

**February 1, 2008**  
**WATER SUPPLY AND UTILIZATION REPORT**  
**NORTH PLATTE RIVER BASIN**  
**WYOMING AREA OFFICE**

**This report concerns the operation of Reclamation facilities in the North Platte River Basin.**

**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. On left side of page Select [Water Operations](#).
3. Under Water Operations Select [Water Management Information](#).
4. Under Water Management Select [Water Supply Report](#).
5. Under North Platte River Basin, select [Current Month](#) or reports from the [previous 12 months](#).

## NORTH PLATTE RIVER BASIN INFLOW

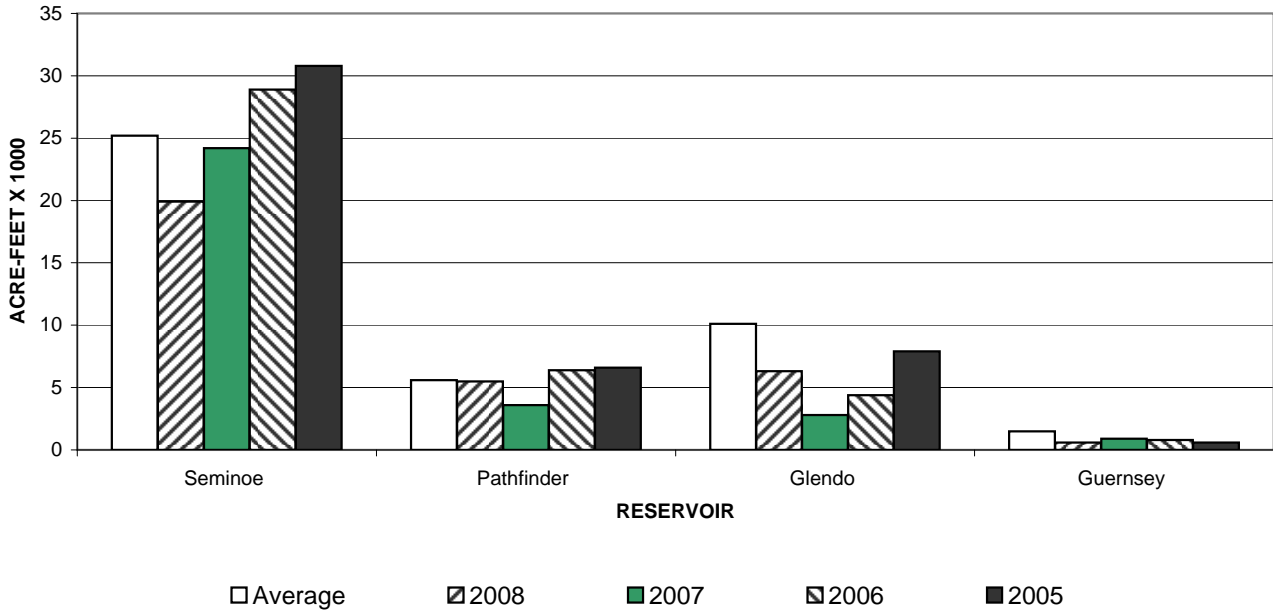
The January inflows were below average for all reservoirs in the North Platte Basin.

(1000 acre-feet)

Reservoir	January Inflow			January Historical Inflow			Accumulated Inflow (October - January)		
	W. Yr. 2008	30 Yr. Avg. <sup>5</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2008	30 Yr. Avg. <sup>5</sup>	% of Avg.
Seminole	19.9	25.2	79	24.2	28.9	30.8	102.4	109.5	94
Pathfinder <sup>1,2</sup>	5.5	5.6	98	3.6	6.4	6.6	17.8	20.3	88
Glendo <sup>3</sup>	6.3	10.1	62	2.8	4.4	7.9	13.7	42.0	33
Guernsey <sup>4</sup>	0.6	1.5	40	0.9	0.8	0.6	3.1	7.3	42

- 1 It is assumed that there is no gain between Seminole and Kortes Dams.
- 2 River gain between Kortes and Pathfinder Dams.
- 3 River gain between Pathfinder and Glendo Dams.
- 4 River gain between Glendo and Guernsey Dams.
- 5 30 year average. (1978-2007)

### NORTH PLATTE RIVER BASIN RESERVOIR INFLOW January



## NORTH PLATTE RIVER BASIN OUTFLOW

The January outflows for the North Platte Reservoirs were below average except for Glendo Reservoir.

