

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 1977-2006, except for water year 2008 information which uses the years 1978-2007. In each coming year this period will be advanced by one 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 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 multipurpose 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 off stream 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 2007. 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 off stream 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 11 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)
Seminole	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, and 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 Wyoming Area Office 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, 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 2007. Table 2 depicts A Summary of Reservoir Storage Content for water year 2007 (end of month). Table 9 depicts the Actual Reservoir Operations for water year 2007.

Table 2 Summary of Reservoir Storage Content for water year 2007 (end of month)

Seminole Reservoir			Pathfinder Reservoir			Alcova Reservoir		
Month	Storage	Record ¹	Month	Storage	Record ¹	Month	Storage	Record ¹
October	274,787	3 rd lowest	October	225,725	3 rd lowest	October	158,734	³
November	280,658		November	230,659	3 rd lowest	November	156,155	
December	276,134		December	234,076	2 nd lowest	December	156,268	
January	267,678		January	239,050	2 nd lowest	January	156,268	
February	265,191		February	245,569	2 nd lowest	February	156,380	
March	331,278		March	248,619	3 rd lowest	March	157,849	
April	320,615		April	239,537	3 rd lowest	April	181,109	
May	430,317		May	274,143	3 rd lowest	May	180,840	
June	460,042		June	244,933	3 rd lowest	June	180,889	
July	365,845		July	204,746	2 nd lowest	July	181,330	
August	245,452	lowest	August	185,474	lowest	August	179,961	
September	226,388	lowest	September	171,126	lowest	September	179,547	
Glendo Reservoir			Guernsey Reservoir			Total System ²		
Month	Storage	Record ¹	Month	Storage	Record ¹	Month	Storage	Record ¹
October	180,595		October	6,476		October	852,658	
November	213,832		November	8,680		November	896,318	
December	245,782		December	10,864		December	929,440	
January	276,476		January	12,702		January	958,440	
February	311,308		February	14,566		February	999,194	
March	364,632		March	16,533		March	1,125,036	
April	452,164		April	24,023		April	1,223,895	
May	509,629		May	27,515	lowest	May	1,428,696	
June	400,538		June	27,769		June	1,320,390	2 nd lowest
July	215,927		July	27,068		July	1,001,218	2 nd lowest
August	85,664		August	13,962		August	716,701	lowest
September	119,254		September	3,649		September	706,338	lowest

¹ Record is the 30 year period from 1978-2007

² Total North Platte system includes storage in Seminole, Kortess, 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)

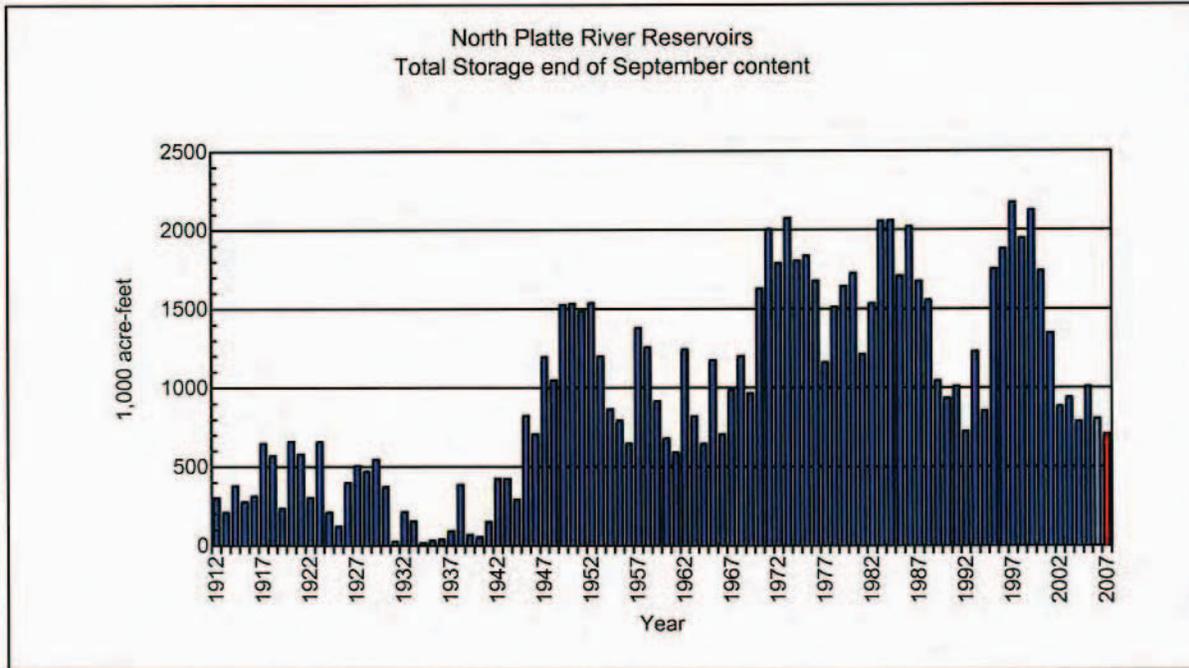


Figure 1 North Platte River Reservoirs Total Storage end of September content (1912-2007)

SYSTEM OPERATIONS WATER YEAR 2007
Seminoe Reservoir Inflow

Seminoe Reservoir inflows were below average for the months April through September when most of the runoff is likely to occur. A total of 727,800 AF or 77 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 October 2006 to a low of 40 percent in July 2007. The actual April through July inflow totaled 425,300 AF, which was 61 percent of the 30 year average of 700,100 AF. The Seminoe computed inflow peaked for the water year on March 21, 2007, at 4,339 cubic feet per second (cfs) compared to 6,658 cfs in water year 2006. Figure 2 depicts a comparison of average, water year 2007 and water year 2006 monthly inflow.

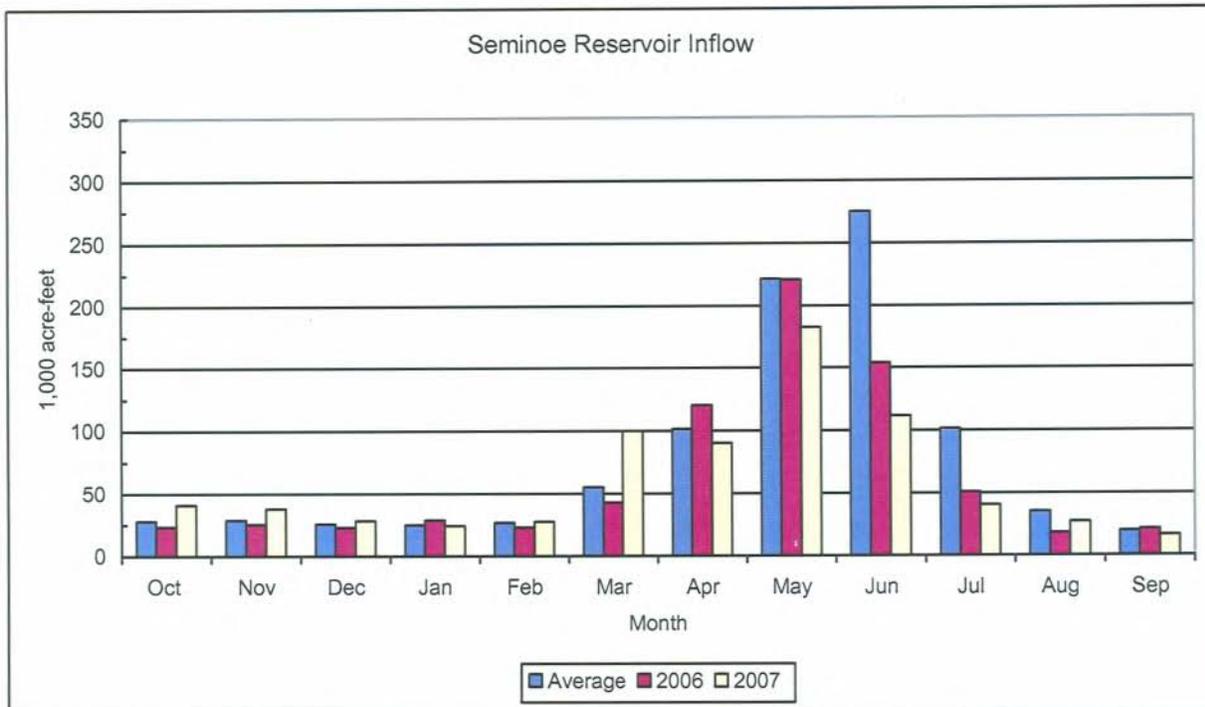


Figure 2 Seminoe Reservoir Inflow

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 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 2007, Seminoe Reservoir had a storage content of 267,825 AF, which was 41 percent of average and 26 percent of capacity. Seminoe storage content remained below average for the entire water year. The maximum Seminoe Reservoir content was reached on June 20, 2007, at 472,995 AF. At the end of water year 2007, Seminoe Reservoir storage content was 226,388 AF, which was 35 percent of average and 22 percent of capacity. See Figure 3 for a comparison of average, water year 2006 and water year 2007 monthly storage.

Releases from Seminoe Dam averaged approximately 530 cfs from October 2006, through March 2007. Releases were increased to approximately 2,540 cfs by the end of April then lowered to 1,000 cfs in May and increased to approximately 1,600 cfs by the end of June. The flows increased to 2,500 cfs by the end of July and then decreased again to approximately 1,500 cfs by the end of August. The water release was reduced to approximately 530 cfs on September 2, 2007 which would be the flow for the winter.

Table 3 depicts a summary of Seminoe Reservoir information for water year 2007.

