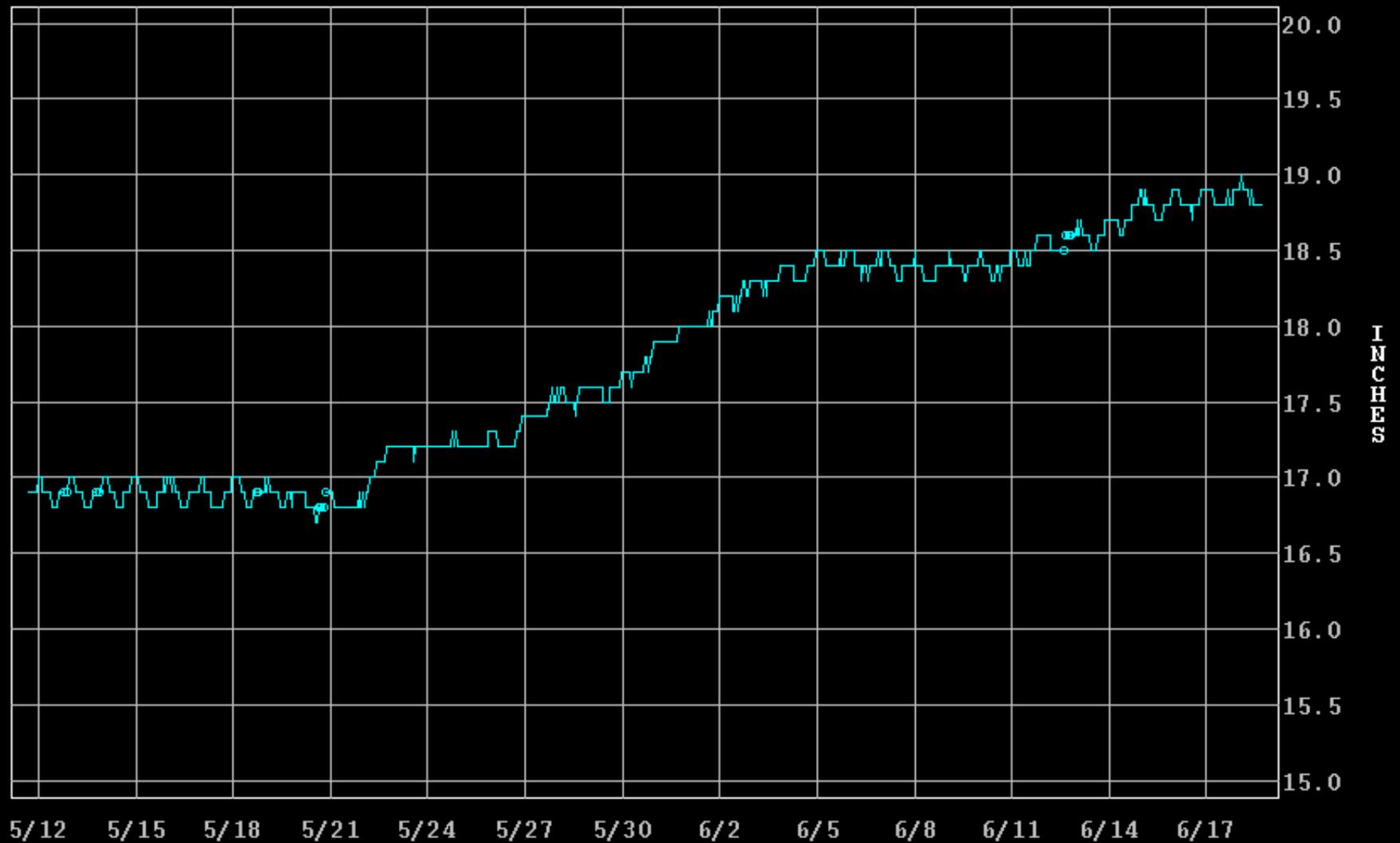
File Options

SLUMGULLION

SLMC2 PCIRMZZ PRECIPITATION ACCUMULATION, INSTANTANEOUS, OBSERVED, METEOR

Max= 19.0 at 06/18/2009 02Z

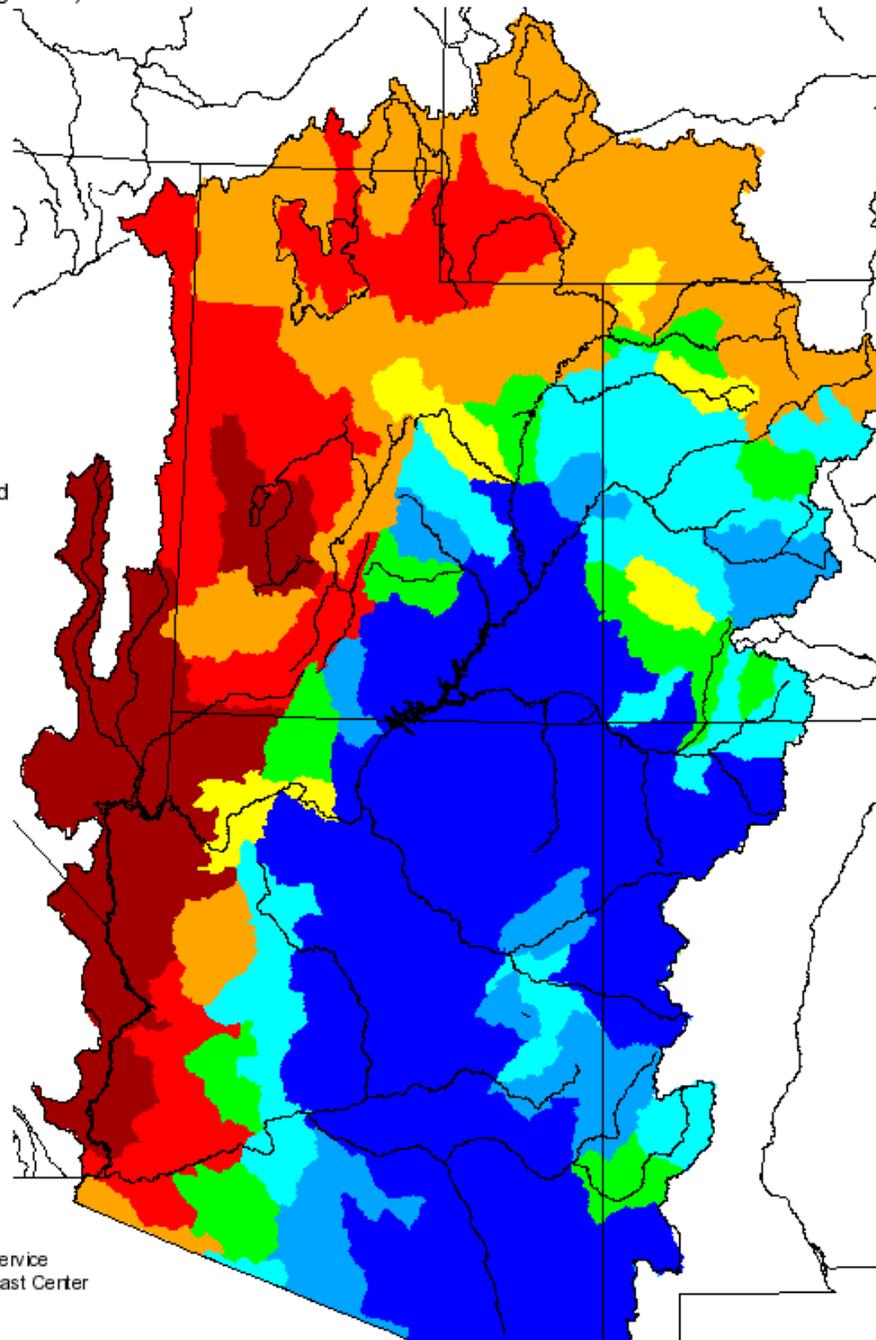
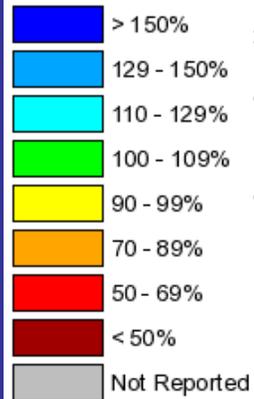
Min= 16.7 at 05/20/2009 14Z



Monthly Precipitation for May 2009

(Averaged by Hydrologic Unit)

% Average

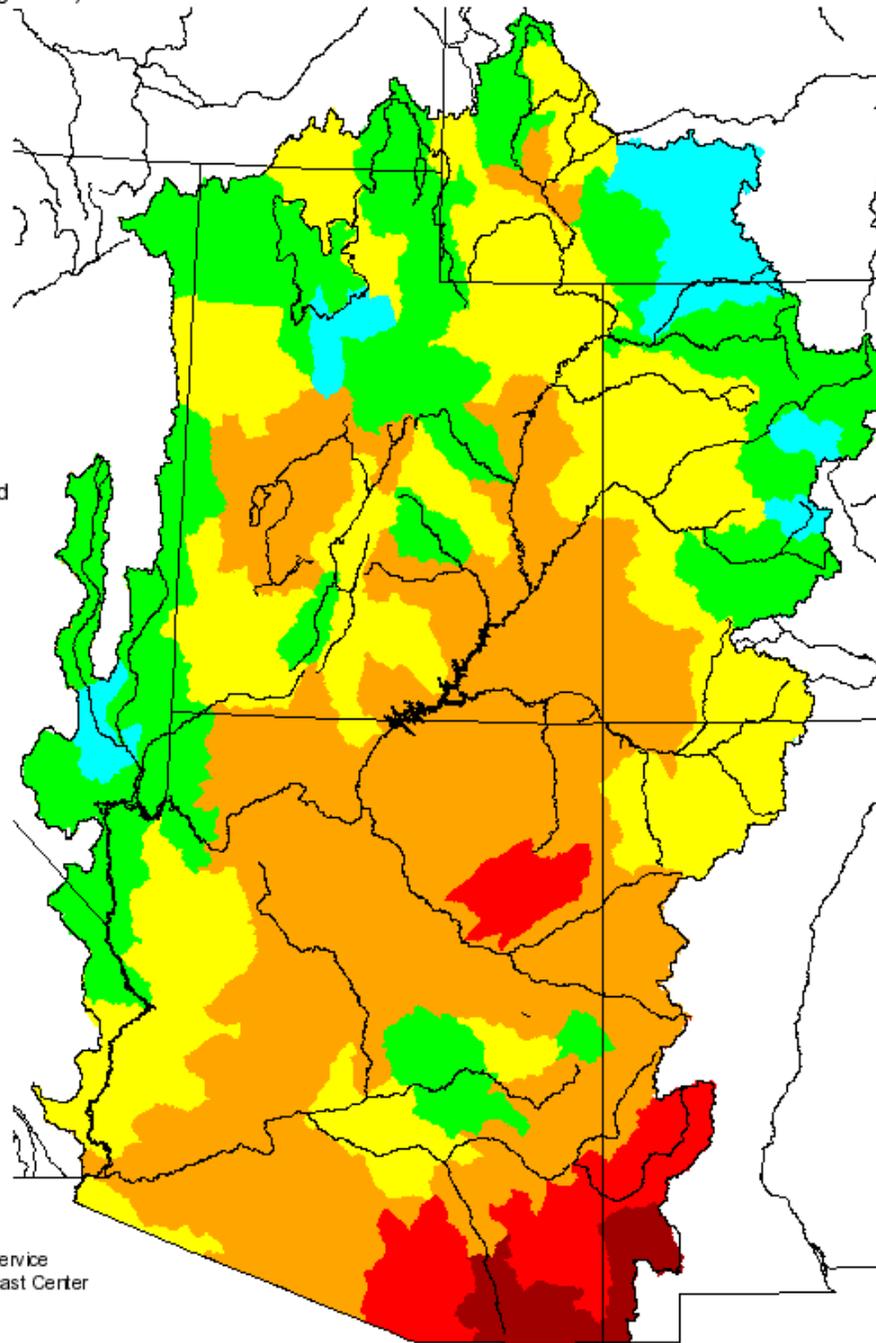
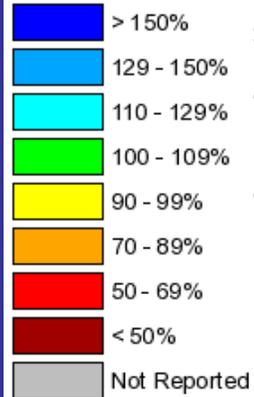


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Seasonal Precipitation, October 2008 - May 2009

(Averaged by Hydrologic Unit)

% Average

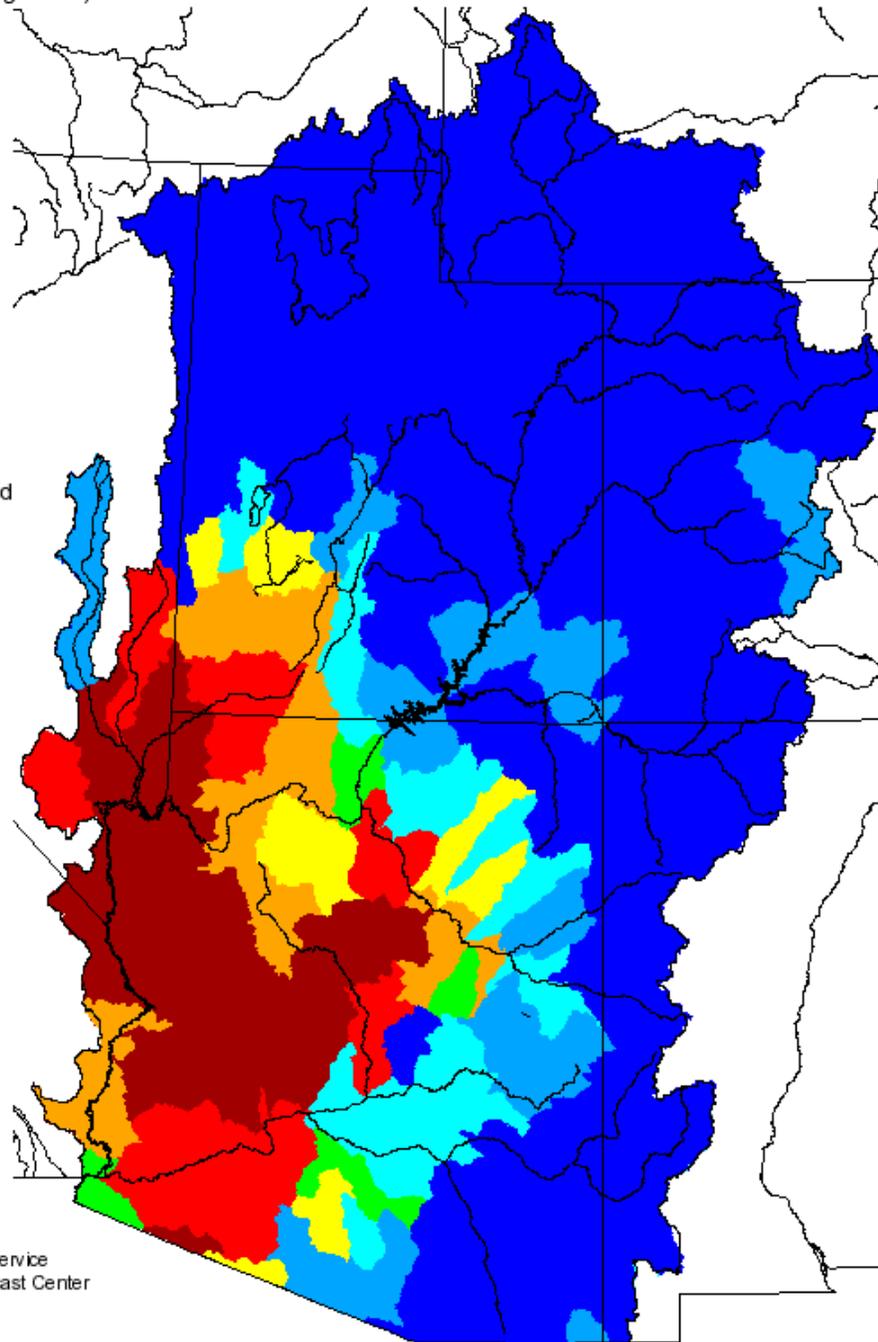
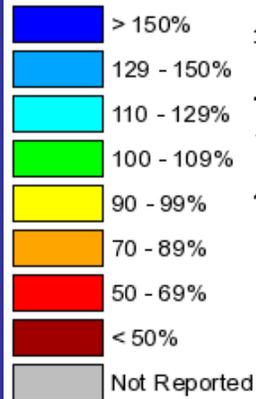


