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 1974-2003, except for water year 2005 information which uses the years 1975-2004. 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 2004. The System furnishes irrigation water to over 440,000 acres of land in Wyoming and Nebraska.

The System includes the Kendrick Project in Wyoming; the North Platte Project in Wyoming and Nebraska; and the Kortes and Glendo Units of the Pick-Sloan Missouri Basin Program in Wyoming and Nebraska. 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 a generating capacity totaling 237.2 megawatts (MW). Table 1 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, and municipal and industrial water supply. The facilities provide year round flows in the section of the river below Kortes Dam known as the Miracle Mile and also below Gray Reef Dam, 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. AOPs are prepared for reasonable maximum and reasonable minimum conditions of water supply and requirements as well as for the expected runoff conditions. The System is operated to optimize the expected water supply and still allow changes in operation should either reasonable maximum or reasonable minimum water supply conditions occur. This flexibility is the basis of the plan. 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 total storage at the end of September for the North Platte Reservoirs for water years 1912 through 2004. Table 2 depicts A Summary of Reservoir Storage Content for water year 2004 (end of month).

Table 2 Summary of Reservoir Storage Content for water year 2004 (end of month)

Seminoe Reservoir			Pathfinder Reservoir			Alcova Reservoir		
Month	Storage	Record 1/	Month	Storage	Record 1/	Month	Storage	Record 1/
October	311,077	3rd lowest	October	293,241	5th lowest	October	158,189	3/
November	298,793	3rd lowest	November	303,568		November	156,088	
December	289,240	3rd lowest	December	313,484	5th lowest	December	156,538	
January	274,937	3rd lowest	January	321,997	5th lowest	January	156,673	
February	263,880	3rd lowest	February	332,606	5th lowest	February	156,899	
March	293,208	5th lowest	March	338,268	5th lowest	March	156,561	
April	321,779	6th lowest	April	333,750	5th lowest	April	178,525	
May	363,040	4th lowest	May	298,575	3rd lowest	May	179,376	4/
June	370,315	lowest	June	233,253	lowest	June	181,379	4/
July	330,600	lowest	July	204,495	lowest	July	181,354	4/
August	290,403	lowest	August	192,060	lowest	August	181,501	4/
September	270,477	lowest	September	194,164	1rd lowest	September	180,352	4/
Glendo Reservoir			Guernsey Reservoir			Total System 2/		
Month	Storage	Record 1/	Month	Storage	Record 1/	Month	Storage	Record 1/
October	180,053		October	7,967		October	956,432	5th lowest
November	212,487		November	10,648		November	987,212	4th lowest
December	245,635		December	13,414		December	1,024,102	5th lowest
January	276,320		January	15,954		January	1,051,542	5th lowest
February	309,207		February	18,247		February	1,086,483	5th lowest
March	356,617		March	20,088		March	1,170,402	5th lowest
April	395,284		April	21,780		April	1,256,726	5th lowest
May	418,453		May	28,656		May	1,294,035	lowest
June	430,500		June	28,299		June	1,250,039	lowest
July	256,432		July	7,820		July	986,887	lowest
August	92,278	5th lowest	August	6,060		August	768,502	lowest
September	127,242		September	9,251		September	787,691	2nd lowest

1/ Record is the 30 year period from 1974-2003

2/ Total North Platte system includes storage in Seminoe, Kortes, Pathfmder, 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 of (between contents 177,070 AF to 181,943 AF)

4/ On May 7, 2004, Alcova Reservoir operating range was restricted between contents 178,768 AF to 179,254 to limit the amount of fluctuation in inflow into Casper-Alcova Canal due to a failure of a radial-gate that controlled the releases into Casper-Alcova Canal. In order to aid irrigation deliveries into Casper-Alcova Canal, on June 1, 2004, Alcova Reservoir operating range restriction was raised between contents 181,207 AF to 181,697 AF and maintained within that range for the remainder of irrigation season.

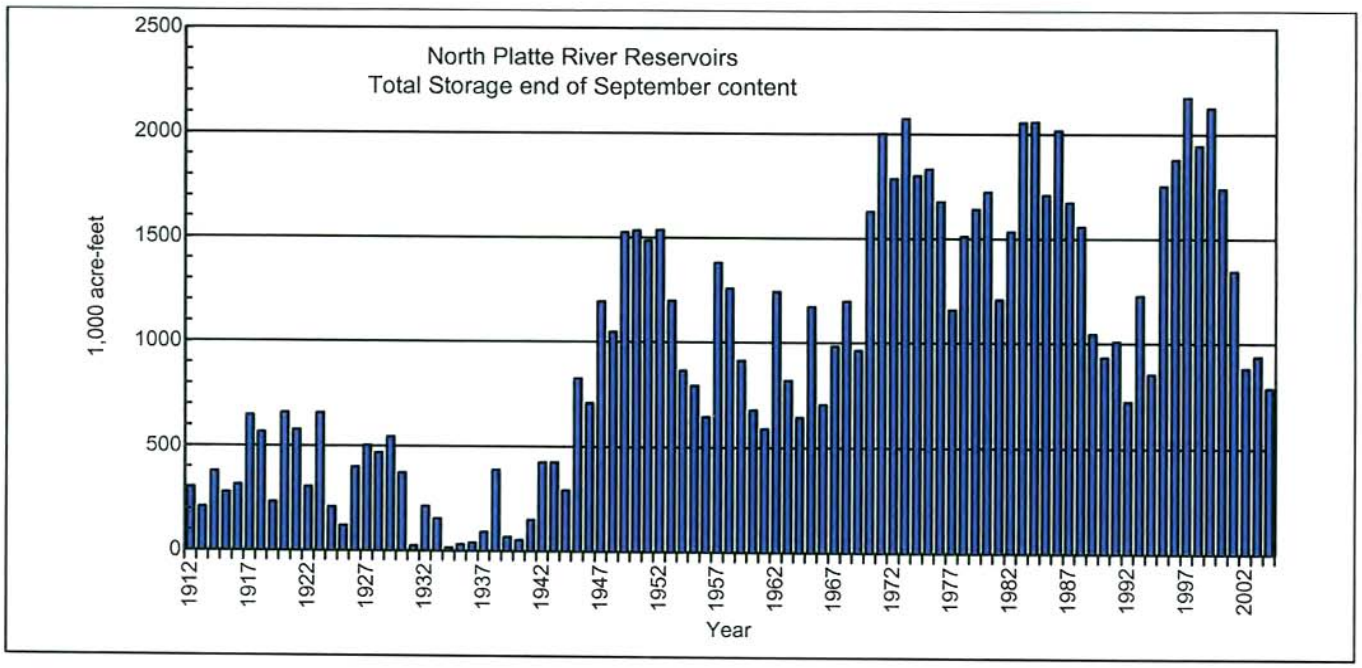

Figure 1 North Platte River Reservoirs Total Storage end of September content (1912-2004)

SYSTEM OPERATIONS WATER YEAR 2004
Seminoe Reservoir Inflow

Seminoe Reservoir inflows were below average for most of the water year with only two months being near or above average. Only 474,000 AF or 48 percent of the 30 year average entered the system above Seminoe Reservoir during the water year which was the 4th lowest Seminoe inflow in the last 30 years. The monthly inflows ranged from a high of 113 percent of average in March, 2004 to a low of only 30 percent in June, 2004. The October inflow into Seminoe Reservoir was the 3rd lowest in the last 30 years and tied the 8th lowest October inflow since the construction of Seminoe Dam in 1939. The February inflow was the 5th lowest February inflow in the last 30 years. The May inflow was the 2nd lowest May inflow since the construction of Seminoe Dam in 1939 with only water year 2002 being lower. The inflow into Seminoe Reservoir for June was the 5th lowest June inflow in the past 30 years. The actual April through July inflow totaled 276,500 AF, which was only 38 percent of the 30 year average of 731,900 AF. The computed Seminoe inflow peaked for the water year on March 25, 2004, at only 2,601 cubic feet per second (cfs). Figure 2 depicts a comparison of average, water year 2004 and water year 2003 monthly inflow.