Table 3 Seminole Reservoir Hydrologic Data for water year 2007

<u>Reservoir Allocations</u>	<u>Elevation (FT)</u>	<u>Storage (AF)</u>	<u>Storage Allocation (AF)</u>
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 <u>Camber</u>)	6361.00		

<u>Storage-Elevation Data</u>	<u>Elevation (FT)</u>	<u>Storage (AF)</u>	<u>Date</u>
Beginning of water year	6298.76	267,825	Oct 1, 2006 ²
End of water year	6292.78	226,388	Sep 30, 2007
Annual Low	6298.76	226,323	Sep 29, 2007
Historic Low ¹	6253.305	6,390	Apr 20, 1961
Annual High	6321.41	472,995	Jun 20, 2007
Historic High'	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

<u>Inflow-Outflow Data</u>	<u>Inflow ³</u>	<u>Date</u>	<u>Outflow</u>	<u>Date</u>
Annual Total (AF)	727,800	Oct' 06 - Sep' 07	740,600	Oct' 06 - Sep' 07
Daily Peak (CFS)	4,339	March 21, 2007	2,589 ⁴	Aug 10, 2007
Daily Minimum (CFS)	6	Sep 17, 2007	477 ⁴	Feb 16, 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	<u>Inflow</u>		<u>Outflow</u>		<u>(Content) ⁶</u>	
	<u>KAF</u>	<u>% of Avg. ⁵</u>	<u>KAF</u>	<u>% of Avg. ⁵</u>	<u>KAF</u>	<u>% of Avg. ⁵</u>
October	41.0	146	32.6	64	274.8	43
November	37.9	132	31.4	58	280.7	46
December	28.4	111	32.6	51	276.1	48
January	24.2	97	32.4	49	267.7	50
February	27.4	102	29.5	48	265.2	54
March	100.1	181	33.0	43	331.3	70
April	90.4	89	98.8	116	320.6	66
May	182.6	82	70.4	75	430.3	71
June	111.9	41	76.3	58	460.0	62
July	40.4	40	128.1	115	365.8	50
August	27.1	77	142.8	188	245.5	36
September	16.4	83	32.7	69	226.4	35
Annual	727.8	77	740.6	98		

⁵ The 30 year average is the period (1977-2006)

⁶ End of month

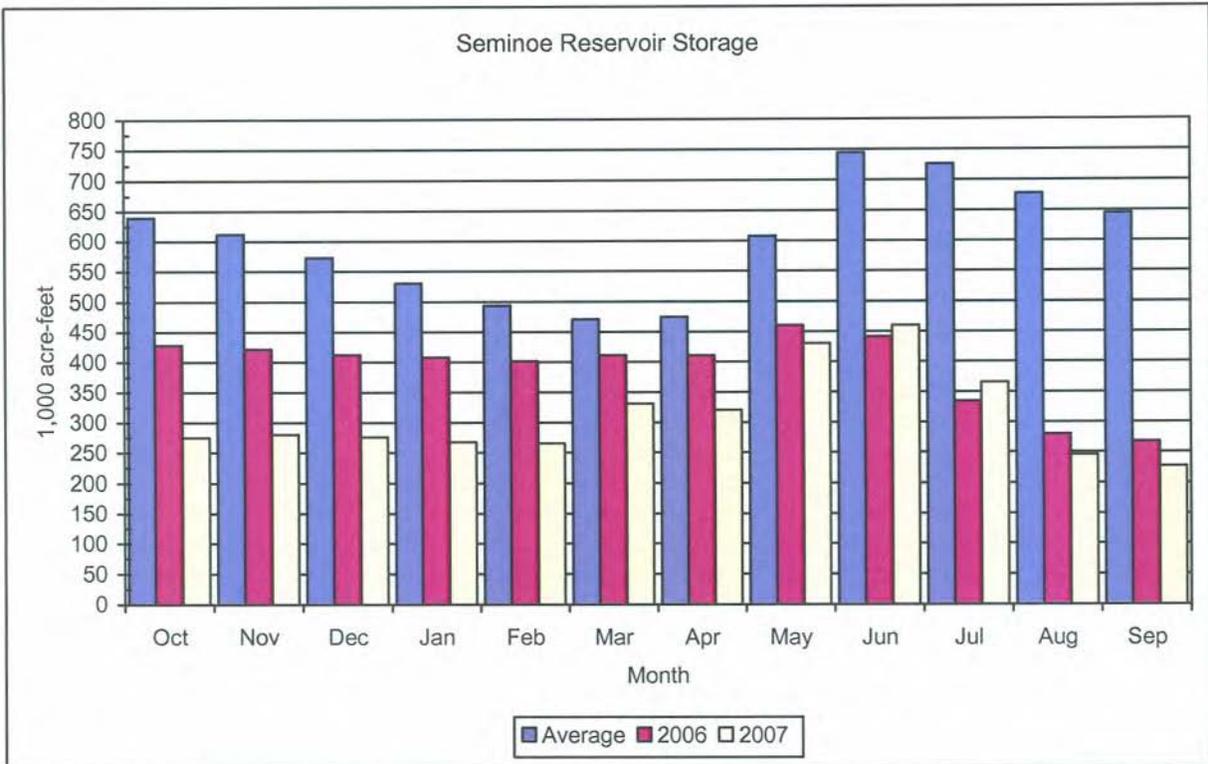


Figure 3 Seminoe Reservoir Storage

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 530 cfs from October 2006 through March 2007. Releases were increased to approximately 2,530 cfs by the end of April and decreased to approximately 1,000 cfs in May and increased to approximately 1,600 cfs by the end of June. The flows increased to 2,500 cfs by the end of July and then decreased again to approximately 1,500 cfs by the end of August. The water release was reduced to approximately 530 cfs on September 2, 2007 which would be the flow for the winter. In water year 2007 most releases were made through the Kortes Powerplant, except for thirteen 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 2006 through February 2007, then above average for March with the remaining months during the water year being below average. The Kortes Dam to Pathfinder Dam river gains ranged from 103 percent in March 2007 to 19 percent of average in June 2007. The Kortes to Pathfinder river gains for April and August 2007 were the lowest in the last 30 years. The actual April through July river gains were 23,900 AF, which is 27 percent of the 30 year average of 88,300 AF. Figure 4 depicts a comparison of average, water year 2006 and water year 2007 monthly river gains.

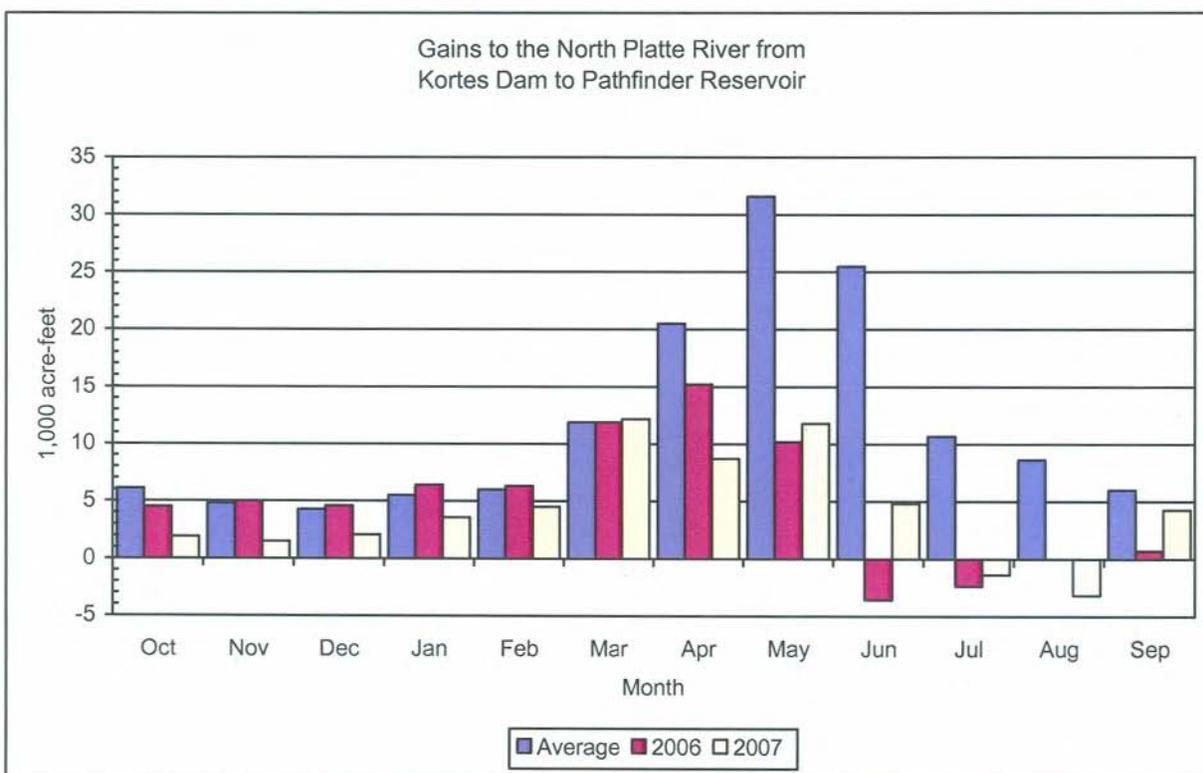


Figure 4 Gains to the North Platte River from Kortes Dam to Pathfinder Reservoir

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 2007, storage in Pathfinder Reservoir was 202,746 AF, which was 42 percent of average and only 20 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 June 13, 2007, at 281,540 AF which was only 28 percent of capacity. The water year ended with 171,126 AF of water in storage in Pathfinder Reservoir, which was 35 percent of average and 17 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 2007.