(1000 acre-feet)

Reservoir	January Outflow			January Historical Outflow			Accumulated Outflow (October - January)		
	W. Yr. 2008	30 Yr. Avg. <sup>2</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2008	30 Yr. Avg. <sup>2</sup>	% of Avg.
Seminoe	32.5	64.3	51	32.4	32.1	31.8	129.8	225.9	57
Kortes	32.5	64.3	51	32.4	32.1	31.7	129.8	225.9	57
Pathfinder	30.8	41.7	74	30.8	30.6	30.7	108.8	156.4	70
Alcova	30.7	41.0	75	30.7	30.8	30.7	130.7	179.1	73
Gray Reef	30.8	40.9	75	30.8	30.8	30.7	130.9	178.9	73
Glendo <sup>1</sup>	1.8	1.1	164	1.3	1.7	2.0	7.2	9.1	79
Guernsey	0.3	0.5	60	0.3	0.4	0.5	0.8	13.4	6

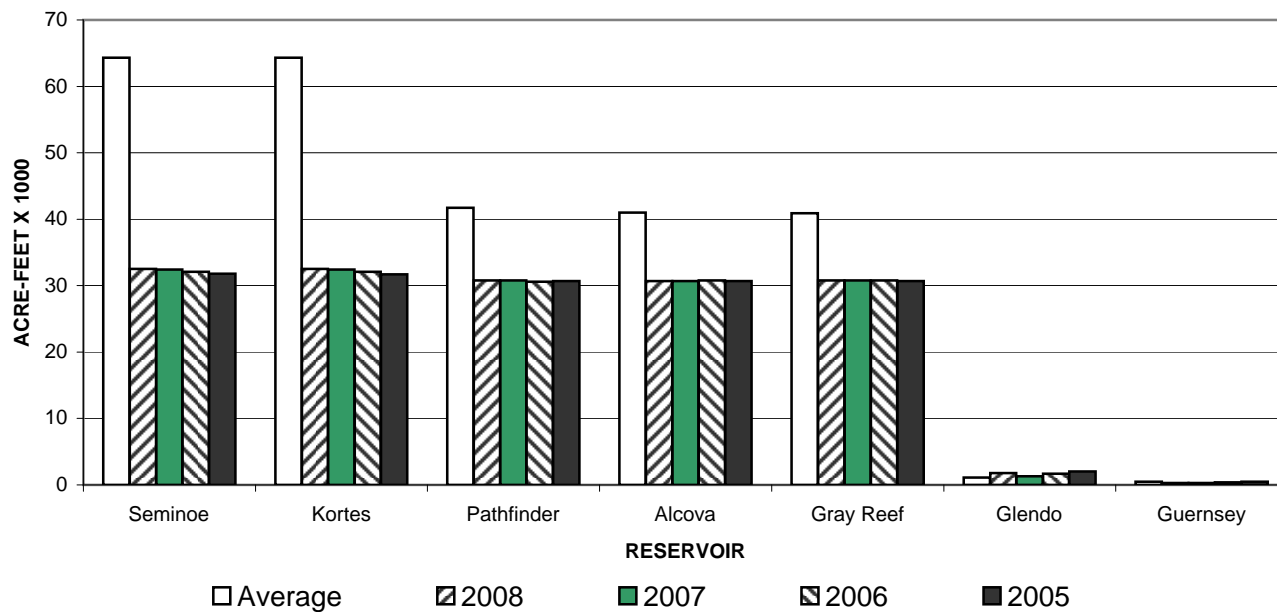
1 In 1993 an outlet was constructed at Glendo Dam which is used to provide a flow of approximately 25 cubic feet per second.