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Salt Lake City, Utah
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Monthly Precipitation for June 2009

(Averaged by Hydrologic Unit)

% Average

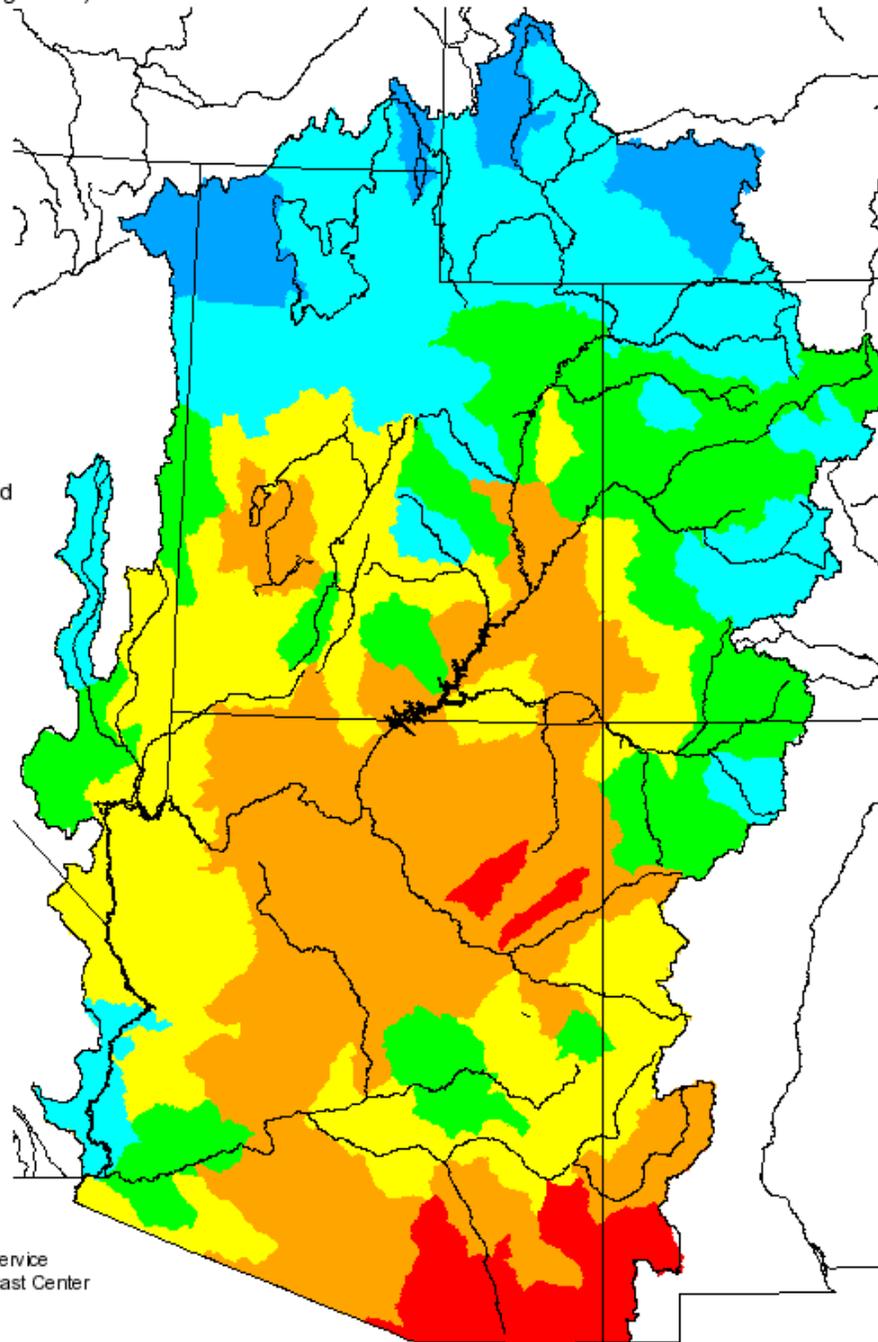
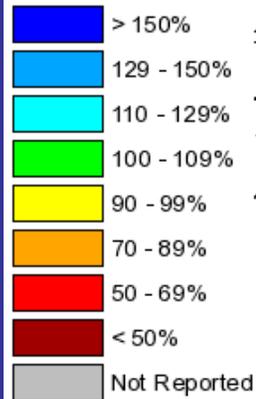


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Colorado Basin River Forecast Center
Salt Lake City, Utah
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Seasonal Precipitation, October 2008 - June 2009

(Averaged by Hydrologic Unit)

% Average

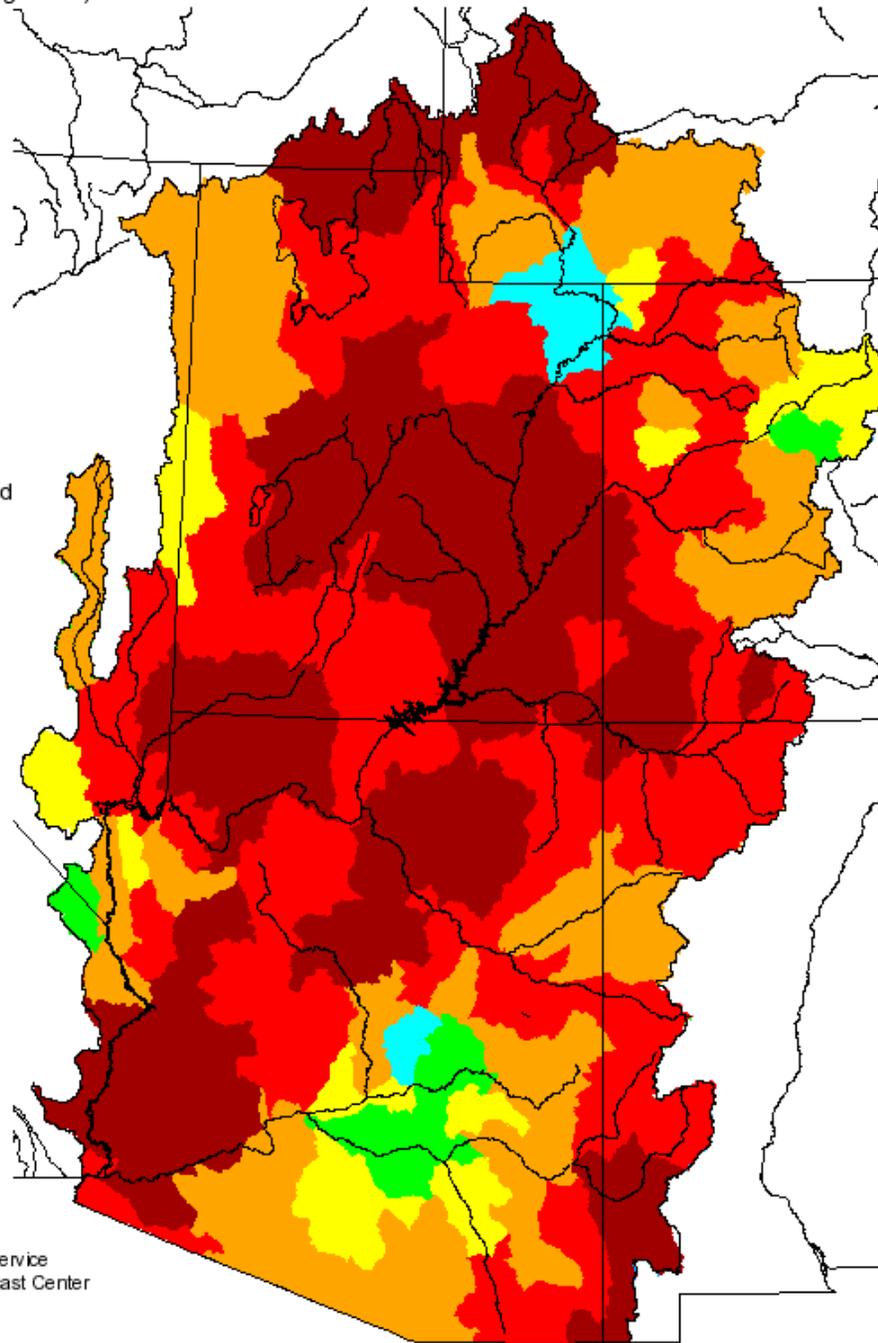
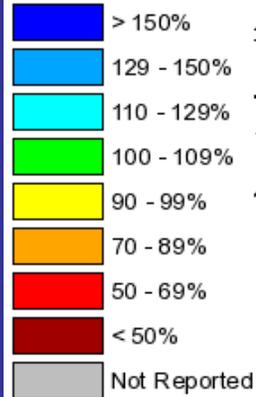


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Monthly Precipitation for July 2009

(Averaged by Hydrologic Unit)

% Average

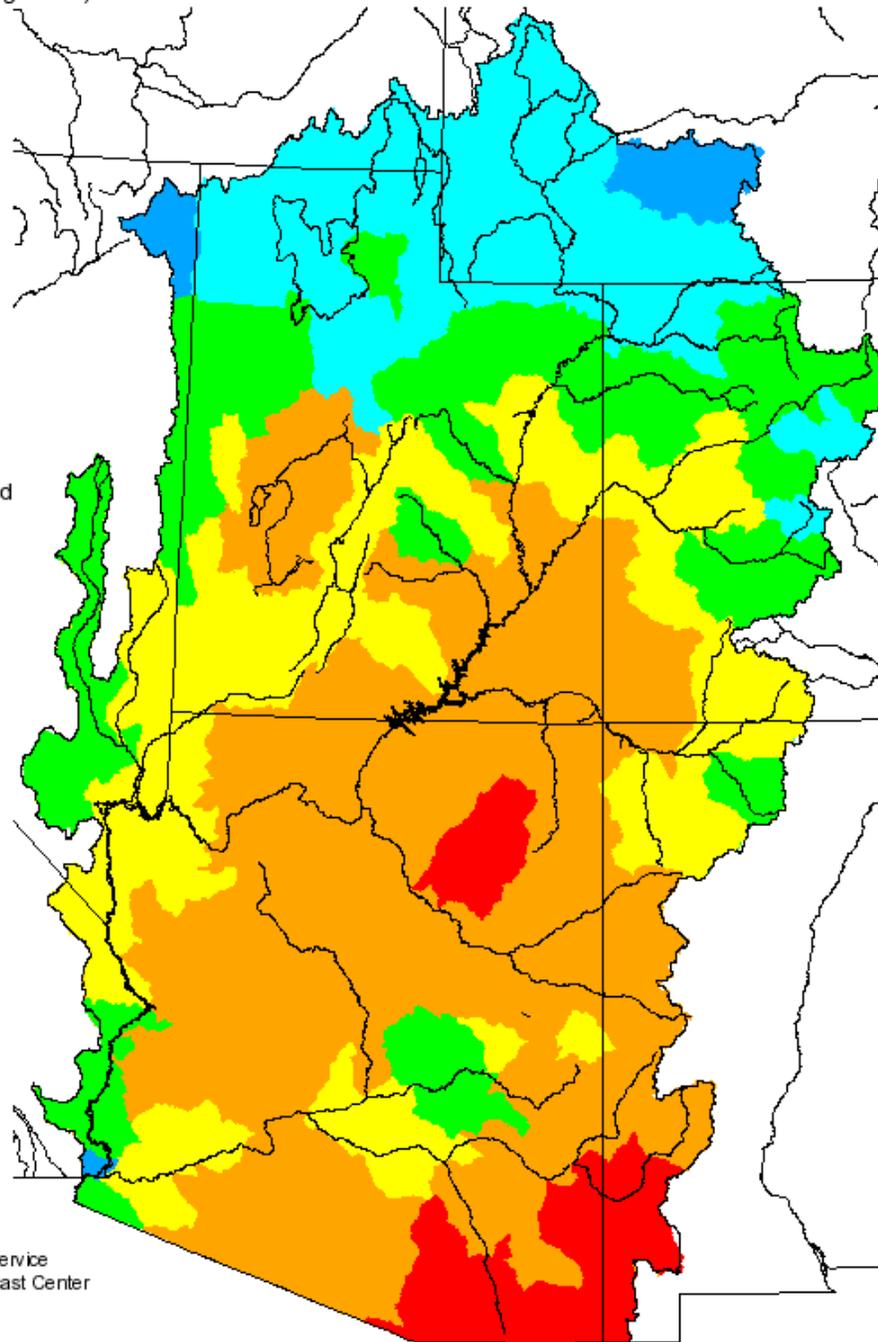
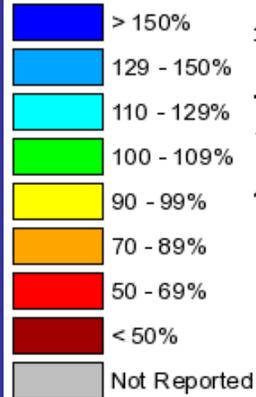


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Seasonal Precipitation, October 2008 - July 2009

(Averaged by Hydrologic Unit)

