February 1, 2009 WATER SUPPLY AND UTILIZATION REPORT 1 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 January inflow was above average for Seminoe and Pathfinder Reservoirs.

									(10	00 acre-feet)
			January Inflow		January Historical Inflow			Accumulated Inflow (October - January)		
Reservoir		W. Yr. 2009	30 Yr. Avg. ⁵	% of Avg.	W. Yr. 2008	W. Yr. 2007	W. Yr. 2006	W. Yr. 2009	30 Yr. Avg. ⁵	% of Avg.
Seminoe		28.9	25.0	116	19.9	24.2	28.9	111.1	110.2	101
Pathfinder	1, 2	7.2	5.7	126	5.5	3.6	6.4	31.5	20.4	154
Glendo	3	4.5	10.2	44	6.3	2.8	4.4	8.4	41.5	20
Guernsey	4	1.3	1.5	87	0.6	0.9	0.8	4.8	7.1	68

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. (1979-2008)

NORTH PLATTE RIVER BASIN RESERVOIR INFLOW January



NORTH PLATTE RIVER BASIN OUTFLOW

The January outflow for Glendo Reservoir was above average.

								(10	00 acre-feet)
	January Outflow			January Historical Outflow			Accumulated Outflow (October - January)		
Reservoir	W. Yr. 2009	30 Yr. Avg. ²	% of Avg.	W. Yr. 2008	W. Yr. 2007	W. Yr. 2006	W. Yr. 2009	30 Yr. Avg. ²	% of Avg.
Seminoe	32.4	62.6	52	32.5	32.4	32.1	130.8	220.0	59
Kortes	32.4	62.6	52	32.5	32.4	32.1	130.8	219.9	59
Pathfinder	32.7	40.7	80	30.8	30.8	30.6	110.0	153.9	71
Alcova	32.7	40.3	81	30.7	30.7	30.8	133.2	176.6	75
Gray Reef	32.8	40.3	81	30.8	30.8	30.8	133.3	176.5	76
Glendo ¹	1.6	1.2	133	1.8	1.3	1.7	7.0	10.0	70
Guernsey	0.5	0.5	100	0.3	0.3	0.4	1.2	13.4	9

1 In 1993 an outlet was constructed at Glendo Dam which is used to provide a flow of approximately 25 cubic feet per second, 15 year average (1994-2008).

2 30 year average (1979-2008).

January 70 60 50 ACRE-FEET X 1000 40 30 20 10 0 Gray Reef Seminoe Kortes Pathfinder Alcova Glendo Guernsey RESERVOIR □Average **2**009 2008 **2007** 2006

NORTH PLATTE RIVER BASIN

RESERVOIR OUTFLOW

NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

(1000 acre-feet) **Total Storage End of January** Total Percent End of January **Historical Storage** Conservation of W. Yr. 30 Yr. W. Yr. W. Yr. W. Yr. Reservoir % of Storage Capacity 2009 2008 2007 2006 Avg. Avg. Capacity Seminoe 507.8 516.6 98 195.4 267.7 408.1 1017.3 50 Kortes 4.7 4.7 4.7 4.7 4.7 4.6 102 100 Pathfinder 395.4 564.2 70 206.8 239.1 283.4 1016.5 39 Alcova 156.6 155.1 156.4 156.3 101 156.3 184.4 85 Gray Reef 1.5 1.4 107 1.6 1.5 1.5 1.8 83 Glendo 258.5 317.4 257.6 269.6 81 276.5 517.5 50 15.7 Guernsey 10.7 147 12.8 10.9 11.6 45.6 34 Total 1340.2 1570.0 85 835.3 956.7 1135.2 2787.8 48

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

1 Average is based on the 1979-2008 period.

NORTH PLATTE RIVER BASIN RESERVOIR STORAGE End of January



NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP

North Platte Ownership was above average for January. Kendrick Ownership at the end of January was the 5th lowest in the last 30 years.

								(1	000 acre-feet)
		O	wnership of w End of Janua	ater ry	Ei Histo	nd of Janua prical Owne	ary ership	Total	Percent of
Ownership		W. Yr. 2009	30 Yr. Avg. ⁵	% of Avg.	of W. Yr. W. Yr. W. Yr. /g. 2008 2007 2006				Capacity
Kendrick		523.7	875.5	60	354.9	439.1	537.3	1201.7	44
North Platte	1	717.7	537.4	134	411.2	472.1	526.7	1062.1	68
Glendo		83.6	125.3	67	52.4	28.0	53.0	183.2	46
Inland Lakes	2	6.0	21.2	28	7.7	12.6	10.7	46.0	13
Cheyenne	3	5.7	6.1 °	93	4.0	4.7	5.8	10.0	57
PacifiCorp	4	2.0	1.5	133	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	1.5	3.6	42	3.1	0.0	1.7	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 PacifiCorp has a storage contract to store water in Glendo Reservoir for Dave Johnston Powerplant.
- 5 Average is based on the 1979-2008 period.
- 6 Average is based on the 1982-2008 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 2008 Natural Flow and Ownership Procedures, the operational account may contain up to 15,000 acre-feet. On January 31, 2008, the Operational account contained 1,520 Acre-feet, the Re-Regulation space contained 0 Acre-feet.