2 30 year average (1978-2007).

## NORTH PLATTE RIVER BASIN

### RESERVOIR OUTFLOW

January



### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

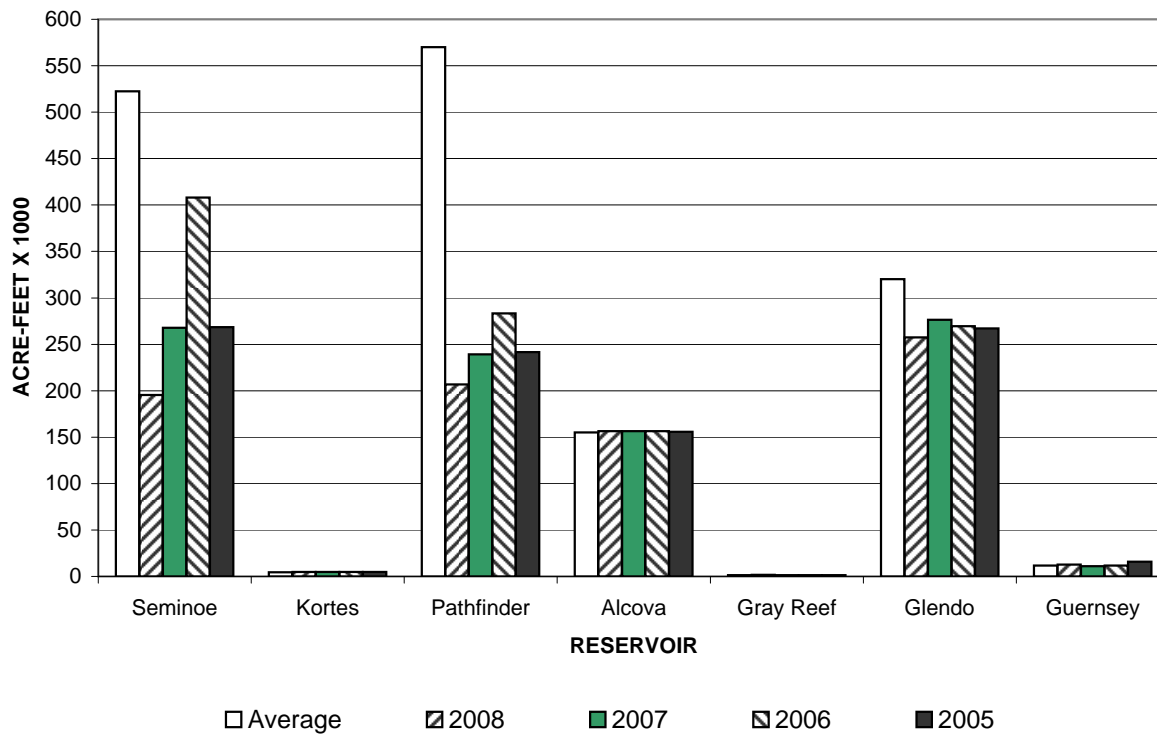
The January storage for the major reservoirs; Seminole and Pathfinder were below average.

(1000 acre-feet)

Reservoir	Total Storage End of January			End of January 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		
Seminole	195.4	522.4	37	267.7	408.1	268.4	1017.3	19
Kortes	4.7	4.6	102	4.7	4.7	4.7	4.7	100
Pathfinder	206.8	570.1	36	239.1	283.4	241.6	1016.5	20
Alcova	156.4	155.1	101	156.3	156.3	155.9	184.4	85
Gray Reef	1.6	1.4	114	1.5	1.5	1.4	1.8	89
Glendo	257.6	320.1	80	276.5	269.6	267.1	517.5	50
Guernsey	12.8	11.6	110	10.9	11.6	15.9	45.6	28
<b>Total</b>	<b>835.3</b>	<b>1585.3</b>	<b>53</b>	<b>956.7</b>	<b>1135.2</b>	<b>955.0</b>	<b>2787.8</b>	<b>30</b>

