PREFACE

This report concerns the operation of all Bureau of Reclamation (Reclamation) facilities in the North Platte River Drainage Basin above and including Guernsey Dam as well as the four Inland Lakes near Scottsbluff, Nebraska. This area of the North Platte River Drainage Basin is simply referred to in this report as the Basin.

References to average in this document will refer to the average of the historical record for the years 1978-2007, except for water year 2009 information which uses the years 1979-2008. In each coming year this period will be advanced by 1 year to maintain a running 30-year average.

INTRODUCTION

The System of dams, reservoirs, and powerplants on the North Platte River (referred to as the "System" in this text) is monitored and in most cases operated and managed from the Wyoming Area Office (WYAO) in Mills, Wyoming. The operation and management of the System is aided by the use of a Programmable Master Supervisory Control, computerized accounting process, extensive Hydromet stations, control crest measurement weirs at gaging stations, SNOTEL stations, and a snowmelt runoff forecasting procedure which is used by the Water Management Branch. The System consists of a number of individual water resource projects that were planned and constructed by Reclamation. The individual projects and features are operated as an integrated system to achieve efficiency and to produce increased multi-purpose benefits. The drainage basin which affects the System covers an area from northern Colorado to southeastern Wyoming, encompassing 16,224 square miles. Storage reservoirs affected by the System include four offstream reservoirs known as the Inland Lakes in western Nebraska as shown in Figure 21.

Approximately 70 to 80 percent of the annual North Platte River streamflow above Seminoe Dam occurs from snowmelt runoff during the April-July period. Primary water demand is irrigation, and the period of delivery of irrigation water normally extends from May through September. Figure 20 represents historical watershed runoff above Pathfinder Reservoir from 1906 through 2008. The System furnishes irrigation water to over 440,000 acres of land in Wyoming and Nebraska.

The System includes the Kendrick Project (formerly Casper-Alcova) in Wyoming; with major features of the project being Seminoe Dam and Powerplant, Alcova Dam and Powerplant, and Casper Canal. Project lands lie in an irregular pattern on the northwest side of the North Platte River between Alcova Reservoir and Casper, Wyoming. The North Platte Project in Wyoming and Nebraska consists of Pathfinder Dam and Reservoir, Guernsey Dam, Reservoir and Powerplant, Whalen Dam, Northport, Fort Laramie, and Interstate canals and four offstream inland reservoirs on the Interstate Canal. The Kortes Unit of the Pick-Sloan Missouri Basin Program (PS-MBP) consists of Kortes Dam, Reservoir and Powerplant, in a narrow gorge of the North Platte River 2 miles below Seminoe Dam. The Glendo Unit of the PS-MBP is a multiple-purpose natural resource development. It consists of Glendo Dam, Reservoir and Powerplant, Fremont Canyon Powerplant, and Gray Reef Dam, and Reservoir which is a re-regulating reservoir.

Major rivers which affect the water supply in the System are the North Platte River in Colorado, and Wyoming, and the Medicine Bow, and Sweetwater Rivers in Wyoming.

The System has seven main stem reservoirs, six of which have powerplants with generating capacities totaling 237,200 kilowatts (kw). Table 12 depicts a breakdown of generating units and their capacity for each North Platte Powerplant. Table 1 below depicts North Platte River Reservoir Data.

The Department of Energy, by Executive Order dated October 1, 1977, assumed the responsibility of marketing power from Federal resources and operation and maintenance of federal transmission facilities.

Western Area Power Administration (WAPA) of the Department of Energy, headquartered in Lakewood, Colorado, now operates and maintains the nearly 3,500 miles of interconnected electrical transmission lines within the System. The power generating facilities are also interconnected with other federal, public and private power facilities. Power from Reclamation Powerplants is marketed by WAPA.

Table 1 North Platte River Reservoir Data

Reservoir	Dead Storage [1] Acre-feet (AF)	Active Storage [2] (AF)	Total Storage (AF)	Minimum Storage (AF)	Minimum Elevation (feet)
Seminoe	556	1,016,717	1,017,273	31,670 [4]	6239.00 [4]
Kortes	151	4,588	4,739	1,666 [4]	6092.00 [4]
Pathfinder	7	1,016,500	1,016,507	31,405 [4]	5746.00 [4]
Alcova	91	184,314	184,405	137,610 [5]	5479.50 [5]
Gray Reef	56	1,744	1,800	56 [6]	5312.00 [6]
Glendo	11,033	778,369	789,402 [3]	63,148	4570.00 [7]
Guernsey	0	45,612	45,612	0	4370.00 [8]
Total	11,894	3,047,844	3,059,738	265,555	

[1] Storage capacity below elevation of lowest outlet
[2] Total storage minus dead storage
[3] Top of Conservation capacity 517,485 AF (Elevation 4635.00 ft) with an additional 271,917 AF allocated to Flood Control (elevation 4653.00 ft)
[4] Minimum water surface elevation and capacity required for power generation This level is the top of inactive capacity
[5] Content and minimum elevation required for power generation, however water cannot be delivered to Casper Canal when reservoir level is below 5487.00 ft (153,802 AF), the elevation of the Casper Canal Gate sill.
[6] Top of dead capacity – spillway crest
[7] Minimum water surface elevation for power generation
[8] Elevation of the North Spillway Crest

SYSTEM PLANNING AND CONTROL

The North Platte River storage, power generation, and water delivery facilities are operated for irrigation, hydroelectric power production, municipal, and industrial water supply. The facilities provide year round flows in the river below each North Platte Dam except for Guernsey Dam. The facilities also provide flood control, recreation, fish and wildlife preservation, and other purposes. Each project of the System must be operated under the purposes for which it was authorized and constructed. The objective of an integrated system is to obtain optimum benefits from the individual projects.

The System's integrated operation is planned and coordinated by Reclamation's WYAO in Mills, Wyoming. This office collects and analyzes information daily and makes the decisions necessary for successful operation of the System. The water management function involves coordination between Reclamation, the Department of Energy, and many other local, state, and Federal agencies. When water levels rise into the exclusive flood control pool at Glendo Reservoir, the flood control operation of Glendo Dam is directed by the U.S. Army Corps of Engineers, Omaha District, in Omaha, Nebraska.

Experience has proven that proper utilization of the available water resource in a system such as this can be achieved only through careful budgeting of the anticipated water supply. The technical end product of this budgeting process is an Annual Operating Plan (AOP).

The System is operated on a water year basis (October 1 through September 30). Early in the water year an AOP is prepared, reviewed, and presented to the public. The AOP consists of three operation studies using reasonable minimum, reasonable maximum, and most probable inflow conditions determined from statistical analysis of historical inflow conditions. The AOP, as developed and reflected in the three operation studies, provides the flexibility to adjust operations as conditions change during the water year. Reclamation makes use of computer programs to revise and adjust the operating plan each month to reflect changing conditions. A computerized process of forecasting the anticipated water supply also aids the revision process during the months of February, March, April and May. Figure 1 depicts North Platte Reservoirs Total Storage End of September Content for water years 1912 through 2008. Table 2 depicts A Summary of Reservoir Storage Content for water year 2008 (End of Month). Table 9 depicts the Actual Reservoir Operations for water year 2008.

Table 2 Summary of Reservoir Storage Content for Water Year 2008 (End of Month)

Seminoe Reservoir			Pathfinder Reservoir			Alcova Reservoir		
Month	Storage	Record [1]	Month	Storage	Record [1]	Month	Storage	Record [1]
October	221,924	lowest	October	188,901	lowest	October	158,348	[3]
November	214,255	lowest	November	195,010	lowest	November	156,425	
December	208,498	lowest	December	200,020	lowest	December	156,561	
January	195,422	lowest	January	206,760	2nd lowest	January	156,448	
February	184,934	lowest	February	213,662	2nd lowest	February	156,583	
March	192,444	lowest	March	213,145	lowest	March	157,554	
April	220,579	2nd lowest	April	191,282	lowest	April	179,742	
May	395,412		May	246,843	3rd lowest	May	179,961	
June	645,073		June	349,456		June	179,815	
July	630,282		July	354,239		July	180,547	
August	560,699		August	346,631		August	180,694	
September	534,527		September	348,178		September	181,134	
Glendo Reservoir			Guernsey Reservoir			Total System [2]		
Month	Storage	Record [1]	Month	Storage	Record [1]	Month	Storage	Record [1]
October	161,657		October	6,166		October	743,515	lowest
November	194,640		November	8,390		November	775,069	lowest
December	224,287		December	10,671		December	806,404	lowest
January	257,556		January	12,778		January	835,284	lowest
February	291,989		February	14,888		February	868,347	lowest
March	337,727	3rd lowest	March	16,896		March	924,144	lowest
April	397,855		April	22,717		April	1,018,642	lowest
May	539,809		May	30,484		May	1,398,871	
June	510,849		June	29,957		June	1,721,579	
July	302,462		July	27,945		July	1,501,933	
August	118,486		August	27,985		August	1,241,005	
September	119,888		September	5,632		September	1,195,828	

[1] Record is the 30 year period from 1978-2007

[2] Total North Platte system includes storage in Seminoe, Kortes, Pathfinder, Alcova, Gray Reef, Glendo and Guernsey Reservoirs

[3] Alcova Reservoir is normally maintained within either a winter operating range (between contents of 153,802 AF to 158,302 AF) or a summer operating range (between contents 177,070 AF to 181,943 AF)

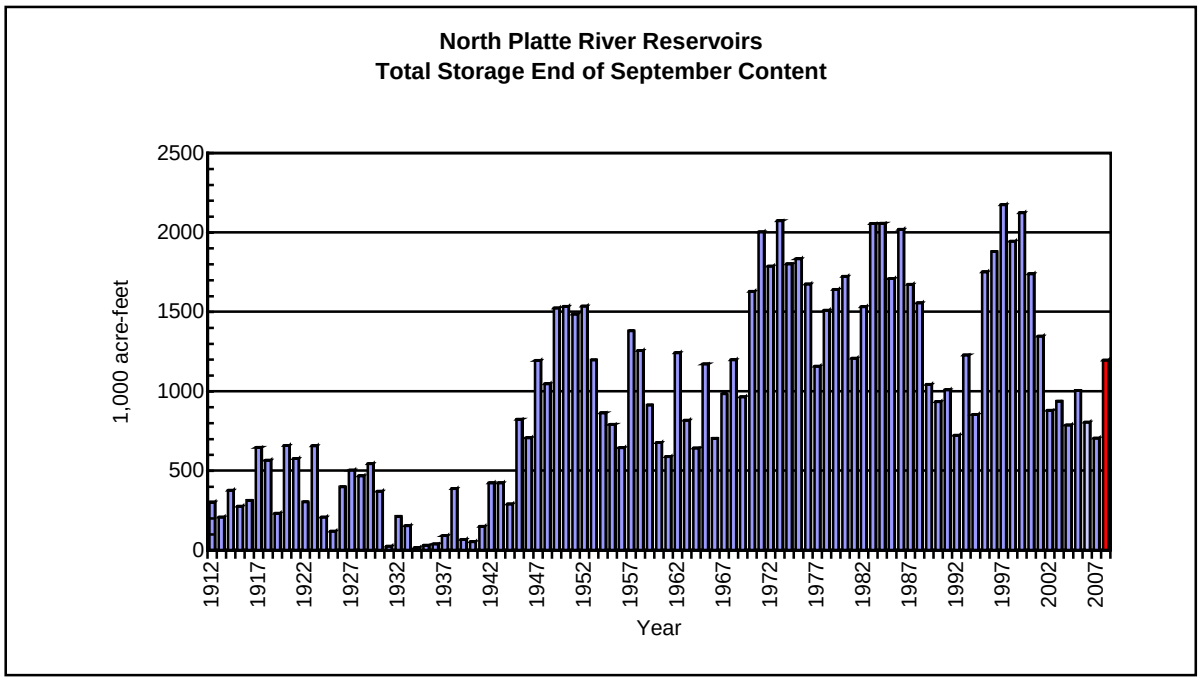

Figure 1 North Platte River Reservoirs Total Storage End of September Content (1912-2008)

SYSTEM OPERATIONS WATER YEAR 2008
Seminoe Reservoir Inflow

Seminoe Reservoir inflows were above average for the months April through September when most of the runoff is likely to occur. A total of 1,197,399 acre-feet (AF) or 126 percent of the 30 year average entered the system above Seminoe Reservoir during the water year. The monthly inflows ranged from a high of 146 percent of average in June 2008 to a low of 75 percent in March 2008. The actual April through July inflow totaled 955,825 AF, which was 136 percent of the 30 year average of 703,800 AF. The Seminoe computed inflow peaked for the water year on June 7, 2008, at 10,904 cubic feet per second (cfs) compared to 4,339 cfs in water year 2007. Figure 2 depicts a comparison of average, water year 2008 and water year 2007 monthly inflow.