Ownership of Water

NORTH PLATTE RIVER BASIN OWNERSHIP OF WATER End of January



INLAND LAKES RESERVOIR STORAGE

				(acre-feet)
	Total	30 Year	Percent of	Total
Reservoir	Storage	Average ⁵	Average	Storage
	End of January			Capacity
Lake Alice	392	400	98	11,034 ¹
Little Lake Alice	35	83	⁶ 42	1,166 ²
Lake Winters Creek	391	573	⁶ 68	1,746 ³
Lake Minatare	35,480	28,400	125	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. (1979-2008)

6 18 year average. (1991-2008)

NORTH PLATTE RIVER BASIN GROSS GENERATION

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

								(Energy in g	iga-watt hours)
	Gr	January January Gross Generation Historical Generation			Accumulated Gross Gen. (October - January)				
Powerplant	W. Yr. 2009	30 Yr. Avg. ²	% of Avg.	W. Yr. 2008	W. Yr. 2007	W. Yr. 2006	W. Yr. 2009	30 Yr. Avg. ²	% of Avg.
Seminoe	4.3	9.6	45	3.8	3.7	4.0	17.8	33.8	53
Kortes	5.4	10.7	50	5.6	5.1	5.1	21.5	36.8	58
Fremont Canyon ¹	5.8	10.9	53	5.0	5.6	5.7	17.7	40.5	44
Alcova	3.0	4.9	61	3.0	3.0	3.1	11.5	21.3	54
Glendo	0.0	0.0	N/A	0.0	0.0	0.0	0.0	0.3	0
Guernsey	0.0	0.0	N/A	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 1979-2008 period.

NORTH PLATTE RIVER BASIN GROSS GENERATION January



NORTH PLATTE ESTIMATED MAY-JULY RUNOFF

The February 1, 2009, water supply forecast indicates above average April - July runoff for Seminoe Reservoir and below average for the rest of the system. The forecast for the North Platte River system is shown in the two tables below.

								(1000	acre-feet)
Forecast	Febru of	ary 1, 2009 Fo April-July Ru	orecast noff	30 Yr. April-July	Expected	Comparative Actual April - July Runoff			
Points	Reasonable Maximum ¹	Expected	Reasonable Minimum ¹	Runoff Avg. ²	% of Avg.	W. Yr. 2008	W. Yr. 2007	W. Yr. 2006	W. Yr. 2005
Seminoe Reservoir	950	750	550	704	107	956	425	546	733
Sweetwater River Above Pathfinder									
Reservoir	70	40	20	61	66	52	24	32	66
Alcova to Glendo	130	85	40	122	70	209	102	45	39

¹ The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum. ² Average is based on the 1979-2008 period.

							(1000 acre-feet)		
Forecast Points		February 1, 2009 Forecast of April-July Runoff Chance of Exceeding							
	95%	75%	50%	% of Avg	25%	5%	Avg. ¹		
Seminoe Reservoir	550	668	750	107	832	950	704		
Sweetwater River Above Pathfinder Reservoir	20	32	40	66	52	70	61		
Alcova to Glendo Gain	40	67	85	70	103	130	122		

¹ Average is based on the 1979-2008 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 page eight of this report.

					SWE	in inches 1
	1	Febr	Comparative February 1			
	snow-water content			snow-water content		
WATERSHED	W. Yr.	30 Yr.	% of	W. Yr.	W. Yr.	W. Yr.
	2009	Avg. ²	Avg.	2008	2007	2006
Seminoe Reservoir	14.3	13.3	108	22.8	11.0	16.7
Pathfinder Reservoir	5.9	9.6	61	11.6	5.9	9.6
Glendo Reservoir	5.9	7.3	80	10.8	6.5	7.8

Seminoe Reservoir Watershed

			SWE in inches ¹
Stations		Water	30 Yr.
(Elevation)		Content	Avg. ²
Cameron Pass (10,300)	3	19.5	16.8
Columbine Lodge(9,300)	3	15.5	15.3
Park View (9,200)	3	6.1	5.9
Brooklyn (10,200)	4	14.4	15.3
Fox Park (9.060)	3	4.9	4.9
North Barrett (9,400)	3	15.0	12.8
North French (10,130)	4	21.5	18.4
Old Battle (9,800)	4	20.9	20.0
Ryan Park (8,400)	3	9.8	7.4
Webber Springs (9,250)	4	15.8	16.1
Watershed Average		14.3	13.3

Pathfinder Reservoir Watershed

	SWE in inches ¹			
Stations	Water	30 Yr.		
(Elevation)	Content	Avg. ²		
South Pass (9,040) 4	7.0	11.4		
Grannier Meadows (8,860) ³	6.1	9.1		
Larsen Creek (9,020) ³	4.5	8.4		
Watershed Average	5.9	9.6		

Glendo Reservoir Watershed

		SWE in inches				
Stations		Water	30 Yr.			
(Elevation)		Content	Avg. ²			
Casper (7,900)	4	5.9	9.0			
Laprele Creek (8,375)	4	5.3	7.3			
Reno Hill (8,500)	4	7.1	8.4			
Windy Peak (7,900)	4	5.1	4.5			
Watershed Average		5.9	7.3			

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

² Average is based on the 1971-2000 period

³ Represents a Natural Resources Conservation Service (NRCS) Snow Course Site.

⁴ Represents a NRCS Snowpack Telemetry Network (SNOTEL) Site.