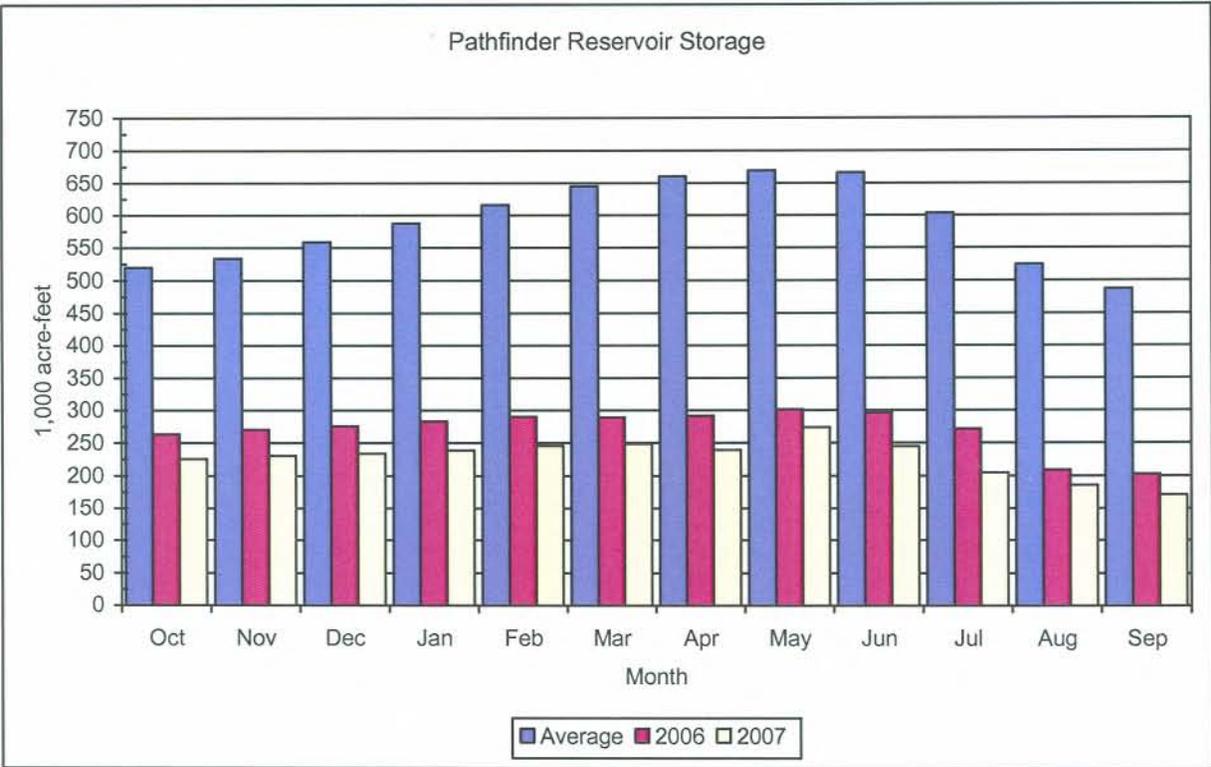


Figure 5 Pathfinder Reservoir Storage

Table 4 Pathfinder Reservoir Hydrologic Data for water year 2007

<u>Reservoir Allocations</u>	<u>Elevation (FT)</u>	<u>Storage (AF)</u>	<u>Storage Allocation (AF)</u>
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		

<u>Storage-Elevation Data</u>	<u>Elevation (FT)</u>	<u>Storage (AF)</u>	<u>Date</u>
Beginning of water year	5786.73	202,746	Oct 1, 2005 ³
End of water year	5781.38	171,126	Sep 30, 2007
Annual Low	5780.86	168,204	Sep 18, 2007
Historic Low ^{2, 3}	5690.00	0	Sep 9, 1958
Annual High	5798.02	281,540	Jun 13, 2007
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.

<u>Inflow-Outflow Data</u>	<u>Inflow</u>	<u>Date</u>	<u>Outflow</u>	<u>Date</u>
Annual Total (AF)	792,000	Oct, 2006 - Sep, 2007	799,900	Oct, 2006 - Sep, 2007
Daily Peak (CFS)	3,415	Apr 30, 2007	2,763	Aug 22, 2007
Daily Minimum (CFS)	277	Nov 16, 2006	48	Oct 30, 2006
Peak Jet Flow Valve (CFS)			89 ⁴	Oct 31, 2006
Total Jet Flow Valve (AF)			52,246	Oct, 2006 - Sep, 2007

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.

<u>Month</u>	<u>Gain from Kortes</u>		<u>Inflow ⁶</u>		<u>Outflow</u>		<u>Content ⁸</u>	
	<u>KAF</u>	<u>% of Avg. ⁵</u>	<u>KAF</u>	<u>% of Avg. ⁵</u>	<u>KAF</u>	<u>% of Avg. ⁵</u>	<u>KAF</u>	<u>% of Avg. ⁵</u>
October	1.9	31	34.4	61	10.2	32	225.7	43
November	1.5	31	32.9	55	27.5	63	230.7	43
December	2.1	49	34.7	51	31.0	73	234.1	42
January	3.6	65	36.1	50	30.8	73	239.1	41
February	5.4	90	34.9	51	28.0	73	245.6	40
March	12.2	103	45.2	51	41.3	72	248.6	39
April	8.7	42	107.5	102	114.7	134	239.5	36
May	11.8	37	82.2	65	45.6	41	274.1	41
June	4.8	19	81.0	52	105.9	70	244.9	37
July	-1.4	NA ⁷	126.7	104	162.2	92	204.7	34
August	-3.2	NA ⁷	139.5	165	154.3	99	185.5	35
September	4.3	72	36.9	69	48.4	56	171.1	35
Annual	58.8	42	792.0	75	799.9	78		

⁵ 30 year average is the period (1977-2006)

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 2, 2006, and continued through October 31, 2006, when the reservoir reached its normal winter operating range of 5488 + one foot. The refill of Alcova Reservoir was initiated on April 1, 2007. The water surface elevation was raised above 5497 feet on April 21, 2007, 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 2006 until March 19, 2007. At the request of the Wyoming Game and Fish Department, a series of flushing flows were initiated on March 19, 2007, and continued through March 23, 2007, 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 3, 2007. 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 June 24, 2007 at 2,505 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 entire water year except for May, July, and August which were above average. The Alcova Dam to Glendo Reservoir river gains ranged from a high of 103 percent in May 2007 to 23 percent of average in June 2007. The Alcova to Glendo river gains for January 2007, were the 2nd lowest river gains in the last 30 years. The actual April through July gain was 101,700 AF, which was 84 percent of average. The maximum computed daily river gain of 3,294 cfs occurred on May 6, 2007 and the daily computed Glendo Reservoir inflow peaked on April 27, 2007, at 4,272 cfs. Figure 6 depicts a comparison of average, water year 2007 and water year 2006 monthly river gains.

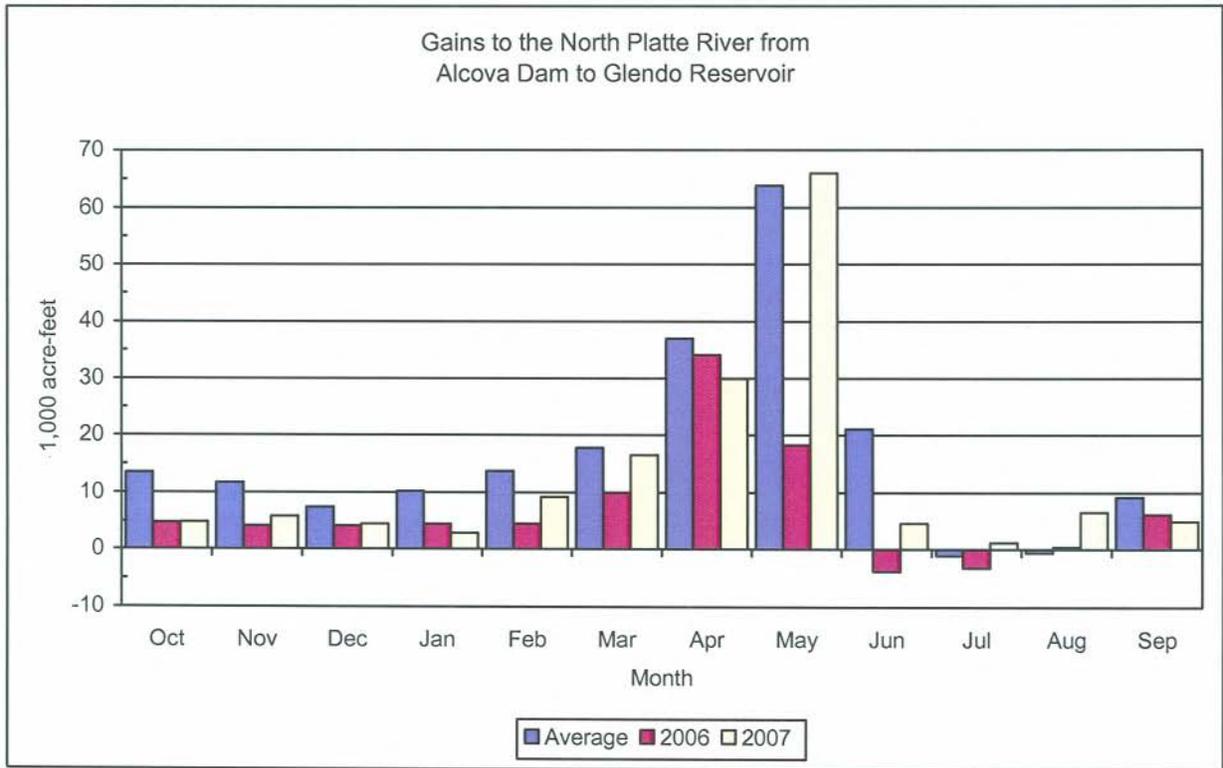


Figure 6 Gains to the North Platte River from Alcova Dam to Glendo Reservoir

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 2 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 145,320 AF at the beginning of water year 2007, which was 134 percent of average but only 28 percent of active conservation of 517,485 AF. Water releases from Glendo Reservoir were initiated on April 19, 2007, in order to move water to the Inland Lakes. The reservoir reached a maximum storage for the year of 511,949 AF (elevation 4634.55 feet) on June 3, 2007. At the end of the water year, Glendo Reservoir contained 119,254 AF of water (water surface elevation 4584.80 feet) which was 110 percent of average and only 23 percent of active conservation of 517,485 AF. Figure 7 depicts water year 2007 and water year 2006 end of month reservoir storage compared to average. Table 5 depicts a summary of Glendo Reservoir information for water year 2007.