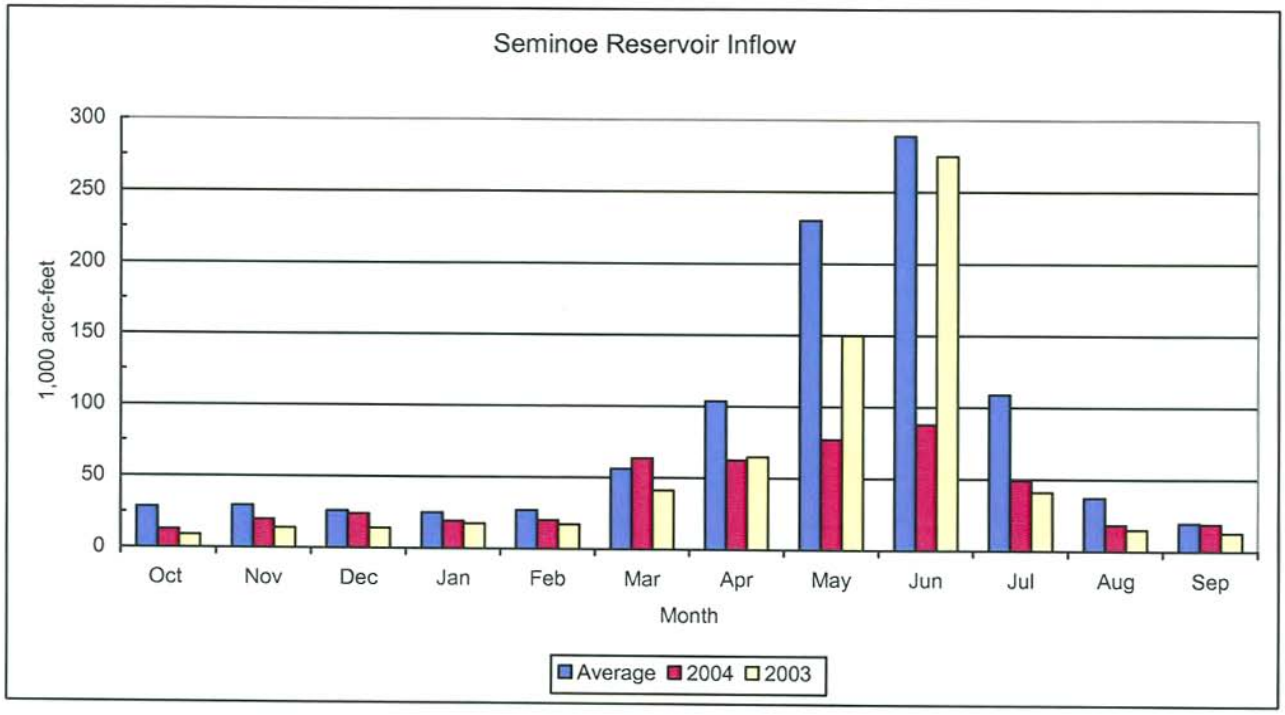

Figure 2 Seminoe Reservoir Inflow

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 2004, Seminoe Reservoir had a storage content of 332,979 AF, which was 48 percent of average and 33 percent of capacity. Seminoe storage content remained below average for the entire water year. The maximum Seminoe Reservoir content was reached on June 9, 2004, at 374,364 AF. At the end of water year 2004, Seminoe Reservoir storage content was 270,477 AF, which was 39 percent of average and 27 percent of capacity. See Figure 3 for a comparison of average, water year 2004 and water year 2003 monthly storage.

Releases averaged approximately 535 cfs from October, 2003, through May, 2004. Releases were increased to approximately 1,300 cfs during June and increased to 1,400 cfs for July and then decreased to approximately 900 cfs in August. The water release was reduced to approximately 535 cfs on September 21, 2004 which would be the flow for the winter. All releases were made through the Seminoe Powerplant, except for two days (May 14, and September 14, 2004), when testing required bypass releases. Table 3 depicts a summary of Seminoe Reservoir information for water year 2004.

Table 3 Seminoe Reservoir Hydrologic Data for water year 2004 (end of month)

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	6306.98	332,979	Oct 1, 2003 2/
End of water year	6299.12	270,477	Sep 30, 2004
Annual Low	6297.94	261,851	Mar 8, 2004
Historic Low 1/	6253.30	56,390	Apr 20, 1961
Annual High	6311.65	374,364	Jun 9, 2004
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)	474,000	Oct' 03 - Sep' 04	514,800	Oct' 03 - Sep' 04
Daily Peak (CFS)	2,601	Mar 25, 2004	1,691 4/	Jun 13, 2004
Daily Minimum (CFS)	10	Oct 7, 2003	472 4/	Sep 22, 2004
Peak Jet Flow Valve (CFS)			450	Sep 14. 2004
Total Jet Flow Valve (CFS)			450	Oct' 03 - Sep' 04

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

Month	Inflow		Outflow		Content	
	KAF	% of Avg. 5/	KAF	% of Avg. 5/	KAF	% of Avg. 5/
October	12.9	45	33.1	60	311.1	45
November	19.9	67	31.8	53	298.8	46
December	24.1	92	33.1	47	289.2	47
January	19.2	77	32.9	43	274.9	49
February	20.2	75	30.2	45	263.9	51
March	63.6	113	32.8	40	293.2	60
April	62.5	60	31.8	36	321.8	64
May	76.9	33	33.0	35	363.0	57
June	87.7	30	77.4	60	370.3	47
July	49.4	45	86.1	81	330.6	42
August	18.5	50	55.5	74	290.4	40
September	19.1	96	37.1	75	270.5	39
Annual	474.0	48	514.8	54		

5/The 30 year average is the period (1974-2003)

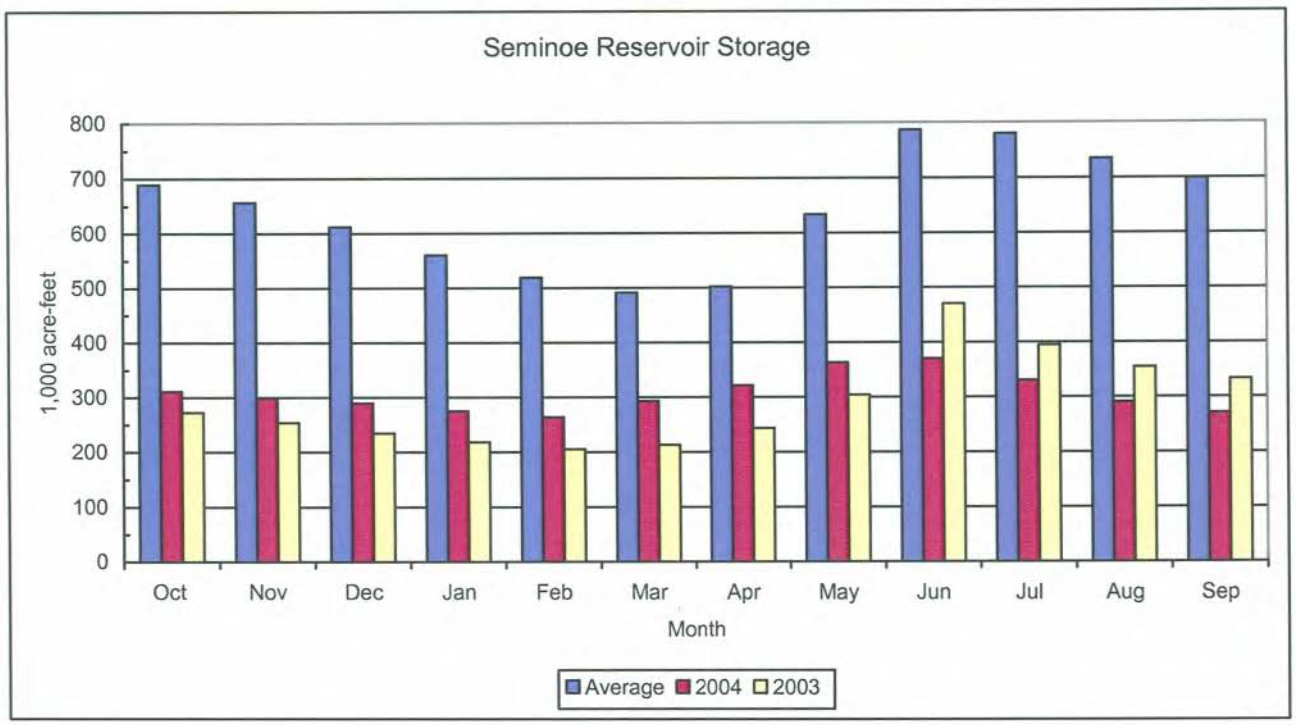

Figure 3 Seminoe Reservoir Storage

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".

The Kortes releases averaged approximately 535 cfs from October, 2003, through May, 2004. Releases were increased to average approximately 1,300 for June and again increased to average approximately 1,400 for July. Because of the lower than average spring runoff, Kortes releases were decreased to approximately 900 cfs in August and further decreased to approximately 535 cfs on September 21 which would be the flow for the winter. In water year 2004 all releases were made through the Kortes Powerplant, except for three occasions (July 7, August 4, and September 14, 2004), when testing required bypass releases. The highest release for the water year was made on June 16, 2004, at a peak flow of only 1,636 cfs.

