

**September 1, 2008**  
**WATER SUPPLY AND UTILIZATION REPORT**  
**BIGHORN RIVER BASIN**  
**WYOMING AREA OFFICE**

**This report concerns the operation of Reclamation facilities in the Shoshone and Wind/Bighorn River Basins.**

**Reclamation defines a water year as the time period of October 1 through September 30. Water year is abbreviated in this report as W. Yr.**

**Other organizations furnished information for the Water Supply and Utilization Report. Their cooperation is greatly appreciated.**

**This report is available on the Internet and can be accessed by following these steps:**

- 1. Log on to the Great Plains Home Page at <http://www.usbr.gov/gp>**
- 2. Select Water Operations.**
- 3. Select Water Management Information.**
- 4. Select Water Supply Report.**
- 5. Under Bighorn Basin, select Current Month or reports from the previous 12 months**

**BIGHORN RIVER BASIN INFLOW**

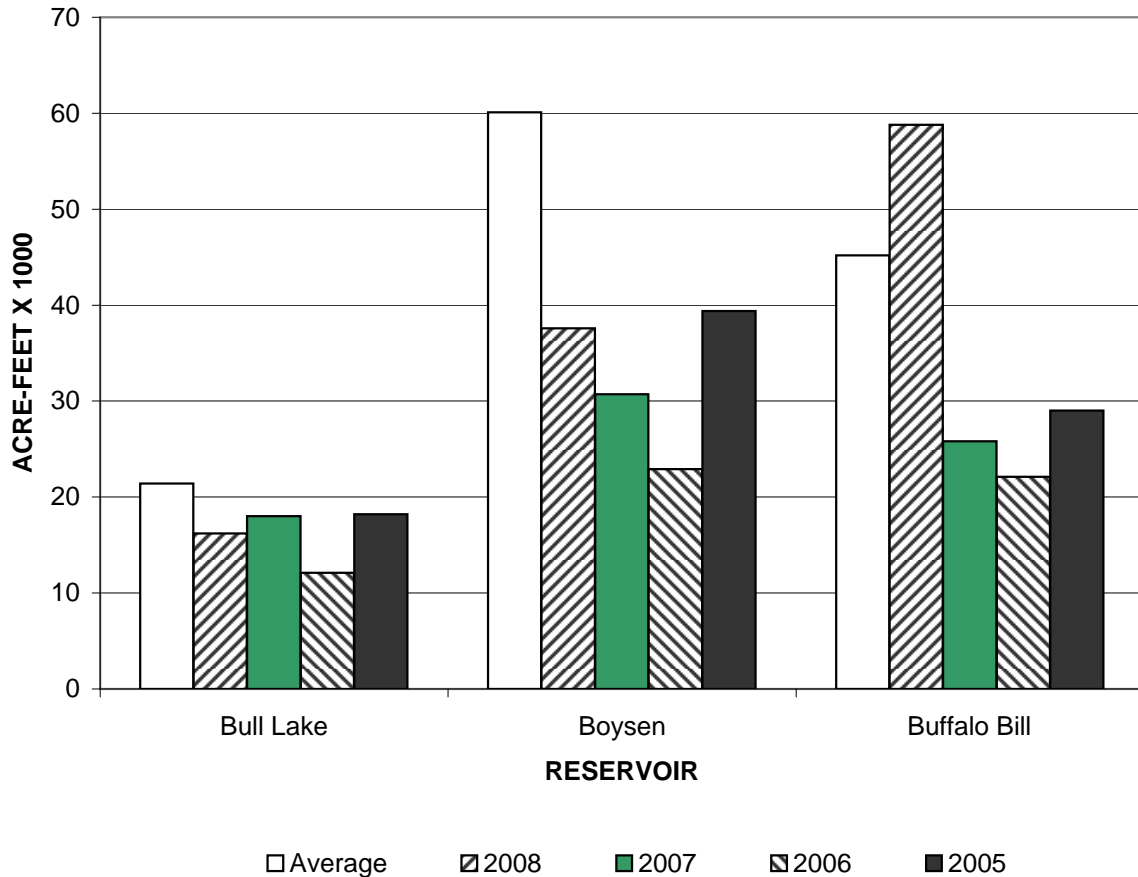
August inflow was above average at Buffalo Bill Reservoir.

(1000 acre-feet)

Reservoir	August Inflow			August Historical Inflow			Accumulated Inflow (October-August)		
	W. Yr. 2008	30 Yr. Avg. <sup>1</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2008	30 Yr. Avg.	% of Avg.
Bull Lake	16.2	21.4	76	18.0	12.1	18.2	170.4	177.5	96
Boysen	37.6	60.1	63	30.7	22.9	39.4	763.8	886.8	86
Buffalo Bill	58.8	45.2	130	25.8	22.1	29.0	1131.7	797.4	142

<sup>1</sup> Average is based on the 1978-2007 period.