Table 5 Glendo Reservoir Hydrologic Data for water year 2007

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 surface(surcharge)	4669.00	1,118,653	329,251
Crest of Dam (without Camber)	4675.00		

Storage-Elevation Data	I	Elevation (FT)	Storage (AF)	Date
Beginning of water year		4590.21	145,320	Oct 1, 2006 ¹
End of water year		4584.80	119,254	Sep 30, 2007
Annual Low		4575.41	81,354	Aug 29, 2007
Historic Low		4548.10	15,140	Sep 28, 1966
Annual High		4634.55	511,949	Jun 3, 2007
Historic High		4650.94	758,830	May 28, 1973

¹ Represents 0001 hours on October 1.

Inflow-Outflow Data	I Inflow	1 Date	Outflow ²	Date
Annual Total (AF)	885,700	Oct, 2006 - Sep, 2007	884,400	Oct, 2006 - Sep, 2007
Daily Peak (CFS)	4,272	Apr 27, 2007	7,521	Jul 26, 2007
Daily Minimum (CFS)	141	Jan 2, 2007	14 ³	Oct 24, 2006
Peak Bypass Release (CFS)			4,262	Jul 27, 2007
Total Bypass Release (AF)			230,042 ³	Oct, 2006 - Sep, 2007

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 ⁴		Outflow		Content ²	
	KAF	% of	KAF	% of	KAF	% of	KAF	% of
		Avg. ⁵		Avg. ⁵		Avg. ⁵		Avg. ⁵
October	4.8	36	37.7	54	1.4	56 ⁶	180.6	106
November	5.8	50	35.2	62	1.5	92 ⁶	213.8	96
December	4.4	59	34.2	68	1.9	101 ⁶	245.8	90
January	2.8	27	32.8	64	1.3	67 ⁶	276.5	86
February	9.2	67	36.6	72	1.4	65 ⁶	311.3	85
March	16.5	93	56.4	80	1.7	10 ⁶	364.6	88
April	29.9	81	114.5	115	24.9	40	452.2	100
May	66.0	103	100.7	63	38.5	31	509.6	106
June	4.6	22	91.4	60	193.7	117 ^g	400.5	87
July	1.2	NA ⁴	142.7	92	321.9	103	215.9	72
August	6.6	NA ⁴	144.7	105	272.5	93	85.7	61
September	5.0	54	58.8	67	23.7	20 ⁸	119.3	110
Annual	156.8	77	885.7	78	884.4	80		

⁴ Represents a negative number that makes the percentage meaningless.

⁵ 30 year average is the period (1977-2006)

⁶ 13 year average is the period (1994-2006) 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. 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

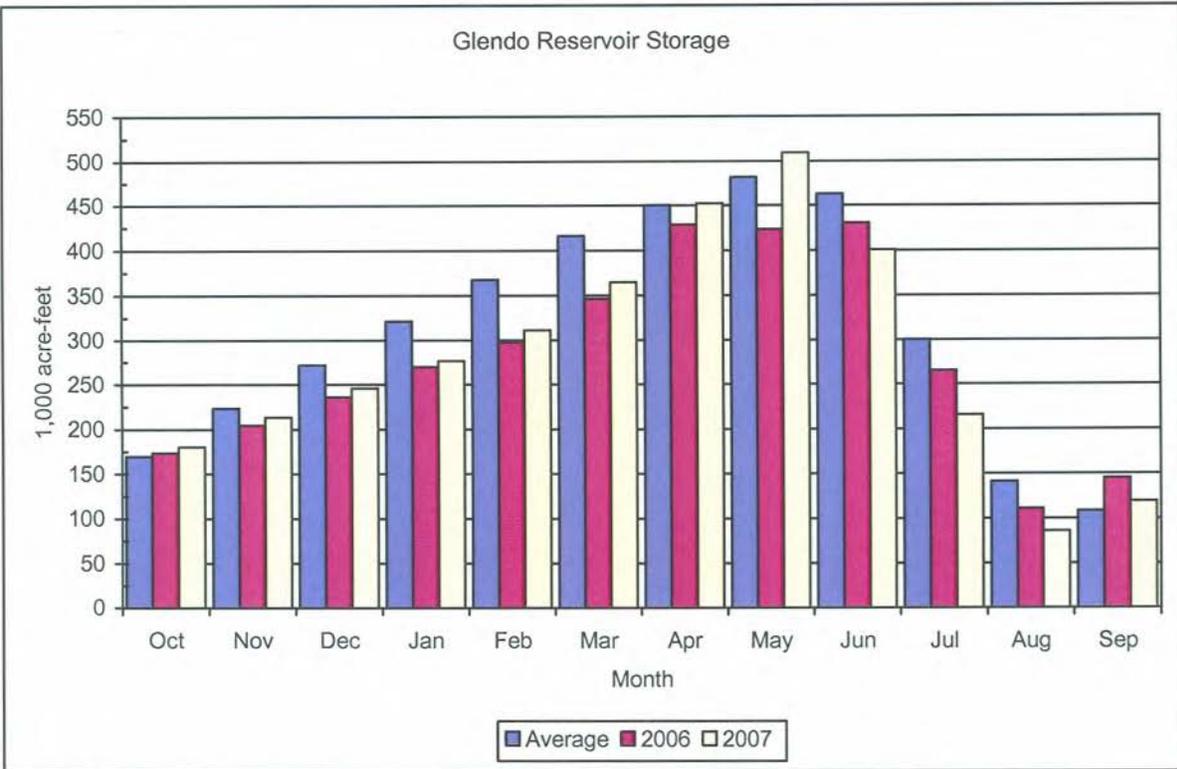


Figure 7 Glendo Reservoir Storage

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

The river gains between Glendo Dam and Guernsey Dam during water year 2007 were below average for eleven months with only the month of May 2007 being average. The Glendo Dam to Guernsey Reservoir river gains ranged from a high of 100 percent in May 2007 to only 38 percent of average in December 2006, with the months of April, June, July and August having a negative value making a percentage value meaningless. On July 25, 2007, daily computed inflow to Guernsey Reservoir peaked at 8,159 cfs. Figure 8 depicts a comparison of average, water year 2007 and water year 2006 monthly river gains.

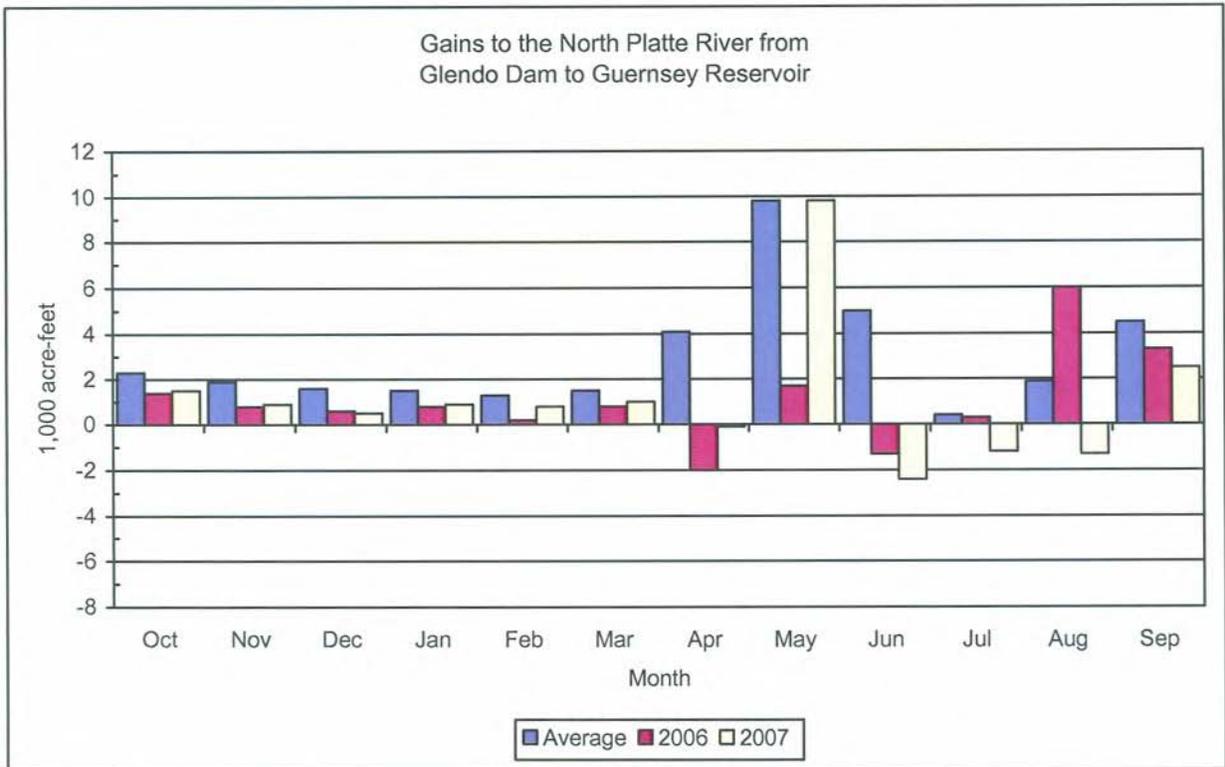


Figure 8 Gains to the North Platte River from Glendo Dam to Guernsey Reservoir

Guernsey Reservoir Storage and Releases

Guernsey Dam located about 25 miles below Glendo Dam, again stores and reregulates 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 2007, storage in Guernsey Reservoir was at 3,815 AF. Releases from Guernsey Reservoir were started on April 22, 2007, as water was moved into the Inland Lakes. The annual "silt run" from the reservoir was initiated on July 10 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 1,007 AF occurred on July 23, 2007. Following the "silt run," the reservoir was refilled to 27,010 AF by July 29, 2007 again making the reservoir suitable for recreation. At the end of the irrigation season, September 30, 2007, Guernsey Reservoir contained 3,649 AF. See Figure 9 for water year 2007 and water year 2006 storage compared to average.