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

### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE End of January



**NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP**

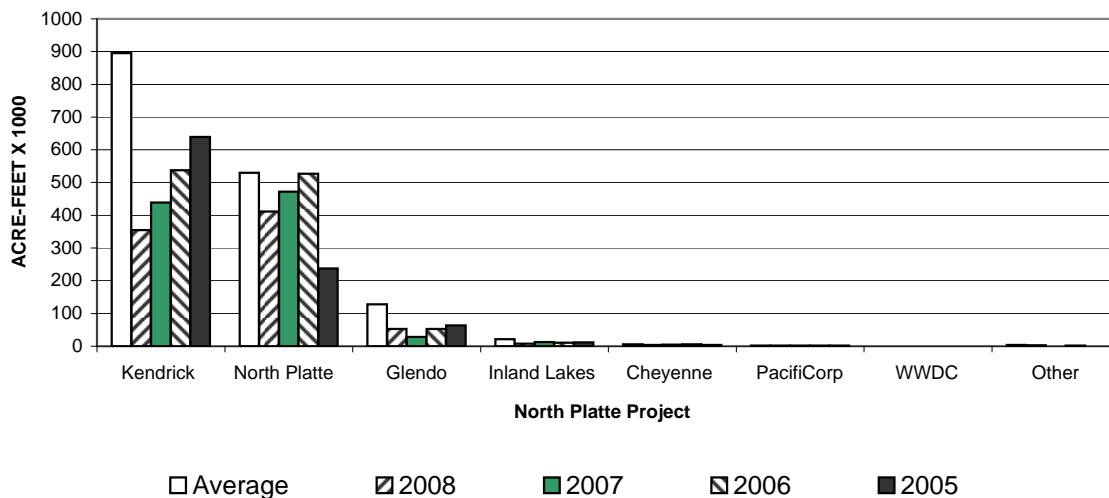
Kendrick ownership was the lowest for the end of January in the last 30 years.  
 Glendo ownership at the end of January was the second lowest in the last 30 years.

(1000 acre-feet)

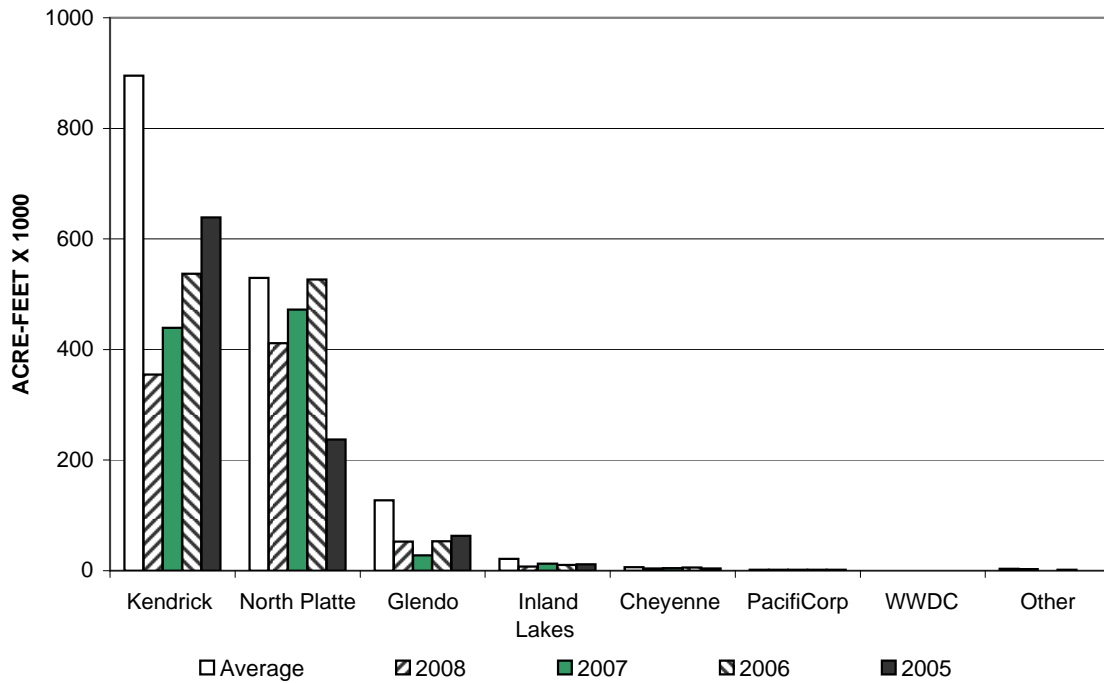
Ownership	Ownership of water End of January			End of January Historical Ownership			Total Storage Capacity	Percent of Capacity
	W. Yr. 2008	30 Yr. Avg. <sup>5</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005		
Kendrick	354.9	895.4	40	439.1	537.3	639.0	1201.7	30
North Platte <sup>1</sup>	411.2	529.4	78	472.1	526.7	237.3	1062.1	39
Glendo	52.4	127.6	41	28.0	53.0	63.1	183.2	29
Inland Lakes <sup>2</sup>	7.7	21.7	35	12.6	10.7	11.8	46.0	17
Cheyenne <sup>3</sup>	4.0	6.2 <sup>6</sup>	65	4.7	5.8	3.8	10.0	40
PacifiCorp <sup>4</sup>	2.0	1.5	133	2.0	2.0	2.0	2.0	100
WWDC <sup>8</sup>	0.0	N/A	N/A	0.0	0.0	0.0	N/A	N/A
Other <sup>7</sup>	3.1	3.5	89	0.0	1.7	0.0	N/A	N/A

