# November 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: <u>http://www.usbr.gov/gp</u>
- 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 October inflows were below average for all reservoirs except Seminoe Reservoir in the North Platte Basin.

		-	(1000 acre-feet									
			October Inflow		His	October storical Infl	ow	Accumulated Inflow (October)				
Reservoir		W. Yr.	30 Yr.	% of	W. Yr.	W. Yr.	W. Yr.	W. Yr.	30 Yr.	% of		
		2008	Avg. ⁵	Avg.	2007	2006	2005	2008	Avg. ⁵	Avg.		
Seminoe		30.8	28.7	107	41.0	23.5	39.6	30.8	28.7	107		
Pathfinder	1, 2	5.0	5.9	85	1.9	4.5	4.0	5.0	5.9	85		
Glendo	3	2.7	13.0	21	4.8	4.7	4.6	2.7	13.0	21		
Guernsey	4	1.2	2.3	52	1.5	1.4	1.2	1.2	2.3	52		

1 It is assumed that there is no gain between Seminoe and Kortes Dams.

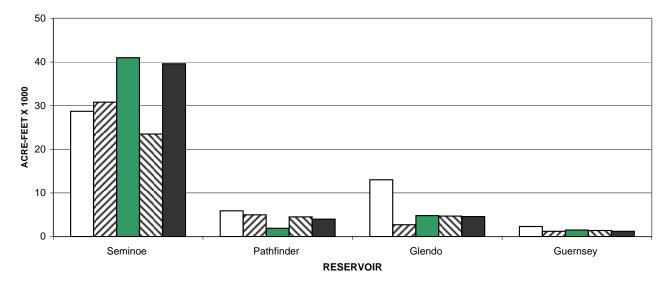
2 River gain between Kortes and Pathfinder Dams.

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 October



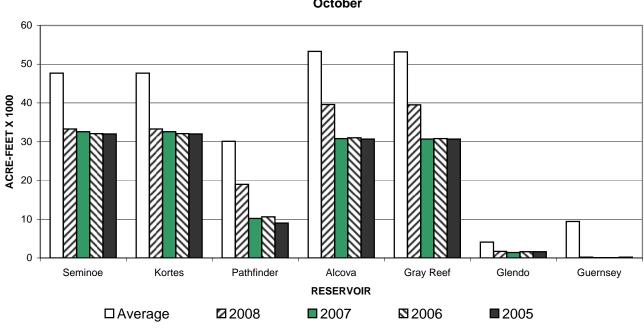
# NORTH PLATTE RIVER BASIN OUTFLOW

								(10	00 acre-feet)
		October Outflow	His	October torical Out	flow	Accumulated Outflow (October)			
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	33.3	47.7	70	32.6	32.1	32	33.3	47.7	70
Kortes	33.3	47.7	70	32.6	32.1	32.0	33.3	47.7	70
Pathfinder	19.0	30.1	63	10.2	10.6	9.0	19.0	30.1	63
Alcova	39.6	53.3	74	30.8	31.0	30.7	39.6	53.3	74
Gray Reef	39.5	53.2	74	30.7	30.8	30.7	39.5	53.2	74
Glendo	<sup>1</sup> 1.7	4.1	41	1.4	1.6	1.6	1.7	4.1	41
Guernsey	0.2	9.4	2	0.1	0.1	0.2	0.2	9.4	2

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

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** 

October

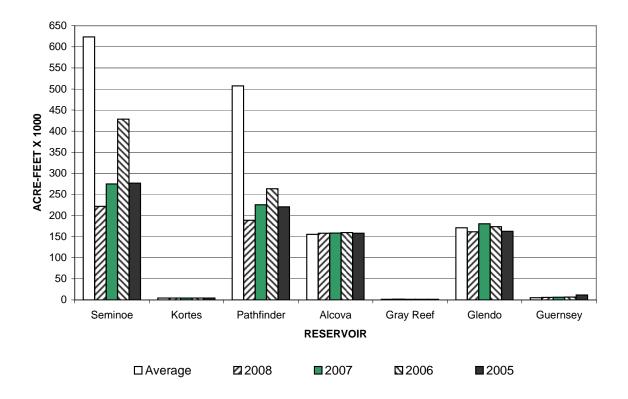
#### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

The October storage for the major reservoirs; Seminoe and Pathfinder was below average. The Pathfinder and Seminoe Reservoir storages were the lowest October storage in the last 30 years.

								(1000 acre-feet)
	T T	otal Storag	e	E	nd of Octob	er	Total	Percent
	E	nd of Octob	er	Historical Storage Conservation			of	
Reservoir	W. Yr.	30 Yr.	% of	W. Yr.	W. Yr.	W. Yr.	Storage	Capacity
	2008	Avg. <sup>1</sup>	Avg.	2007	2006	2005	Capacity	
Seminoe	221.9	623.5	36	274.8	428.6	277.0	1017.3	22
Kortes	4.7	4.6	102	4.7	4.7	4.7	4.7	100
Pathfinder	188.9	507.5	37	225.7	263.6	220.6	1016.5	19
Alcova	158.3	155.4	102	158.7	159.5	158.3	184.4	86
Gray Reef	1.8	1.4	129	1.6	1.6	1.5	1.8	100
Glendo	161.7	171.1	95	180.6	173.7	162.6	517.5	31
Guernsey	6.2	5.3	117	6.5	7.0	11.7	45.6	14
Total	743.5	1468.8	51	852.6	1038.7	836.4	2787.8	27