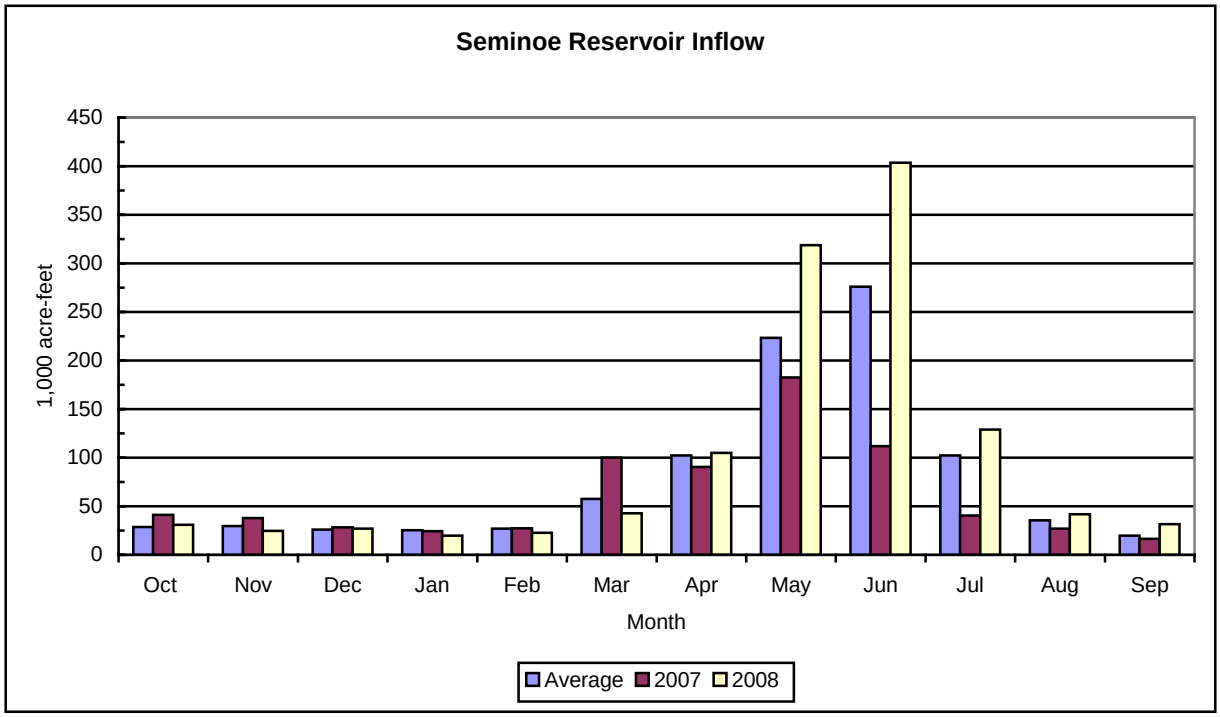

Figure 2 Seminoe Reservoir Inflow

Seminoe Reservoir Storage and Releases

Seminoe Dam and Reservoir, on the North Platte River, is the main storage facility for the Kendrick Project. Construction of the dam was completed in 1939, providing a storage capacity of 1,017,273 AF. The powerplant contains three electrical generating units with a total capacity of 51 mega-watts (MW) at a full release capability of about 4,050 cfs.

The spillway consists of a concrete-lined tunnel through the right abutment controlled by three fixed-wheel gates with a release capability of close to 48,000 cfs. Two 60 inch jet flow valves provide a low level river outlet with a flow capacity of 3,420 cfs.

At the start of water year 2008, Seminoe Reservoir had a storage content of 226,388 AF, which was 36 percent of average and 22 percent of capacity. Seminoe storage content remained below average for the entire water year. The maximum Seminoe Reservoir content was reached on July 10, 2008, at 664,021 AF. At the end of water year 2008, Seminoe Reservoir storage content was 534,527 AF, which was 84 percent of average and 53 percent of capacity. See Figure 3 for a comparison of average, water year 2007 and water year 2008 monthly storage.

Releases from Seminoe Dam averaged approximately 545 cfs from October 2007, through March 2008. The releases were increased to approximately 2,240 cfs by the end of April then flows increased to 2,425 cfs by the end of May and then decreased again to approximately 1,500 cfs by the beginning of August. The water release was reduced to approximately 530 cfs on September 25, 2008, which would be the flow for the winter.

Table 3 depicts a summary of Seminoe Reservoir information for water year 2008.

Table 3 Seminoe Reservoir Hydrologic Data for Water Year 2008

Reservoir Allocations	Elevation (FT)	Storage (AF)	Storage Allocation (AF)
Top of Inactive and Dead	6239.00	31,670	31,670
Top of Active Conservation	6357.00	1,017,273	985,603
Crest of Dam (without Camber)	6361.00		

Storage-Elevation Data	Elevation (FT)	Storage (AF)	Date
Beginning of water year	6292.78	226,388	Oct 1, 2007 [2]
End of water year	6326.73	534,527	Sep 30, 2008
Annual Low	6285.78	183,974	March 15, 2008
Historic Low [1]	6253.30	56,390	Apr 20, 1961
Annual High	6336.50	663,732	July 9, 2008
Historic High [1]	6359.29	1,073,050	Jun 20, 1949

[1] The daily records for this table are only available from water year 1946.
[2] Represents 0001 hours on October 1

Inflow-Outflow Data	Inflow [3]	Date	Outflow	Date
Annual Total (AF)	1,197,399	Oct' 07 – Sep' 08	852,300	Oct' 07 – Sep' 08
Daily Peak (CFS)	10,904	June 7, 2008	2,532 [4]	Jul 8, 2008
Daily Minimum (CFS)	89	Nov 25, 2007	350 [4]	Dec 7, 2007
Peak Jet Flow Valve (CFS)				
Total Jet Flow Valve (CFS)				

[3] Inflows are a computed number.
[4] Daily peak and minimum are releases to the river.

Month	Inflow		Outflow		Content [6]	
	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]
October	30.8	107	33.3	70	221.9	36
November	24.8	84	31.5	60	214.3	36
December	26.9	103	32.5	53	208.5	37
January	19.8	79	32.5	51	195.4	37
February	22.7	84	33.0	53	184.9	38
March	42.9	75	34.8	45	192.4	41
April	104.8	103	75.3	86	220.6	46
May	318.6	142	141.4	148	395.4	66
June	403.6	146	147.6	111	645.1	87
July	128.9	126	133.9	117	630.3	88
August	41.9	118	103.9	130	560.7	84
September	31.7	159	52.7	110	534.5	84
Annual	1197.4	126	852.4	92		

[5] The 30 year average is the period (1978-2007)
[6] End of Month

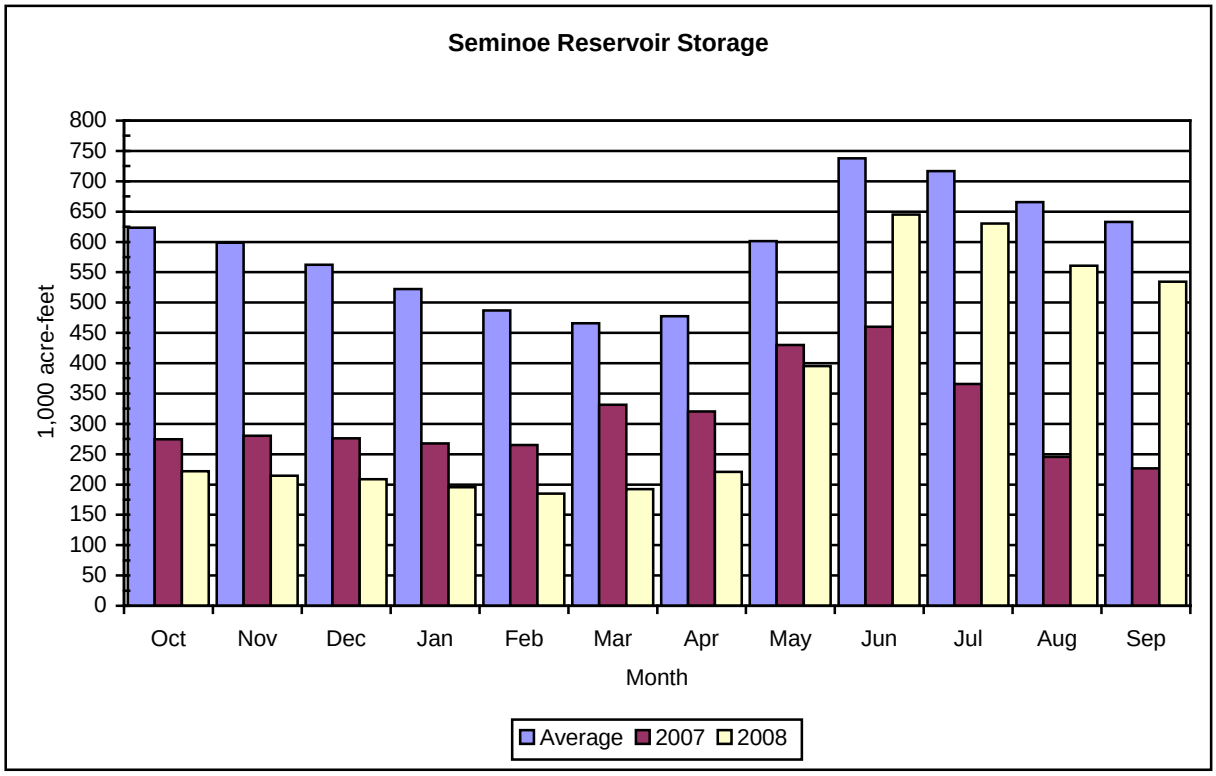

Figure 3 Seminoe Reservoir Storage

Kortes Reservoir Storage and Releases

Completed in 1951, Kortes Dam, Reservoir, and Powerplant of the Kortes Unit (Pick-Sloan Missouri Basin Project) are located about 2 miles below Seminoe Dam. It was the first unit initiated by the Bureau of Reclamation under the Missouri River Basin Project. Kortes Reservoir provides a maximum storage capacity of 4,739 AF at elevation 6165.7 feet. Kortes Powerplant has three electrical generating units with a total capacity of 36 MW and a release capability of approximately 3,000 cfs. Water released from Seminoe Dam to Pathfinder Reservoir passes through the Kortes turbines to generate power. Maximum benefits are obtained when Kortes Reservoir remains full and the power releases are coordinated with those from Seminoe powerplant to maintain a full reservoir.

The spillway on the right abutment consists of an uncontrolled crest with a concrete-lined tunnel and has a capacity of 50,000 cfs.

Senate Bill 2553 which was passed in the 90th Congress authorized the modification of the operation of Kortes Dam and Powerplant to provide a minimum streamflow of 500 cfs in the North Platte River between Kortes Reservoir and the normal headwaters of Pathfinder Reservoir. The minimum flow permits maintenance of a fishery in a stretch of the North Platte River commonly referred to as the "Miracle Mile".

Kortes releases averaged approximately 545 cfs from October 2007 through March 2008. Releases were increased to approximately 2,250 cfs by the end of April and decreased to approximately 2,000 cfs by the end of July. The water release was reduced to approximately 530 cfs on September 25, 2008, which would be the flow for the winter. In water year 2008 most releases were made through the Kortes Powerplant, except for occasions, when testing or maintenance required bypass releases.

Gains to the North Platte River from Kortes Dam to Pathfinder Dam

Kortes Dam to Pathfinder Dam, river gains were below average for October 2007 through September 2008. The Kortes Dam to Pathfinder Dam, river gains ranged from 98 percent in January 2008 to 6 percent of average in July 2008. The Kortes to Pathfinder, river gains for August and September 2008 were the third and second lowest in the last 30 years. The actual April through July river gains was 55,337 AF, which is 63 percent of the 30 year average of 87,200 AF. Figure 4 depicts a comparison of average, water year 2007 and water year 2008 monthly river gains.