- This includes North Platte Guernsey and North Platte Pathfinder.
- Water stored temporarily in mainstem facilities for later transfer to the Inland Lakes. This table does not reflect that water currently stored in the Inland Lakes.
- The City of Cheyenne has a storage contract to store water in Seminoe Reservoir by exchange of Upper North Platte Basin water through a system of trans-basin diversions.
- Pacific Power has a storage contract to store water in Glendo Reservoir for Dave Johnston Powerplant.
- Average is based on the 1978-2007 period.
- Average is based on the 1982-2007 period.
- Water which is captured in the re-regulation space of Glendo in addition to storage rights, operational water account, and replacement of evaporation losses is labeled as "Re-regulation of Natural Flow" per Wyoming Board of Control Order Docket Number I-2000-3-8 in water Division Number One. In accordance with 2007 Natural Flow and Ownership Procedures, the operational account may contain up to 15,000 acre-feet. On January 31, 2008, the Operational account contained 3,123 Acre-feet and Re-Regulation space contained 0 Acre-feet.
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**Ownership of Water  
End of January**



**NORTH PLATTE RIVER BASIN  
OWNERSHIP OF WATER  
End of January**



**INLAND LAKES RESERVOIR STORAGE**

( acre-feet)

Reservoir	Total Storage End of January	30 Year Average <sup>5</sup>	Percent of Average	Total Storage Capacity
Lake Alice	28	500	6	11,034 <sup>1</sup>
Little Lake Alice	95	83 <sup>6</sup>	114	1,166 <sup>2</sup>
Lake Winters Creek	394	584 <sup>6</sup>	67	1,746 <sup>3</sup>
Lake Minatare	16,760	28,400	59	58,795 <sup>4</sup>

1 At Elevation 4182.0  
2 At Elevation 4139.0  
3 At Elevation 4125.0  
4 At Elevation 4125.0  
5 30 year average. (1978-2007)  
6 17 year average. (1991-2007)

## NORTH PLATTE RIVER BASIN GROSS GENERATION

Power generation was below average for all powerplants in the North Platte Basin.