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

Kortes Dam to Pathfinder Dam river gains were well above average from November, 2003 through March, 2004, with the remaining months during the water year being below average. The Kortes to Pathfinder river gains for December, 2003, tied the 3rd highest of record since the completion of Kortes Dam in 1951. The Kortes Dam to Pathfinder Dam river gains ranged from 207 percent in December, 2003 to 33 percent of average in May, 2004. The Kortes to Pathfinder river gains for May, 2004, were the 5 th lowest in the last 30 years. The actual April through July gain was 31,900 AF, which is 33 percent of the 30 year average of 97,300 AF. Figure 4 depicts a comparison of average, water year 2004 and water year 2003 monthly river gains. Due to a broken cableway, the Water Management Branch was unable to get a discharge measurement from June 15 through August 25, 2004. Therefore the total gains for the month of June, July and August may be erroneous and are not shown in figure 4.

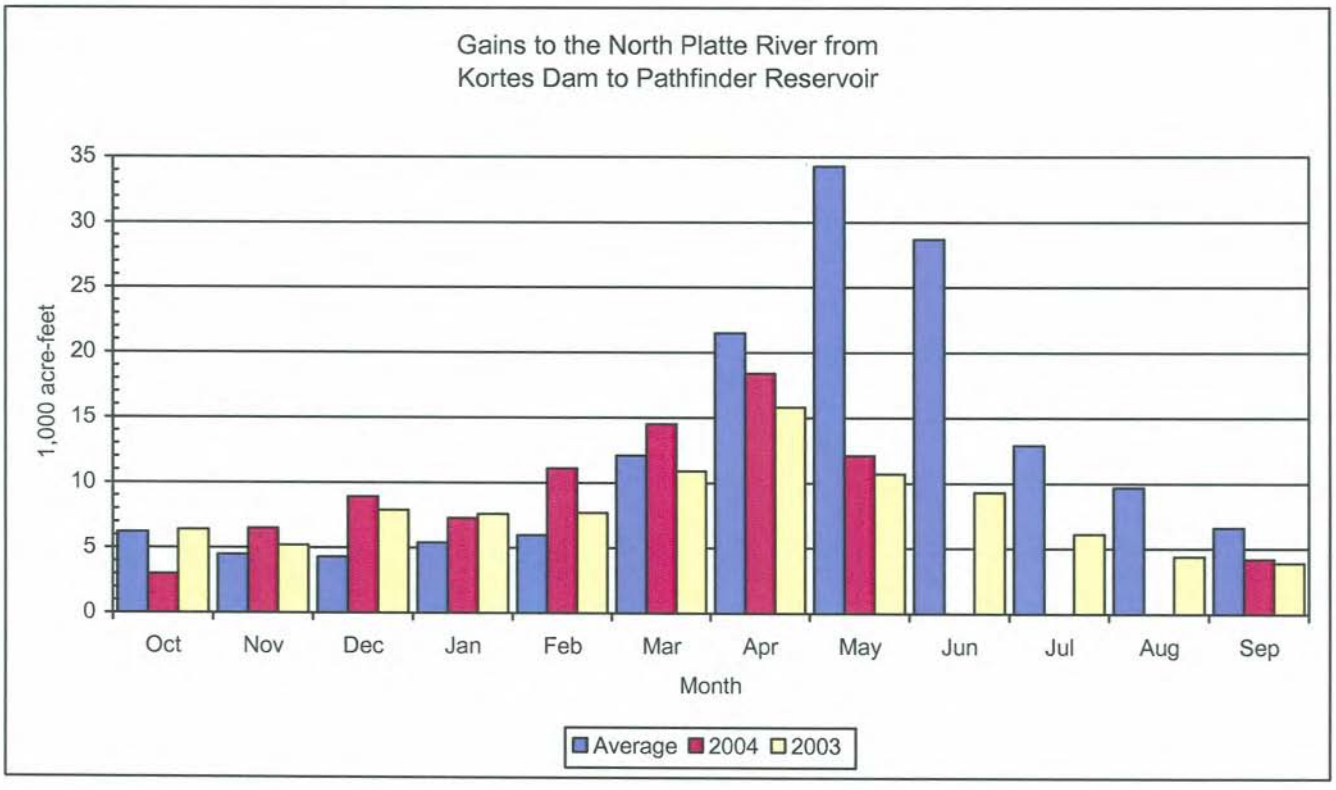

Figure 4 Gains to the North Platte River from Kortes Dam to Pathfinder Reservoir

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 2004, storage in Pathfinder Reservoir was 269,747 AF, which was 51 percent of average and 27 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 April 2, 2004, at 338,712 AF which was only 33 percent of capacity. The water year ended with 194,164 AF of water in storage in Pathfinder Reservoir, which was 37 percent of average and only 19 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 2004.

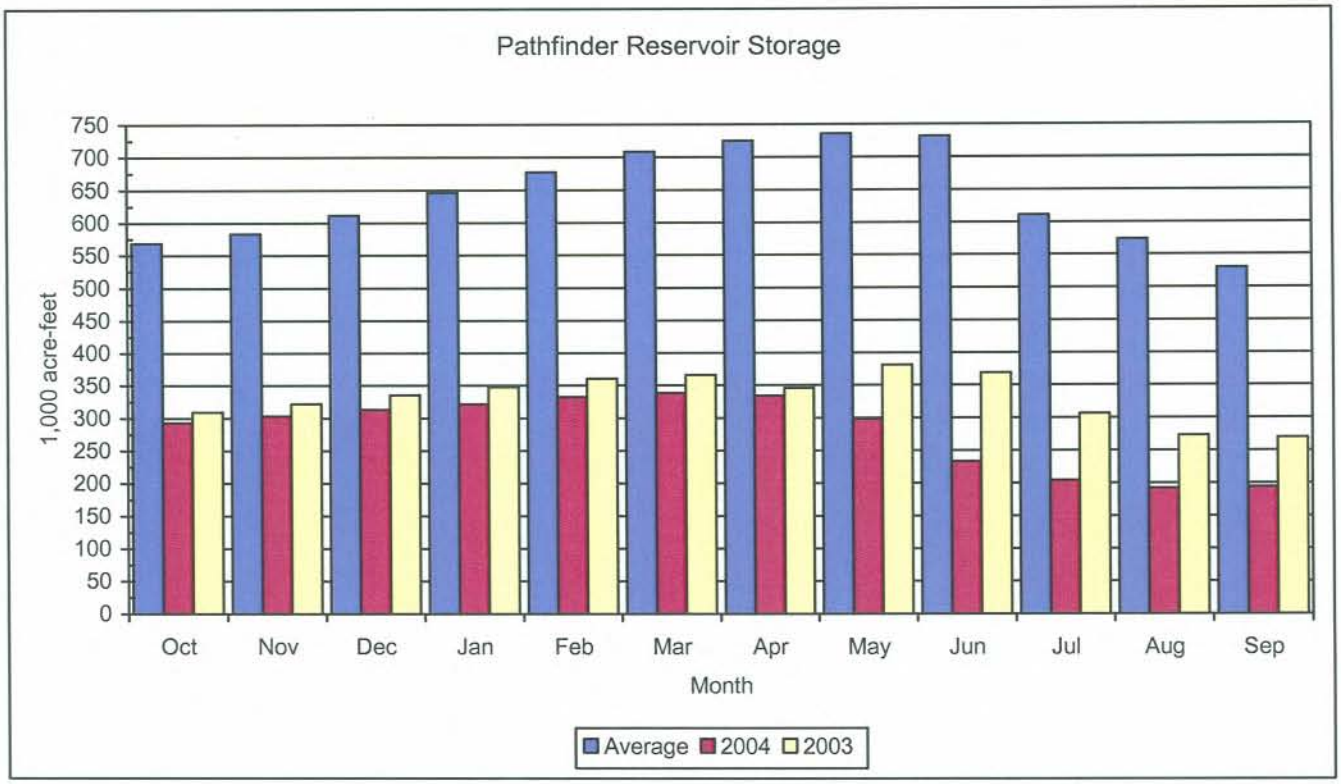

Figure 5 Pathfinder Reservoir Storage

Table 4 Pathfinder Reservoir Hydrologic Data for water year 2004 (end of month)

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	5796.48	269,747	Oct 1, 2003
End of water year	5785.33	194,164	Sep 30, 2004
Annual Low	5784.84	191,223	Aug 26, 2004
Historic Low 1/ 2/	5690.00	0	Sep 9, 1958
Annual High	5804.87	338,713	Apr 2, 2004
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)	599,800	Oct, 2003 - Sep, 2004	654,900	Oct, 2003 - Sep, 2004
Daily Peak (CFS)	1,965	Jun 25, 2004	2,646	Jun 13, 2004
Daily Minimum (CFS)	319	Aug 23, 2004	27	Oct 6, 2003
Peak Jet Flow Valve (CFS)			95 4/	Jan 22, 2004
Total Jet Flow Valve (AF)			54,886	Oct, 2003 - Sep, 2004

4/At the request of the Wyoming Game and Fish Depai_inent 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	
	KAF	% of Avg. 5/	KAF	% of Avg. 5/	KAF	% of Avg. 5/	KAF	% of Avg. 5/
October	3.0	48	36.1	59	10.7	30	293.2	52
November	6.5	144	38.2	59	27.5	57	303.6	52
December	8.9	207	42.0	57	31.5	71	313.5	51
January	7.3	135	40.2	50	30.9	69	322.0	50
February	11.1	185	41.2	56	29.3	72	332.6	49
March	14.5	120	47.3	50	39.8	65	338.3	48
April	18.4	86	50.2	45	52.3	59	333.8	46
May	12.1	35	45.1	35	77.7	70	298.6	41
June	3.7	NA 7/	80.9	51	143.5	94	233.3	32
July	-2.3	NA 7/	83.8	70	110.5	61	204.5	31
August	-1.9	NA 7/	53.5	63	63.6	39	192.1	34
September	4.2	64	41.3	74	37.6	40	194.2	37
Annual	86.0	NA 7/	599.8	54	654.9	61		

5/30 year average is the period (1974-2003)

6/ Inflow includes the gain from Kortes Dam to Pathfinder Dam.