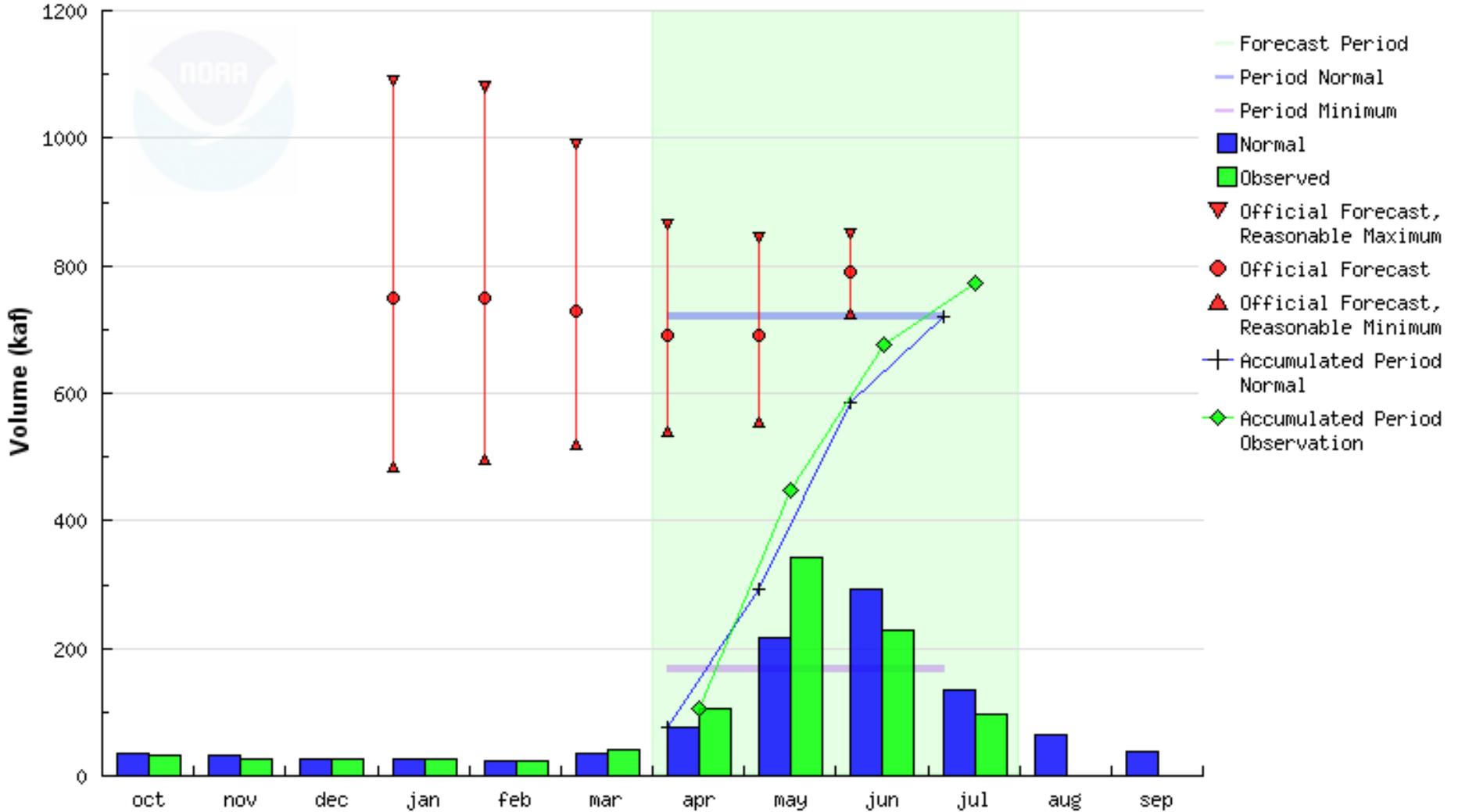
% Average



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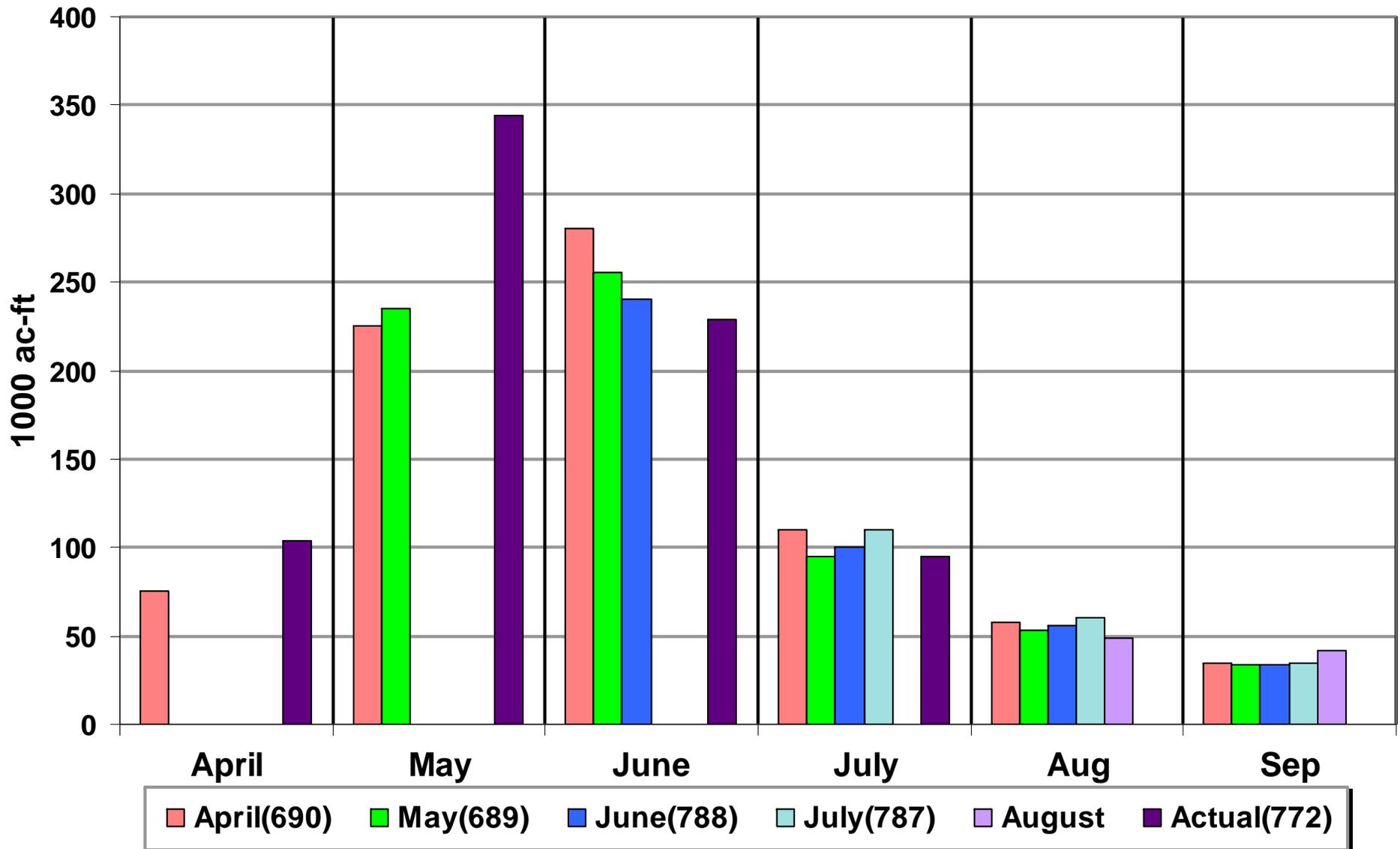
GUNNISON - BLUE MESA RES (BMDC2)

Water Year 2009, Forecast Period apr-jul (highlighted)



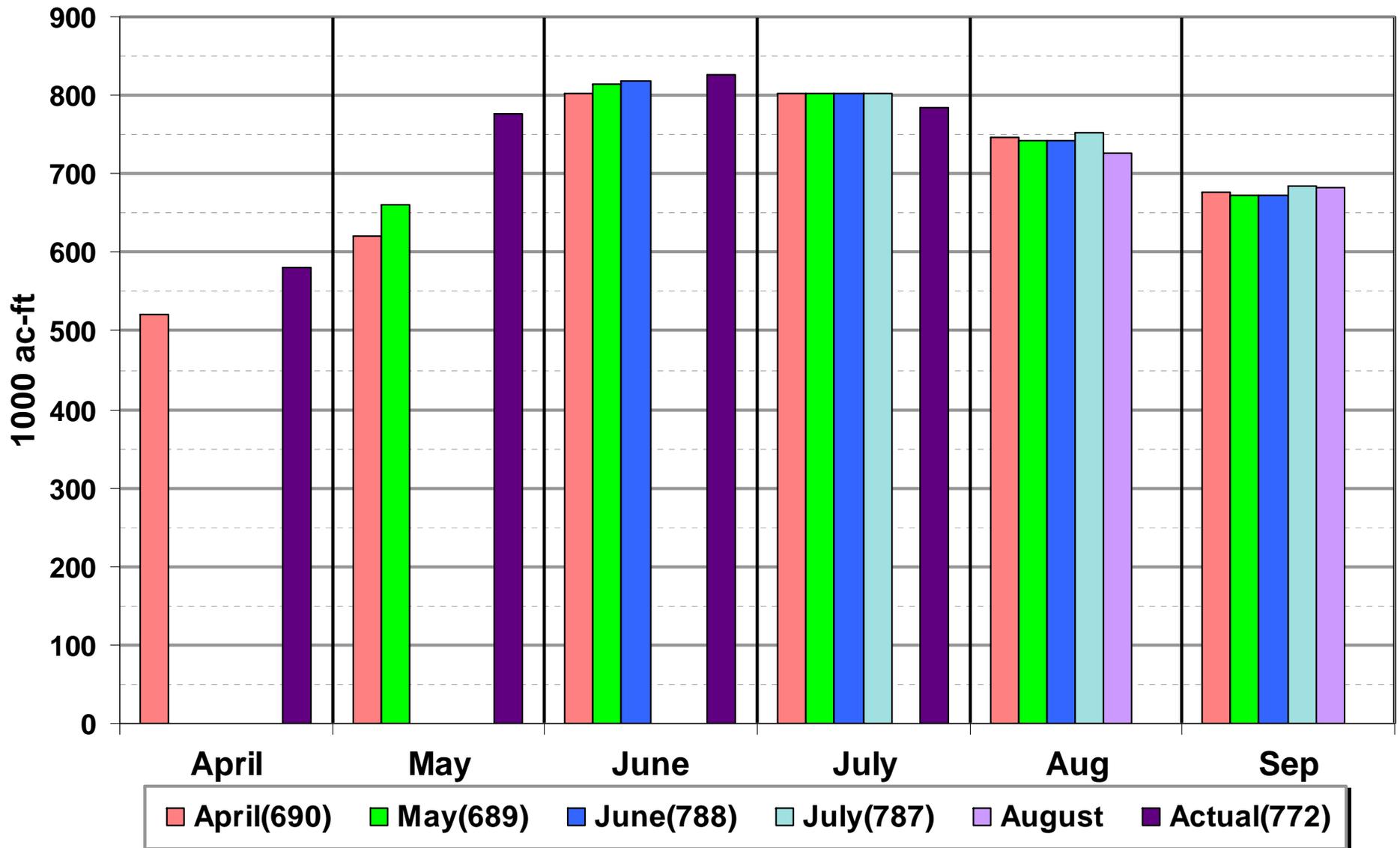
Blue Mesa Unregulated Monthly Inflow

(with total Apr-July Blue Mesa inflow 1000 ac-ft)



RECLAMATION

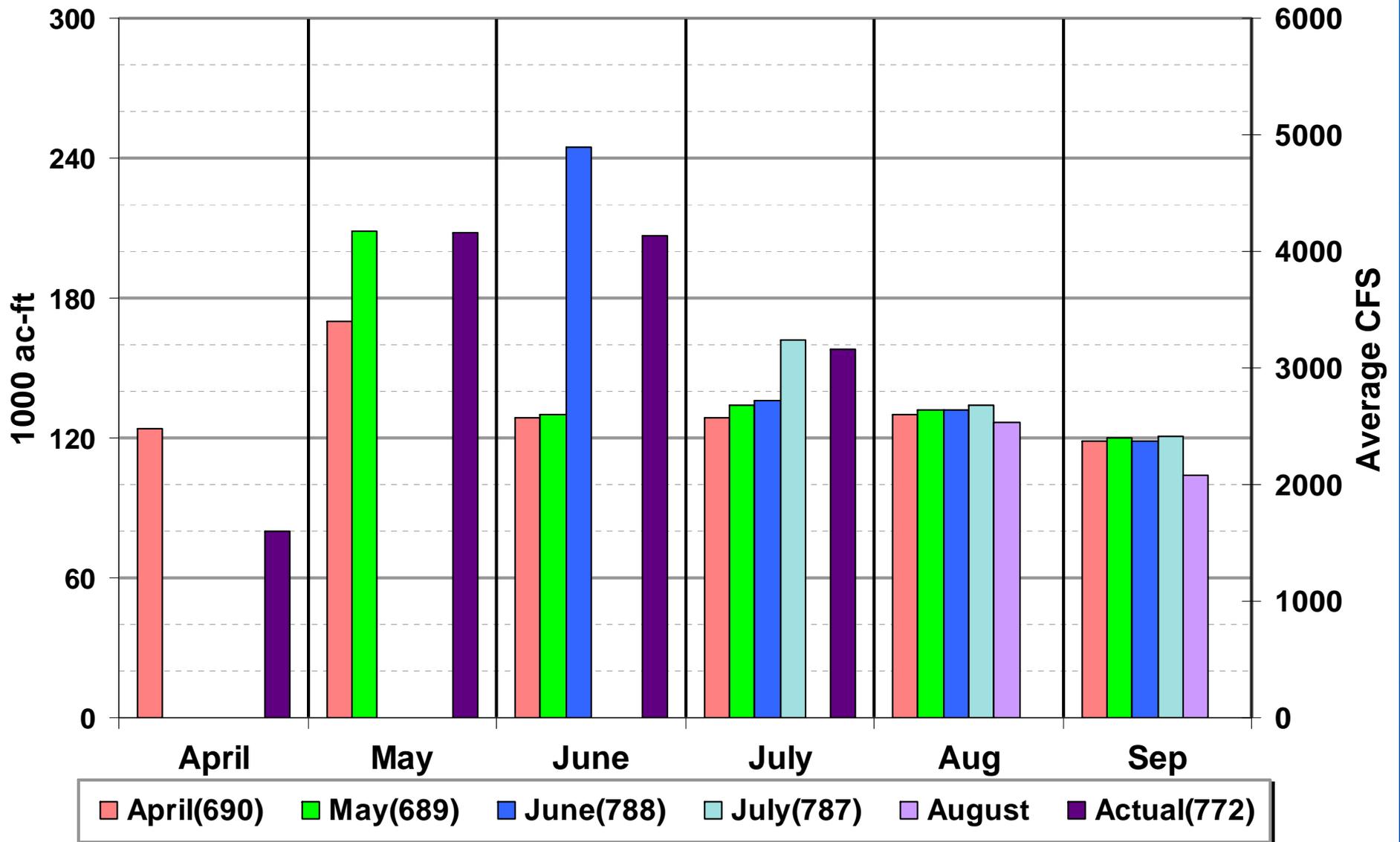
Blue Mesa EOM Content (with total Apr-July Blue Mesa inflow 1000 ac-ft)