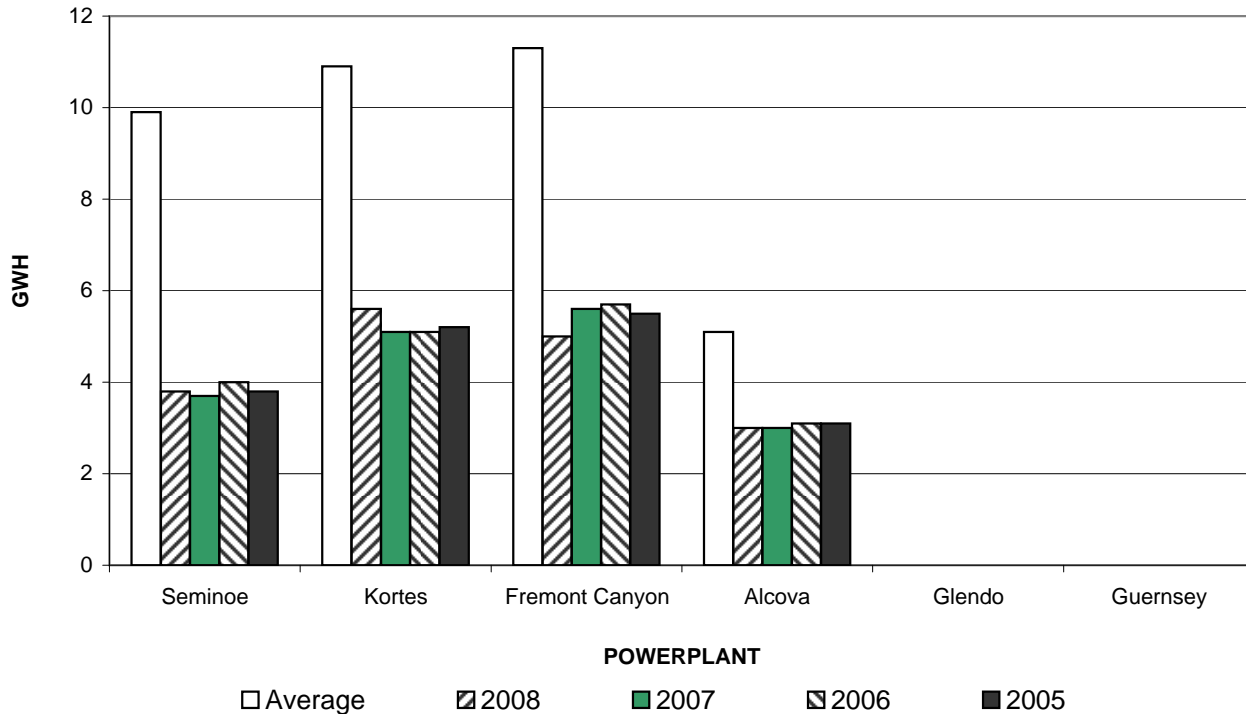
(Energy in giga-watt hours)

Powerplant	January Gross Generation			January Historical Generation			Accumulated Gross Gen. (October - January)		
	W. Yr. 2008	30 Yr. Avg. <sup>2</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2007	30 Yr. Avg. <sup>2</sup>	% of Avg.
Seminoe	3.8	9.9	38	3.7	4.0	3.8	15.0	34.8	43
Kortes	5.6	10.9	51	5.1	5.1	5.2	22.0	37.9	58
Fremont Canyon <sup>1</sup>	5.0	11.3	44	5.6	5.7	5.5	18.4	41.4	44
Alcova	3.0	5.1	59	3.0	3.1	3.1	13.2	21.9	60
Glendo	0.0	0.0	0	0.0	0.0	0.0	0.0	0.3	0
Guernsey	0.0	0.0	0	0.0	0.0	0.0	0.0	0.5	0

1 The powerplant for Pathfinder Dam is Fremont Canyon.

2 Average is based on the 1978-2007 period.

### NORTH PLATTE RIVER BASIN GROSS GENERATION January



**NORTH PLATTE ESTIMATED APRIL-JULY RUNOFF**

The February 1, 2008, water supply forecast indicates near average April - July runoff for the upper Reservoirs, and below average in the lower North Platte Basin. The two tables below show the forecasted value as expected, reasonable maximum, and reasonable minimum, with the other table showing percent chance of exceeding values.