7/ Due to a broken cableway, the Water Management Branch was unable to get a discharge measurement from June 15 through August 25, 2004. Therefore the gains for the months of June, July and August may be inconsistent for those months. With that possibility the actual and average numbers for June, July and August were not figured into this table.

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 and accommodate recreation use, while the lower winter operating level reduces the potential for ice damage to the canal gate and boat docks.

The annual drawdown of Alcova Reservoir began on October 1, 2003, and continued through October 31, 2003, when Alcova reached its normal winter operating range of 5488 + one foot. The refill of Alcova Reservoir was initiated on April 1, 2004. The water surface elevation was raised above 5497 feet on April 29, 2004, and the reservoir was too be maintained within 1 foot of elevation 5498 throughout the summer. However, on May 7, 2004, Alcova Reservoir operating level was restricted to elevation 5497.80 + 0.10 foot to limit the amount of fluctuation in inflow to Casper-Alcova Canal. This was a result of a failure of a radial-gate that controlled the releases into Casper-Alcova Canal. In order to aid irrigation deliveries into Casper-Alcova Canal, on June 1, 2004, Alcova Reservoir operating level was raised between elevation 5498.70 to 5498.90 and maintained within that range for the remainder of irrigation season. Increases and decreases into Casper-Alcova Canal were regulated by putting needles (vertical planks) in Alcova Reservoir trash racks. There were no bypass releases made at Alcova Reservoir during water year 2004.

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 flows acceptable to 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, 2003 until March, 2004. At the request of the Wyoming Game and Fish Department, a series of flushing flows were initiated on March 8, 2004, and continued through March 12, 2004, 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 May 2, 2004. Releases for the remainder of the water year were adjusted to manage upstream inflows from snowmelt runoff and to meet irrigation demands below Guernsey Reservoir. The largest release of water for the water year occurred on June 20, 2004 at 2,207 cfs.

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

River gains from Alcova Dam to Glendo Reservoir were well below average for the entire water year. The actual April through July gain was 34,200 AF, which was only 26 percent of average. The computed daily river gain reached the maximum, gain on June 14, 2004 and the daily computed Glendo Reservoir inflow peaked on July 20, 2004, at 423 cfs and 2,813 respectively. Figure 6 depicts a comparison of average, water year 2004 and water year 2003 monthly river gains.

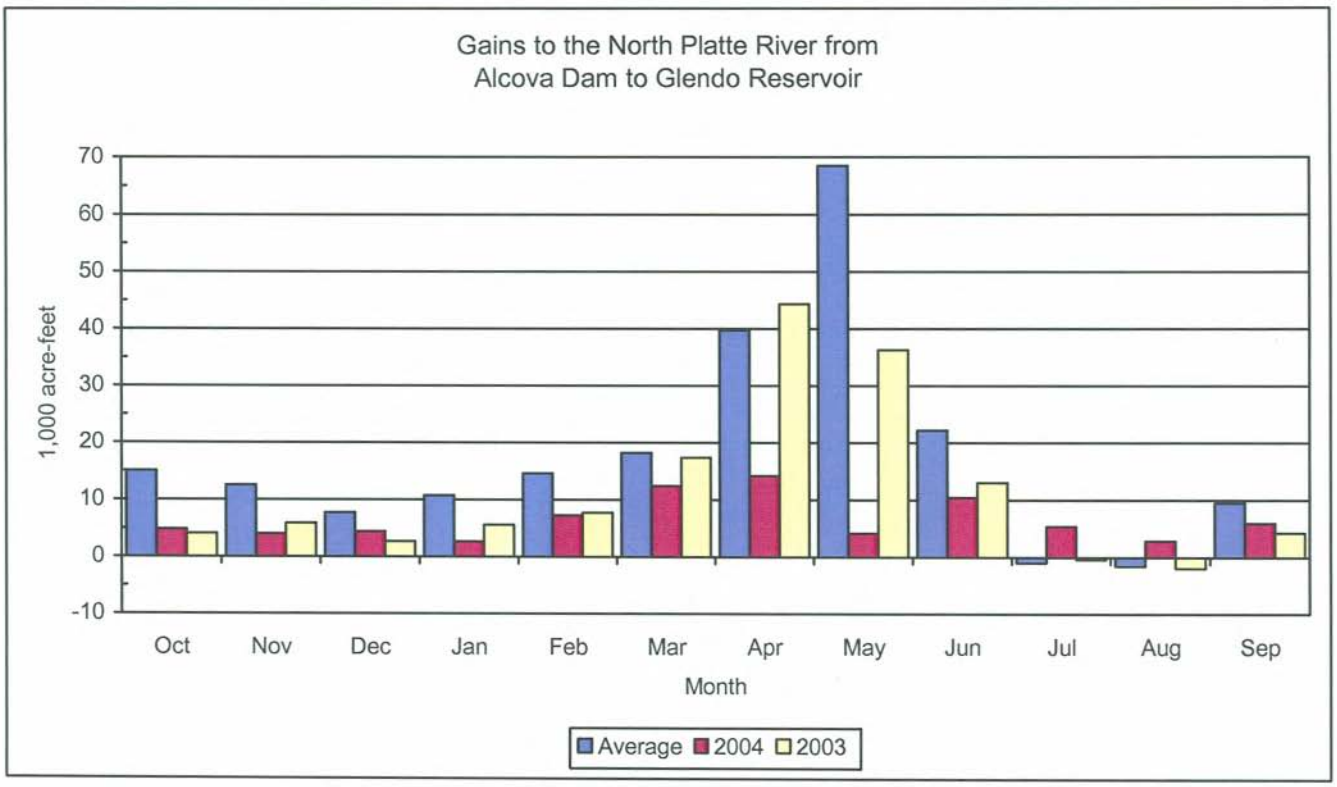

Figure 6 Gains to the North Platte River from Alcova Dam to Glendo Reservoir

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. Releases are, however, restricted to 6,600 cfs as a precautionary practice. This precautionary practice is to minimize the potential for damage to the stilling basin and training walls. In order to exceed 6,600 cfs discharge through the primary outlet works, prior approval of the Director, Denver Technical Service Center and of the Great Plains Regional Director, Billings, Montana is required. 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 145,371 AF at the beginning of water year 2004, which was 144 percent of average but only 28 percent of capacity. Water releases from Glendo Reservoir were initiated on May 17, 2004, in order to refill Guernsey Reservoir in preparation of irrigation releases. The reservoir reached a maximum storage for the year of 433,338 AF (elevation 4627.60 feet) on June 4, 2004. At the end of the water year, Glendo Reservoir contained 127,242 AF of water (water surface elevation 4586.53 feet) which was 126 percent of average and only 25 percent of capacity. Figure 7 depicts water year 2004 and water year 2003 end of month reservoir storage compared to average. Table 5 depicts a summary of Glendo Reservoir information for water year 2004.

Table 5 Glendo Reservoir Hydrologic Data for water year 2004 (end of month)

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	Elevation (FT)	Storage (AF)	Date
Beginning of water year	4590.22	145,371	Oct 1, 2003 1/
End of water year	4586.53	127,242	Sep 30, 2004
Annual Low	4576.02	83,242	Aug 22, 2004
Historic Low	4548.10	15,140	Sep 28,1966
Annual High	4627.60	433,338	Jun 4, 2004
Historic High	4650.94	758,830	May 28, 1973

1/ Represents 0001 hours on October 1.