RECLAMATION

Crystal Reservoir Release

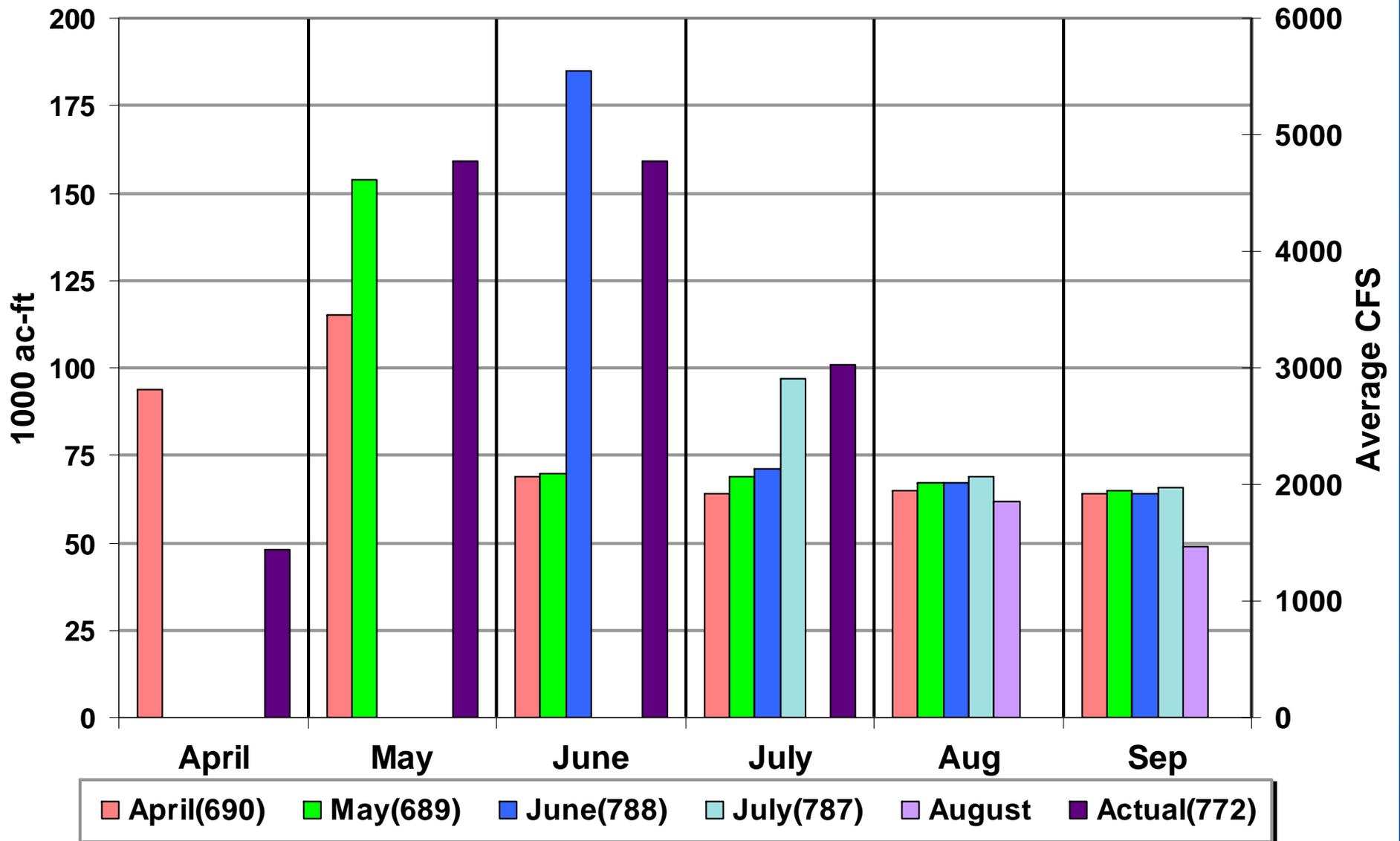
(with total Apr-July Blue Mesa inflow 1000 ac-ft)



RECLAMATION

Black Canyon Flow

(with total Apr-July Blue Mesa inflow 1000 ac-ft)



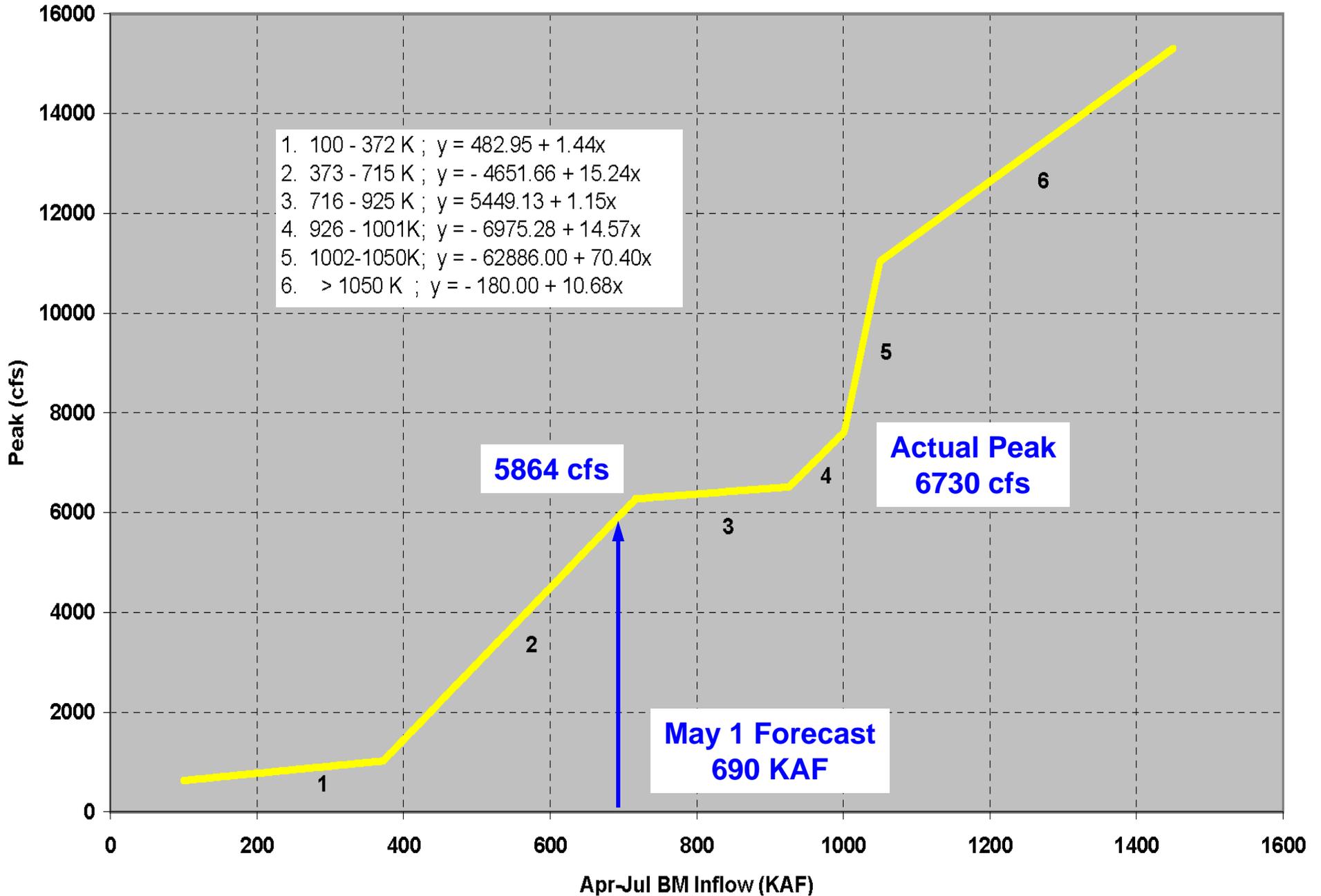
RECLAMATION

BLACK CANYON PEAK OPERATION DISCUSSION

RECLAMATION

Black Canyon Peak Flow Determination

based on Blue Mesa May 1 forecast



River Forecasts

slcESPPeak
delc2Peak20090407 edit.slcespeak

COLORADO BASIN RIVER FORECASTCENTER
NATIONAL WEATHER SERVICE SALT LAKE CITY UTAH

April 07, 2009

INTERNAL NWS PRODUCT FOR GUIDANCE PURPOSES ONLY

Seasonal outlook for maximum flows for Gunnison - Delta

Comments:

This outlook is based on flows from ESP with model states and snow conditions as of Apr 06

Daily Peak -- Seasonal Maximum

ESP Forecast Information

#

Analysis Period: 4/6/2009 - 08/1/2009 (MST)

Forecast Parameters: River Discharge

Forecast Interval: 4/6/2009 - 08/1/2009 (MST)

Forecast Point: Gunnison - Delta

#

Gunnison - Delta

Exceedance Prob. 0.90 0.75 0.50 0.25 0.10 Units

#

3800 4280 5100 6030 6890 CFSD

Number of Days to Peak from: 4/6/2009

#

Gunnison - Delta

Exceedance Prob. 0.90 0.75 0.50 0.25 0.10 Units

#

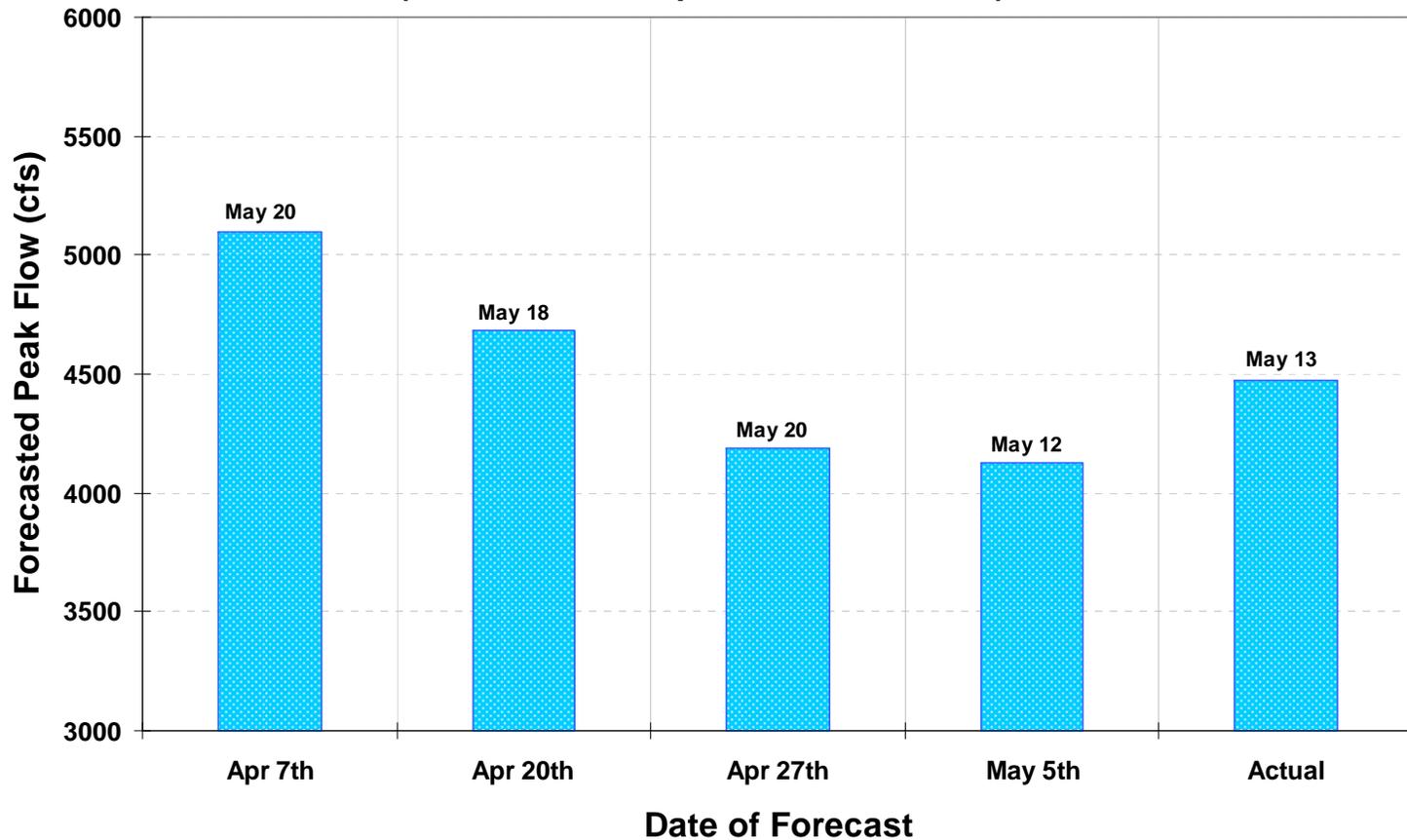
31 36 43 50 58 DAYS

RECLAMATION



Most Probable Peak Flows

Contribution to Peak Flow on Gunnison R @ Delta
(Release from Aspinall Unit Excluded)



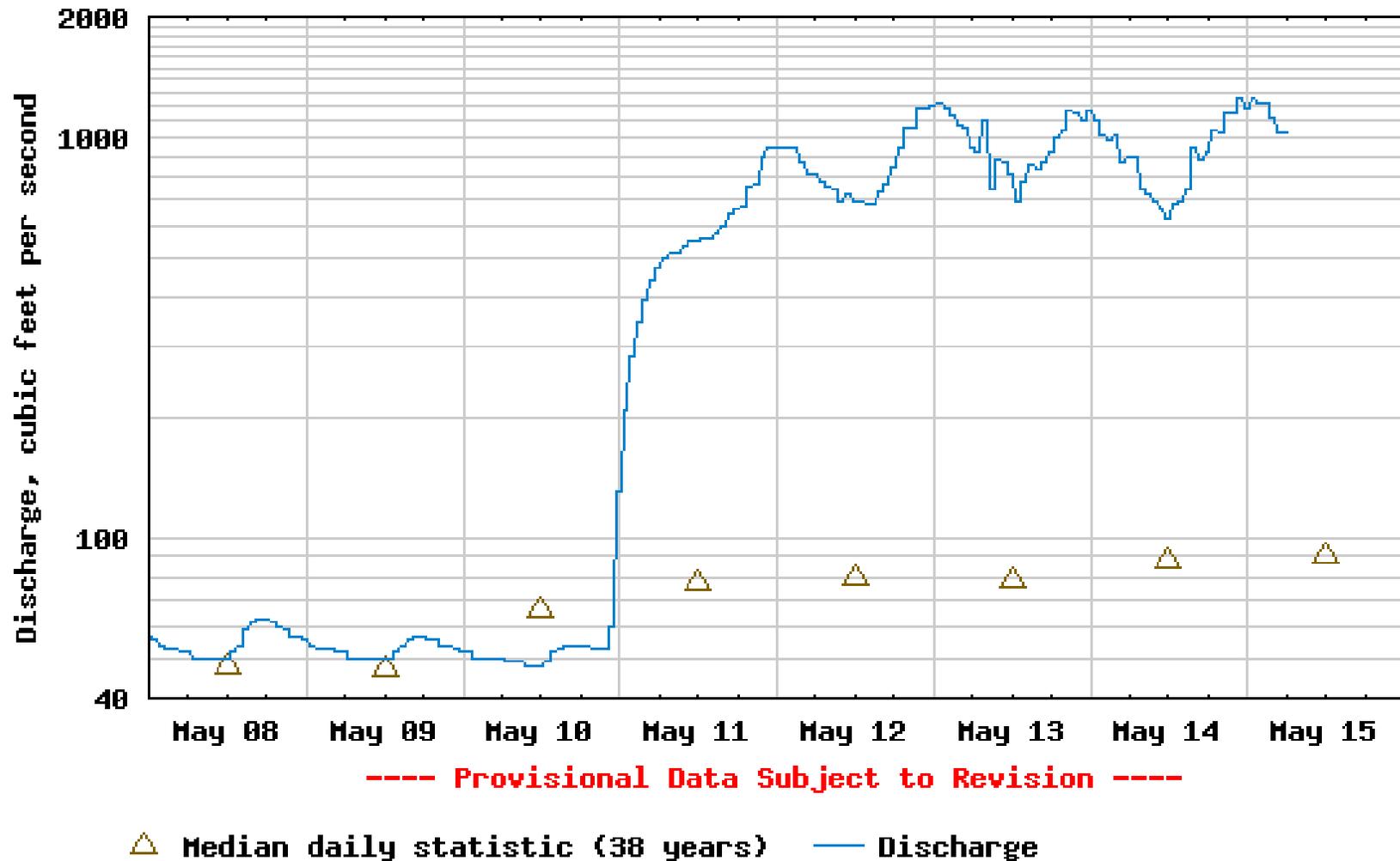
Runoff Preparations



RECLAMATION

Cimarron River Flows

USGS 09126000 CIMARRON RIVER NEAR CIMARRON, CO.