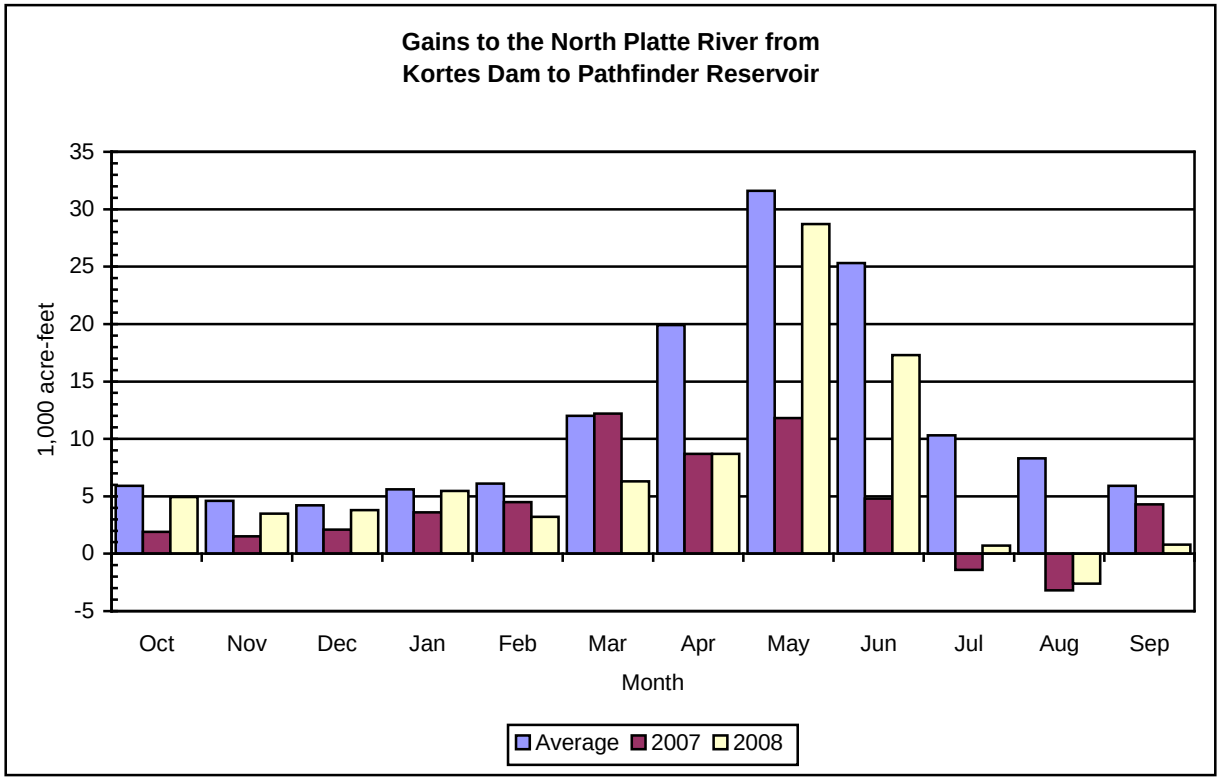

Figure 4 Gains to the North Platte River from Kortes Dam to Pathfinder Reservoir

Pathfinder Reservoir Storage and Releases

Pathfinder Dam and Reservoir, a major storage facility of the North Platte Project, has a total capacity of 1,016,507 AF at elevation 5850.10 feet. Construction of the dam was completed in 1909. Operationally, this structure is a bottleneck in the System with its restricted release capability of approximately 6,000 cfs. The rated capacity of the left abutment outlet works through the two 60-inch jet flow gates is 2,928 cfs at elevation 5850.10 feet. The flow capacity range of the 30-inch jet flow gate is from approximately 50 to 450 cfs. Depending on the elevation of the reservoir, as much as 2,900 cfs can be released through the Fremont Canyon Power conduit and discharged from the Fremont Canyon turbines at the powerplant 3 miles downstream. Fremont Canyon Powerplant has been reconditioned to a generation capacity of 66.8 MWs under full reservoir operating head. The uncontrolled spillway is a flat-crested weir of natural rock over the left abutment of the dam and any time the reservoir water surface exceeds 5850.10 feet a spill occurs. The calculated discharge capacity of the spillway is 33,940 cfs at reservoir elevation 5858.10 feet.

At the start of water year 2008, storage in Pathfinder Reservoir was 171,126 AF, which was 35 percent of average and only 17 percent of capacity. Pathfinder storage remained below average for the entire water year. (See Figure 5). The maximum Pathfinder Reservoir content for the water year was reached on July 14, 2008, at 362,834 AF which was only 36 percent of capacity. The water year ended with 348,178 AF of water in storage in Pathfinder Reservoir, which was 72 percent of average and 34 percent of capacity. A continual release of water from Pathfinder Reservoir during October was maintained during the gradual drawdown of Alcova Reservoir to its winter operating range. At the request of the Wyoming Game and Fish Department a year round flow of 75 cfs was provided through the Pathfinder Reservoir 30 inch Jet-Flow Valve to the river below Pathfinder Dam. Table 4 depicts a summary of Pathfinder Reservoir information for water year 2008.

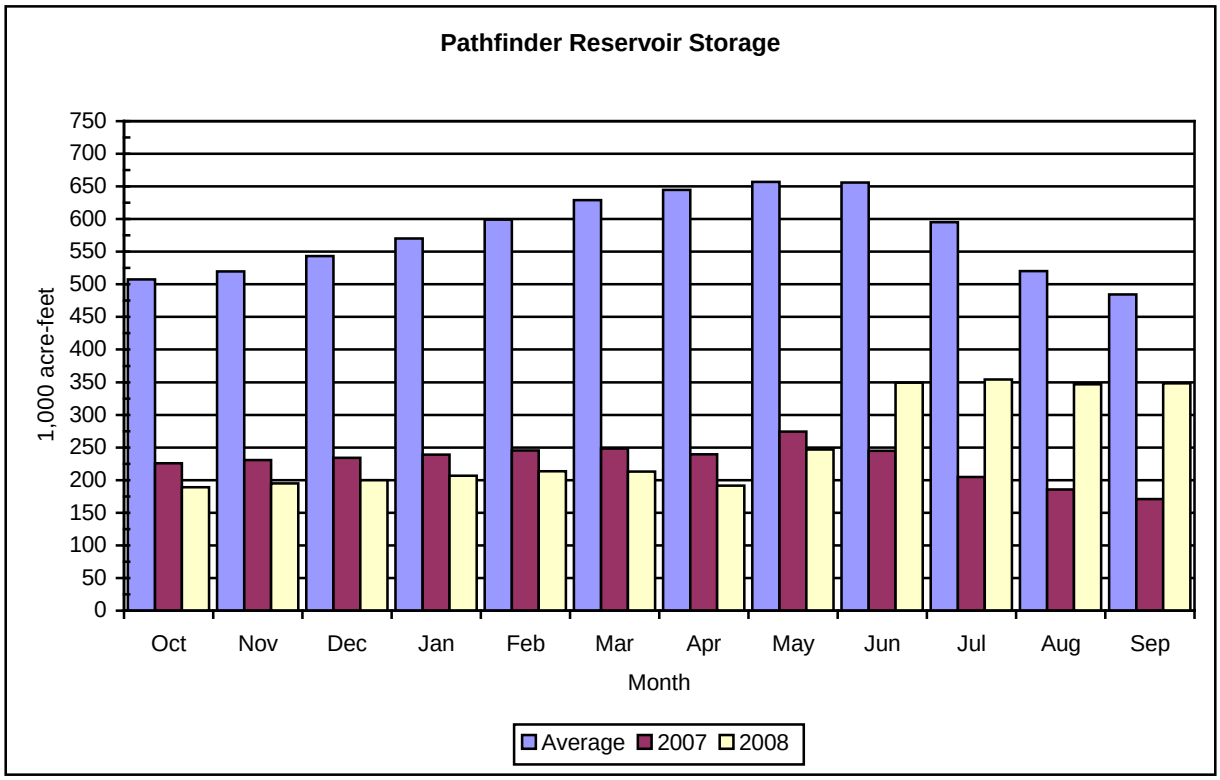

Figure 5 Pathfinder Reservoir Storage

Table 4 Pathfinder Reservoir Hydrologic Data for Water Year 2008

Reservoir Allocations	Elevation (FT)	Storage (AF)	Storage Allocation (AF)
Top of Inactive and Dead	5746.00	31,405	31,405
Top of Active Conservation	5850.10	1,016,507	985,102
Crest of Dam (without Camber)	5858.10		

Storage-Elevation Data	Elevation (FT)	Storage (AF)	Date
Beginning of water year	5781.38	171,126	Sep 30, 2007[3]
End of water year	5805.92	348,178	Sep 30, 2008
Annual Low	5781.52	171,917	Oct 1, 2008
Historic Low [2, 3]	5690.00	0	Sep 9, 1958
Annual High	5807.50	362,834	Jul 14, 2008
Historic High [1]	5853.11	1,083,755	Jul 7, 1983

[1] Daily records for this table are only available from water year 1946

[2] From September 1958 through January 1959, Pathfinder Reservoir was drained for construction of Fremont Canyon tunnel.

[3] Represents 0001 hours on October 1.

Inflow-Outflow Data	Inflow	Date	Outflow	Date
Annual Total (AF)	932,900	Oct, 2007 – Sep, 2008	730,500	Oct, 2007 – Sep, 2008
Daily Peak (CFS)	4,046	May 24, 2008	2,728	Jul 25, 2008
Daily Minimum (CFS)	477	Dec 3, 2007	70	Oct 22, 2007
Peak Jet Flow Valve (CFS)			84 [4]	Oct 26, 2007
Total Jet Flow Valve (AF)			53,614	Oct, 2007 – Sep, 2008

[4] At the request of the Wyoming Game and Fish Department a yearly flow of 75 cfs will be provided through the Pathfinder Reservoir 30 inch Jet-Flow Valve to the river below Pathfinder Dam.

Month	Gain from Kortes		Inflow [6]		Outflow		Content [8]	
	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]
October	5.0	84.7	38.3	71	19.0	63	188.9	37
November	3.5	76.1	35.0	62	28.0	65	195.0	38
December	3.8	90.5	36.3	55	31.0	75	200.0	37
January	5.5	98.2	38.0	54	30.8	74	206.8	36
February	3.2	52.5	36.2	53	29.1	77	213.7	36
March	6.3	51.7	41.0	46	40.9	72	213.1	34
April	8.7	43.7	83.8	78	104.3	119	191.3	30
May	28.7	90.8	170.2	134	112.8	104	246.8	38
June	17.3	68.4	164.9	104	58.0	39	349.5	53
July	0.7	6.8	134.6	108	123.8	70	354.2	60
August	-2.6	NA [7]	101.3	115	104.0	67	346.6	67
September	0.8	13.6	53.4	99	48.8	58	348.2	72
Annual	58.8	42	932.9	88	730.5	72		

[5] 30 year average is the period (1978-2007)

[6] The inflow includes the gain from Kortes Dam to Pathfinder Dam.

[7] Represents a negative number that makes the percentage meaningless.

[8] End of Month

Alcova and Gray Reef Reservoirs Storage and Releases

Alcova Dam and Reservoir is part of the Kendrick Project. The dam serves as a diversion dam for the Casper Canal and the reservoir as a forebay for the Alcova Powerplant. The dam, located about 10 miles downstream from Pathfinder Dam, was completed in 1938. Reservoir storage capacity is about 184,405 AF at elevation 5500 feet, of which only the top 30,600 AF is active capacity available for irrigation of the Kendrick Project. The powerplant consists of two electrical generating units with a total installed capacity of 36 MW at a full release capability of about 4,100 cfs. The spillway is a concrete lined open channel in the left abutment of the dam controlled by three 25 by 40 foot gates with a capacity of 55,000 cfs at a reservoir level of 5500 feet. The reservoir is operated within a 2 foot range during summer and winter but at levels 10 feet apart. A higher operating level is maintained during the summer months to provide adequate head on the Casper Canal, while the lower winter operating level reduces the potential for ice damage to the canal gate.

The annual drawdown of Alcova Reservoir began on October 1, 2007, and continued through October 31, 2007, when the reservoir reached its normal winter operating range of 5488 $\pm$ one foot. The refill of Alcova Reservoir was initiated on April 1, 2008. The water surface elevation was raised above 5497 feet on April 27, 2008, and the reservoir was maintained within 1 foot of elevation 5498 throughout the summer.

Gray Reef Dam and Reservoir is part of the Glendo Unit, Oregon Trail Division, Pick-Sloan Missouri Basin Program. The dam which was completed in 1961 is a three-zoned rock and earthfill structure located about 2.5 miles below Alcova Dam. The reservoir has an active capacity of 1,744 AF. Gray Reef Reservoir is operated to reregulate widely fluctuating water releases from the Alcova Powerplant, and provide stable flow for irrigation, municipal, industrial, and fish and wildlife interests along the 147 miles of river between Alcova and Glendo Dams.

The Gray Reef releases were maintained at 500 cfs from October 2007 until March 16, 2008. At the request of the Wyoming Game and Fish Department, a series of flushing flows were initiated on March 17, 2008, and continued through March 21, 2008, during which the flows were varied each day from 500 cfs to 4,000 cfs, for the purpose of flushing silt from spawning gravels used by trout. At the completion of the flushing flows, releases from Gray Reef were again set at 500 cfs until April 1, 2008. Releases for the remainder of the water year were adjusted to meet irrigation demands below Guernsey Reservoir. The largest daily release of water for the water year occurred on May 20, 2008 at 2,337 cfs.

Gains to the North Platte River from Alcova Dam to Glendo Reservoir

River gains from Alcova Dam to Glendo Reservoir were below average for the water year except for May and June, which were above average due to heavy unexpected runoff. The Alcova Dam to Glendo Reservoir river gains ranged from highs of 238 percent in May 2008 and 200 percent of average in June 2008. The Alcova to Glendo river gains for October and November 2007 were the lowest river gains in the last 50 years. The actual April through July gain was 209,300 AF, which was 172 percent of average. The maximum computed daily river gain of 8,124 cfs occurred on May 24, 2008 and the daily computed Glendo Reservoir inflow peaked on May 24, 2008, at 11,068 cfs. Figure 6 depicts a comparison of average, water year 2008 and water year 2007 monthly river gains.