1 Average is based on the 1978-2007 period.

## NORTH PLATTE RIVER BASIN RESERVOIR STORAGE End of October



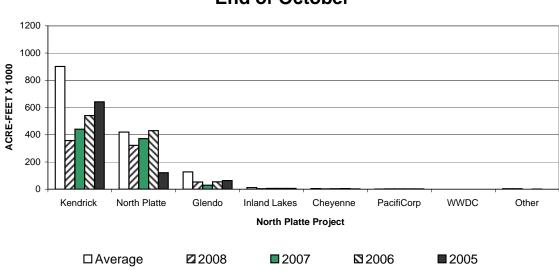
#### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP

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

								(1	000 acre-feet)
			wnership of wa End of Octobe			nd of Octob prical Owne	Total	Percent of	
Ownership		W. Yr.	30 Yr.	% of	W. Yr.	W. Yr.	W. Yr.	Storage	Capacity
		2008	Avg. ⁵	Avg.	2007	2006	2005	Capacity	
Kendrick		357.0	901.3	40	440.6	540.9	642.0	1201.7	30
North Platte	1	322.4	420.1	77	371.6	429.7	120.7	1062.1	30
Glendo		52.8	126.5	42	29.0	53.6	63.7	183.2	29
Inland Lakes	2	3.7	12.1	31	6.1	6.0	5.6	46.0	8
Cheyenne	3	2.5	<b>4.2</b> <sup>6</sup>	60	3.3	4.9	2.5	10.0	25
PacifiCorp	4	2.0	1.7	118	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	3.4	91	0.0	1.7	0.0	N/A	N/A

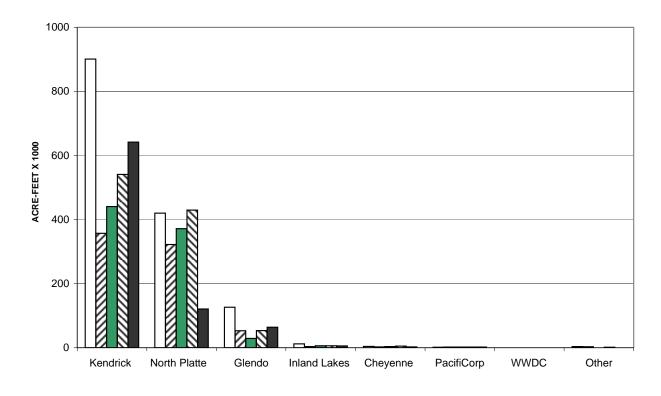
1 This includes North Platte Guernsey and North Platte Pathfinder.

- 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 October 31, 2007, the Operational account contained 3,132 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 October

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



#### INLAND LAKES RESERVOIR STORAGE

				( acre-feet)
	Total	30 Year	Percent of	Total
Reservoir	Storage	Average <sup>5</sup>	Average	Storage
	End of October	_	-	Capacity
Lake Alice	294	1,100	27	<b>11,034</b> <sup>1</sup>
Little Lake Alice	237	146 <sup>6</sup>	162	1,166 <sup>2</sup>
Lake Winters Creek	607	<b>709</b> <sup>6</sup>	86	1,746 <sup>3</sup>
Lake Minatare	17,400	29,300	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

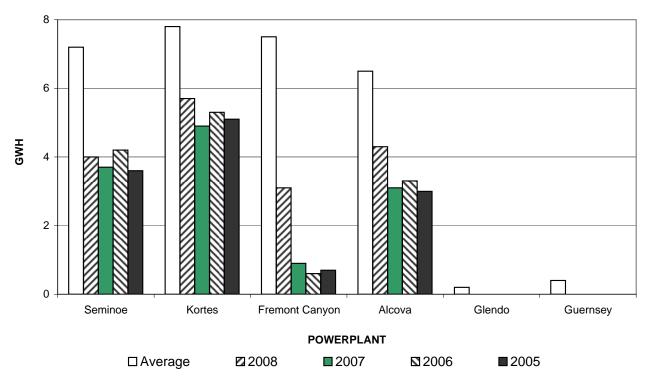
### Power generation was below average for all powerplants in the North Platte Basin.

								(Energy in g	giga-watt hours)	
		October			October		Accumulated Gross Gen.			
	Gr	oss Genera	ation	Histo	orical Gener	ration		(October)		
Powerplant	W. Yr.	30 Yr.	% of	W. Yr.	W. Yr.	W. Yr.	W. Yr.	30 Yr.	% of	
	2008	Avg. <sup>2</sup>	Avg.	2007	2006	2005	2007	Avg. <sup>2</sup>	Avg.	
Seminoe	4.0	7.2	56	3.7	4.2	3.6	4.0	7.2	56	
Kortes	5.7	7.8	73	4.9	5.3	5.1	5.7	7.8	73	
Fremont Canyon <sup>1</sup>	3.1	7.5	41	0.9	0.6	0.7	3.1	7.5	41	
Alcova	4.3	6.5	66	3.1	3.3	3.0	4.3	6.5	66	
Glendo	0.0	0.2	0	0.0	0.0	0.0	0.0	0.2	0	
Guernsey	0.0	0.4	0	0.0	0.0	0.0	0.0	0.4	0	

1 The powerplant for Pathfinder Dam is Fremont Canyon.

2 Average is based on the 1978-2007 period.





### NORTH PLATTE ESTIMATED APRIL- JULY RUNOFF

-									(1000	acre-feet)
	July 1, 20	July 1, 2007 Estimated April-July				Most	Comparative Actual			
Basin	Runoff w	ith actual A	pri	I and May	April-July	Probable				f
	Reasonable Maximum <sup>1</sup>	Expected		Reasonable Minimum <sup>1</sup>	Runoff Avg. <sup>2</sup>	% of Avg.	W. Yr. 2006	W. Yr. 2005	W. Yr. 2004	W. Yr. 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>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>3</sup> The actual April-June inflow into Seminoe Reservoir was 273,000 AF.

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

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