# December 1, 2007 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: <a href="http://www.usbr.gov/gp">http://www.usbr.gov/gp</a>
- 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

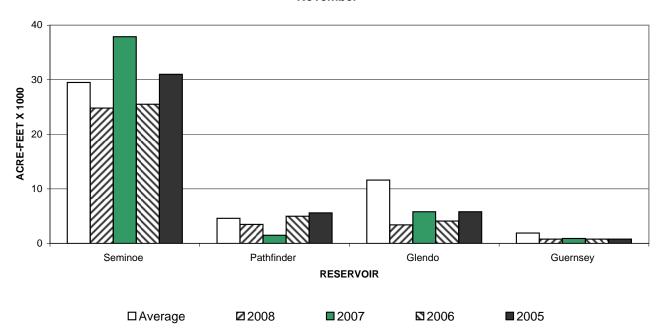
The November inflows were below average for all reservoirs in the North Platte Basin.

(1000 acre-feet)

			November Inflow		His	November		Accumulated Inflow (October - November)			
Reservoir		W. Yr. 2008	30 Yr. Avg. ⁵	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	W. Yr. 2008	30 Yr. Avg. ⁵	% of Avg.	
Seminoe		24.8	29.5	84	37.9	25.5	31.0	55.6	58.2	96	
Pathfinder	1, 2	3.5	4.6	76	1.5	5.0	5.6	8.5	10.5	81	
Glendo	3	3.4	11.6	29	5.8	4.1	5.8	6.1	24.6	25	
Guernsey	4	0.8	1.9	42	0.9	0.8	0.8	2.0	4.2	48	

- 1 It is assumed that there is no gain between Seminoe 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 November



#### NORTH PLATTE RIVER BASIN OUTFLOW

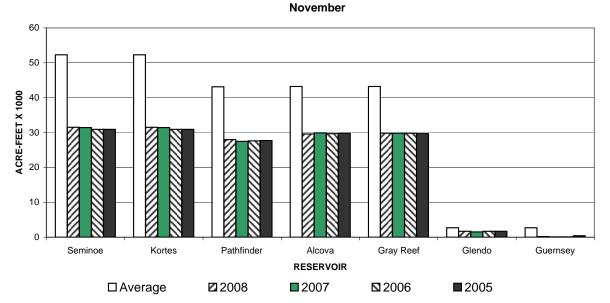
The November outflows for the North Platte Reservoirs were below average.

(1000 acre-feet)

		November Outflow		His	November torical Out		Accumulated Outflow (October - November)			
Reservoir	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	31.5	52.3	60	31.4	30.9	30.9	64.8	100.0	65	
Kortes	31.5	52.3	60	31.4	30.9	30.9	64.8	100.0	65	
Pathfinder	28.0	43.1	65	27.5	27.6	27.7	47.0	73.2	64	
Alcova	29.6	43.2	69	29.9	29.7	29.8	69.2	96.5	72	
Gray Reef	29.8	43.2	69	29.8	29.8	29.7	69.3	96.4	72	
Glendo	1 1.7	2.7	63	1.5	1.7	1.7	3.4	6.8	50	
Guernsey	0.2	2.7	7	0.1	0.1	0.4	0.4	12.1	3	

- 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



#### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

The November storage for the major reservoirs; Seminoe and Pathfinder was below average.

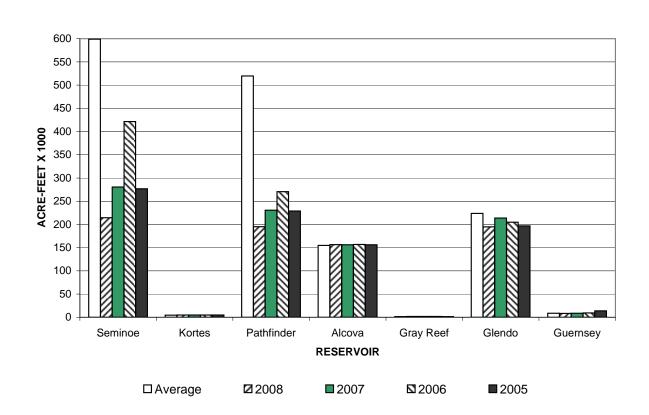
The Pathfinder and Seminoe Reservoir storages were the lowest November storage in the last 30 years.