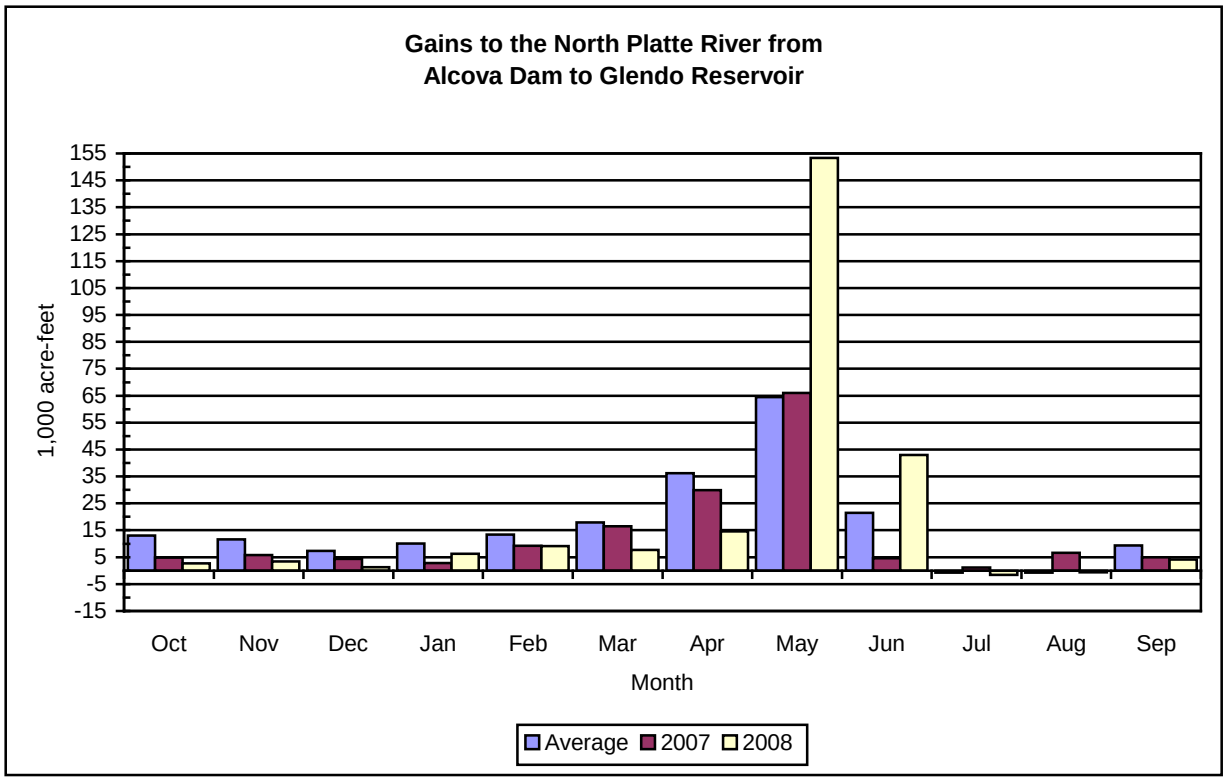

Figure 6 Gains to the North Platte River from Alcova Dam to Glendo Reservoir

Glendo Reservoir Storage and Releases

Glendo Dam and Reservoir is the only storage facility for the Glendo Unit. The reservoir has a storage capacity of 789,402 AF, including 271,917 AF allocated to flood control. Glendo Powerplant consists of two electrical generating units, with a total installed capacity of 38 MW. With both generating units operating at capacity and the reservoir water surface at elevation 4635.0 feet, approximately 3,920 cfs can be released through Glendo Powerplant. The reinforced concrete spillway has an ungated ogee crest. The spillway capacity at elevation 4669.0 feet, (6 feet below the crest of the dam), is 10,335 cfs.

The outlet works from Glendo Dam consist of the primary outlet works which discharge at the powerplant, and the low-flow outlet which discharges to the river immediately below the dam. The three primary outlet gates can release a combined discharge of 13,000 cfs with the powerplant shut down. During normal operation when the reservoir elevation is below the top of conservation storage (4635 feet), outlet works discharges should typically remain below 5,500 cfs. This precautionary practice is to minimize the potential for damage to the stilling basin and training walls. The low-flow outlet works are operated to maintain a continuous release of approximately 25 cfs. This provides a reliable water source for the downstream wetland area and results in associated fish and wildlife benefits.

Glendo Reservoir storage was 119,254 AF at the beginning of water year 2008, which was 110 percent of average but only 23 percent of active conservation of 517,485 AF. Water releases from Glendo Reservoir were initiated on April 21, 2008, in order to move water to the Inland Lakes. The reservoir reached a maximum storage for the year of 558,615 AF (elevation 4638.21 feet) on June 12, 2008. On May 22, 2008, the snowpack combined with warm rain increased the inflow from 6,500 cfs to 10,352 cfs in just 24 hours, although the high flows only lasted seven days the total gain for May was the fourth highest in 30 years. At the end of the water year, Glendo Reservoir contained 119,888 AF of water (water surface elevation 4584.94 feet) which was 110 percent of average and only 23 percent of active conservation of 517,485 AF. Figure 7 depicts water year 2008 and water year 2007 end of month reservoir storage compared to average. Table 5 depicts a summary of Glendo Reservoir information for water year 2008.

Table 5 Glendo Reservoir Hydrologic Data for Water Year 2008

Reservoir Allocations	Elevation (FT)	Storage (AF)	Storage Allocation (AF)
Top of Inactive and Dead	4570.00	63,148	63,148
Top of Active Conservation	4635.00	517,485	454,337
Top of Exclusive Flood Control	4653.00	789,402	271,917
Maximum water	4669.00	1,118,653	329,251
surface(surcharge)	4675.00		
Crest of Dam (without Camber)			

Storage-Elevation Data	Elevation (FT)	Storage (AF)	Date
Beginning of water year	4584.80	119.254	Oct 1, 2007 [1]
End of water year	4584.94	119,888	Sep 30, 2008
Annual Low	4577.61	89,486	Sep 8, 2008
Historic Low	4548.10	15,140	Sep 28, 1966
Annual High	4638.21	558,615	Jun 12, 2008
Historic High	4650.94	758,830	May 28, 1973

[1] Represents 0001 hours on October 1.

Inflow-Outflow Data	Inflow	Date	Outflow [2]	Date
Annual Total (AF)	911,206	Oct, 2007 – Sep,2008	883,350	Oct, 2007 – Sep, 2008
Daily Peak (CFS)	11,068	May 24, 2008	7,480	Jul 25, 2008
Daily Minimum (CFS)	16	September 3, 2008	18 [3]	March 18, 2008
Peak Bypass Release (CFS)			4,051	Jul 27, 2008
Total Bypass Release (AF)			152,045 [3]	Oct, 2007 – Sep, 2008

[2] Includes the average daily release of approximately 25 cfs from the low flow outlet works.

[3] A low flow outlet works was completed in 1993 and an average release of 25 cfs is maintained all year.

Month	Gain from Alcova		Inflow [7]		Outflow		Content [9]	
	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]
October	2.7	21	45.2	66	1.7	42 [6]	161.7	95
November	3.4	29	35.4	63	1.7	63 [6]	194.6	87
December	1.3	18	31.9	65	2.0	167 [6]	224.3	83
January	6.3	62	36.2	71	2.6	164 [6]	257.6	81
February	9.1	68	37.2	75	2.2	50 [6]	292.0	80
March	7.7	43	48.5	69	1.8	9 [6]	337.7	82
April	14.6	40	85.7	86	23.2	38	397.8	89
May	153.3	238	273.0	173	127.4	108	539.8	111
June	43.0	200	80.8	53	103.5	62 [8]	510.8	110
July	-1.6	NA [4]	102.2	66	304.1	97	302.5	101
August	-0.6	NA [4]	89.0	65	269.7	92	118.5	85
September	4.1	44	46.2	53	43.5	38 [8]	119.9	110
Annual	243.1	120	911.2	80	883.4	80		

[4] Represents a negative number that makes the percentage meaningless.

[5] 30 year average is the period (1978-2007)

[6] 14 year average is the period (1994-2007) In 1993 a low flow valve was installed at Glendo Dam which allowed the release of 25 cfs during the non irrigation season. Therefore, a 13 year average is used for the months of October through March. The March average is skewed high due to evacuation of space in the upper system to allow for snow melt run off. The higher March average caused the percent of average to be lower than normal.

[7] Inflow include the gain from Alcova Dam to Glendo Dam.

[8] Irrigation districts in an effort to conserve their water supply delayed irrigation deliveries until June and discontinued their irrigation deliveries in early September.

[9] End of Month

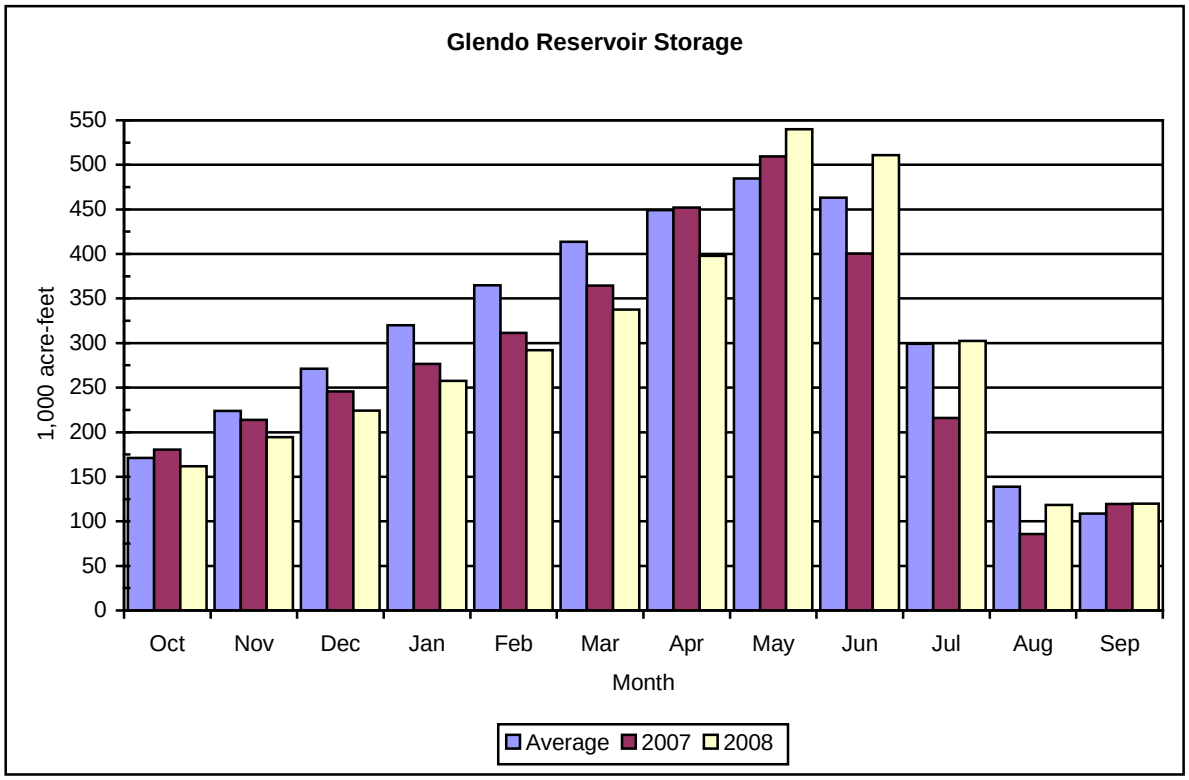

Figure 7 Glendo Reservoir Storage

Gains to the North Platte River from Glendo Dam to Guernsey Reservoir

The river gains between Glendo Dam and Guernsey Dam during water year 2008 were below average for 7 months with only the months of May, June, and September 2008 being above average. With the snowpack levels above 100 percent and with fast warming days for the month of May the average in flow for the month was 2,800 cfs. The Glendo Dam to Guernsey Reservoir river gains ranged from a high of 475 percent in May 2008 to only 31 percent of average in December 2007, with the month of July having a negative value making a percentage value meaningless. On May 23, 2008, daily computed inflow to Guernsey Reservoir peaked at 7,241 cfs. Figure 8 depicts a comparison of average, water year 2008 and water year 2007 monthly river gains.