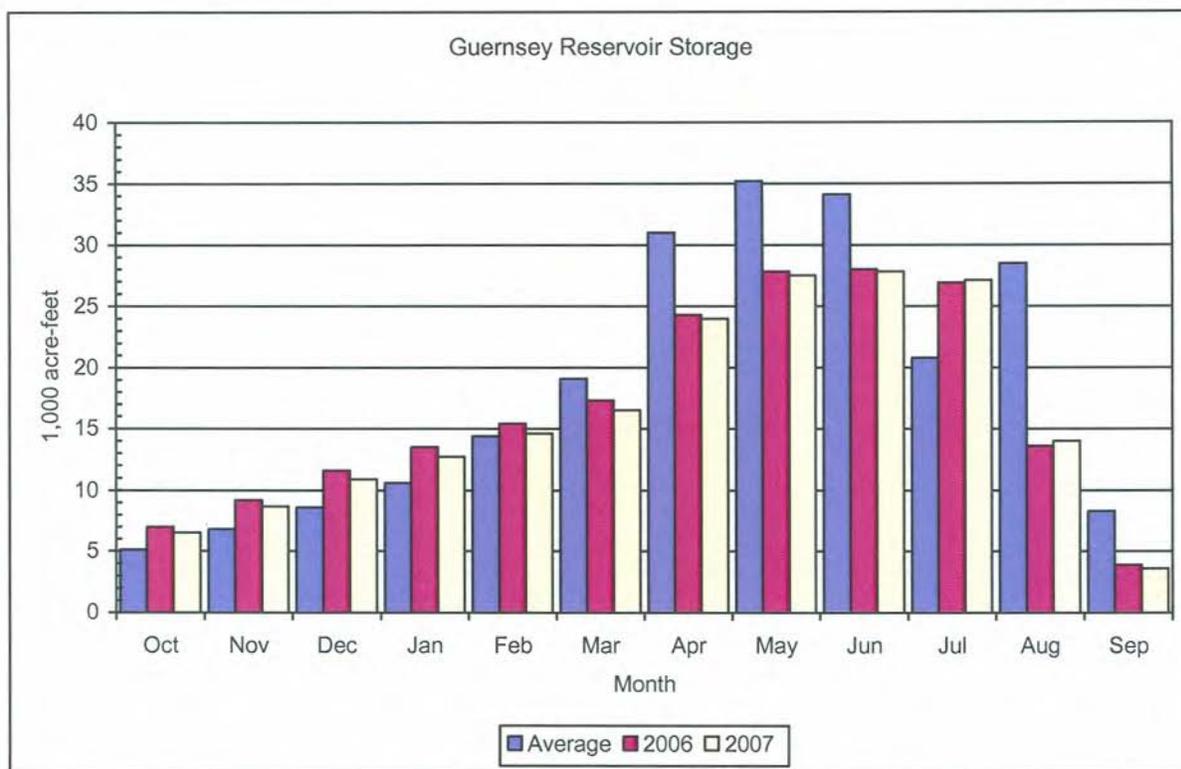


Figure 9 Guernsey Reservoir Storage

Precipitation summary for water year 2007

Although the precipitation was quite variable from month to month throughout the North Platte River Basin, all watersheds had below average total precipitation for the water year except for the Glendo Watershed which 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 Walden, Colorado weather stations recorded the second highest October precipitation in the last 30 years. The Seminoe watershed precipitation data recorded fifth highest October precipitation combining for an average of 149 percent for the month of October. The Seminoe watershed precipitation data recorded third lowest June precipitation combining for an average of 16 percent for the month of June.

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 third highest January precipitation in the last 30 years. The Pathfinder watershed precipitation data recorded second lowest April precipitation combining for an average of 24 percent for the month of May.

In the Glendo watershed, precipitation at the Casper, Wyoming, weather station had the highest July and second highest August precipitation in the last 30 years. The Glendo watershed precipitation data recorded second highest August precipitation combining for an average of 191 percent for the month of August. The Pathfinder Dam weather station is used as an indicator in both the Pathfinder and Glendo watersheds.

In the Guernsey watershed, precipitation at the Guernsey Dam, Wyoming, weather station had the second lowest June precipitation in the last 30 years. In the Guernsey watershed, precipitation at the Glendo, Wyoming, weather station tied for the third lowest June precipitation in the last 30 years. The Guernsey watershed precipitation data recorded the lowest June precipitation combining for an average of 11 percent for the month of June.

See Figure 10 for a comparison of average, water year 2007, and water year 2006 total precipitation.

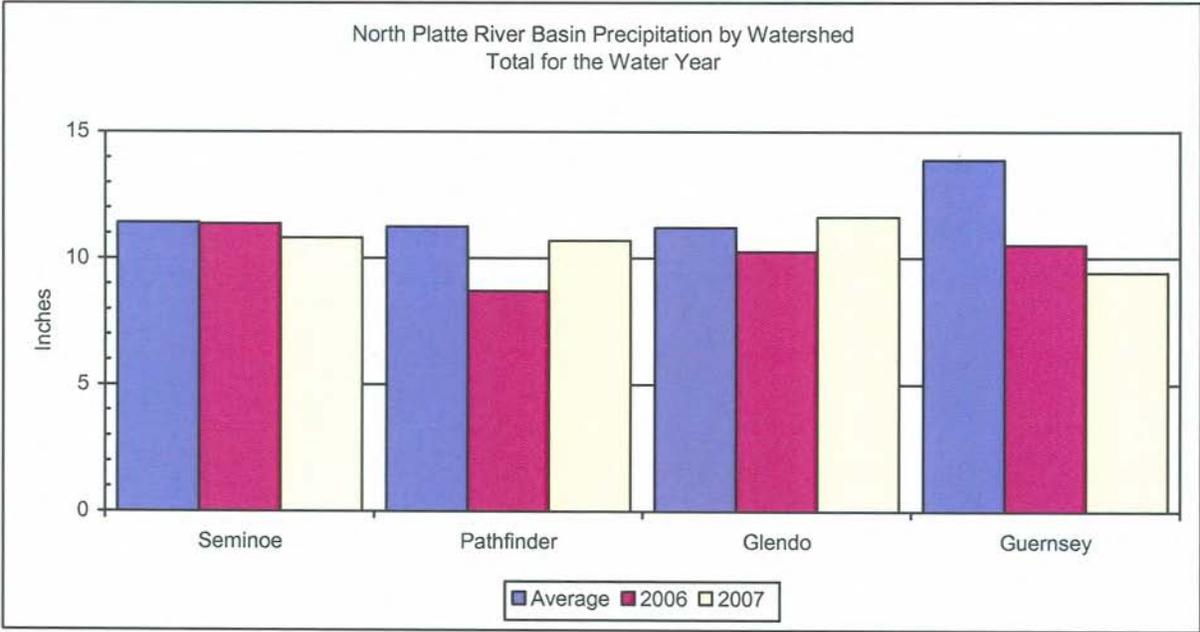


Figure 10 North Platte River Basin Precipitation by Watershed Total for water year

Snow pack summary for water year 2007

Reclamation relies on the Natural Resources Conservation Service (MRCS) to provide snow water equivalent (SWE) information for the three drainage areas in which Reclamation forecasts snowmelt runoff. The watershed areas above Seminoe Reservoir, the Sweetwater River, and the watershed between Alcova Dam and Glendo Reservoir were below average for the February, March, and April, and May. Table 6 shows a summary of snowpack for water year 2007.

Snow pack SWE for February was below average at 83 percent for the watershed above Seminoe Reservoir; below average at 61 percent for the Sweetwater River watershed which flows into Pathfinder Reservoir and below average at 88 percent for the Alcova to Glendo watershed.

Snow pack on March 1, 2007 had risen slightly, with SWE at 85 percent of average for the watershed above Seminoe Reservoir; at 63 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir and increased to 91 percent of average for the Alcova to Glendo watershed.

Snow pack for April 1, 2007 declined slightly with SWE at 74 percent of average for the watershed above Seminoe Reservoir, at 85 percent of average for the Alcova to Glendo watershed; and improving to 70 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir.