(1000 acre-feet)

		otal Storag d of Novem			d of Novem		Total Conservation	Percent of
Reservoir	W. Yr. 2008	30 Yr. Avg. <sup>1</sup>	% of Avg.	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005	Storage Capacity	Capacity
Seminoe	214.3	598.9	36	280.7	421.5	276.6	1017.3	21
Kortes	4.7	4.6	102	4.7	4.7	4.7	4.7	100
Pathfinder	195.0	519.7	38	230.7	270.7	228.9	1016.5	19
Alcova	156.4	154.8	101	156.2	156.9	156.0	184.4	85
Gray Reef	1.6	1.4	114	1.6	1.6	1.5	1.8	89
Glendo	194.6	223.8	87	213.8	204.7	196.9	517.5	38
Guernsey	8.4	8.7	97	8.7	9.2	13.7	45.6	18
Total	775.0	1511.9	51	896.4	1069.3	878.3	2787.8	28

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

### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE



#### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP

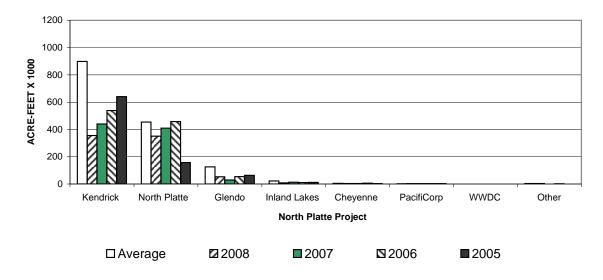
Kendrick ownership was the lowest for the end of November in the last 30 years. Glendo ownership at the end of November was the third lowest in the last 30 years.

(1000 acre-feet)

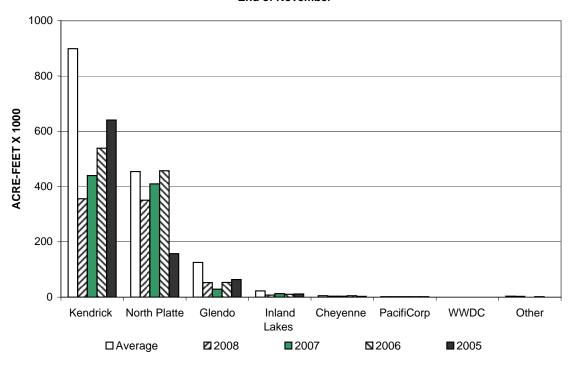
		0	wnership of w	ater	En	d of Novem	Ì	Percent	
		E	nd of Novem	ber	Histo	rical Owne	rship	Total	of
Ownership		W. Yr.	30 Yr.	% of	W. Yr.	W. Yr.	W. Yr.	Storage	Capacity
		2008	Avg. 5	Avg.	2007	2006	2005	Capacity	
Kendrick		355.8	898.5	40	439.9	538.8	640.9	1201.7	30
North Platte	1	350.8	454.0	77	409.5	457.4	157.4	1062.1	33
Glendo		52.5	125.5	42	28.8	53.4	63.5	183.2	29
Inland Lakes	2	7.7	22.8	34	12.6	10.7	11.8	46.0	17
Cheyenne	3	3.2	5.0 <sup>6</sup>	64	3.6	5.3	2.8	10.0	32
PacifiCorp	4	2.0	1.6	125	2.0	2.0	2.0	2.0	100
WWDC	8	0.0	N/A	N/A	0.0	0.0	0.0	N/A	N/A
Other	7	3.1	3.3	94	0.0	1.7	0.0	N/A	N/A

- 1 This includes North Platte Guernsey and North Platte Pathfinder.
- 2 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.
- 3 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.
- 4 Pacific Power has a storage contract to store water in Glendo Reservoir for Dave Johnston Powerplant.
- 5 Average is based on the 1978-2007 period.
- 6 Average is based on the 1982-2007 period.
- 7 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 November 30, 2007, the Operational account contained 3,124 Acre-feet and Re-Regulation space contained 0 Acre-feet.
- 8 Wyoming Water Development Commission contracted a portion of Glendo Reservoir re-regulation space for storage of non-project water in 2007.