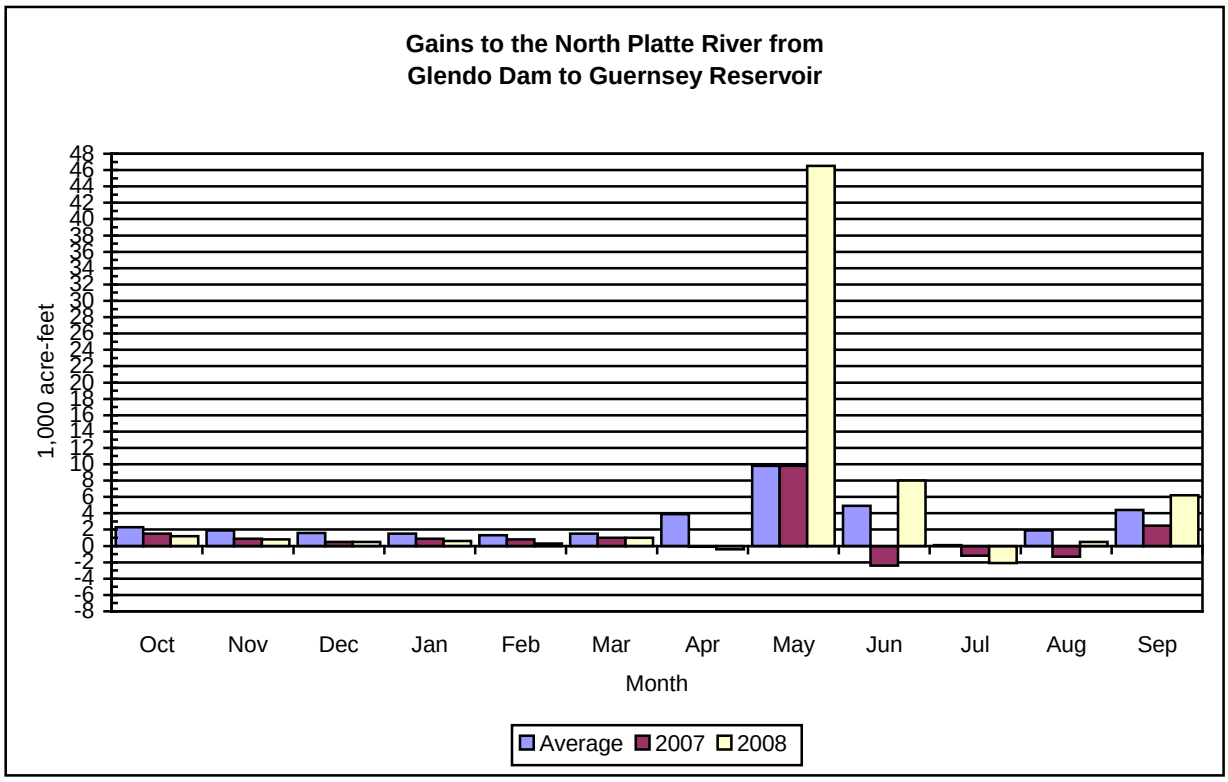

Figure 8 Gains to the North Platte River from Glendo Dam to Guernsey Reservoir

Guernsey Reservoir Storage and Releases

Guernsey Dam located about 25 miles below Glendo Dam, again stores and re-regulates the flow of the river prior to delivery of storage water to project lands of the North Platte Project and Glendo Unit. Guernsey Powerplant, located on the right abutment of the dam, has two 3.2 MW electrical generating units with a combined release capability of about 1,340 cfs. The windings of both units have been replaced resulting in the rating of 3.2 MW per unit. The north spillway gate, with a capacity of 50,000 cfs at a reservoir level of 4420 feet, is utilized for irrigation releases to supplement the maximum powerplant releases.

The original capacity of the reservoir was 73,800 AF, but this has been greatly reduced by deposition of silt. Utilizing data from the 1980 Sedimentation Survey of Guernsey Reservoir, the March 1982 - Area Capacity Tables and Curves shows about 45,600 AF of available storage.

At the beginning of water year 2008, storage in Guernsey Reservoir was at 3,649 AF. Releases from Guernsey Reservoir were started on April 22, 2008, as water was moved into the Inland Lakes. The annual "silt run" from the reservoir was initiated on July 11 and continued for 14 days. Reservoir storage was reduced to initiate the "silt run" and was maintained at a low level throughout the period. The minimum reservoir content during the "silt run" of 1,506 AF occurred on July 22, 2008. Following the "silt run," the reservoir was refilled to 25,916 AF by July 28, 2008, again making the reservoir suitable for recreation. At the end of the irrigation season, September 30, 2008, Guernsey Reservoir contained 5,632 AF. See Figure 9 for water year 2008 and water year 2007 storage compared to average.

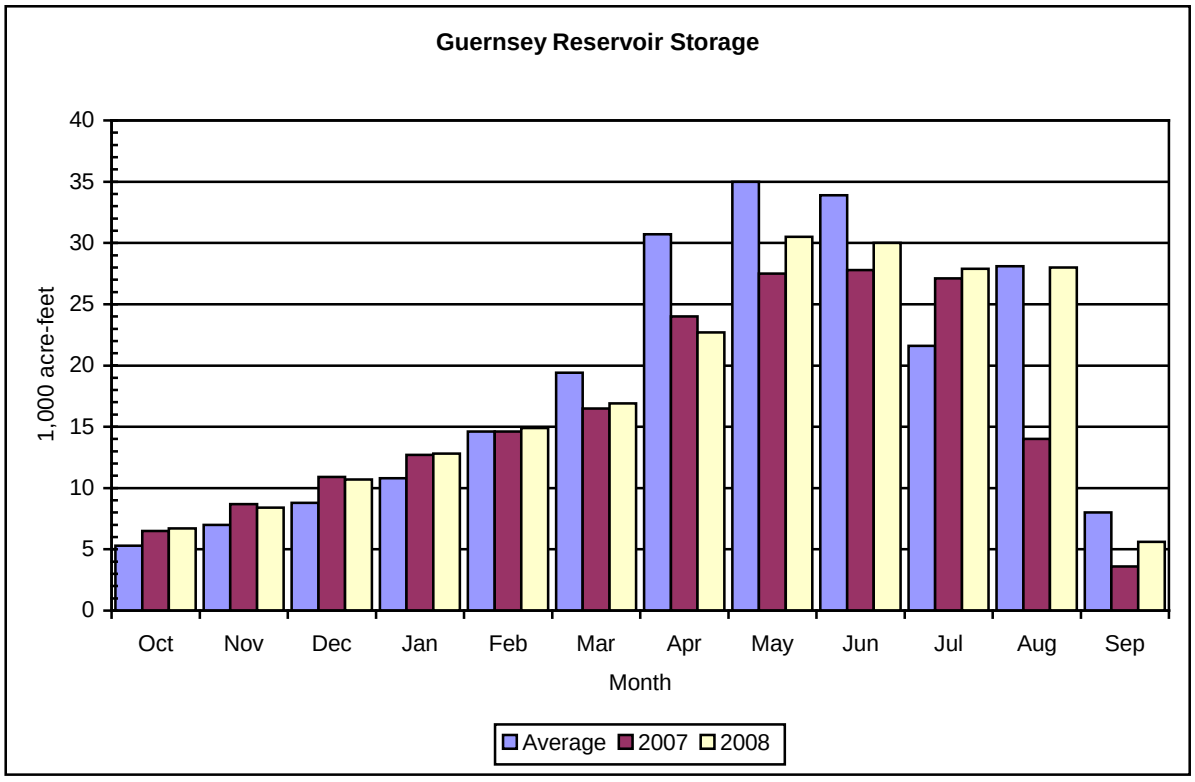

Figure 9 Guernsey Reservoir Storage

Precipitation Summary for Water Year 2008

Although the precipitation was quite variable from month to month throughout the North Platte River Basin, all watersheds had above average total precipitation for the water year. Watershed precipitation is an average of the precipitation readings using several stations as indicators for each watershed.

In the Seminoe watershed, precipitation at the Elk Mountain and Saratoga, Wyoming, weather stations, both recorded the highest December precipitation on record of 293 percent. The Seminoe watershed precipitation was over 100 percent cumulative for all of the 2008 water year which was very much needed moisture after a 9 year period of below average runoff.

In the Pathfinder watershed, precipitation at the Lander, Wyoming, weather stations recorded the lowest April precipitation in the last 30 years. In the Pathfinder watershed, precipitation at the Pathfinder, Wyoming, weather stations recorded the second highest December precipitation in the last 30 years. The Pathfinder watershed precipitation data recorded a tie for the lowest precipitation combining for an average of 14 percent for the month of November.

In the Glendo watershed, precipitation at the Glenrock, Wyoming, weather station had no precipitation for the month of November which was the lowest on record in the last 30 years. The Glendo watershed precipitation data recorded the highest May precipitation combining for an average of 261 percent for the month. The Pathfinder Dam weather station is used as an indicator in both the Pathfinder and Glendo watersheds.

In the Guernsey watershed, the Guernsey Dam, Wyoming, weather station had the second highest May precipitation in the last 30 years and the Glendo Dam, Wyoming, weather station had the greatest May precipitation in 50 years. The Guernsey watershed precipitation data recorded the lowest precipitation combining for an average of 29 percent for the month of November.

See Figure 10 for a comparison of average, water year 2008, and water year 2007 total precipitation.

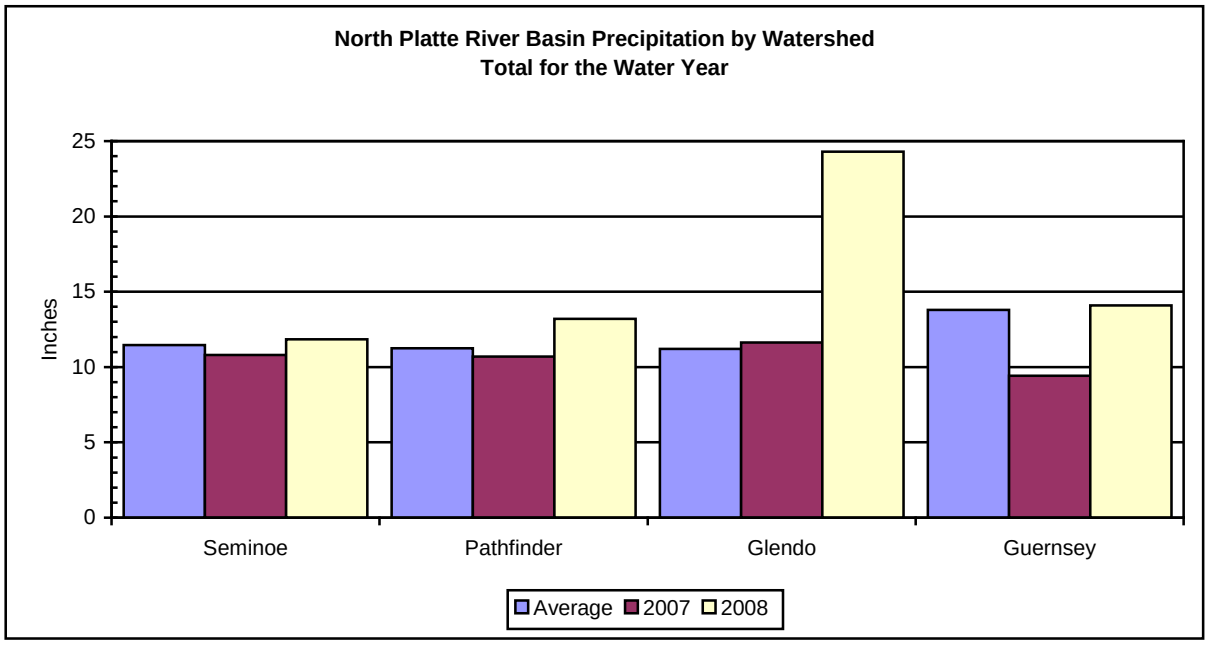

Figure 10 North Platte River Basin Precipitation by Watershed Total for Water Year

Snowpack Summary for Water Year 2008

Reclamation relies on the Natural Resources Conservation Service (NRCS) to provide snow water equivalent (SWE) information for the three drainage areas in which Reclamation forecasts snowmelt runoff. The watershed area above Seminoe Reservoir was above average for February, March, April, and May. The Sweetwater River and the watershed between Alcova Dam and Glendo Reservoir were below average for the February, March, April, and May. Table 6 shows a summary of snowpack for water year 2008.

Snowpack SWE for February was above average at 101 percent for the watershed above Seminoe Reservoir; below average at 82 percent for the Sweetwater River watershed which flows into Pathfinder Reservoir and below average at 78 percent for the Alcova to Glendo watershed.

Snowpack on March 1, 2008, had risen slightly, with SWE at 107 percent of average for the watershed above Seminoe Reservoir; it decreased slightly to 81 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir and increased to 86 percent of average for the Alcova to Glendo watershed.

Snowpack for April 1, 2008, declined slightly with SWE at 102 percent of average for the watershed above Seminoe Reservoir, and improving to 94 percent of average for the Alcova to Glendo watershed; 76 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir.

Snowpack for May 1, 2008, improved with SWE at 105 percent of average for the watershed above Seminoe Reservoir; 80 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir; and 99 percent of average for the Alcova to Glendo watershed.

Table 6 North Platte Snowpack Water Content for 2008

Watershed	Feb 1		Mar 1		Apr 1		May 1	
	SWE[1]	% of Avg.[2]	SWE[1]	% of Avg.[2]	SWE[1]	% of Avg.[2]	SWE[1]	% of Avg.[2]
Seminoe Reservoir	13.4	101	18.7	107	21.8	102	22.8	105
Pathfinder Reservoir	7.9	82	9.9	81	11.1	76	11.6	80
Glendo Reservoir	5.7	78	7.9	86	11.3	94	10.8	99

[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.

Allocation for Water Year 2008

No allocation of storage water was required in water year 2008. The most consecutive allocation years historically are now 2002, 03, 04, 05, 06, and 2007, with 1953, 54, 55, 56, and 1957, being the second longest consecutive allocation years.