Inflow-Outflow Data	Inflow	Date	Outflow 1/	Date
Annual Total (AF)	619,400	Oct, 2003 - Sep,2004	611,000	Oct, 2003 - Sep, 2004
Daily Peak (CFS)	2,813	Jul 20, 2004	7,519	Aug 2, 2004
Daily Minimum (CFS)	80	Jul 4, 2004	25 2/	Oct, 2003 - Sep, 2004
Peak Bypass Release (CFS)			4,058	Aug 2, 2004
Total Bypass Release (AF)			110,407 1/	Oct, 2003 - Sep, 2004

1/ Includes the average daily release of approximately 25 cfs from the low flow outlet works.
2/ A low flow outlet works was completed in 993 and an average release of 25 cfs is maintained a 1 year

Month	Gain from Alcova		Inflow 6/		Outflow		Content	
	KAF	% of Avg. 4/	KAF	% of Avg. 4/	KAF	% of Avg. 4/	KAF	% of Avg. 4/
October	4.8	32	37.5	50	1.5	56 5/	180.1	105
November	4.0	32	34.6	56	1.5	94 5/	212.5	93
December	4.4	57	35.2	67	1.8	95 5/	245.6	87
January	2.7	25	32.7	60	1.7	85 5/	276.3	83
February	7.3	50	35.3	65	1.7	74 5/	309.2	81
March	12.4	68	50.9	68	1.6	6 7/	356.6	84
April	14.2	36	43.0	40	1.6	2 7/	395.3	86
May	4.2	6	53.2	32	25.4	19	418.5	86
June	10.4	47	118.0	76	100.7	57	430.5	93
July	5.4	NA 3/	93.7	59	262.7	84	256.4	86
August	2.9	NA 3/	47.3	33	209.0	70	92.3	65
September	6.0	64	38.0	39	1.8	1 7/	127.2	126
Annual	78.7	36	619.4	52	611.0	52 5/		

3/Represents a negative number that makes the percentage meaningless.
4/30 year average is the period (1974-2003)
5/10 year average is the period (1994-2003)
6/ Inflow includes the gain from Alcova Dam to Glendo Dam.
7/ Irrigation districts in an effort to conserve their water supply delayed any irrigation deliveries until late June and stopped deliveries on September 1.

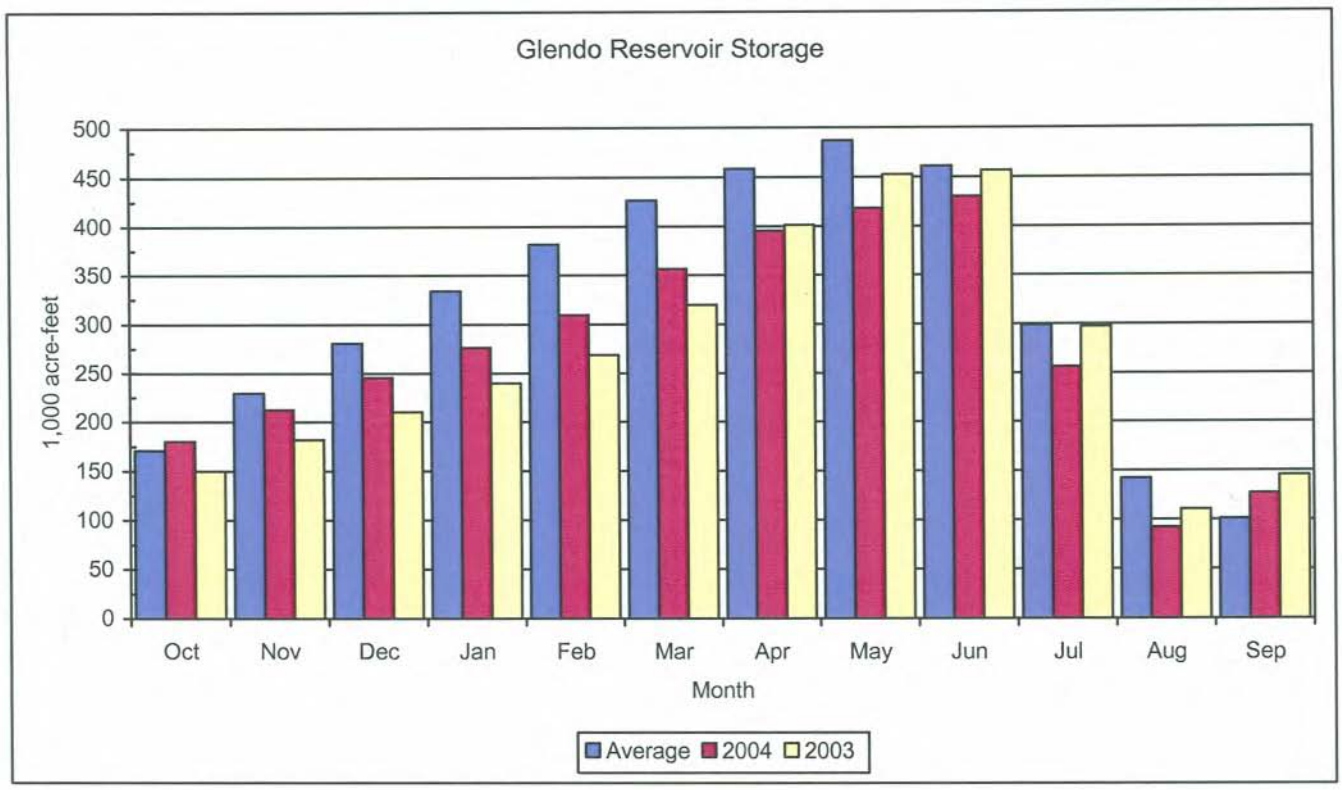

Figure 7 Glendo Reservoir Storage

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

The river gains between Glendo Dam and Guernsey Dam during water year 2004 were below average for ten months with only the months of July and August, 2004 being above average. The actual April through July gain was 7,800 AF which was only 39 percent of the 30 year average. On August 2, 2004, daily computed inflow to Guernsey Reservoir peaked at 7,441 cfs. Figure 8 depicts a comparison of average, water year 2004 and water year 2003 monthly river gains.

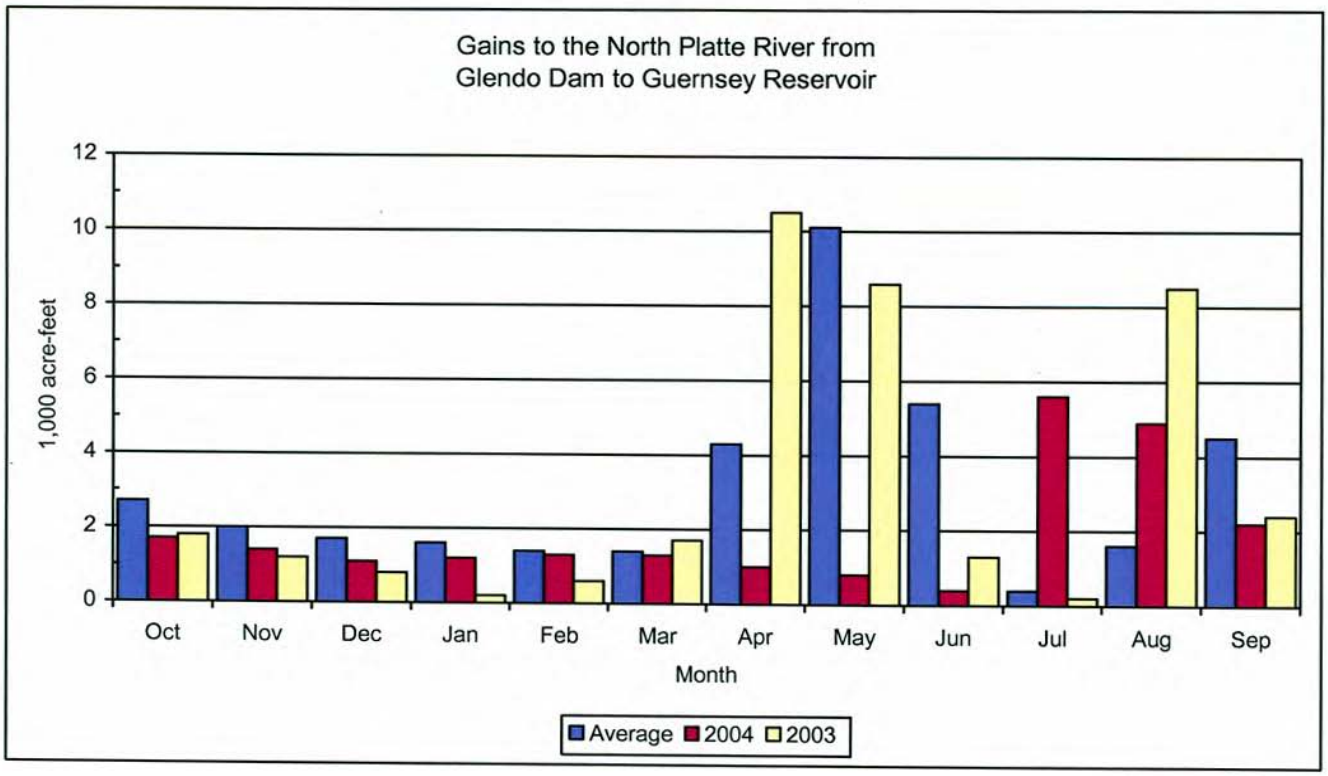

Figure 8 Gains to the North Platte River from Glendo Dam to Guernsey Reservoir

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 2004, storage in Guernsey Reservoir was at 5,163 AF. Releases from Guernsey Reservoir were started on May 23, 2004, as water was moved into the Inland Lakes. The annual "silt run" from the reservoir was initiated on July 10 and continued for 21 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 1,362 AF occurred on July 22, 2004. Following the "silt run," the reservoir was refilled to 25,653 AF by August 3, 2004 again making the reservoir suitable for recreation. At the end of the irrigation season, September 30, 2004, Guernsey Reservoir contained 9,251 AF. See Figure 9 for water year 2004 and water year 2003 storage compared to average.