**BIGHORN RIVER BASIN  
RESERVOIR INFLOW  
August**



### BIGHORN RIVER BASIN OUTFLOW

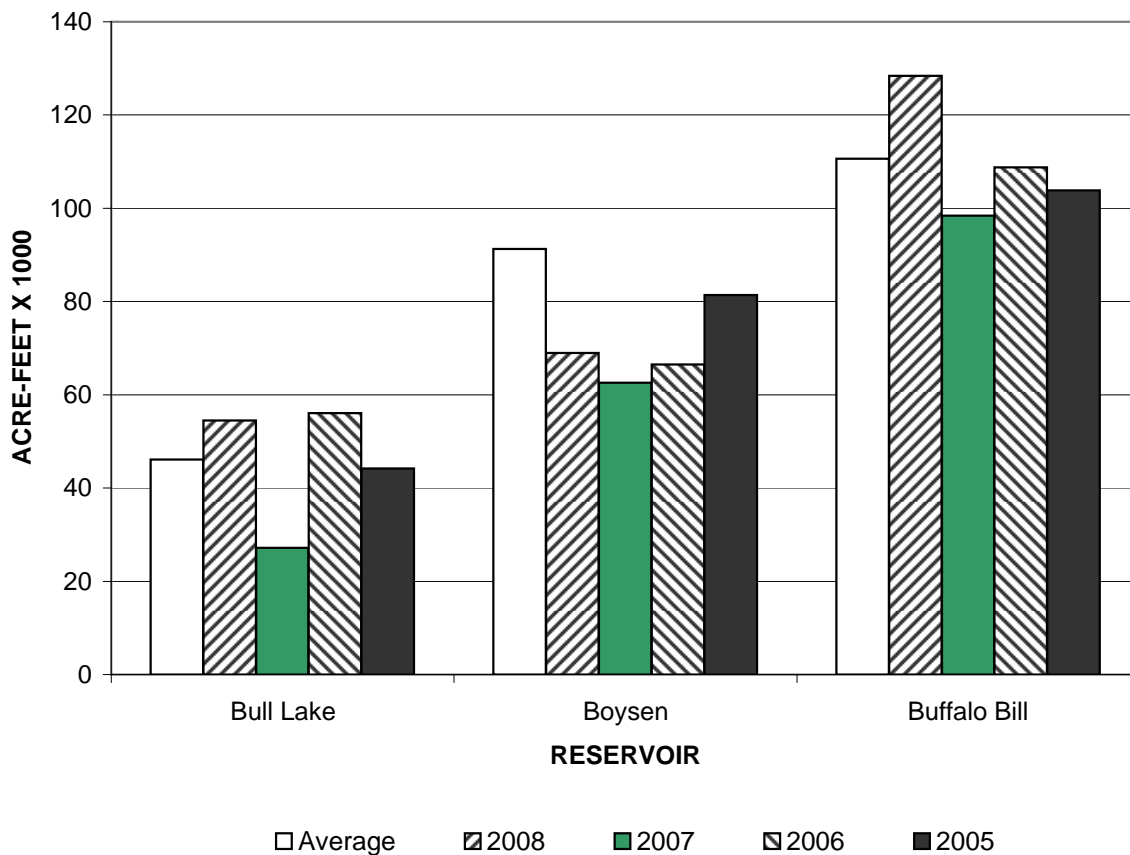
The release from Bull Lake and Buffalo Bill Reservoirs was above average during August.

(1000 acre-feet)

Reservoir	August Outflow			August Historical Outflow			Accumulated Outflow (October-August)		
	W. Yr. 2008	30 Yr. Avg. <sup>1</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2008	30 Yr. Avg.	% of Avg.
Bull Lake	54.5	46.1	118	27.2	56.1	44.2	108.2	151.9	71
Boysen	69.0	91.3	76	62.6	66.5	81.4	522.1	868.7	60
Buffalo Bill	128.4	110.6	116	98.4	108.8	103.8	989.8	736.6	134

<sup>1</sup> Average is based on the 1978-2007 period.

### BIGHORN RIVER BASIN RESERVOIR OUTFLOW August



### BIGHORN RIVER BASIN STORAGE

Storage at the end of August was above average at Bull Lake, Boysen, and Buffalo Bill Reservoirs.