Ownerships for Water Year 2008

Stored water which is held in accounts for various entities is referred to as their ownership. At the beginning of water year 2008, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained only 286,249 AF of water, which is 72 percent of average. The Kendrick ownership contained 359,306 AF of water, which is 41 percent of average; and the Glendo ownership contained 53,566 AF of water, which is 42 percent of average. Guernsey ownership filled to its permitted amount during water year 2008.

The total amount of water stored at the end of water year 2007 in the mainstem reservoirs for use in water year 2008 was 706,338 AF which was 50 percent of average. This total does not include 19,383 AF of water remaining in the four Inland Lakes in Nebraska.

At the end of water year 2008, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 572,718 AF of water which is 144 percent of average. The Glendo ownership contained 85,417 AF of water which is 68 percent of average. The Kendrick ownership contained 530,788 AF, which is 60 percent of average and the operational/re-regulation water account contained 1,536 AF. Also stored in the North Platte storage system was 3,369 AF for the city of Cheyenne and 2,000 AF for Pacific Power. See Figure 11 for the last two water years ownership carryover compared with average. Table 8 shows a summary of ownership for water year 2008.

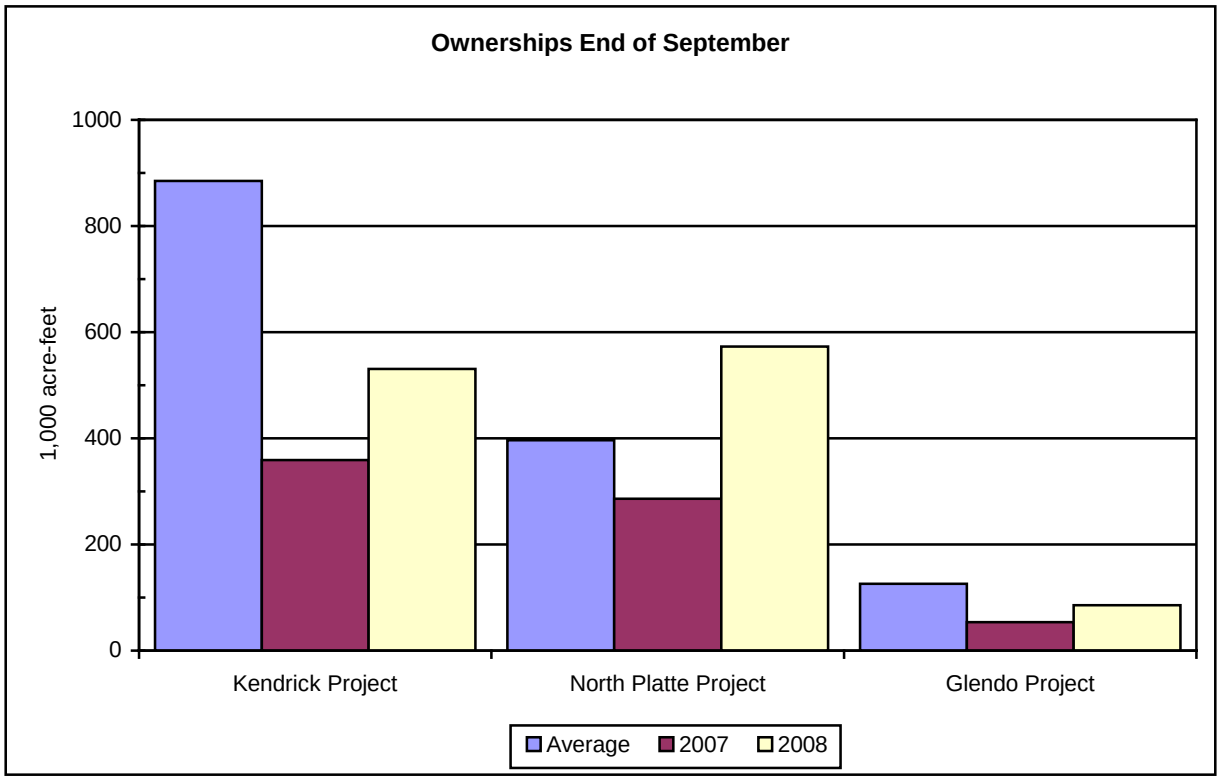

Figure 11 Ownerships End of September

Reservoir inflow forecasts are prepared at the first of February, March, April, and May, to estimate the inflows expected for the April through July runoff period.

Runoff forecasts for the Seminoe Reservoir watershed, the Sweetwater River above Pathfinder Reservoir, and the North Platte River from Alcova Dam to Glendo Reservoir are based on snow telemetry (SNOTEL) and/or snow course sites, precipitation sites, and calculated November inflow. Reclamation maintains a database consisting of historic monthly data for reservoir inflows, snow and precipitation stations. WYAO staff coordinates with NRCS Portland Office staff to exchange forecasted numbers. Reclamation forecasts and NRCS forecasts are then reviewed by WYAO management. All the information available is considered and judgment is applied to result in a final forecast of reservoir inflow. The forecasted information is then made available to the public through a news release and is used in updating monthly reservoir operating plans. Table 7 depicts a summary of the monthly forecasts for water year 2008.

Table 7 Summary of Forecasts of April-July Runoff for Water Year 2008

Forecast Points	Feb 1 KAF	Feb 1 % of Avg.	Mar 1 KAF	Mar 1 % of Avg.	Apr 1 KAF	Apr 1 % of Avg.	May 1 KAF	May 1 % of Avg.	Actual April-July KAF	% of Apr-Jul Avg.[1]
Seminoe Reservoir	700	99	700	99	750	107	850 [2]	121	955.9	136
Sweetwater River	40	65	40	65	50	81	50 [3]	81	51.7	84
Alcova to Glendo	75	62	80	66	100	83	100 [4]	83	209.3	172

[1] Average is based on the 1978-2007 period.
[2] The May 1 forecast includes an actual April inflow of 104,800 AF.
[3] The May 1 forecast includes an actual April inflow of 5,300 AF.
[4] The May 1 forecast includes an actual April inflow of 14,600 AF.

Table 8 Summary of North Platte River System Ownership for Water Year 2008

SUMMARY OF NORTH PLATTE RIVER SYSTEM OWNERSHIPS FOR WATER YEAR 2008 (Acre-feet)

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
PATHFINDER OWNERSHIP														
ACCRUAL A/		38332	29866	30001	23975	24588	46839	97279	315509	138897				745286
EVAPORATION		2159	1454	346	749	364	1190	2925	4700	10924	13939	10346	4852	53948
DELIVERY B/		2	0	0	0	0	0	0	806 A/	394 A/	126724	222789	56556	407271
OWNERSHIP	286251	322422	350834	380489	403715	427939	473588	567942	879557	1007924	867261	634126	572718	
KENDRICK OWNERSHIP														
ACCRUAL		0	0	0	0	0	0	0	0	218805	0	0	25990	244795
EVAPORATION		2289	1244	300	582	277	838	1756	2199	4933	7824	6365	4172	32779
DELIVERY B/		0	0	0	0	0	0	0	1613	2087	17156	15735	3943	40534
OWNERSHIP	359306	357017	355773	355473	354891	354614	353776	352020	348208	559993	535013	512913	530788	
GLENDO OWNERSHIP														
ACCRUAL		2 D/	0	0	0	0	0	0	49776	0	0	0	2421	52199
EVAPORATION		783	326	20	84	222	377	648	1190	1627	2342	1675	1166	10460
DELIVERY & LOSS B/			0	0	0	0	0	50	0	23	1334	3819	4660	9886
OWNERSHIP	53564	52783	52457	52437	52353	52131	51754	51056	99642	97992	94316	88822	85417	
PACIFIC POWER & LIGHT														
ACCRUAL		0	0	0	0	0	0	0	413	425	558	558	156	2110
DELIVERY B/		0	0	0	0	0	0	0	2000	0	0	0	0	2000
EVAPORATION		15	5	0	1	1	4	10	1	0	19	29	25	110
IN STORAGE	2000	1985	1980	1980	1979	1978	1974	1964	376	801	1340	1869	2000	
GUERNSEY OWNERSHIP														
ACCRUAL		0	0	1667	5855	8847	8078	0	22064	0	0	0	0	46511
EVAPORATION		0	0	5	37	51	197	426	824	1196	474	0	0	3200
DELIVERY B/		0	0	0	0	0	0	0	0	0	43301	0	0	43301
OWNERSHIP	0	0	0	1662	7480	16276	24157	23731	44971	43775	0	0	0	

Table 8 (Continued) Summary of North Platte River System Ownership for Water Year 2008

SUMMARY OF NORTH PLATTE RIVER SYSTEM OWNERSHIPS FOR WATER YEAR 2008 (Acre-feet)

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
INLAND LAKES OWNERSHIP														
ACCRUAL		3695	4041	0	0	0	0	13605	0	0	0	0	0	21341
EVAPORATION		6	21	0	4	2	15	65	1	0	0	0	0	114
TRANSFER C/		0	0	0	0	0	0	15987	5240	0	0	0	0	21227
OWNERSHIP	0	3689	7709	7709	7705	7703	7688	5241	0	0	0	0	0	
CITY OF CHEYENNE														
ACCRUAL		445	715	338	512	546	3523	886	241	1182	727	880	721	10716
EVAPORATION		16	10	0	4	0	16	56	63	14	26	31	28	264
DELIVERY F/		0	0	0	0	0	0	0	4178	4963	0	0	0	9141
OWNERSHIP	2058	2487	3192	3530	4038	4584	8091	8921	4921	1126	1827	2676	3369	
OPERATIONAL														
ACCRUAL		0	0	0	0	0	0	0	0	0	0	0	1544	1544
EVAPORATION		27	8	0	1	1	6	13	21	34	40	11	8	170
RELEASED		0	0	0	0	0	0	0	0	0	1225	1207	565	2997
OWNERSHIP	3159	3132	3124	3124	3123	3122	3116	3103	3082	3048	1783	565	1536	
RE-REGULATION														
ACCRUAL		0	0	0	0	0	0	17 E/	0	8 E/	0	0	0	25
EVAPORATION		0	0	0	0	0	0	0	0	0	0	0	0	0
RELEASED		0	0	0	0	0	0	0	0	0	25 E/	0	0	25
OWNERSHIP	0	0	0	0	0	0	0	17	17	25	0	0	0	
WWDC Water (In Glendo)														
TRANSFERRED F/		0	0	0	0	0	0	4659	2461	0	0	0	117	7237
EVAPORATION		0	0	0	0	0	0	12	57	75	75	0	0	219
RELEASED		0	0	0	0	0	0	0	0	81	6427	359	151	7018
OWNERSHIP	0	0	0	0	0	0	0	4647	7051	6895	393	34	0	

Table 8 (continued) Summary of North Platte River System Ownership for Water Year 2008

A/ In 1992 the Wyoming State Engineer granted an exchange which allows Pacific Power to exchange direct flows in the winter months (Oct-Apr) for direct flow in the summer months. During the winter months some direct flows which are available for storage under Pathfinder's storage right are not stored but instead are allowed to pass downstream for use by Pacific Power. In exchange starting on May 1, Pacific Power allows some of its available direct flow to pass downstream to Glendo Reservoir to be stored as Pathfinder ownership. The exchange water was returned to Pathfinder at a rate of 26 AF daily starting on May 1, 2008, until June 17, 2008, when the last 6 AF of the exchange water was returned.

B/ Amounts shown as delivery are storage water only. Natural flow which was delivered is not shown in this table.

C/ Transfer refers to Inland Lakes ownership water which was delivered from storage in Glendo or Guernsey Reservoirs. In April and May 21, 227 AF was transferred to the Inland Lakes.

D/ Not an actual accrual but a 2 AF correction for water used which was corrected on October 2, 2007, for a miscalculated number for September 2007.

E/ Water diverted under temporary Glendo contract by exchange from Glendo Reservoir shall comply with the November 13, 2001, modifed North Platte Decree, Article 17d., which provides that for each 2 AF of Glendo storage water diverted above Glendo Reservoir 1 additional AF shall be contracted at the same time for release from Glendo Reservoir and passed through Guernsey Reservoir to the North Platte River.

F/ Wyoming Water Development Commission (WWDC) contracted with the Bureau of Reclamation for storage space of 7,000 AF in Glendo Reservoir for a one water year period to store non-project water for irrigation purposes.