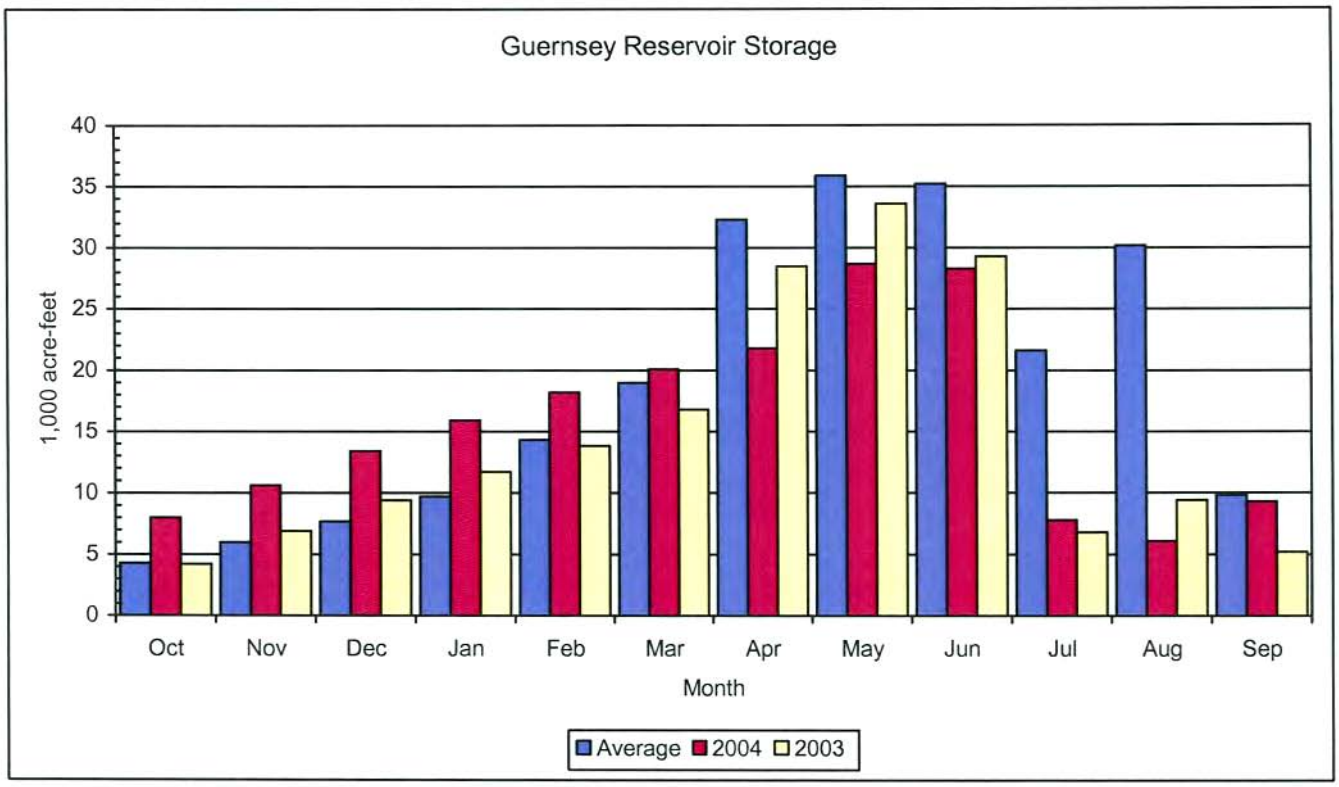

Figure 9 Guernsey Reservoir Storage

Precipitation during water year 2004

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.

Precipitation in the Seminoe watershed, at the Saratoga, Wyoming, weather station recorded the 4th lowest October precipitation in the last 30 years. In the Pathfinder and Glendo watersheds, precipitation at the Pathfinder Dam, Wyoming weather station recorded the 3rd lowest October precipitation in the last 30 years. In the Guernsey watershed, precipitation at the Guernsey Dam, Wyoming weather station recorded the 3rd lowest October precipitation in the last 30 years.

Precipitation in the Seminoe watershed, at the Saratoga, Wyoming, weather station recorded the 4th highest November precipitation in the last 30 years and the Walden, Colorado, weather station recorded the 5th highest November precipitation the last 30 years. In the Pathfinder watershed,

precipitation at the Lander, Wyoming weather station recorded the 3rd lowest November precipitation in the last 30 years. In the Glendo watershed, precipitation at the Casper, Wyoming, weather station recorded the 5th lowest November precipitation in the last 30 years.

Precipitation at the Pathfinder Dam, Wyoming weather station recorded the 4th highest December precipitation in the last 30 years. The Pathfinder Dam weather station is used as an indicator in both the Pathfinder and Glendo watersheds.

In the Pathfinder watershed, precipitation at the Pathfinder Dam,Wyoming, weather station recorded the 2nd lowest January precipitation of record in 104 years. The Pathfinder Dam weather station is used as an indicator in both the Pathfinder and Glendo watersheds. In the Glendo watershed, precipitation at the Casper, Wyoming, weather station recorded the 2nd lowest January precipitation of record in 90 years.

Precipitation in the Seminoe watershed, at the Elk Mountain, Wyoming, weather station recorded the 4th highest February precipitation in the last 30 years. In the Pathfinder watershed, precipitation at the Pathfinder Dam, Wyoming weather station recorded the highest February precipitation in the last 30 years and the Lander, Wyoming, weather station recorded the 2nd highest precipitation in the last 30 years. 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 recorded the 4th highest February precipitation in the last 30 years.

Precipitation in the Seminoe watershed, at the Elk Mountain, Wyoming, weather station recorded the 2nd lowest March precipitation of record in 98 years and the Walden, Colorado and Saratoga, Wyoming, both tied the 2nd lowest March precipitation in the last 30 year. In the Pathfinder watershed, precipitation at the Lander, Wyoming, weather station recorded the lowest March precipitation of record in 103 years. In the Glendo watershed, precipitation at the Casper, Wyoming, weather station recorded the lowest March precipitation of record in 89 years.

In the Seminoe watershed, precipitation at the Walden, Colorado weather station recorded the 2nd lowest April Precipitation in the last 30 years. In the Pathfinder watershed, precipitation at the Lander, Wyoming weather station recorded the 3rd highest April precipitation in the last 30 years. In the Guernsey watershed, precipitation at the Glendo Dam, Wyoming weather station tied the 4 th lowest April precipitation in the last 30 year while the Guernsey Dam, Wyoming weather station was the 4th lowest April precipitation in the last 30 years.

In the Seminoe watershed, precipitation at the Walden, Colorado and Saratoga, Wyoming, weather station recorded the 3rd lowest May precipitation in the last 30 years. In the Pathfinder watershed, precipitation at the Muddy Gap and Pathfinder Dam, Wyoming, weather stations both recorded the 4th lowest May precipitation in the last 30 years. The Pathfinder Dam weather station is used as an indicator in both the Pathfinder and Glendo watersheds.

In the Seminoe watershed, precipitation at the Walden, Colorado and Saratoga, Wyoming, Wyoming, weather stations both recorded the fourth highest June precipitation in the last 30 years. In the Pathfinder watershed, precipitation at the South Pass, Wyoming weather station recorded the second highest June precipitation in the last 30 years.