RECLAMATION

Operations Directive

	2009		Blue Mesa		Morrow Point			Crystal Dam						
	Date	Time, Hrs	By-Pass Change (CFS)	Total By-Pass Release (CFS)	By-Pass Change (CFS) *3	Total By-Pass Release (CFS)	Spillway Change Release (CFS) *3	Total Spillway Release (CFS)	Power Change (CFS) *2	Total Power Release (CFS)	By-Pass Change (CFS)	Total By-Pass Release (CFS)	Computed Spillway Release (CFS) *1	Total Release (CFS)
Wed	6-May	MDY		0		0	0	0		1800		0	0	1,800
Thurs	7-May	8:00		0		0	0	0	250	2050		0	0	2,050
		16:00		0		0	0	0	100	2150	150	150	0	2,300
Fri	8-May	8:00		0		0	0	0		2150	300	450	0	2,600
		16:00		0		0	0	0		2150	300	750	0	2,900
Sat	9-May	8:00		0		0	0	0		2150	350	1100	0	3,250
		16:00		0		0	0	0		2150	350	1450	0	3,600
Sun	10-May	8:00		0		0	0	0		2150	300	1750	0	3,900
		16:00	400	400		0	0	0		2150	300	2050	0	4,200
Mon	11-May	8:00	450	850		0	0	0		2150		2050	0	4,200
		16:00		850		0	0	0		2150		2050	0	4,200
Tues	12-May	8:00	450	1,300	500	500	0	0		2150		2050	1700	5,900
		16:00	450	1,750	500	1,000	0	0		2150		2050	3000	7,200
Wed	13-May	10:00		1,750	-500	500	0	0		2150		2050	3300	7,500
		16:00	-500	1,250	-500	0	0	0		2150		2050	2800	7,000
Thur	14-May	8:00	-350	900		0	0	0		2150		2050	2100	6,300
		16:00	-300	600		0	0	0		2150		2050	1600	5,800
Fri	15-May	8:00		600		0	0	0		2150		2050	1200	5,400
		16:00	-600	0		0	0	0		2150		2050	800	5,000
Sat	16-May	8:00		0		0	0	0		2150		2050	550	4,750
		16:00		0		0	0	0		2150		2050	300	4,500
Sun	17-May	8:00		0		0	0	0		2150		2050	0	4,200
		16:00		0		0	0	0		2150		2050	0	4,200
Mon	18-May	8:00		0		0	0	0		2150		2050	0	4,200
		16:00		0		0	0	0		2150	-200	1850	0	4,000
Tues	19-May	8:00		0		0	0	0		2150	-250	1600	0	3,750
		16:00		0		0	0	0		2150	-250	1350	0	3,500
Wed	20-May	8:00		0		0	0	0		2150	-200	1150	0	3,300
		16:00		0		0	0	0		2150	-200	950	0	3,100
Thur	21-May	8:00		0		0	0	0		2150	-200	750	0	2,900
		16:00		0		0	0	0		2150	-200	550	0	2,700
Fri	22-May	8:00		0		0	0	0		2150		550	0	2,700

Updated: 18-May-2009

Note: All release changes at each dam is indicated by red bolded fonts. This schedule will be updated as changes to the reservoirs are affected by changes in runoff conditions.

*1 Crystal Spill Release column is a computed mean daily release rate. This is based on forecasted daily upstream reservoir releases combined with flows from the Cimarron River which may vary. Therefore, the Crystal spill flow is an estimate of what it may be during this time period.

*2 Power ramp rates:

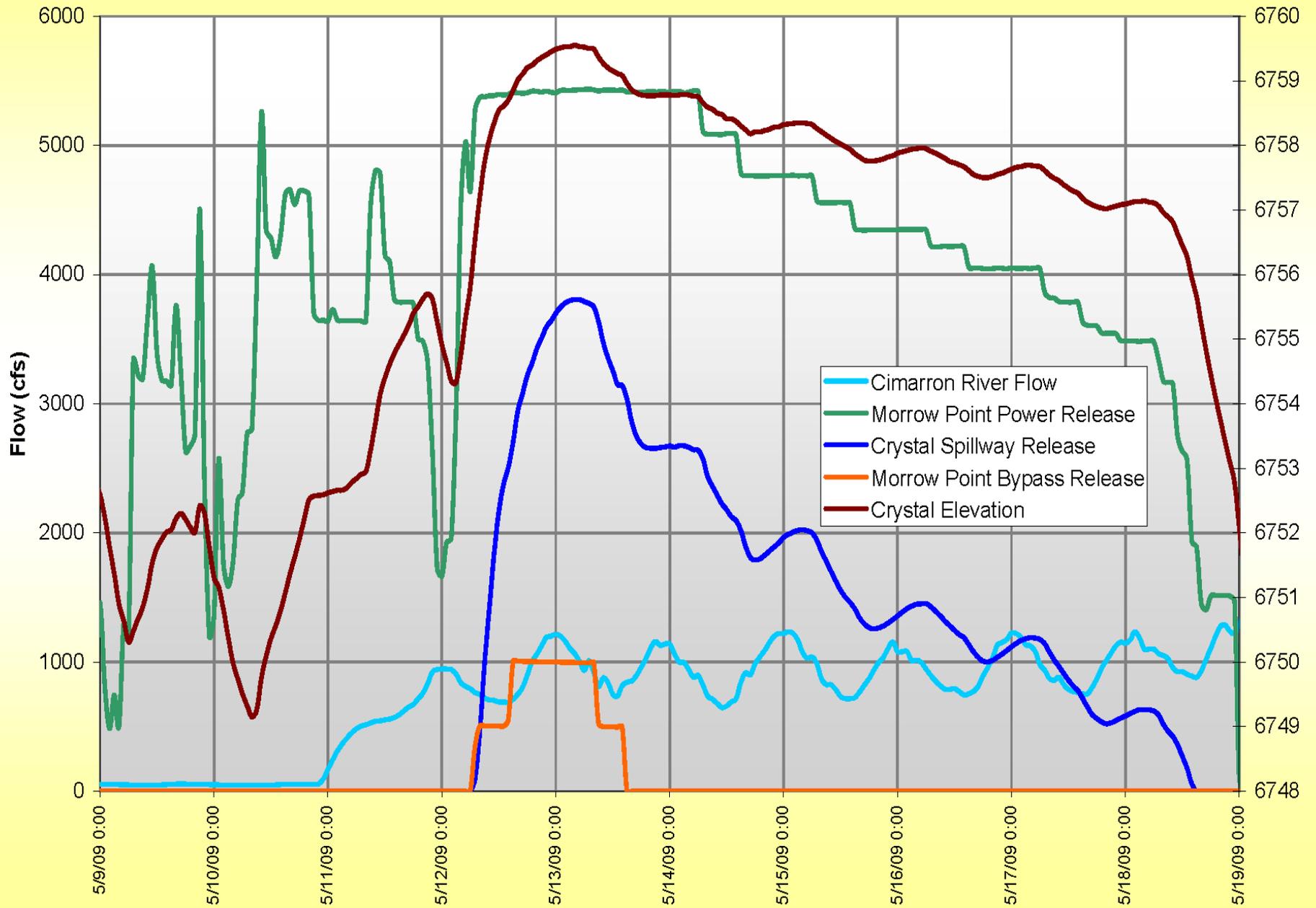
i) Power ramp-up are tentative so that the powerplant is at max rate when the by-pass starts. These actual rates will be determined by WAPA.

ii) After the by-pass releases have ended at Morrow Point and Blue Mesa, the total power release rate will be set by WAPA according to power needs and balancing the system storage at each reservoir. Power rate reductions (in red) are intended for guidance to WAPA in order to reduce enough flow from Morrow Point to stop the spill at Crystal.

*3 Morrow Point Spill and Bypass Releases: Reclamation will try to minimize these flows according to the flows from the Cimarron River in achieving the peak flow in the Gunnison River below the tunnel.

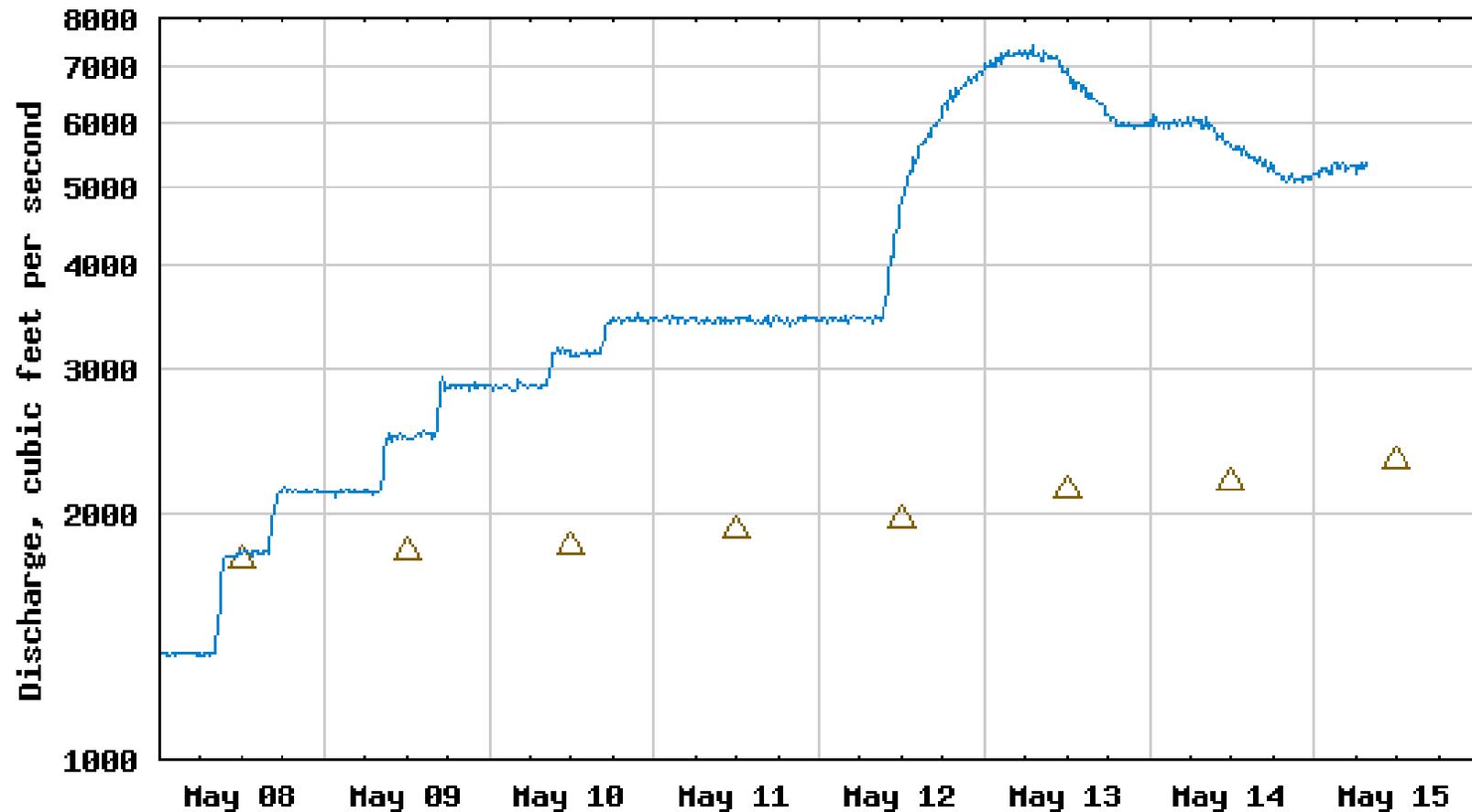
RECLAMATION

Black Canyon Spring Peak



Gunnison River Below Tunnel

USGS 09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO



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

△ Median daily statistic (98 years) — Discharge

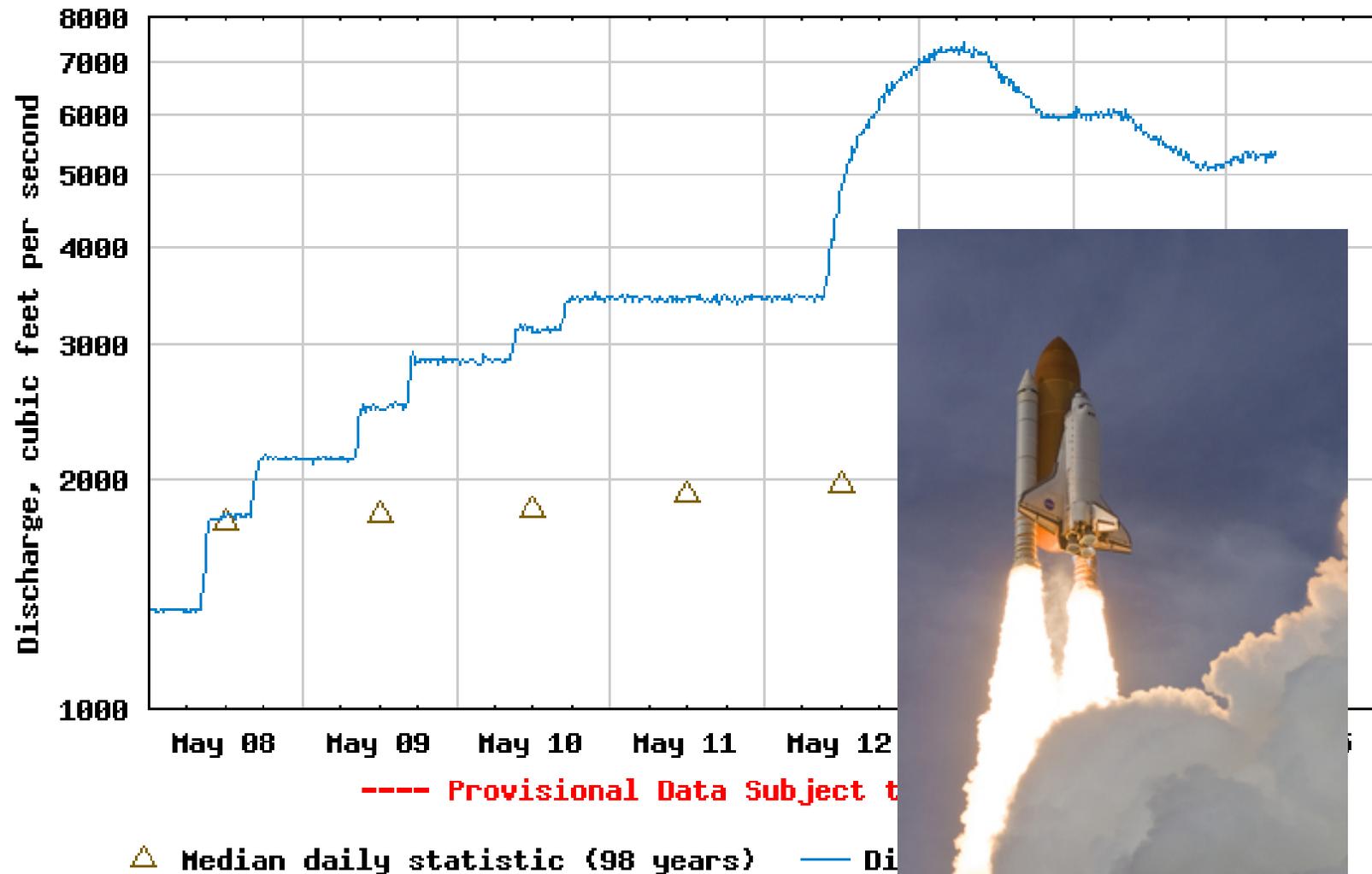
[Create presentation-quality graph](#)

Parameter 00

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Gunnison River Below Tunnel

USGS 09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO



Create presentation-quality graphs

Parameter 00

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Gunnison Pleasure Park



Pat Oglesby Photo

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DENVER AND THE WEST

Black Canyon awash in water-rights victory

Huge flow into Black Canyon is part of federal water-rights strategy in West
By Mark Jaffe
The Denver Post

POSTED: 05/15/2009 01:00:00 AM MDT



2 of 3

war culminates in an unfettered Gunnison | gunnison, park, black - Top Stories - Colorado...