Table 9 Actual Reservoir Operations for Water Year 2008

NPRAOP V1.1K 21-Mar-2003 Run: 14-Oct-2008 7:36 Page 1

NORTH PLATTE RIVER OPERATING PLAN
Year Beginning Oct 2007

HYDROLOGY OPERATIONS

Seminoe Reservoir Operations — Initial Content 226.4 Kaf — Operating Limits: Max 1017.3 Kaf, 6357.00 Ft. Min 31.7 Kaf, 6239.02 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	30.8	24.8	26.9	19.9	22.7	42.9	104.8	318.6	403.6	128.9	41.9	31.7
Total Inflow	cfs	501.	417.	438.	323.	395.	698.	1761.	5181.	6782.	2097.	681.	533.
Turbine Release	kaf	33.3	31.5	32.5	32.5	33.0	34.8	75.3	141.4	147.6	133.9	103.9	52.5
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Release	kaf	33.3	31.5	32.5	32.5	33.0	34.8	75.3	141.4	147.6	133.9	103.9	52.7
Total Release	cfs	542.	530.	528.	529.	573.	566.	1265.	2300.	2481.	2178.	1690.	885.
Evaporation	kaf	1.9	0.9	0.2	0.4	0.2	0.6	1.4	2.3	6.3	9.8	7.5	5.2
End-month content	kaf	221.9	214.3	208.5	195.4	184.9	192.4	220.6	395.4	645.1	630.3	560.7	534.5
End-month elevation	ft	6292.1	6290.9	6290.0	6287.8	6286.0	6287.3	6291.9	6313.9	6335.2	6334.1	6328.9	6326.7

Kortes Reservoir Operations — Initial Content 4.7 Kaf — Operating Limits: Max 4.8 Kaf, 6142.73 Ft. Min 1.7 Kaf, 6092.73 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	33.3	31.5	32.5	32.5	33.0	34.8	75.3	141.4	147.6	133.9	103.9	52.7
Total Inflow	cfs	542.	530.	528.	529.	573.	566.	1265.	2300.	2481.	2178.	1690.	885.
Turbine Release	kaf	32.2	31.5	32.5	32.5	31.3	34.2	68.1	130.4	147.6	133.9	103.9	51.9
Spillway Release	kaf	1.1	0.0	0.0	0.0	1.7	0.6	7.0	11.1	0.0	0.0	0.0	0.7
Total Release	kaf	33.3	31.5	32.5	32.5	33.0	34.8	75.1	141.5	147.6	133.9	103.9	52.6
Total Release	cfs	542.	530.	528.	529.	574.	565.	1262.	2301.	2480.	2177.	1690.	884.

Pathfinder Reservoir Operations — Initial Content 171.1 Kaf — Operating Limits: Max 1016.5 Kaf, 5850.10 Ft. Min 31.4 Kaf, 5746.00 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Sweetwater Inflow	kaf	1.7	2.6	2.5	2.8	2.3	3.1	5.3	18.7	21.3	6.4	1.9	2.4
Kortes-Path Gain	kaf	5.0	3.5	3.8	5.5	3.2	6.3	8.7	28.7	17.3	0.7	-2.6	0.8
Inflow from Kortes	kaf	32.5	31.4	32.5	32.5	29.3	70.2	120.1	124.1	120.1	124.1	124.2	45.8
Total Inflow	kaf	38.3	35.0	36.3	38.0	36.2	41.0	83.8	170.2	164.9	134.6	101.3	53.4
Total Inflow	cfs	629.	613.	595.	585.	596.	1308.	2363.	2464.	2371.	2248.	2194.	860.
Turbine Release	kaf	14.5	23.7	26.5	26.2	24.8	36.4	99.8	108.4	53.4	119.0	99.5	44.6
Jetflow Release	kaf	4.5	4.3	4.5	4.6	4.3	4.4	4.5	4.4	4.6	4.8	4.5	4.2
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Release	kaf	19.0	28.0	31.0	30.8	29.1	40.8	104.3	112.8	58.0	123.8	104.0	48.8
Total Release	cfs	310.	4716.	505.	501.	505.	665.	1753.	1834.	975.	2013.	1692.	819.
Evaporation	kaf	1.5	0.9	0.2	0.4	0.2	0.7	1.4	1.9	4.3	6.0	4.8	3.1
End-month content	kaf	188.9	195.0	200.0	206.8	213.7	213.1	191.3	246.8	349.5	354.2	346.6	348.2
End-month elevation	ft	5784.5	5785.5	5786.3	5787.4	5788.5	5788.4	5784.9	5793.3	5806.1	5806.6	5805.8	5805.9

Alcova Reservoir Operations — Initial Content 179.5 Kaf — Operating Limits: Max 184.4 Kaf, 5500.00 Ft. Min 145.3 Kaf, 5483.12 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	19.0	28.0	31.0	30.8	29.1	40.9	104.3	112.8	58.0	123.8	104.0	48.8
Total Inflow	cfs	310.	506.	503.	503.	504.	659.	2358.	2127.	2608.	2396.	2262.	1064.
Turbine Release	kaf	39.6	29.6	30.8	30.7	28.8	39.7	81.6	110.2	47.0	104.2	86.9	42.1
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Casper Canal Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	9.9	17.2	15.7	5.4
Total Release	kaf	39.6	29.6	30.8	30.7	27.8	40.1	116.0	129.8	153.8	145.7	137.7	62.2
Total Release	cfs	645.	501.	499.	499.	501.	652.	1949.	2111.	2585.	2370.	2239.	1045.
Evaporation	kaf	0.6	0.3	0.1	0.2	0.1	0.2	0.5	0.7	1.3	1.6	1.3	0.8
End-month content	kaf	158.3	156.4	156.6	156.4	156.6	157.6	179.7	180.0	179.8	180.5	180.7	181.1
End-month elevation	ft	5487.9	5487.9	5487.9	5487.9	5487.9	5487.9	5498.0	5498.0	5498.0	5498.0	5498.0	5498.0

Table 9 (Continued) Actual Reservoir Operations for Water Year 2008

NORTH PLATTE RIVER OPERATING PLAN
Year Beginning Oct 2007

Gray Reef Reservoir Operations — Initial Content 1.7 Kaf — Operating Limits: Max 1.1 Kaf, 5327.42 Ft. / Min 0.0 Kaf, 5306.00 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	39.6	29.6	30.8	30.7	28.8	39.7	81.6	110.2	47.0	104.2	86.9	42.1
Total Inflow	cfs	645.	498.	501.	500.	501.	645.	1371.	1793.	789.	1695.	1413.	708.
Total Release	kaf	39.5	29.8	30.8	30.8	28.9	39.6	81.6	110.2	46.8	104.1	86.7	42.1
Total Release	cfs	642.	500.	501.	501.	502.	644.	1371.	1792.	787.	1693.	1410.	707.

Glendo Reservoir Operations — Initial Content 119.3 Kaf — Operating Limits: Max 789.4 Kaf, 4653.00 Ft. / Min 63.2 Kaf, 4570.02 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Alcova-Glendo Gain	kaf	2.7	3.4	1.3	6.3	9.1	7.7	14.6	153.3	43.0	-1.6	-0.6	4.1
Infl from Gray Reef	kaf	39.5	29.8	30.8	30.8	28.9	39.6	81.6	110.2	46.8	104.1	86.7	42.1
Total Inflow	kaf	45.2	35.4	31.9	36.2	37.2	48.5	85.7	273.0	80.8	102.2	89.0	46.2
Total Inflow	cfs	735.	594.	518.	589.	646.	789.	1440.	4441.	1357.	1662.	1448.	776.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	21.4	117.3	99.2	225.5	230.0	38.0
Low Flow Release	kaf	1.7	1.7	2.0	2.6	2.2	1.8	0.0	0.0	0.0	0.0	0.0	5.5
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Irrigation Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	1.8	10.0	4.4	78.6	39.8	0.0
Total Release	kaf	1.7	1.7	2.0	2.6	2.2	1.8	23.2	127.4	103.6	304.1	269.7	43.5
Total Release	cfs	27.	28.	32.	42.	38.	29.	391.	2072.	1740.	4946.	4386.	731.
Evaporation	kaf	1.1	0.7	0.2	0.4	0.3	1.0	2.3	3.7	6.2	6.5	3.3	1.3
End-month content	kaf	161.7	194.6	224.3	257.6	292.0	337.7	397.9	539.8	510.8	302.5	118.5	119.9
End-month elevation	ft	4593.3	4598.8	4603.3	4607.9	4612.3	4617.7	4624.1	4636.8	4634.5	4613.6	4584.6	4584.9

Guernsey Reservoir Operations — Initial Content 3.6 Kaf — Operating Limits: Max 45.6 Kaf, 4419.99 Ft. / Min 0.0 Kaf, 4370.00 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Glendo-Guerns Gain	kaf	1.2	0.8	0.5	0.6	0.3	1.0	-0.4	46.5	8.0	-2.1	0.5	6.2
Inflow from Glendo	kaf	1.7	1.7	2.0	2.6	2.2	1.8	23.2	127.4	103.6	304.1	269.7	43.5
Total Inflow	kaf	2.9	2.5	2.5	2.5	2.7	2.8	22.8	173.9	111.6	302.0	270.2	49.7
Total Inflow	cfs	47.	42.	39.	40.	46.	45.	383.	2828.	1875.	4911.	4394.	834.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	16.0	63.8	59.0	31.9	61.4	20.4
Seepage	kaf	0.2	0.2	0.1	0.3	0.5	0.6	0.6	0.0	0.0	0.0	0.0	0.0
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.5	52.1	271.4	207.7	51.3
Total Release	kaf	0.2	0.2	0.1	0.3	0.5	0.6	16.6	165.3	111.1	303.3	269.1	71.7
Total Release	cfs	3.	3.	2.	5.	8.	10.	279.	2689.	1866.	4933.	4377.	1205.
Evaporation	kaf	0.2	0.1	0.0	0.1	0.1	0.2	0.4	0.8	1.0	0.7	1.0	0.3
End-month content	kaf	6.2	8.4	10.7	12.8	14.9	16.9	22.7	30.5	30.0	27.9	28.0	5.6
End-month elevation	ft	4396.1	4398.7	4400.9	4402.6	4404.2	4405.6	4409.1	4413.2	4412.9	4411.9	4411.9	4395.4

Flood Benefits for Water Year 2008

Because of the existence of dams on the North Platte River, The Corps of Engineers, Omaha District, estimates that in water year 2008 flood damages of $2,382,500 were prevented. Table 10 is a breakdown of flood damage prevented by dams.

Table 10 Flood Damage Prevented by Dams for Water Year 2008 (on the North Platte River Basin System)

DAMS	WATER YEAR 2008	PRIOR TO 2008 [2]	ACCUMULATED TOTAL [1]
SEMINOE	$858,900	$30,105,100	$30,964,000
PATHFINDER	$329,700	$8,874,800	$9,204,500
ALCOVA	$0	$547,900	$547,900
GLENDO	$1,193,900	$81,641,800	$82,835,700
GUERNSEY	$0	$434,000	$434,000
TOTAL	$2,382,500	$121,603,600	$123,986,100

[1] This data is received from the Army Corps of Engineers, Omaha District Office, and is revised every October.

[2] The period of assessment is 1970 through 2007 except for Glendo Dam, which is 1965 through 2007.

Generation for Water Year 2008

Power generation was well below average for all powerplants except Kortes powerplant on the North Platte River Basin in water year 2008. See Table 11 for a breakdown of generation by powerplant.

Table 11 Power Generation Water Year 2008

Powerplant	Gross generation [1](GWh)	Percent of Average [2]
Seminoe	115.6	87
Kortes	140.8	100
Fremont Canyon	162.1	69
Alcova	82.5	69
Glendo	68	71
Guernsey	17.4	86
Total Basin	586.4	81

[1] Generation is reported in giga-watt hours (GWh).
[2] 30 year average (1978-2007)

The number of generation units at each powerplant, their capacity and output at rated head is shown in Table 12.

Table 12 North Platte River Powerplant Data

Powerplant	Number of Units	Capacity Each Unit (kw)	Total [2] Installed Capacity (kw)	Normal Operating Head (feet)	Output At rated Head (cfs)	30 year Average [1] (GWh)
Seminoe	3	17,000	51,000	97-227	4,050	132.6
Kortes	3	12,000	36,000	192-204	2,910	141.5
Fremont Canyon	2	33,400	66,800	247-363	3,080	234.3
Alcova	2	19,500	39,000	153-165	4,100	116.4
Glendo	2	19,000	38,000	73-156	3,400	79
Guernsey	2	3,200	6,400	89-91	1,340	18.7
Total	14	---	237,200	---	---	722.5

[1] 1978-2007
[2] Installed capacity from Monthly Report of Power Operations-Powerplant (Form PO&M 59)

Glossary

Annual Operating Plan (AOP) - An annual publication which is prepared, reviewed, and presented to the public, with a summary of the actual operations and outlook for the coming water year.

Acre-Foot (AF) - A measure of volume of water equal to an area of 1 acre covered with water 1 foot deep. (43,560 cubic feet)

Basin - The watershed from which overland runoff flows into the North Platte River. When used alone in this report it refers to the North Platte River Drainage Basin upstream of Guernsey Dam.

Bypass - That amount of water released from a reservoir other than through the powerplant for those reservoirs which have a powerplant connected to them.

Cubic foot per second (cfs) - The rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute. The volume of water represented by a flow of 1 cubic foot per second for 24 hours is equivalent to 86,400 cubic feet, approximately 1.983 AF, or 646,272 gallons.

Evaporation Pool - A volume of water set aside in the accounting process from which reservoir evaporation is subtracted as it occurs. (Used in Glendo storage accounting).