In the Glendo watershed, precipitation at the Pathfinder Dam, Wyoming, weather station tied the third lowest July precipitation in the last 30 years and the Casper, Wyoming, weather station recorded the fourth highest July precipitation in the last 30 years. The Pathfinder Dam weather station is used as an indicator in both the Pathfinder and Glendo watersheds. In the Guernsey watershed, precipitation at the Glendo Dam, Wyoming, weather station tied the third highest July precipitation in the last 30 years and the Guernsey Dam, Wyoming, weather station recorded the fifth highest July precipitation in the last 30 years.

In the Seminoe watershed, the Walden, Colorado and Saratoga, Wyoming, weather stations both recorded the fourth highest August precipitation in the last 30 years. In the Pathfinder watershed, the Lander, Wyoming weather station, recorded the second highest August precipitation of record (1901-2004). In the Guernsey watershed, the Guernsey Dam, Wyoming, weather station recorded the third lowest August precipitation in the last 30 years.

In the Seminoe watershed, precipitation at the Walden, Colorado and Elk Mountain, Wyoming, weather stations both recorded the second highest September precipitation in the last 30 years. In the Glendo watershed, precipitation at the Casper, Wyoming weather station, recorded the fourth highest September precipitation in the last 30 years. In the Guernsey watershed, precipitation at the Glendo Dam, Wyoming, weather station recorded the third highest September precipitation in the last 30 years and the Guernsey Dam, Wyoming, weather station recorded the highest September precipitation of record (1945-2004). See Figure 10 for a comparison of average, water year 2004, and water year 2003 total precipitation.

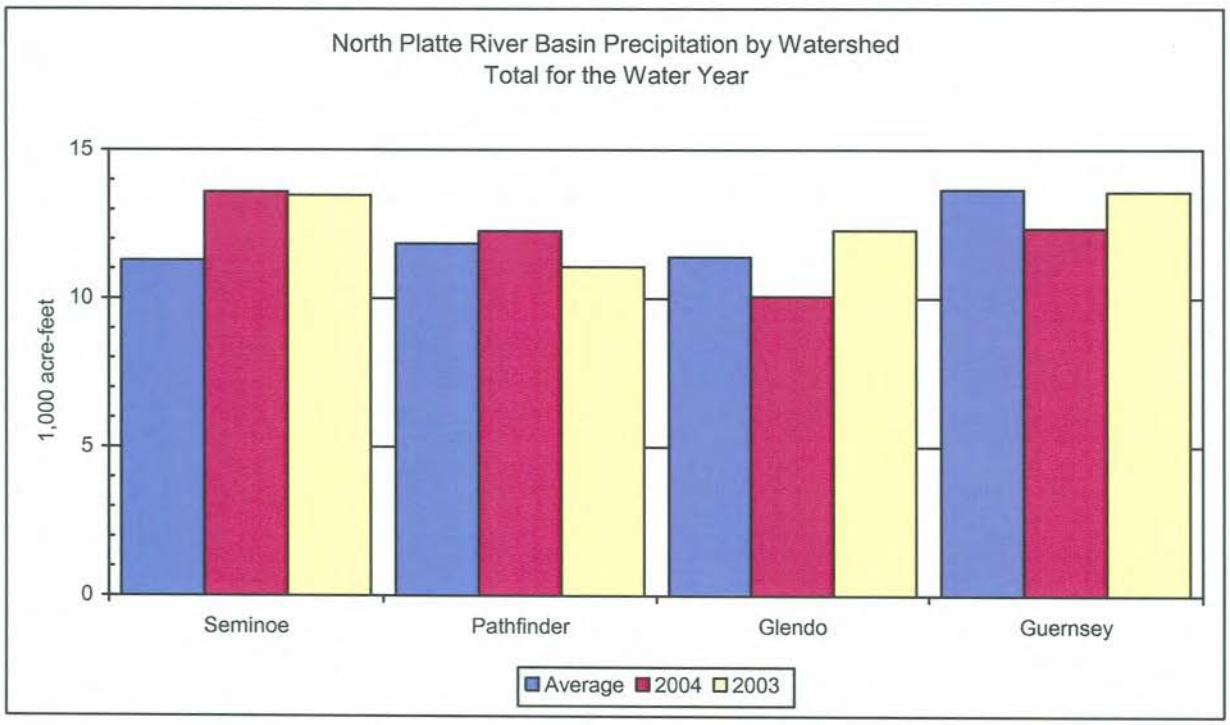

Figure 10 North Platte River Basin Precipitation by Watershed Total for water year

Allocation for water year 2004

For the third year in a row because of low carryover storage, drought conditions and below average snowmelt runoff, an allocation of storage water was put into effect on June 16, 2004. The allocation 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).

Ownerships for water year 2004

At the beginning of water year 2004, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained only 72,237 AF of water, which is only 17 percent of average. The Kendrick ownership contained 752,534 AF of water, which is 77 percent of average; and the Glendo ownership contained 104,499 AF of water, which is 76 percent of average. No ownerships filled to their permitted amount during water year 2004.

The total amount of water stored at the end of water year 2003 in the mainstem reservoirs for use in water year 2004 was 937,959 AF which was 62 percent of average. This total does not include 9,545 AF of water remaining in the four Inland Lakes in Nebraska.

At the end of water year 2004, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained only 75,177 AF of water which is only 18 percent of average. The Glendo ownership contained 64,304 AF of water which is 46 percent of average. The Kendrick ownership contained 643,796 AF, which is 67 percent of average and the operational/re-regulation water account contained zero water. Also stored in the North Platte storage system was 2,414 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 number 6 shows a summary of ownership for water year 2004.