Water war culminates in an unfettered Gunnison

Comments 1 | Recommend 3
May 14, 2009 10:21 AM

R. SCOTT RAPPOLD
THE GAZETTE

BLACK CANYON OF THE GUNNISON NATIONAL PARK - The largest waterfall in Colorado was here Wednesday, a gushing torrent that plunged 227 feet, surpassing Niagara Falls, swelling the Gunnison River to levels unprecedented in the age of dams and diversions.

The misty, rainbowed spectacle, with spray felt two football fields away, was seen by few in the gated recesses of Crystal Dam in the Black Canyon of the Gunnison. It took 30 years to make. It will be gone in a few days.

But the significance is that water is being allowed to recreation or drinking water. The once-great river withered. Flow peaked at 7,000 cubic feet per second.

Such a thing would have so goes the saying, whis over.

"It is overwhelming," said for Black Canyon of the C done is what the whole b and the whole state agre

It took one of the longest

The Gunnison was once foot-deep chasm that thv William Jackson Palmer's

A century ago, its spring mountains.

Construction of three dar changed that.

Stories - Colorado...



KIRK SPEER, THE GAZETTE
Water gushed over Crystal Dam, just upriver of Black Canyon of the Gunnison National Park on Wednesday. More water than usual was released to simulate pre-dam conditions on the river.

war culminates in an unfettered Gunnison | gunnison, park, black - Top Stories - Colorado...

The peak spring flow in 2007 was just 1,710 cubic feet per second.

The effect on the river, fish and the canyon have long been a concern of the National Park Service and environmental groups. Vegetation, debris and rocks that would normally wash away in the spring had accumulated, choking the channel and water quality for fish.

Federal courts in 1978 recognized a water right for the park, but the issue of how much water it should get was never resolved among the competing interests of drinking water, hydroelectric power and conservation.

Environmental groups sued in 2003 over a Bush administration deal that set flows from the reservoirs into the canyon, saying it was not enough. A settlement in that suit reached earlier this year guarantees a minimum flow from Crystal Dam, immediately upriver from the park, and a spring release to mimic heavy runoff.

Water ran over the dam last year, but only because the state's massive snowpack swelled the reservoirs to capacity.

"This is kind of rebalancing the Gunnison River system, from the past 40 years when it's been focused on hydropower generation, storage of water at all costs and really a minimum of addressing the needs of the canyon itself and the ecology down there," said Bart Miller, attorney and water program director for Western Resource Advocates, one of the groups that sued.

The spring release began a week ago. Water began flowing over the top of the dam Tuesday, peaking Wednesday. It will be drawn down gradually by Saturday.

For tourists on the canyon's rim Wednesday, there was a gentle roar not normally discernable.

Below, in the canyon, a steady stream of interested visitors tried to get close enough to feel the spray, only to be denied by a locked gate. The public is expected to be allowed closer to the dam starting today.

Frank Kugel, manager of the Upper Gunnison River Water Conservancy District, who was in the canyon Wednesday, said he was thrilled to see the water flowing over the dam.

"It's a good thing WAPA (the Western Area Power Administration) isn't here. They'd be in tears over this," Kugel said.

Black Canyon Spring Peaks

2009

6,730 cfs

2008

7,480 cfs

RECLAMATION

Good Press? Bad Press? Any Press!

Below, in the canyon, a steady stream of interested visitors tried to get close enough to feel the spray, only to be denied by a locked gate. The public is expected to be allowed closer to the dam starting today.

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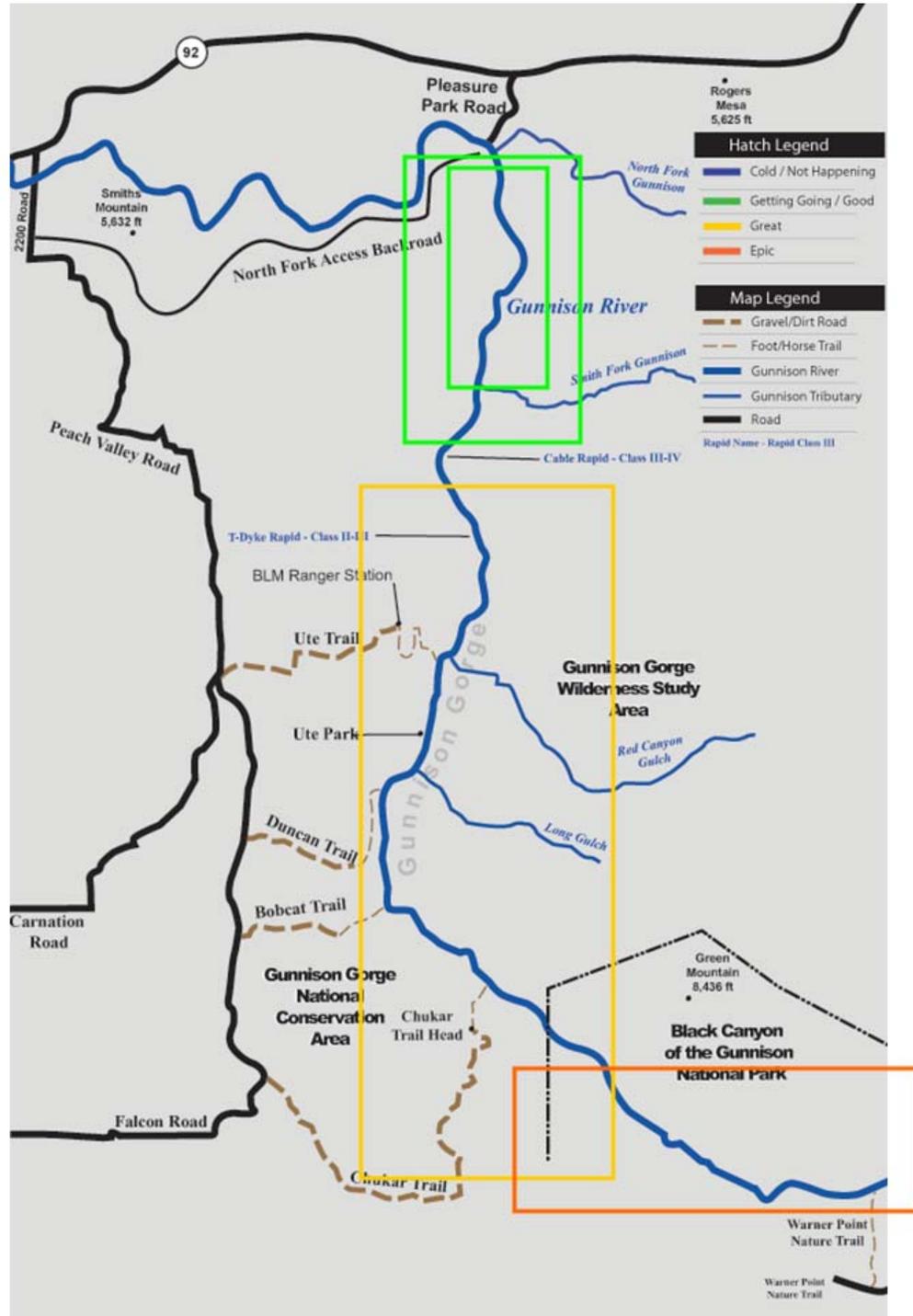
"We lose some of a resource," said Leslie James, executive director of the Colorado River Energy Distributors Association. "I hope the park is getting what it needs because this is having a lot of impacts."

On Thursday, the first water from that accord flowed out of the Aspinall Unit.

"We are ramping up gradually, in part for safety reasons. We want to give people in the canyon ample time to get out before the high water," said Dan Crabtree, the bureau's water-resources group chief.

"We were able to reach a consensus that everyone could support," said Clayton Palmer, an environment specialist with the Western Area Power Authority, which markets electricity from the Aspinall Unit.

RECLAMATION



Gunnison River At Delta

USGS 09144250 GUNNISON RIVER AT DELTA, CO.



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

△ Median daily statistic (32 years) — Discharge

[Create presentation-quality graph](#)

Parameter 000

RECLAMATION

New Gunnison River Stakeholder

Animal Law Coalition

Advocating for animals to live and live free of cruelty and neglect

Pending Bills Pending Cases Laws Forums Downloads Resources © Animal Law Coalition 20

Home » [Feral Cats](#) » [Article](#) » [Save Delta, Colorado Feral Cats](#)

Save Delta, Colorado Feral Cats

Posted Apr 29, 2008 by lauraallen

[Feral Cats](#)



The City of Delta, Colorado has given **Melissa Heinzen** until **May 4, 2008** to stop feeding a feral cat colony in Confluence Park. Animal Control Officer Tammy Holden has given Ms. Heinzen until then to relocate the cats. The city intends to trap and kill the remaining cats.

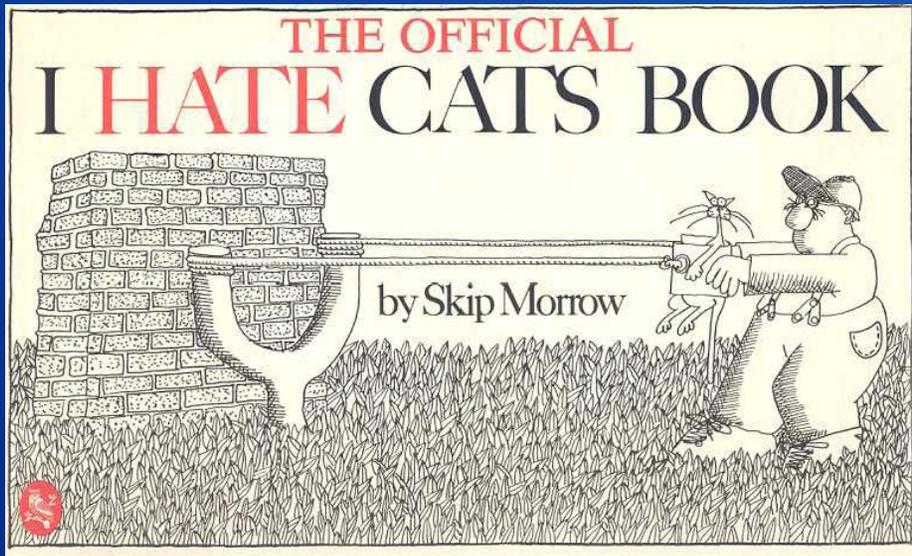
Ms. Heinzen has been managing this colony for more than 6 years. With help from other residents, she has fed the cats and also trapped and had the cats spayed/neutered and then returned to the colony. A retired veterinarian provides the spay/neuter services. One year the veterinarian spayed/neutered 300 cats.

Ms. Heinzen describes that before she began trap, neuter and return, "*cats were everywhere*". Now the colony has only about 10 feral cats. 2 more cats are domesticated and which she is placing in homes. "*Trap neuter return is working,*" says Ms. Heinzen.

A nearby tourist attraction, a fort, relies on 3-4 of the cats to keep down the mouse population.



RECLAMATION



RECLAMATION



Resuscitating a drowning cat
Pick it up by its back legs and whirl it round and round so that centrifugal force drives out the water blocking the airways.

Cat Channel.com
 the website for cat lovers



Search: **GO**

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Cat Drowning

Reward Offered in Cat Drowning Case
 Delta, CO., animal cruelty investigators seek information about the person responsible for drowning a cat in a river this month.

Animal cruelty investigators in Delta, CO, are seeking information leading to the arrest and conviction of the person responsible for drowning a cat in the Gunnison River last month. The Humane Society of the United States is offering a reward of up to \$2,500,000 for such information.



The Humane Society of the United States is offering a reward of up to \$2,500,000 for information about a person responsible for drowning a cat.

On May 13, a parks and recreation worker found the body of a male Norwegian Forest cat, approximately 7 years old, floating in the backwaters of the Gunnison River. The robust condition of the cat leads animal cruelty investigators to believe the cat was formerly a registered member of the Ft Uncompahgre branch of the Delta Cat Colony.

If you have any information about this incident, contact Delta Animal Cruelty Investigator Melissa Heinzen at (970) 248-0638.

Posted: May 15, 2009, 5 a.m. EST

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Scratch, Rattle, and Roll Cat Scratcher Toy Style: Frog
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Cat of the I



Hi my name's Babbett. Thank you every day. [Visit the Photo Gallery](#) cast your vote