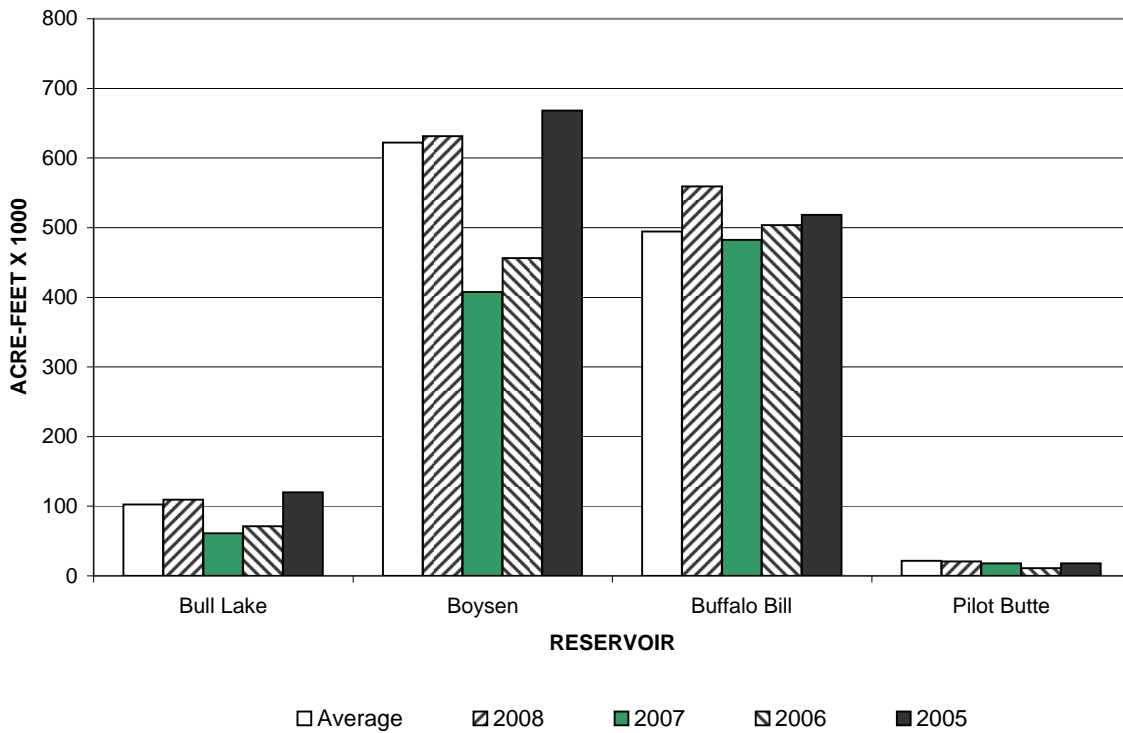
(1000 acre-feet)

Reservoir	Total Storage End of August			End of August Historical Storage			Total Conservation Storage Capacity	Percent of Capacity
	W. Yr. 2008	30 Yr. Avg. <sup>1</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005		
Bull Lake	109.5	102.6	107	61.2	71.3	120.0	152.5	72
Boysen	631.2	622.0	101	407.5	456.5	668.2	741.6	85
Buffalo Bill	559.2	494.5 <sup>2</sup>	113	482.5	503.4	518.1	646.6	86
Pilot Butte	20.9	21.8	96	17.9	11.2	17.7	33.7	62

<sup>1</sup> Average is based on the 1978-2007 period.

<sup>2</sup> This does not reflect a long term average because in 1992 the capacity of the reservoir was increased to approximately 646,565 acre-feet as a result of raising the dam. The average used here reflects data from 1993 through 2007

### BIGHORN RIVER BASIN RESERVOIR STORAGE End of August



## BIGHORN RIVER BASIN GENERATION

Generation was below average at Boysen, Pilot Butte, and Spirit Mountain Powerplants.

(Energy in giga-watt hours)

Powerplant	August Gross Generation			August Historical Generation			Accumulated Gross Gen. (October-August)		
	W. Yr. 2008	Avg.	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2008	Avg.	% of Avg.
Boysen <sup>1</sup>	5.7	7.1	80	4.6	5.1	7.3	37.2	61.7	60
Pilot Butte <sup>2</sup>	0.6	0.9	67	1.0	1.1	1.2	1.5	2.7	56
Heart Mtn. <sup>3</sup>	2.8	2.7	104	2.4	3.0	1.0	13.3	11.3	118
Buffalo Bill <sup>3</sup>	12.9	9.7	133	8.0	8.3	12.2	58.2	59.7	97
Shoshone <sup>3</sup>	2.1	2.1	100	2.1	2.1	2.1	18.6	18.7	99
Spirit Mtn. <sup>4</sup>	2.9	3.1	94	3.2	3.1	3.3	11.4	12.1	94

<sup>1</sup> Average is based on the 1978-2007 period.

<sup>2</sup> Average is based on the 1990-2007 period.

<sup>3</sup> Average is based on the 1993-2007 period.

<sup>4</sup> Average is based on the 1995-2007 period.

## BIGHORN RIVER BASIN GROSS GENERATION August