Snow pack for May 1, 2007 declined with SWE at 65 percent of average for the watershed above Seminoe Reservoir; 39 percent average for the Sweetwater River watershed which flows into Pathfinder Reservoir; and a dramatic drop to 46 percent of average for the Alcova to Glendo watershed.

Table 6 North Platte Snowpack Water Content for 2007

Watershed	Feb 1		Mar 1		Apr 1		May 1	
	SWEI	% of Avg. ²	SWEI	% of Avg. ²	SWEI ¹	% of Avg. ²	SWEI	% of Avg. ²
Seminole Reservoir	11.0	83	14.9	85	15.7	74	14.1	65
Pathfinder Reservoir	5.9	61	7.7	63	10.1	70	5.6	39
Glendo Reservoir	6.5	88	8.3	91	10.2	85	5.0	46

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 2007

For the sixth year in a row, because of low carryover storage, and continued drought conditions, an allocation of storage water was required. The allocation, which was put into effect on June 13, 2007, applied to the four Government Districts; Pathfinder Irrigation District (ID), Goshen ID, Gering-Fort Laramie ID and Northport ID and to the nine Warren Act Contractors; Farmers ID, Gering ID, Lingle Water Users Assoc., Hill ID, Rock Ranch ID, Central ID, Chimney Rock ID, Browns Creek ID, and Beerline Irrigation Canal Co. In an effort to conserve water and improve carryover storage, all releases from Guernsey Reservoir for allocation districts were discontinued by midnight, on September 7, 2007. On September 30, 2007, the North Platte ownership contained 286,249 AF for use in water year 2008, which was the third largest carryover since water year 2000. 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 2007

Stored water which is held in accounts for various entities is referred to as their ownership. At the beginning of water year 2007, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained only 328,588 AF of water, which is 84 percent of average. The Kendrick ownership contained 442,693 AF of water, which is 49 percent of average; and the Glendo ownership contained 29,597 AF of water, which is 23 percent of average. Guernsey ownership filled to its permitted amount during water year 2007.

- The total amount of water stored at the end of water year 2006 in the mainstem reservoirs for use in water year 2007 was 805,913 AF which was 56 percent of average. This total does not include 19,190 AF of water remaining in the four Inland Lakes in Nebraska.

At the end of water year 2007, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 286,249 AF of water which is 74 percent of average. The Glendo ownership contained 53,566 AF of water which is 42 percent of average. The Kendrick ownership contained 359,306 AF, which is 40 percent of average and the operational/re-regulation water account contained 3,159 AF. Also stored in the North Platte storage system was 2,058 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 2007.

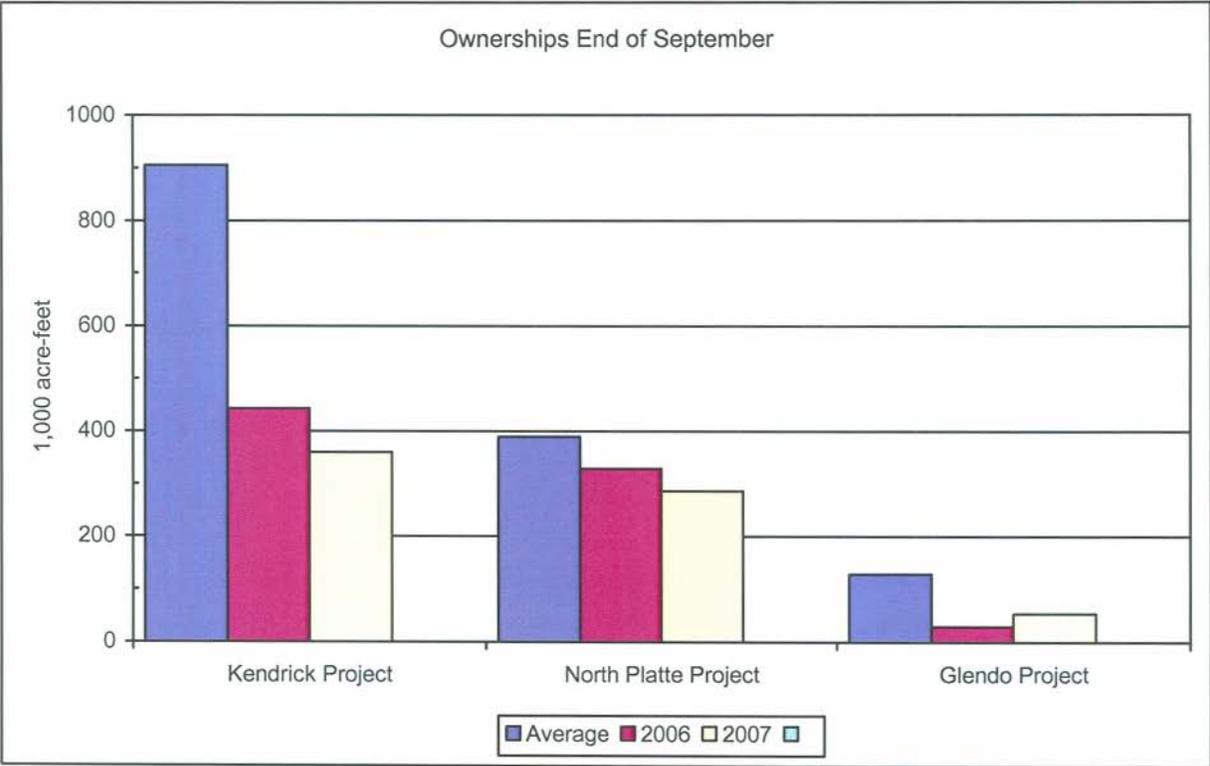


Figure 11 Ownership End of September

North Platte River Forecast 2007

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 judgement 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 2007.

Table 7 Summary of Forecasts of April-July runoff for water year 2007

Forecast Points	Feb 1		Mar 1		Apr 1		May 1		Actual April-July KAF	% of Apr-Jul Avg. *
	KAF	% of Avg.	KAF	% of Avg.	KAF	% of Avg.	KAF	% of Avg.		
Seminoe Reservoir	600	86	625	89	440	63	350 ²	50	425	61
Sweetwater River	30	48	30	48	40	65	30 ³	48	24	38
Alcova to Glendo	90	74	90	74	80	66	65 ⁴	54	102	84

¹ Average is based on the 1977-2006 period.

² The May 1 forecast includes an actual April inflow of 90,400 AF.

³ The May 1 forecast includes an actual April inflow of 8,600 AF.

⁴ The May 1 forecast includes an actual April inflow of 29,900 AF.

Table 8 Summary of North Platte River System Ownership for water year 2007

Page 1 of 3

SUMMARY OF NORTH PLATTE RIVER SYSTEM OWNERSHIPS FOR WATER YEAR 2007 (Acre-feet)

Page 1 of 3

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>PATHFINDER OWNERSHIP</u>														
ACCRUAL A/	45140	38710	29133	24821	31880	110284	87335	198281	38717	170	0	20444	624915	
EVAPORATION	1918	794	444	433	643	1728	1818	7262	11827	12290	8516	4192	51865	
DELIVERY B/	0	0	0	0	0	0	0	0	69299	269147	253515	16754	608715	
OWNERSHIP	321914	365136	403052	431741	456129	487366	595922	681439	872458	830049	548782	286751	286249	
<u>KENDRICK OWNERSHIP</u>														
ACCRUAL	0	0	0	0	0	0	0	0	0	0	0	27 D/	27	
EVAPORATION	2045	774	417	383	537	1216	1136	3873	4915	5823	5268	3717	30104	
DELIVERY B/	0	0	0	0	0	0	0	9523	11732	17272	8934	5849	53310	
OWNERSHIP	442693	440648	439874	439457	439074	438537	437321	436185	422789	406142	383047	368845	359306	
<u>GLENDO OWNERSHIP</u>														
ACCRUAL	0	0	0	0	0	0	0	51015	1567	0	0	4126	56708	
EVAPORATION	509	228	236	554	20	485	770	1050	1586	1167	1022	1091	8718	
DELIVERY & LOSS B/	101	0	0	0	0	0	0	0	113	9954	6627	7226	24021	
OWNERSHIP	29597	28987	28759	28523	27969	27949	27464	26694	76659	76527	65406	57757	53566	
<u>PACIFIC POWER & LIGHT</u>														
ACCRUAL	0	0	0	0	0	0	0	14	412	558	558	248	1790	
DELIVERY B/	0	0	0	0	0	0	0	1686	0	0	0	0	1686	
EVAPORATION	11	2	1	4	0	6	4	3	3	1	17	27	104	
IN STORAGE	2000	1989	1987	1986	1982	1982	1976	1972	297	708	1249	1780	2000	
<u>GUERNSEY OWNERSHIP</u>														
ACCRUAL	0	0	4717	5007	9643	16984	0	3244	0	0	0	0	39595	
EVAPORATION	173	62	55	121	63	340	443	931	804	0	0	0	2992	
DELIVERY B/	0	0	0	0	0	0	0	0	43277	0	0	0	43277	
OWNERSHIP	6674	6501	6439	11101	15987	25567	42211	41768	44081	0	0	0	0	

Table 8 (continued) Summary of North Platte River System Ownership for water year 2007
Page 2 of 3

SUMMARY OF NORTH PLATTE RIVER SYSTEM OWNERSHIPS FOR WATER YEAR 2006 (Acre-feet)