#### Ownership of Water End of November



#### NORTH PLATTE RIVER BASIN OWNERSHIP OF WATER End of November



#### **INLAND LAKES RESERVOIR STORAGE**

( acre-feet)

=				( acre-reet)
	Total	30 Year	Percent of	Total
Reservoir	Storage	Average ⁵	Average	Storage
	End of November			Capacity
Lake Alice	114	900	13	11,034 1
Little Lake Alice	192	117	164	1,166 <sup>2</sup>
Lake Winters Creek	529	721	73	1,746 <sup>3</sup>
Lake Minatare	16,997	29,100	58	58,795 ⁴

- 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

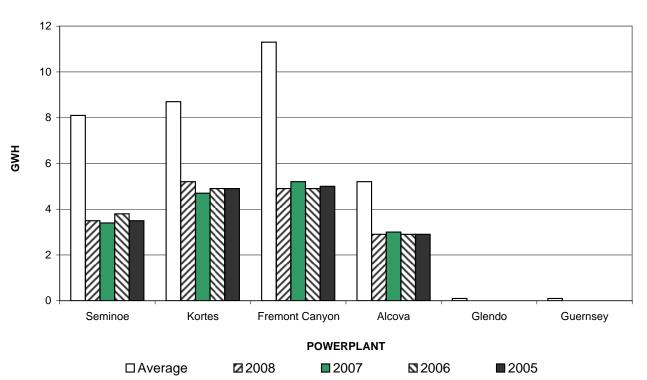
Power generation was below average for all powerplants in the North Platte Basin.

(Energy in giga-watt hours)

	November Gross Generation			Histo	November		Accumulated Gross Gen. (October - November)			
Powerplant	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. ²	% of Avg.	
Seminoe	3.5	8.1	43	3.4	3.8	3.5	7.5	15.3	49	
Kortes	5.2	8.7	60	4.7	4.9	4.9	10.9	16.5	66	
Fremont Canyon <sup>1</sup>	4.9	11.3	43	5.2	4.9	5.0	8.0	18.8	43	
Alcova	2.9	5.2	56	3.0	2.9	2.9	7.2	11.7	62	
Glendo	0.0	0.1	0	0.0	0.0	0.0	0.0	0.3	0	
Guernsey	0.0	0.1	0	0.0	0.0	0.0	0.0	0.5	0	

<sup>1</sup> The powerplant for Pathfinder Dam is Fremont Canyon.

#### NORTH PLATTE RIVER BASIN GROSS GENERATION November



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

#### NORTH PLATTE ESTIMATED APRIL-JULY RUNOFF

(1000 acre-feet)

									(1000	acic-icci)
Basin	II	07 Estimat		. ,	30 Yr. April-July	Most Probable	Comparative Actual April - July Runoff			
	Reasonable			Reasonable	Runoff	% of Avg.	W. Yr.	W. Yr.	W. Yr.	W. Yr.
	Maximum <sup>1</sup>	Expected		Minimum <sup>1</sup>	Avg. <sup>2</sup>		2006	2005	2004	2003
Seminoe Reservoir	495	395	3	345	700	56	546	733	277	530
Sweetwater River										
Above Pathfinder										
Reservoir	30	25	4	22	62	40	32	66	34	17
Alcova to Glendo	110	100	5	98.5	121	83	45	39	34	93

<sup>&</sup>lt;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 1977-2006 period.

<sup>&</sup>lt;sup>3</sup> The actual April-June inflow into Seminoe Reservoir was 273,0<mark>00 AF.</mark>

<sup>&</sup>lt;sup>4</sup> The actual April-June inflow from Sweetwater River was 20,000 AF.

<sup>&</sup>lt;sup>5</sup> The actual April-June gain between Alcova and Glendo Reservoirs was 96,000 AF.