(1000 acre-feet)

Basin	February 1, 2008 Forecast of April-July Runoff			30 Yr. April-July Runoff Avg. <sup>2</sup>	Most Probable % of Avg.	Comparative Actual April - July Runoff			
	Reasonable Maximum <sup>1</sup>	Expected	Reasonable Minimum <sup>1</sup>			W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2004
Seminole Reservoir	950	700	450	704	99	425	546	733	277
Sweetwater River Above Pathfinder Reservoir	60	40	20	62	65	24	32	66	34
Alcova to Glendo	115	75	35	121	62	102	45	39	34

<sup>1</sup> The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

<sup>2</sup> Average is based on the 1978-2007 period.

(1000 acre-feet)

Forecast Points	February 1, 2008 Forecast of April-July Runoff						30 Yr. April-July Runoff Avg. <sup>1</sup>
	Chance of Exceeding						
	95%	75%	50%	% of Avg	25%	5%	
Seminole Reservoir	450	598	700	99	802	950	704
Sweetwater River Above Pathfinder Reservoir	20	32	40	65	48	60	62
Alcova to Glendo Gain	35	59	75	62	91	115	121

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



### NORTH PLATTE SNOWPACK WATER CONTENT

The tables shown below display the Snotel and Snow Courses used in the development of the April-July snowmelt runoff forecasts displayed on the previous page.

SWE in inches <sup>1</sup>

WATERSHED	February 1, 2008 snow-water content			Comparative February 1 snow-water content		
	W. Yr. 2008	30 Yr. Avg. <sup>2</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005
Seminole Reservoir	14.3	13.3	108	11.0	16.7	12.1
Pathfinder Reservoir	7.6	9.6	79	5.9	9.6	11.5
Glendo Reservoir	5.7	7.3	78	6.5	7.8	4.9

#### Seminole Reservoir Watershed

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Avg. <sup>2</sup>
Cameron Pass (10,300) <sup>3</sup>	18.1	16.8
Columbine Lodge(9,300) <sup>3</sup>	16.5	15.3
Park View (9,200) <sup>3</sup>	10.7	5.9
Brooklyn (10,200) <sup>4</sup>	13.2	15.3
Fox Park (9,060) <sup>3</sup>	4.8	4.9
North Barrett (9,400) <sup>3</sup>	14.6	12.8
North French (10,130) <sup>4</sup>	20.4	18.4
Old Battle (9,800) <sup>4</sup>	21.2	20.0
Ryan Park (8,400) <sup>3</sup>	7.2	7.4
Webber Springs (9,250) <sup>4</sup>	16.4	16.1
Watershed Average	14.3	13.3

#### Pathfinder Reservoir Watershed

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Avg. <sup>2</sup>
South Pass (9,040) <sup>4</sup>	8.2	11.4
Grannier Meadows (8,860) <sup>3</sup>	8.8	9.1
Larsen Creek (9,020) <sup>3</sup>	5.9	8.4
Watershed Average	7.6	9.6

#### Glendo Reservoir Watershed

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Avg. <sup>2</sup>
Casper (7,900) <sup>4</sup>	6.7	9.0
Laprele Creek (8,375) <sup>4</sup>	3.9	7.3
Reno Hill (8,500) <sup>4</sup>	7.3	8.4
Windy Peak (7,900) <sup>4</sup>	4.8	4.5
Watershed Average	5.7	7.3

<sup>1</sup> SWE (Snow Water Equivalent) is the amount of water in the snowpack expressed in inches)

<sup>2</sup> Average is based on the 1971-2000 period

<sup>3</sup> Represents a Natural Resources Conservation Service (NRCS) Snow Course Site.

<sup>4</sup> Represents a NRCS Snowpack Telemetry Network (SNOTEL) Site.