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>INLAND LAKES OWNERSHIP</u>														
ACCRUAL		6114	6532	0	0	0	0	29674	0	0	0	0	0	42320
EVAPORATION		11	16	8	22	2	38	116	50	0	0	0	0	263
TRANSFER C/ OWNERSHIP	0	0	0	0	0	0	0	16555	25502	0	0	0	0	42057
	0	6103	12619	12611	12589	12587	12549	25552	0	0	0	0	0	
<u>CITY OF CHEYENNE</u>														
ACCRUAL		481	491	608	730	594	2428	1020	112	387	735	797	1003	9386
EVAPORATION		9	4	1	0	3	17	29	64	3	0	12	21	163
DELIVERY B/ OWNERSHIP	3035	244	193	174	41	95	24	348	6688	1751	334	77	231	10200
	3035	3263	3557	3990	4679	5175	7562	8205	1565	198	599	1307	2058	
<u>OPERATIONAL</u>														
ACCRUAL		0	0	0	0	0	0	0	6092	128	0	0	3182	9402
EVAPORATION		0	0	0	0	0	0	0	38	81	63	5	23	210
RELEASED OWNERSHIP	0	0	0	0	0	0	0	0	58	873	3566	1536	0	6033
	0	0	0	0	0	0	0	0	5996	5170	1541	0	3159	
<u>RE-REGULATION</u>														
ACCRUAL		31	0	0	0	0	0	0	0	0	0	0	0	31
EVAPORATION		0	0	0	0	0	0	0	0	0	0	0	0	0
RELEASED OWNERSHIP	0	0	0	0	0	0	0	0	0	31 F/	0	0	0	31
	0	31	31	31	31	31	31	31	31	0	0	0	0	
<u>WWDC Water (In Glendo)</u>														
TRANSFERRED G/ EVAPORATION		0	0	0	0	0	0	2054	2882	1233	196	0	0	6365
RELEASED OWNERSHIP	0	0	0	0	0	0	0	5	42	58	7	0	0	112
	0	0	0	0	0	0	0	0	69	4399	1191	333	261 1/	6253
	0	0	0	0	0	0	0	2049	4820	1596	594	261	0	

Table 8 (continued) Summary of North Platte River System Ownership for water year 2007
Page 3 of 3

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
<u>WWDC Water Un Seminoe)</u>														
TRANSFERRED H/		0	0	0	0	0	0	0	0	0	0	0	0	0
EVAPORATION	-	0	0	0	0	0	0	0	0	0	0	0	0	0
RELEASED		0	0	0	0	0	0	0	0	0	0	0	0	0
OWNERSHIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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, 2007 until June 11, 2007, when the last 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 16,555 AF and in May 25,502 AF was transferred to the Inland Lakes.

D/ Not an actual accrual but a 27 AF correction for storage diverted which was corrected on September 18, 2007 for water charged on September 16, 2007 and September 17, 2007.

F/ Water diverted under temporary Glendo contact by exchange from Glendo Reservoir shall comply with the November 13, 2001, modified 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.

G/ Wyoming Water Development Commission (WWDC) contracted with the Bureau of Reclamation for storage space of 6,404 AF in Glendo Reservoir for a one water year period to store non-project water for irrigation purposes.

H/ Wyoming Water Development Commission (WWDC) contracted with the Bureau of Reclamation for storage space of 1,345 AF in Seminoe Reservoir for a one water year period to store water purchased from the City of Cheyenne for municipal and industrial use.

I/ On September 30, 2007, water remaining in the WWDC account of 0 AF from Glendo Reservoir was returned to the City of Cheyenne.

Table 9 Actual Reservoir Operations for water year 2007

NORTH PLATTE RIVER ACTUAL RESERVOIR OPERATIONS
Year Beginning Oct 2007

HYDROLOGY OPERATIONS

Seminoe Reservoir Operations			Initial Content					267.8 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	41.0	37.9	28.4	24.2	27.4	100.1	90.4	182.6	111.9	40.4	27.1	16.4				
Total Inflow	cfs	667.	637.	462.	394.	493.	1628.	1519.	2970.	1881.	657.	441.	276.				
Turbine Release	kaf	32.6	31.4	32.6	32.4	29.5	33.0	98.8	70.4	76.3	128.1	142.8	32.7				
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	32.6	31.4	32.6	32.4	29.5	33.0	98.8	70.4	76.3	128.1	142.8	32.7				
Total Release	cfs	530.	528.	530.	527.	530.	537.	1660.	1145.	1282.	2084.	2322.	549.				
Evaporation	kaf	1.5	0.6	0.3	0.3	0.4	1.0	2.3	2.5	5.9	6.5	4.7	2.8				
End-month content	kaf	274.8	280.6	276.1	267.7	265.2	331.3	320.6	430.3	460.0	365.8	245.5	226.4				
End-month elevation	ft	6299.7	6300.5	6299.9	6298.7	6298.4	6306.8	6305.5	6317.4	6320.2	6310.7	6295.6	6292.8				
Kortees 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	32.6	31.4	32.6	32.4	29.5	33.0	98.8	70.4	76.3	128.1	142.8	32.7				
Total Inflow	cfs	524.	529.	532.	529.	515.	559.	1665.	1138.	1311.	2095.	2217.	561.				
Turbine Release	kaf	30.2	31.2	32.6	32.4	27.7	32.1	98.6	70.4	76.2	128.1	142.5	31.2				
Spillway Release	kaf	2.3	0.2	0.0	0.0	1.8	0.9	0.1	0.0	0.0	0.0	0.2	1.4				
Total Release	kaf	32.6	31.4	32.6	32.4	29.5	33.0	98.7	70.4	76.2	128.1	142.7	32.6				
Total Release	cfs	522.	529.	532.	529.	515.	559.	1665.	1138.	1311.	2095.	2217.	561.				
Pathfinder Reservoir Operations			Initial Content					202.8 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	1.9	3.2	2.4	3.2	2.6	7.9	8.8	11.1	3.1	0.9	1.0	0.7				
Kortees-Path Gain	kaf	0.0	-1.7	-0.3	0.4	2.8	4.3	-0.1	0.7	1.7	-2.3	-4.2	3.6				
Inflow from Kortees	kaf	32.1	31.5	32.7	32.5	29.6	34.4	99.1	70.0	78.0	128.8	136.3	33.4				
Total Inflow	kaf	34.4	32.9	34.7	36.1	34.9	45.2	107.5	82.2	81.0	126.7	139.5	36.9				
Total Inflow	cfs	553.	555.	566.	587.	608.	758.	1812.	1330.	1392.	2072.	2165.	634.				
Turbine Release	kaf	5.6	22.7	26.5	26.4	23.8	36.6	110.4	41.1	101.2	157.7	150.0	44.1				
Jetflow Release	kaf	4.6	4.8	4.5	4.4	4.2	4.7	4.3	4.5	4.7	4.5	4.3	4.3				
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	10.2	27.5	31.0	30.8	28.0	41.3	114.7	45.6	135.9	162.2	154.3	48.4				
Total Release	cfs	165.	461.	504.	501.	504.	671.	1928.	742.	1779.	2637.	2509.	815.				
Evaporation	kaf	1.3	0.5	0.3	0.3	0.4	0.9	1.9	2.0	4.4	4.7	4.5	2.9				
End-month content	kaf	225.7	230.7	234.1	239.1	245.6	248.6	239.5	274.1	244.9	204.7	185.5	171.1				
End-month elevation	ft	5790.3	5791.0	5791.5	5792.2	5793.2	5793.6	5792.3	5797.1	5793.1	5787.1	5783.9	5781.4				
Alcova Reservoir Operations			Initial Content					179.8 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	10.2	27.5	31.0	30.8	28.0	41.3	114.7	45.6	135.9	162.2	154.3	48.4				
Total Inflow	cfs	165.	461.	504.	501.	504.	671.	1928.	742.	1779.	2637.	2509.	815.				
Turbine Release	kaf	30.7	29.9	30.7	30.7	27.8	39.5	90.8	35.7	92.5	142.7	144.9	41.7				
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0				
Casper Canal Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	11.7	17.3	8.9	5.9				
Total Release	kaf	30.7	29.9	30.7	30.7	27.8	39.5	90.8	45.2	104.4	160.0	153.9	47.6				
Total Release	cfs	501.	502.	500.	500.	500.	642.	1526.	736.	1754.	2602.	2502.	800.				
Evaporation	kaf	0.5	0.2	0.1	0.1	0.1	0.3	0.6	0.7	1.4	1.7	1.8	1.2				
End-month content	kaf	158.7	156.2	156.3	156.3	156.4	157.8	181.1	180.8	180.9	181.3	180.0	179.5				
End-month elevation	ft	5489.2	5488.1	5488.1	5488.1	5488.2	5488.8	5498.7	5498.5	5498.6	5498.7	5498.2	5498.0				