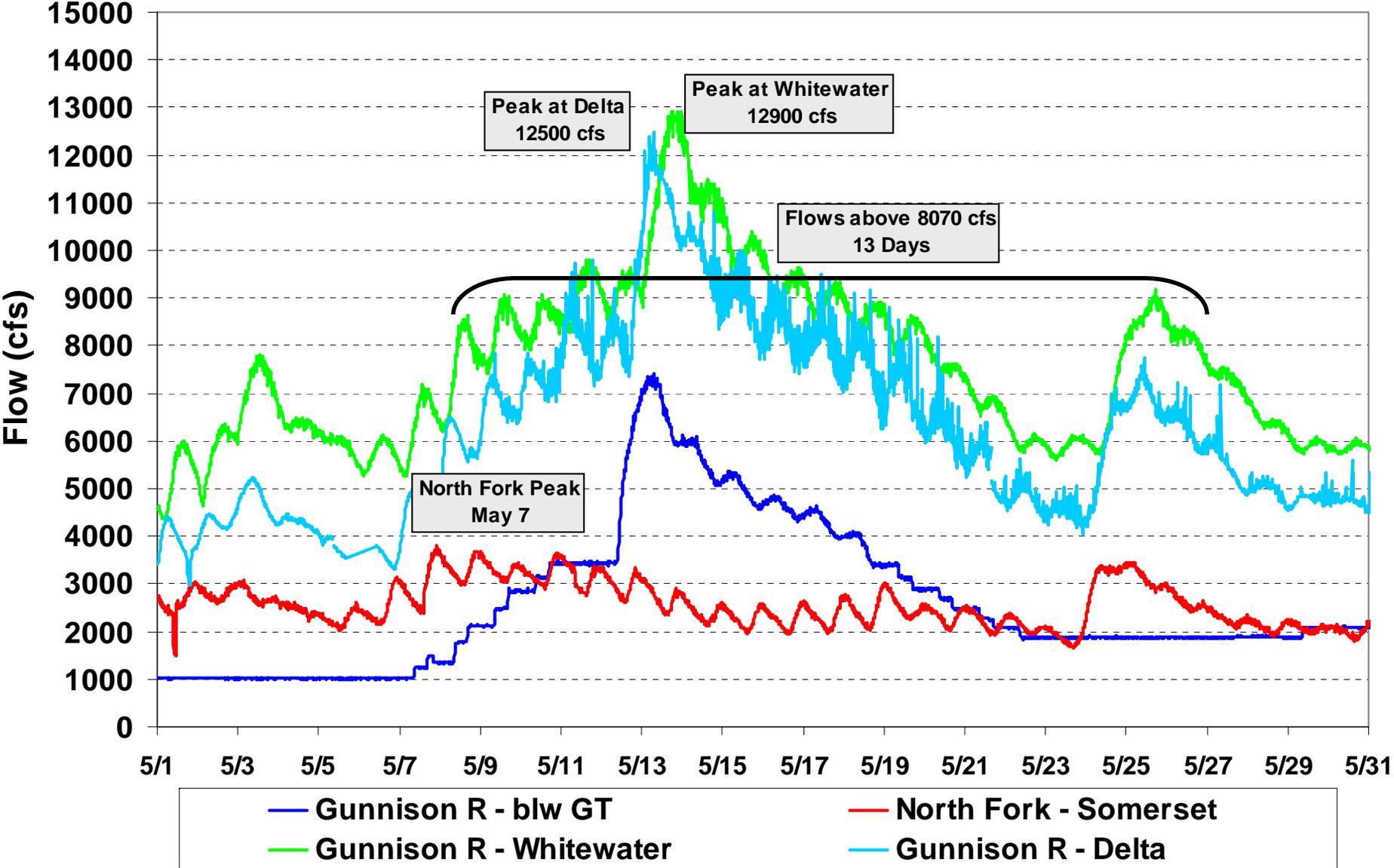
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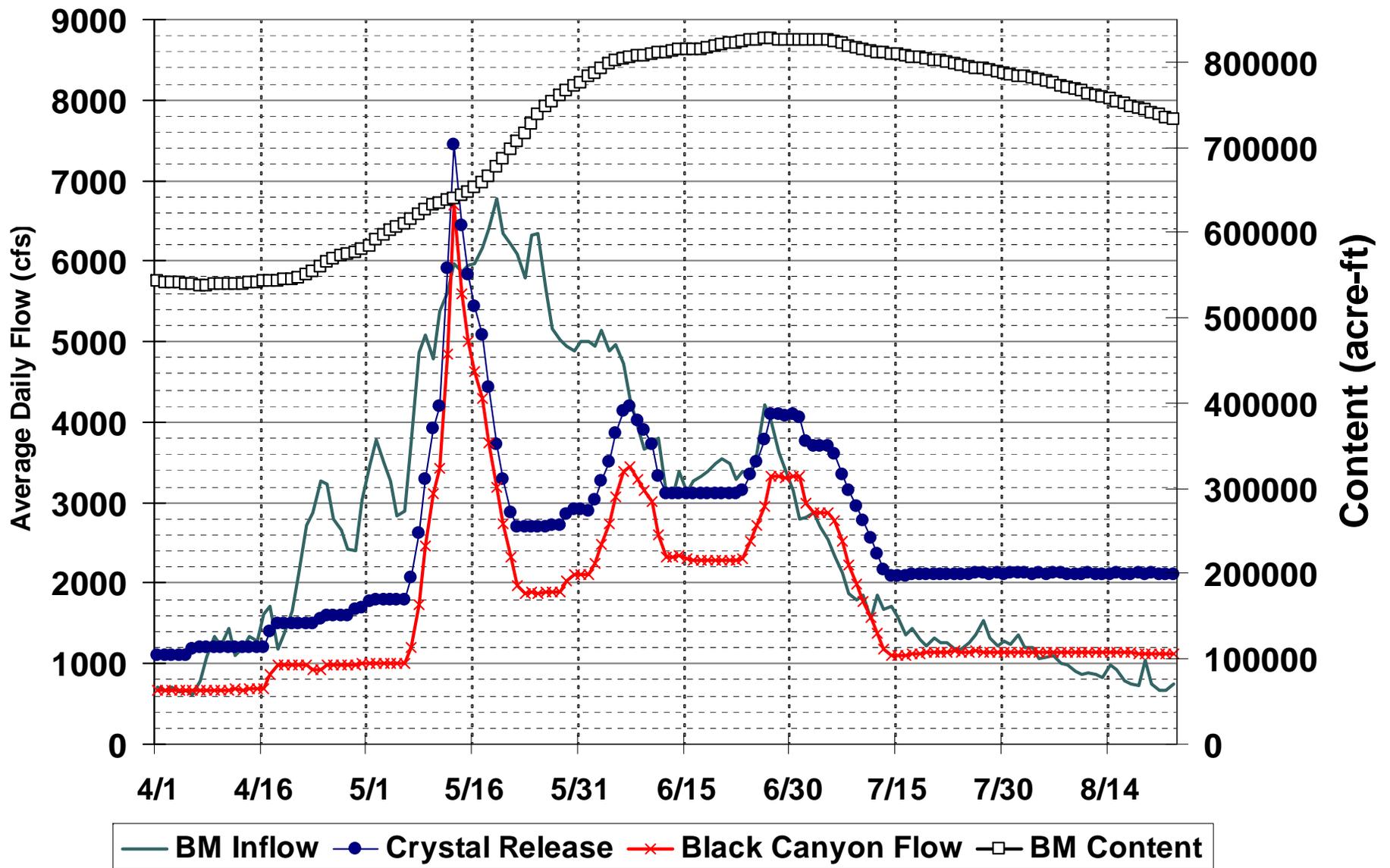
CURRENT CONDITIONS

RECLAMATION

Gunnison River @ Whitewater

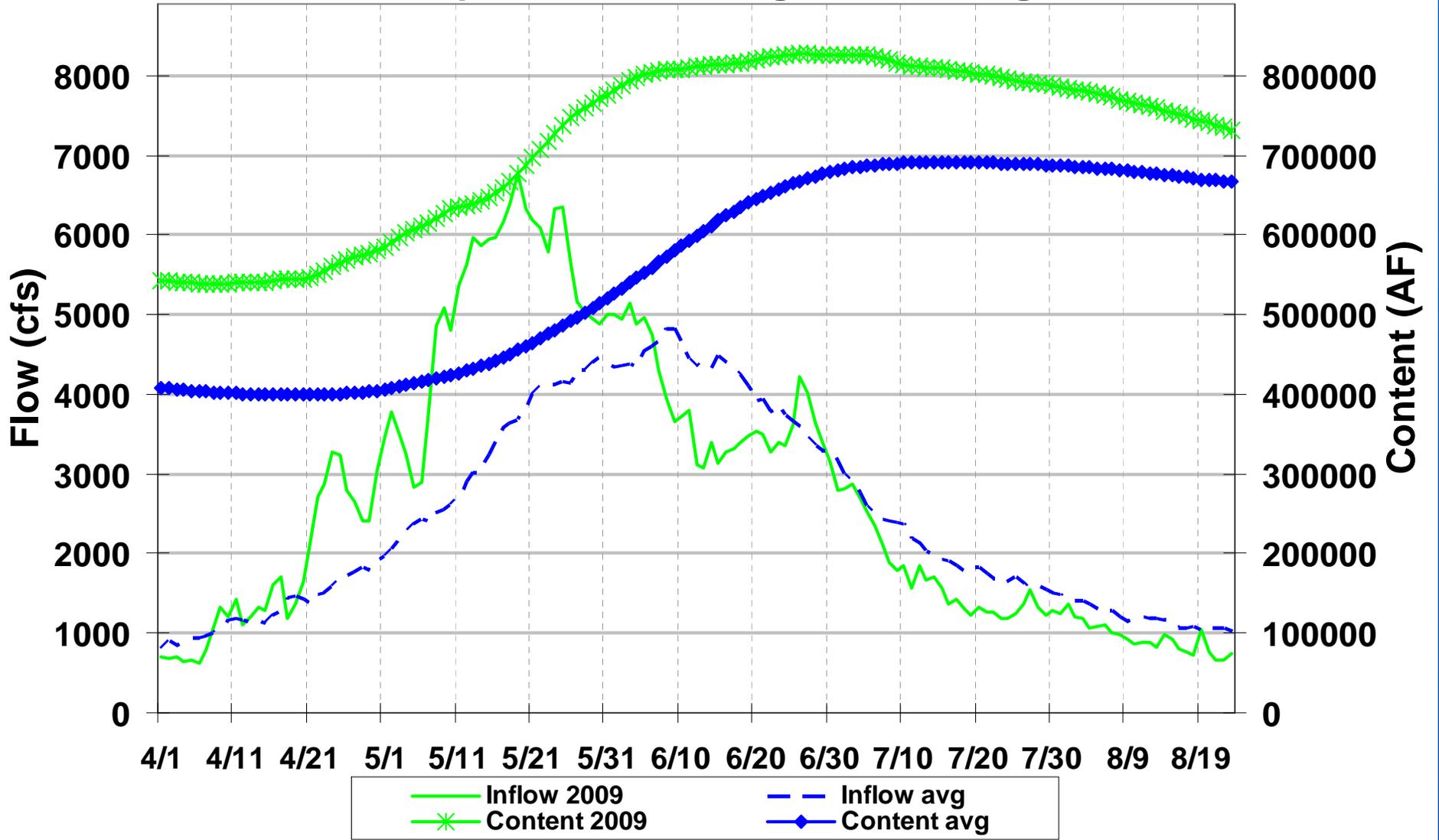


April - August 2009



RECLAMATION

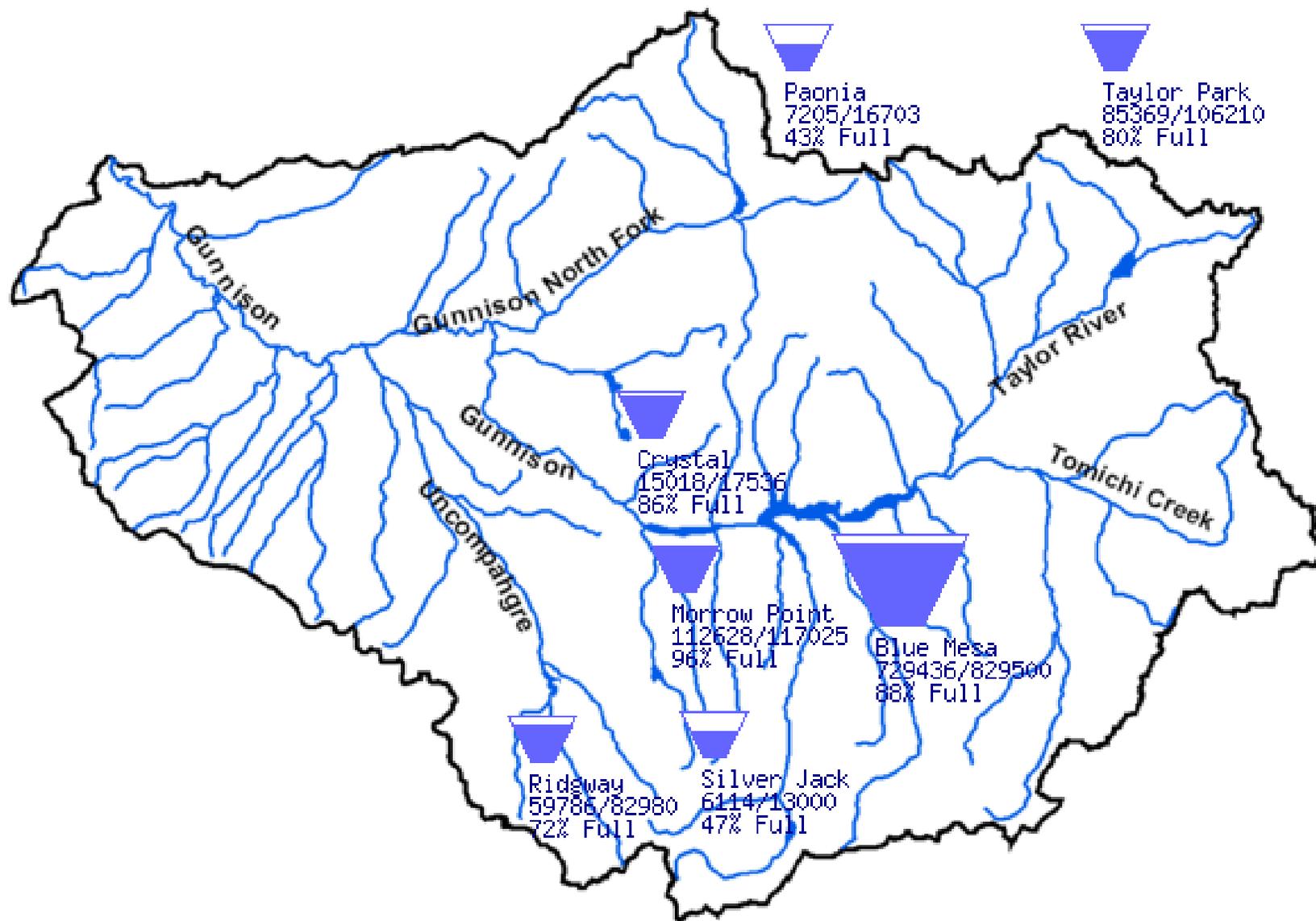
April - August 2009 Blue Mesa Comparison with Long Term Average