Flood Pool - A physical space in the reservoir which is to be occupied only by water from flood events. In Glendo Reservoir, the volume between reservoir elevations 4635.0 feet and 4653.0 feet is reserved exclusively for flood control.

Gains - Water which enters a river in a defined reach from a source other than an upstream release. When flow released into a reach is greater than the river flow exiting the lower end of the reach, the net gain is negative (loss of water in the reach).

Giga Watt hour (GWh) - A unit of power equal to one billion watt hours.

Head - The difference in elevation between the reservoir water surface and the power generating turbines at a powerplant which is connected to a reservoir.

Hydromet - Computer software designed for the acquisition, processing, storage and retrieval of hydrological and meteorological data which is gathered via satellite from remote sites.

Inflow - As used in this report is any water which enters a reservoir irrespective of whether it originated in the reach or was released from an upstream storage reservoir.

Glossary (continued)

Inland Lakes - A series of four off-stream storage reservoirs on the Interstate Canal system in Nebraska which are used to store and re-release irrigation water. (Lake Alice, Lake Minatare, Little Lake Alice, and Lake Winters Creek)

Megawatt (MW) – A unit of power equal to one million watts.

Natural Flow - River flow which has originated from a source other than reservoir storage.

NRCS. – The Natural Resources Conservation Service which is a government agency under the Department of Agriculture.

Power Pool - That space in a reservoir which must be full in order to efficiently generate electrical power through an associated turbine generator.

Precipitation - A deposit on the earth of hail, mist, rain, sleet, or snow.

Runoff - That part of precipitation on the Basin which appears as flow in the North Platte River.

Silt Run - The name given to the practice of flushing silt from Guernsey Reservoir into the North Platte River downstream where the silt laden water is diverted by irrigators. The silt tends to settle in the slower moving water of canals and laterals helping to seal the wetted perimeter and reduce seepage losses.

SNOTEL - Snowpack telemetry network. A network of NRCS automated sites which continually monitor snowpack and weather conditions and transmit data to a data retrieval center in Portland, Oregon.

System - As used in the report the System includes all storage, delivery, and power generating facilities on the mainstem of the North Platte River in Wyoming.

SWE – Snow Water Equivalent is the amount of water in the snowpack expressed in inches.

Water Year - October 1 through September 30

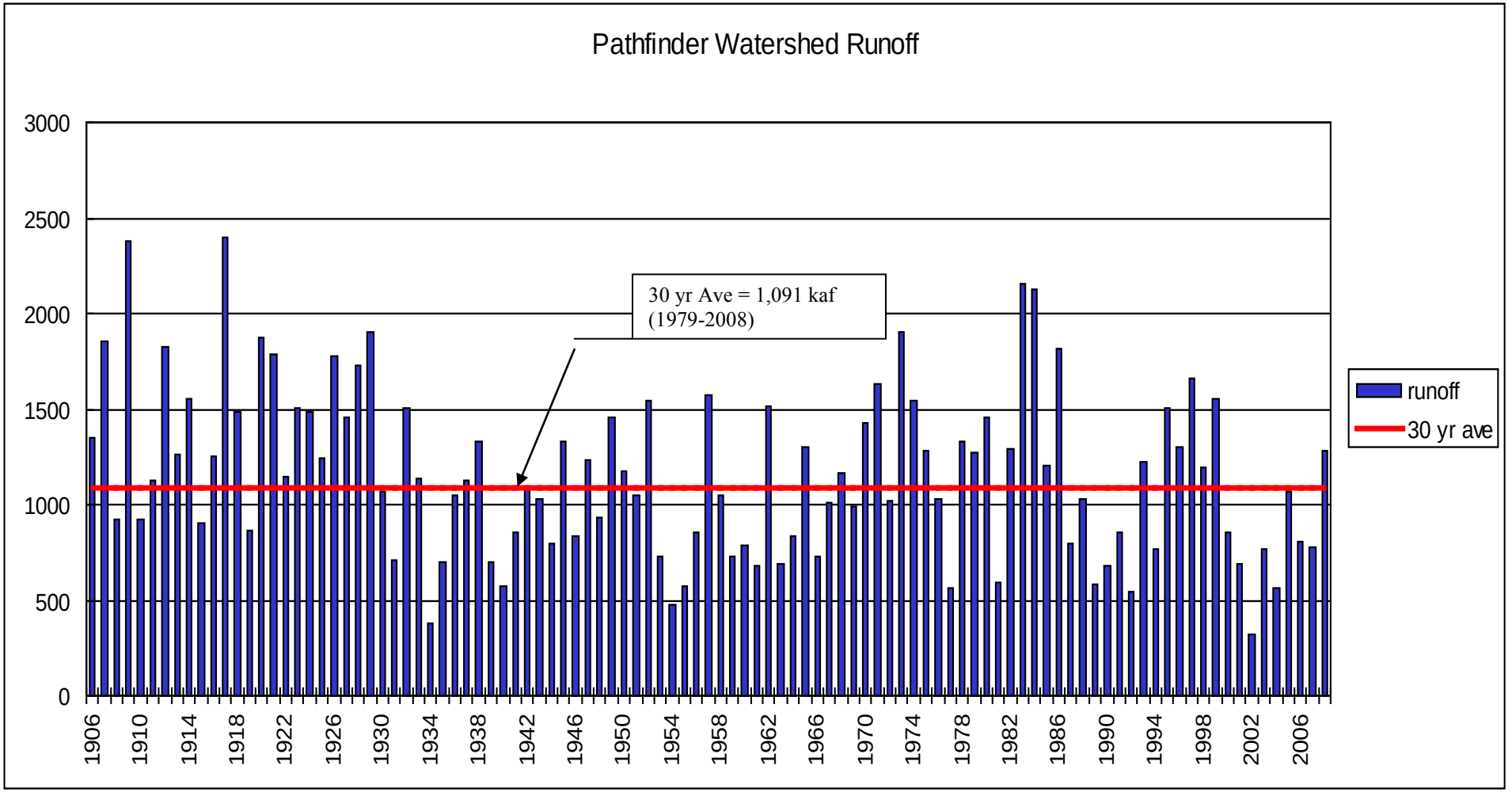

Figure 20 Pathfinder Watershed Runoff 1906-2008

Reservoir Data Definitions Sheets

A. General:

Dam design and reservoir operation utilize reservoir capacity and water surface elevation data. To insure uniformity in the establishment, use, and publication of these data the following standard definitions of water surface elevations and reservoir capacities shall be used.

B. Water Surface Elevation Definitions:

Maximum Water Surface - the highest acceptable water surface elevation with all factors affecting the safety of the structure considered. Normally it is the highest water surface elevation resulting from a computed routing of the inflow design flood through the reservoir on the basis of established operating criteria. It is the top of surcharge capacity.

Top of Exclusive Flood Control Capacity - the reservoir water surface elevation at the top of the reservoir capacity allocated to exclusive use for the regulating of flood inflows to reduce damage downstream.

Maximum Controllable Water Surface Elevation -the highest reservoir water surface elevation at which gravity flows from the reservoir can be completely shut off.

Top of Joint Use Capacity - the reservoir water surface elevation at the top of the reservoir capacity allocated to joint use, i.e., flood control and conservation purposes.

Top of Active Conservation Capacity - the reservoir water surface elevation at the top of the capacity allocated to the storage of water for conservation purposes only.

Top of Inactive Capacity -the reservoir water surface elevation below which the reservoir will not be evacuated under normal conditions.

Top of Dead Capacity - the lowest elevation in the reservoir from which water can be drawn by gravity.

Streambed at the Dam Axis - the elevation of the lowest point in the streambed at the axis of the dam prior to construction. This elevation normally defines the zero for the area-capacity tables.

C. Capacity Definitions:

Surcharge Capacity - the reservoir capacity provided for use in passing the inflow design flood through the reservoir. It is the reservoir capacity between the maximum water surface elevation and the highest of the following elevations:

a) Top of exclusive flood control capacity

b) Top of joint use capacity

c) Top of active conservation capacity

Total Capacity - the reservoir capacity below the highest of the elevations representing the top of exclusive flood control capacity, the top of joint use capacity, or the top of active conservation capacity. In the case of a natural lake which has been enlarged, the total capacity includes the dead capacity of the lake. Total capacity is used to express the total quantity of water which can be impounded and is exclusive of surcharge capacity.

Live Capacity - the part of the total capacity from which water can be withdrawn by gravity. It is equal to the total capacity less the dead capacity.

Active Capacity - the reservoir capacity normally usable for storage and regulation of reservoir inflows to meet established reservoir operating requirements. Active capacity extends from the highest of the top of exclusive flood control capacity, the top of joint use capacity, or the top of active conservation capacity to the top of inactive capacity. It is the total capacity less the sum of the inactive and dead capacities.

Exclusive Flood Control Capacity - the reservoir capacity assigned to the sole purpose of regulating flood inflows to reduce flood damage downstream.

Joint Use Capacity - the reservoir capacity assigned to flood control purposes during certain periods of the year and to conservation purposes during other periods of the year.

Active Conservation Capacity - the reservoir capacity assigned to regulate reservoir inflow for irrigation, power, municipal, and industrial, fish and wildlife, navigation, recreation, water quality, and other purposes. It does not include exclusive flood control or joint use capacity. The active conservation capacity extends from the top of the active conservation capacity to the top of the inactive capacity.

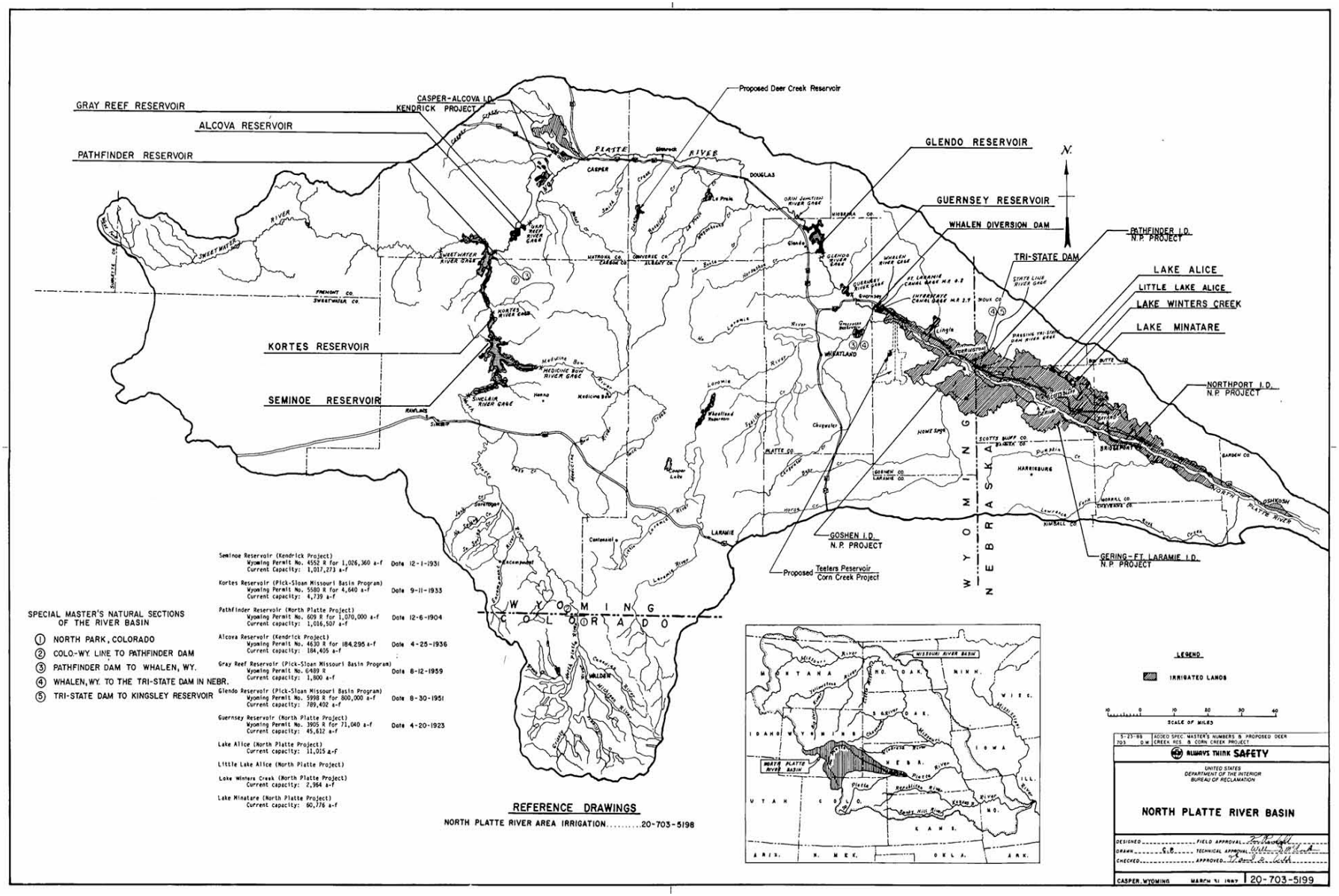

Figure 21 North Platte River Basin Map