Table 9 (Continued) Actual Reservoir Operations for water year 2007

NORTH PLATTE RIVER ACTUAL RESERVOIR OPERATIONS
Year Beginning Oct 2007

Gray Reef Reservoir Operations		Initial Content					1.6 Kaf		Operating Limits:			1.1 Kaf, 5327.42 Ft. 0.0 Kaf, 5306.00 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Total Inflow	kaf	30.7	29.9	30.7	30.7	27.8	39.5	90.8	35.7	92.6	142.7	144.9	41.7	
Total Inflow	cfs	501.	502.	500.	500.	500.	642.	1526.	581.	1557.	2321.	2357.	701.	
Total Release	kaf	30.7	29.8	30.8	30.8	27.8	39.5	90.5	35.9	92.6	142.5	145.0	41.4	
Total Release	cfs	500.	502.	500.	500.	501.	643.	1520.	583.	1555.	2318.	2357.	696.	
Glendo Reservoir Operations		Initial Content					145.3 Kaf		Operating Limits:			789.4 Kaf, 4653.00 Ft. 63.2 Kaf, 4570.02 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Alcova-Glendo Gain	kaf	4.8	5.8	4.4	2.8	9.2	16.5	29.9	66.0	4.6	1.2	6.6	5.0	
Infl from Gray Reef	kaf	30.7	29.8	30.8	30.8	27.8	39.5	90.5	35.9	92.6	142.5	145.0	41.4	
Total Inflow	kaf	37.7	35.2	34.2	33.8	36.6	56.4	114.5	100.7	91.4	142.7	144.7	58.8	
Total Inflow	cfs	613.	592.	557.	533.	658.	918.	1924.	1638.	1536.	2321.	2353.	989.	
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	22.8	36.7	157.1	215.4	200.6	21.4	
Low Flow Release	kaf	1.4	1.5	1.9	1.3	1.4	1.7	2.1	1.6	1.5	1.5	1.5	1.5	
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	0.0	0.0	35.1	105.0	70.3	0.6	
Total Release	kaf	1.4	1.5	1.9	1.3	1.4	1.7	24.9	38.5	193.7	321.9	272.5	23.7	
Total Release	cfs	23.	25.	31.	22.	26.	28.	419.	626.	3255.	5235.	4431.	398.	
Evaporation	kaf	1.0	0.5	0.4	0.8	0.3	1.4	2.0	4.8	6.8	5.4	2.5	1.5	
End-month content	kaf	180.6	213.8	245.8	276.5	311.3	364.6	452.2	509.6	400.5	215.9	85.7	119.3	
End-month elevation	ft	4596.5	4601.7	4606.3	4610.4	4614.6	4620.7	4629.4	4634.4	4624.4	4602.1	4576.6	4584.8	
Guernsey Reservoir Operations		Initial Content					3.9 Kat		Operating Limits:			45.6 Kaf, 4419.99 Ft. 0.0 Kaf, 4370.00 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Glendo-Guerns Gain	kaf	1.5	0.9	0.5	0.9	0.8	1.0	-0.1	9.8	-2.4	-1.2	-1.3	2.5	
Infl from Glendo	kaf	1.4	1.5	1.9	1.3	1.4	1.7	24.9	38.5	193.7	321.9	272.5	23.7	
Total Inflow	kaf	2.9	2.4	2.5	2.2	2.2	2.7	24.8	48.3	191.2	320.7	271.1	26.2	
Total Inflow	cfs	47.	40.	38.	36.	40.	43.	417.	785.	3214.	5215.	4410.	440.	
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	13.6	41.1	55.0	33.7	63.9	7.5	
Seepage	kaf	0.1	0.1	0.1	0.3	0.3	0.5	3.4	3.0	3.0	3.1	2.0	0.2	
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	131.8	284.0	217.4	28.7	
Total Release	kaf	0.1	0.1	0.1	0.3	0.3	0.5	17.0	44.1	189.8	320.8	283.3	36.3	
Total Release	cfs	2.	2.	2.	4.	6.	8.	285.	716.	3190.	5217.	4607.	611.	
Evaporation	kaf	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.7	1.2	0.6	1.0	0.2	
End-month content	kaf	6.5	8.7	10.9	12.7	14.6	16.5	24.0	27.5	27.8	27.1	14.0	3.6	
End-month elevation	ft	4396.5	4399.0	4401.1	4402.6	4404.0	4405.3	4409.8	4411.7	4411.8	4411.5	4403.6	4392.1	

Flood Benefits for water year 2007

Because of the existence of dams on the North Platte River, The Corps of Engineers, Omaha District, estimates that in water year 2007 flood damages of \$2,541,700 were prevented. Table 10 is a breakdown of flood damage prevented by Dams.

Table 10 Flood Damage Prevented by Dams for water year 2007 (on the North Platte River Basin System)

DAMS	WATER YEAR 2007	PRIOR TO 2007 ²	ACCUMULATED <u>TOTAL</u>
<u>SEMINOE</u>	<u>\$23,900</u>	<u>\$30,081,200</u>	<u>\$30,105,100</u>
<u>PATHFINDER</u>	<u>\$3,500</u>	<u>\$8,871,300</u>	<u>\$8,874,800</u>
<u>ALCOVA</u>	<u>\$2,900</u>	<u>\$545,000</u>	<u>\$547,900</u>
<u>GLEND0</u>	<u>\$2,511,300</u>	<u>\$79,130,500</u>	<u>\$81,641,800</u>
<u>GUERNSEY</u>	<u>\$0</u>	<u>\$434,000</u>	<u>\$434,000</u>
<u>TOTAL</u>	<u>\$2,541,700</u>	<u>\$119,062,000</u>	<u>\$121,603,700</u>

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 2006 except for Glendo Dam, which is 1965 through 2006.

Generation for water year 2007

Power generation was well below average for all powerplants on the North Platte River Basin in water year 2007. See Table 11 for a breakdown of generation by powerplant.

Table 11 Power Generation water year 2007

Powerplant	Gross generation ¹ (GWh)	Percent of Average ²
Seminole	96.8	73
Kortes	123.5	88
Fremont Canyon	174.0	73
Alcova	92.5	79
Glendo	58.7	74
Guernsey	14.6	76
Total Basin	560.1	77

¹ Generation is reported in giga-watt hours (GWh).

² 30 year average (1977-2006)

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)
Seminole	3	17,000	51,000	97-227	4,050	132.6
Kortes	3	12,000	36,000	192-204	2,910	141.1
Fremont Canyon	2	33,400	66,800	247-363	3,080	237.3
Alcova	2	19,500	39,000	153-165	4,100	117.4
Glendo	2	19,000	38,000	73-156	3,400	79.6
Guernsey	2	3,200	6,400	89-91	1,340	19.2
Total	14	---	237,200	---	---	--727.2

¹ 1977-2006

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.

MRCS. — 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 MRCS 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

Pathfinder Watershed Runoff

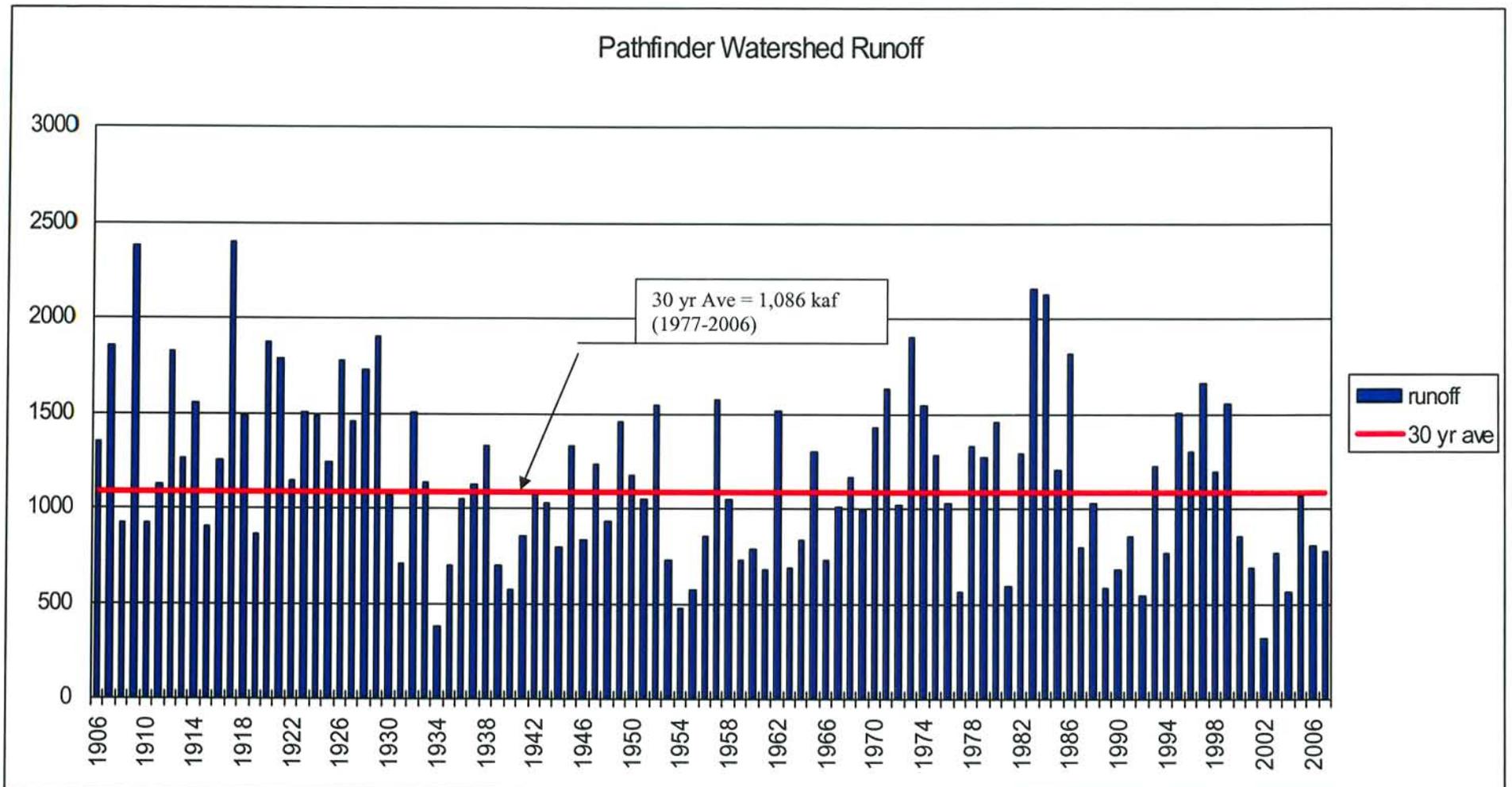


Figure 20 Pathfinder Watershed Runoff 1906-2007

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.