RECLAMATION

Data Current as of:
08/24/2009

Gunnison River Basin, CO



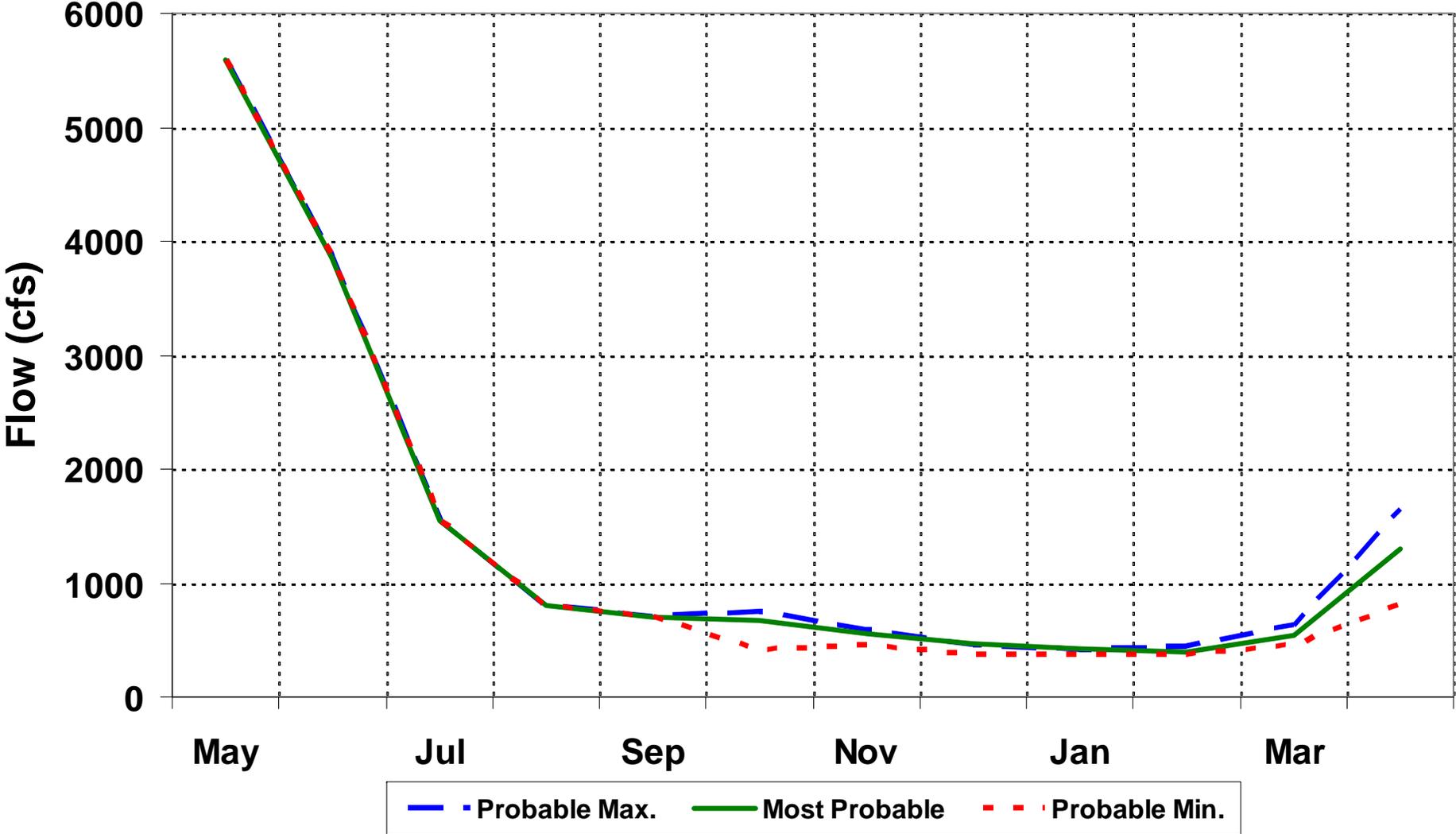
RECLAMATION

24 MONTH STUDY

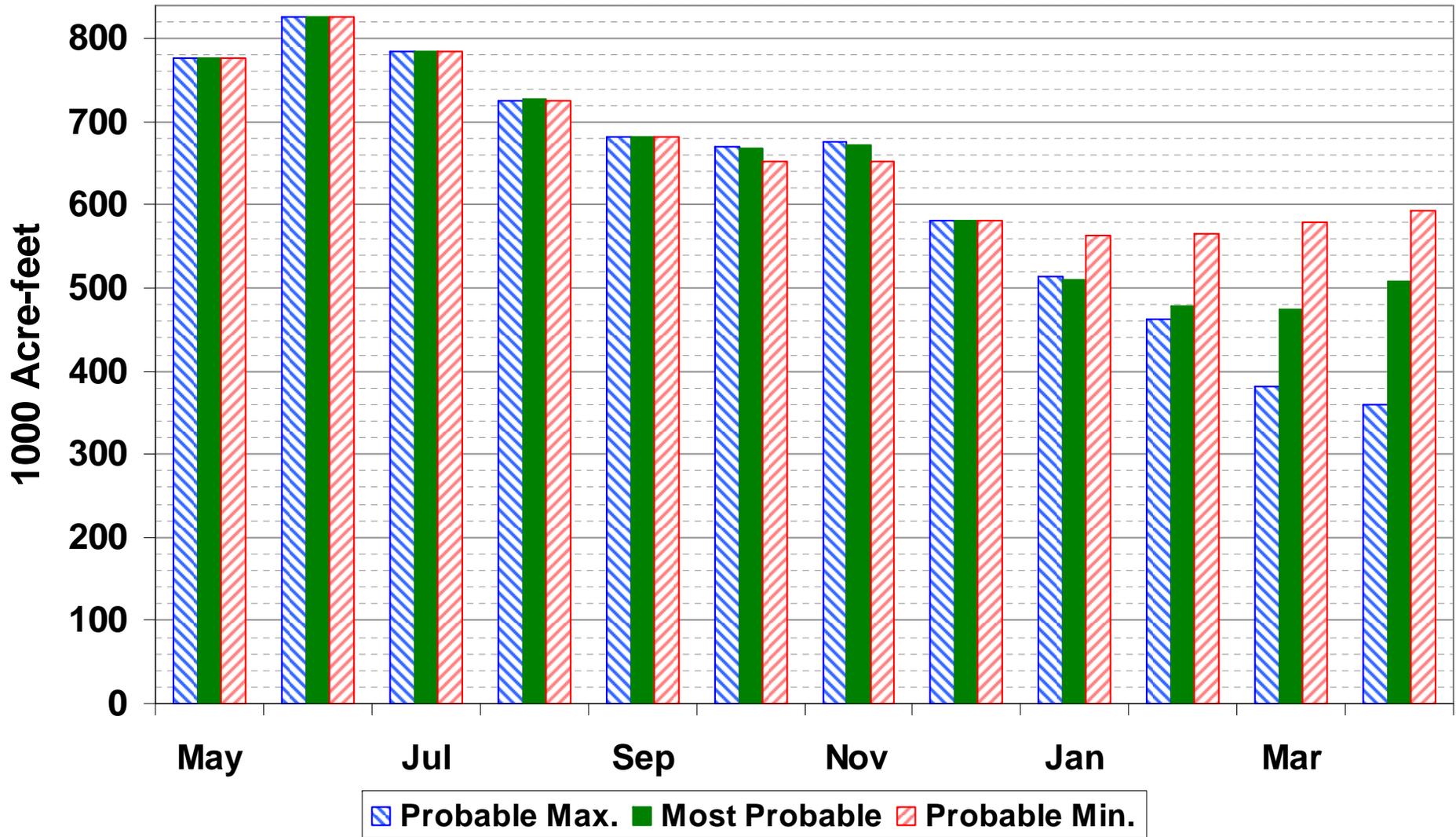
RECLAMATION

Unregulated Blue Mesa Inflow

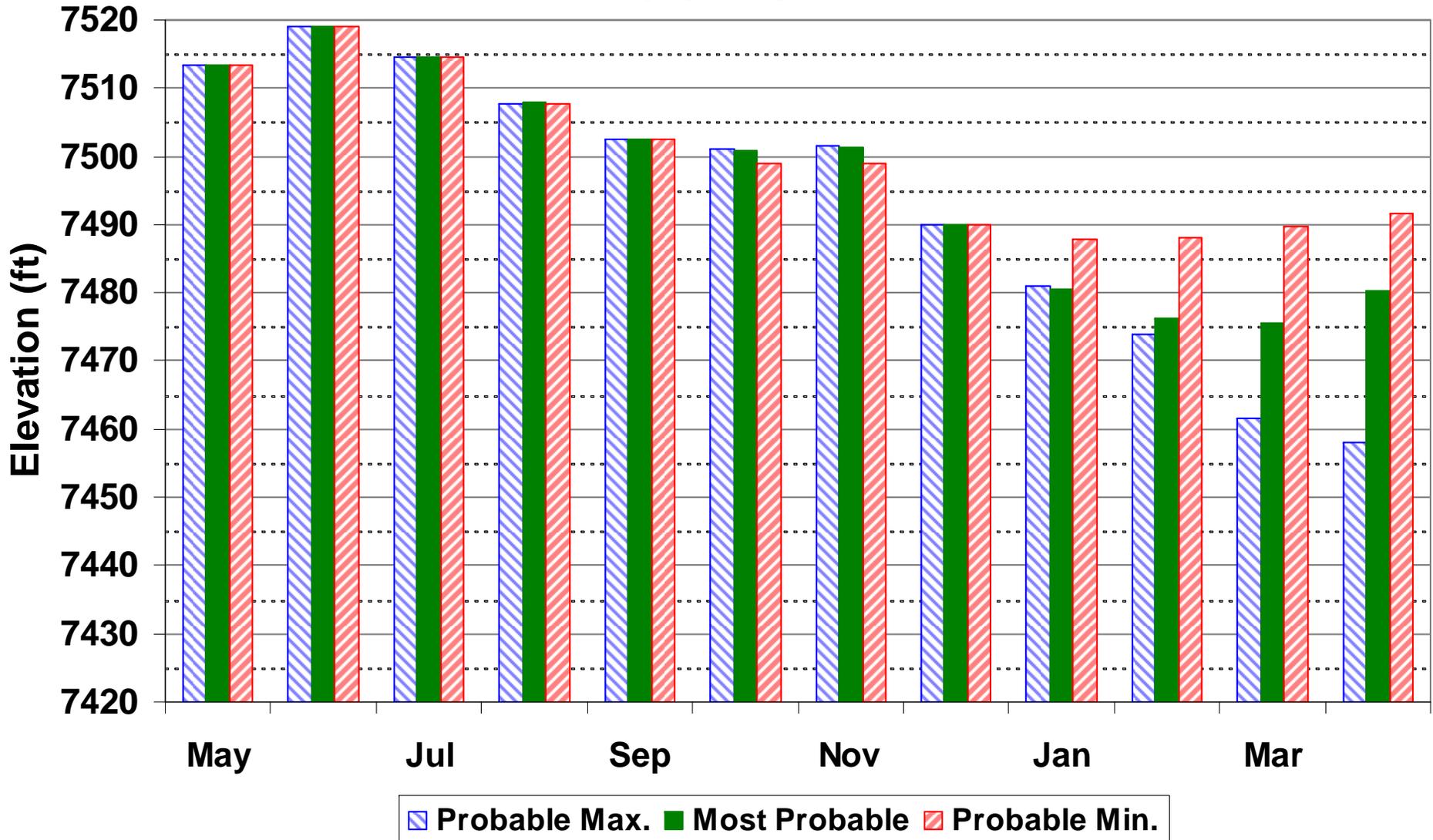
Monthly Average



Blue Mesa Content End of Month

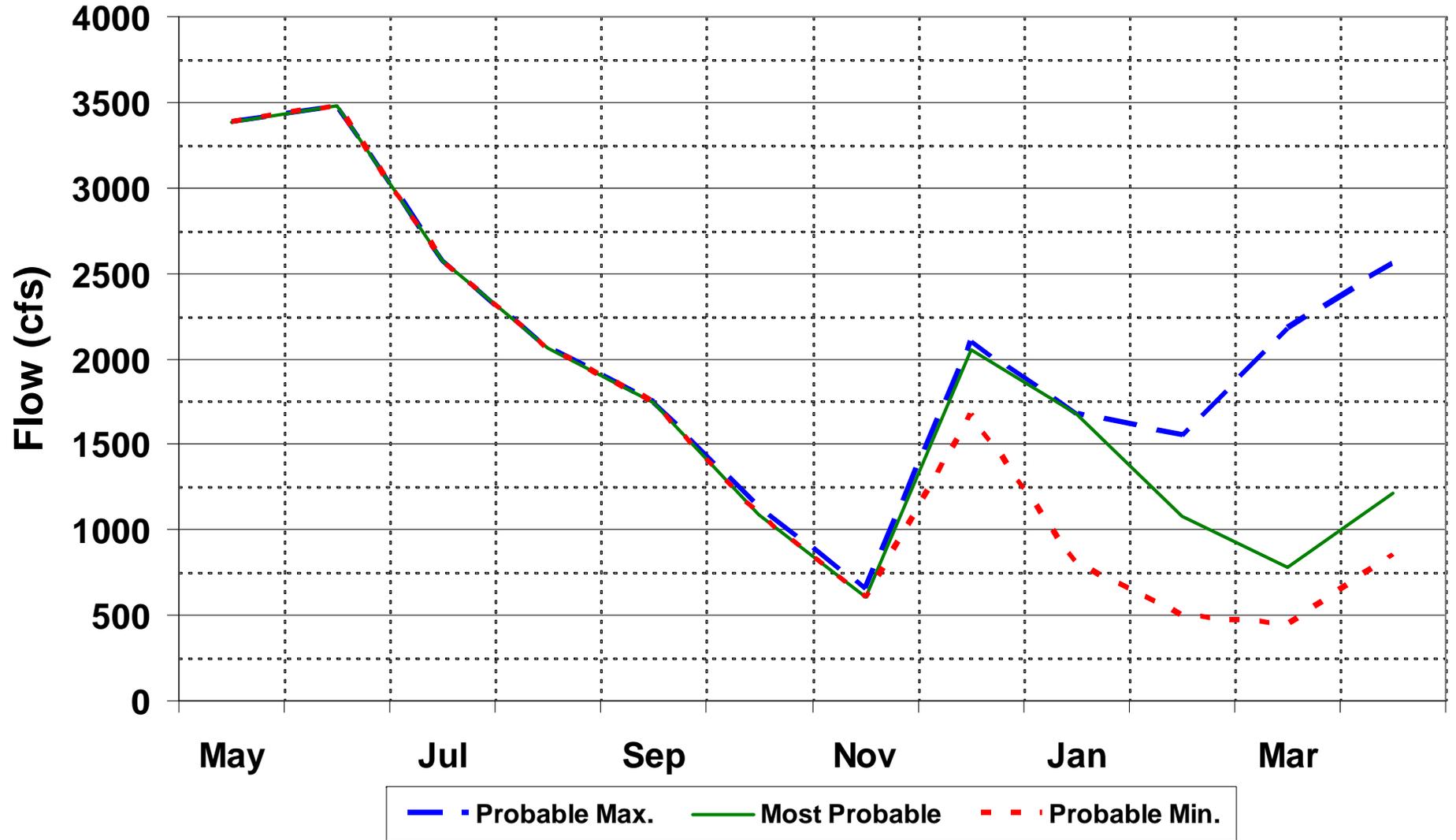


Blue Mesa Elevation End of Month



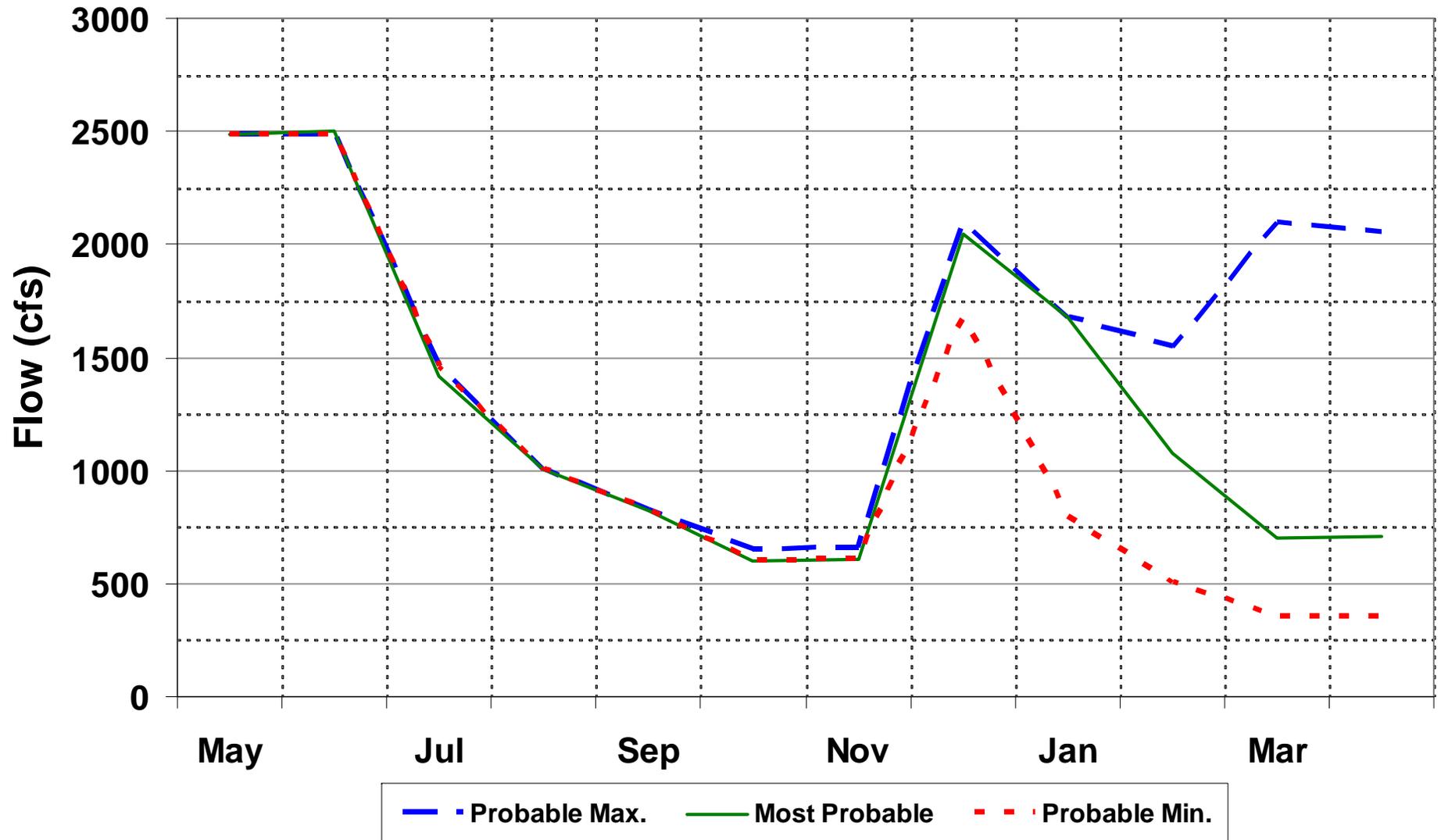
RECLAMATION

Crystal Release Monthly Average



RECLAMATION

Black Canyon Monthly Average



RECLAMATION



RECLAMATION