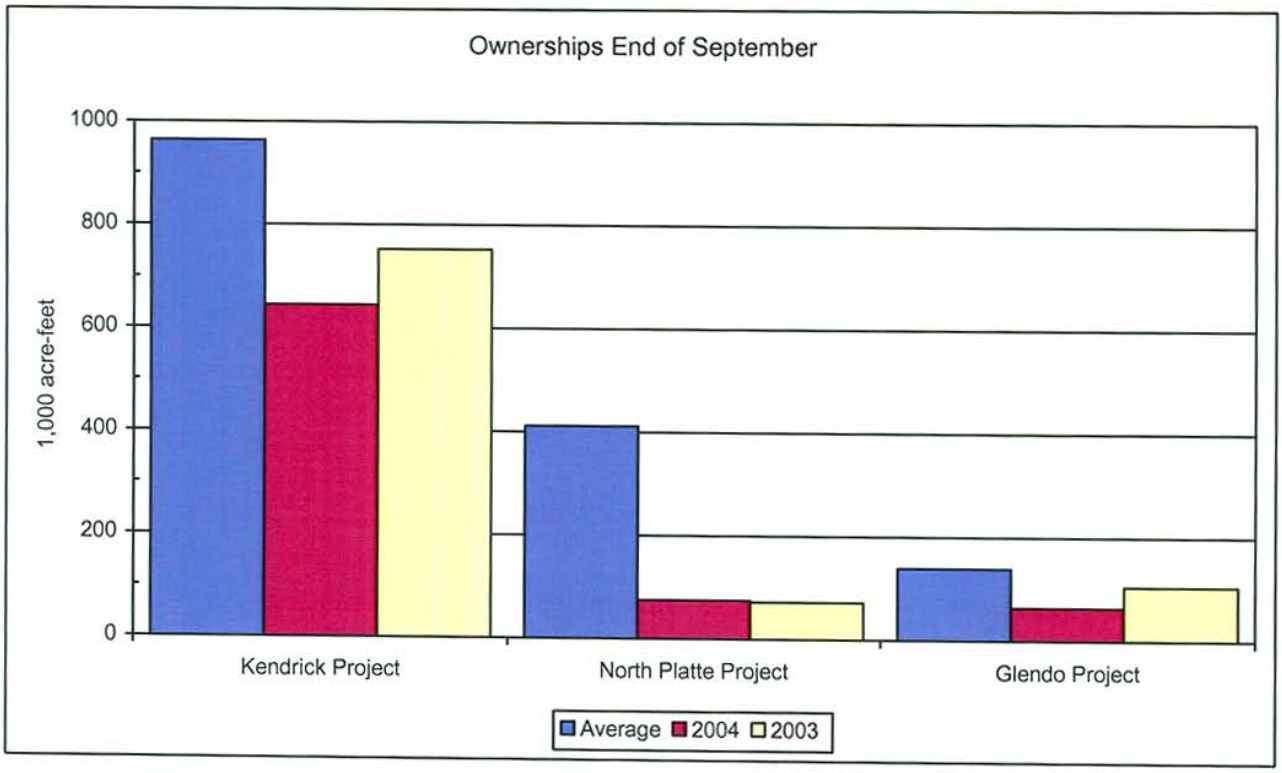

Figure 11 Ownership End of September

Table 6 Summary of North Platte River System Ownership for water year 2004

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
PATHFINDER OWNERSHIP														
ACCRUAL Al		16941	26912	31912	25454	29976	76495	76112	77970	16638	0	1444	25798	405652
EVAPORATION		1090	317	341	506	921	1467	2335	2980	4028	3072	2193	956	20206
DELIVERY B/		0	0	0	0	0	0	0	0	0	211203	178740	322	390265
OWNERSHIP 1	72233	88084	114679	146250	171198	200253	275281	349058	424048	436658	222383	42894	674141	
KENDRICK OWNERSHIP														
ACCRUAL		0	0	0	0	0	0	0	0	0	0	0	0	0
EVAPORATION		3150	783	641	1350	2293	3059	4005	4601	4741	4609	5374	3927	38533
DELIVERY B/		0	0	0	0	0	0	0	12623	15251	16052	17978	8301	70205
OWNERSHIP 1	752534	749384	748601	747960	746610	744317	741258	737253	720029	700037	679376	656024	6437961	
GLENDO OWNERSHIP														
ACCRUAL		0	0	0	13 131	0	0	0	0	0	0	0	360 E/	373
EVAPORATION		1381	613	24	148	238	990	1339	2507	2961	3387	2097	1206	16891
DELIVERY & **LOSS** B/		0	0	0	0	0	0	553	521	6	12490	9831	276	23677
OWNERSHIP 1	104499	103118	102505	102481	102346	102108	101118	99226	96198	93231	77354	65426	643041	
PACIFIC **POWER & LIGHT**														
ACCRUAL		0	0	0	0	0	0	0	50	24	32	35	0	141
DELIVERY B/		0	0	0	0	0	0	0	0	0	0	0	0	0
EVAPORATION		20	4	0	1	3	9	13	0	24	32	35	0	141
IN **STORAGE** 1	2000	1980	1976	1976	1975	1972	1963	1950	2000	2000	2000	2000	20001	
GUERNSEY OWNERSHIP														
ACCRUAL		0	0	5493	3378	8072	12986	0	3615	192	0	0	7844	41580
EVAPORATION		0	0	20	44	117	401	441	777	968	32	0	81	2881
DELIVERY B/		0	0	0	0	0	0	0	0	19914	11022			30936
OWNERSHIP	0	0	0	5473	8807	16762	29347	28906	31744	11054	0	0	77631	
INLAND **LAKES OWNERSHIP**														
ACCRUAL		6336	5302	13	-13 D/	0	0	14763	0	0	0	0	0	26401
EVAPORATION		23	25	0	5	17	51	135	262	14	0	0	0	532
TRANSFER C/		0	0	0	0	0	0	0	15863	10006	0	0	0	25869
OWNERSHIP		6313	11590	11603	11585	11568	11517	26145	10020	0	0	0	01	

Summary of North Platte River System Ownership for water year 2004 (Continued)

MONTHS		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
CITY OF **CHEYENNE**															
ACCRUAL			1305	320	501	670	505	459	1981	0	0	670	795	1082	8288
EVAPORATION			10	1	3	6	16	24	56	53	9	0	12	17	207
DELIVERY B/										4548	2398	0	167	276	7389
OWNERSHIP	I	1722	3017	3336	3834	4498	4987	5422	7347	2746	339	1009	1625	2414	
OPERATIONAL															
ACCRUAL			0	0	0	0	0	0	0	0	0	0	0	0	0
EVAPORATION			38	11	0	2	7	20	28	47	56	53	0	0	262
RELEASED											32	1543	2737		4312
OWNERSHIP	I	4574	4536	4525	4525	4523	4516	4496	4468	4421	4333	2737	0	0	
RE-REGULATION															
ACCRUAL			0	0	0	0	0	0	227	170	0	0	0	0	397
EVAPORATION			0	0	0	0	0	0	0	0	0	0	0	0	0
RELEASED			0	0	0	0	0	0	0	0	397	0	0	0	397
OWNERSHIP	I		0	0	0	0	0	0	227	397	0	0	0	0	
WWDC Water															
ACCRUAL F/			0	0	0	0	0	0	2150	317	0	0	0	0	2467
EVAPORATION									4	26	31	31	17	1	110
RELEASED			397							5	14	328	1478	532	2754
OWNERSHIP	I	397	0	0	0	0	0	0	2146	2432	2387	2028	533	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, 2003 until August 1, 2003, 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. 15,863 AF in May and 10,006 AF in June was transferred to the Inland Lakes.

D/ Not an actual accrual or delivery but a 13 AF correction for December evaporation which was corrected on January 7, 2004.

E/ Not an actual accrual but a 360 AF correction to Glendo ownership for water used by the Town of Mills.

F/ Wyoming Water Development Commission (WWDC) contracted with the Bureau of Reclamation for storage space of 2,500 AF of non-project water in Glendo Reservoir for a one water year period (for irrigation purposes).

Table 7 Actual Reservoir Operations for water year 2004

NORTH PLATTE RIVER ACTUAL RESERVOIR OPERATIONS
Year Beginning Oct 2003

HYDROLOGY OPERATIONS

Seminoe Reservoir Operations — Initial Content 333.0 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	12.9	19.9	24.1	19.2	20.2	63.6	62.5	76.9	87.7	49.4	18.5	19.1
Total Inflow	cfg	209.	334.	391.	312.	351.	1035.	1051.	1251.	1474.	803.	301.	322.
Turbine Release	kaf	33.1	31.8	33.1	32.9	30.2	32.8	31.8	32.6	77.4	86.1	55.5	36.7
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
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	33.1	31.8	33.1	32.9	30.2	32.8	31.8	33.0	77.4	86.1	55.5	37.1
Total Release	cfs	538.	534.	538.	534.	524.	533.	534.	536.	1302.	1402.	902.	623.
Evaporation	kaf	1.7	0.4	0.6	0.6	1.0	1.5	2.1	2.7	3.0	3.0	3.2	1.9
End-month content	kaf	311.1	298.8	289.2	274.9	263.9	293.2	321.8	363.0	370.3	330.6	290.4	270.5
End-month elevation	ft	6304.4	6302.8	6301.6	6299.7	6298.2	6302.1	6305.6	6310.4	6311.2	6306.7	6301.7	6299.1

Kortes Reservoir Operations — Initial Content 4.4Kaf — 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	33.1	31.8	33.1	32.9	30.2	32.8	31.8	33.0	77.4	86.1	55.5	37.1
Total Inflow	cfs	538.	534.	538.	534.	524.	533.	534.	536.	1302.	1402.	902.	623.
Turbine Release	kaf	33.1	31.8	33.1	32.9	30.1	32.8	31.8	33.0	77.2	86.0	55.3	36.7
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4
Total Release	kaf	33.1	31.8	33.1	32.9	30.1	32.8	31.8	33.0	77.2	86.1	55.4	37.1
Total Release	cfs	538.	534.	538.	534.	524.	533.	534.	536.	1297.	1401.	901.	623.

Pathfinder Reservoir Operations — Initial Content 269.7 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	0.5	2.1	2.4	2.9	2.9	4.5	11.5	11.3	5.4	5.6	1.6	0.9
Kortes-Path Gain	kaf	2.5	4.3	6.5	4.4	8.2	10.0	6.9	0.8	-1.7	-7.9	-3.5	3.3
Inflow from Kortes	kaf	33.1	31.8	33.1	32.9	30.1	32.8	31.8	33.0	77.2	86.1	55.4	37.1
Total Inflow	kaf	36.1	38.2	42.0	40.2	41.2	47.3	50.2	45.1	80.9	83.8	53.5	41.3
Total Inflow	cfs	586.	643.	683.	654.	716.	769.	844.	733.	1359.	1363.	870.	694.
Turbine Release	kaf	6.1	23.1	26.8	26.3	24.8	35.0	47.6	73.0	139.0	106.0	59.0	33.2
Jetflow Release	kaf	4.6	4.4	4.7	4.6	4.5	4.8	4.7	4.7	4.5	4.5	4.6	4.4
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	10.7	27.5	31.5	30.9	29.3	39.8	52.3	77.7	143.5	110.5	63.6	37.6
Total Release	cfs	174.	463.	512.	503.	509.	648.	880.	1263.	2412.	1797.	1035.	631.
Evaporation	kaf	1.9	0.3	0.6	0.8	1.3	1.8	2.4	2.6	2.7	2.1	2.3	1.6
End-month content	kaf	293.2	303.6	313.5	322.0	332.6	338.3	333.8	298.6	233.3	204.5	192.1	194.2
End-month elevation	ft	5799.5	5800.8	5802.0	5803.0	5804.2	5804.8	5804.3	5800.2	5791.4	5787.0	5785.0	5785.3

Alcova Reservoir Operations — Initial Content 178.7 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	10.7	27.5	31.5	30.9	29.3	39.8	52.3	77.7	143.5	110.5	63.6	37.6
Total Inflow	cfs	174.	463.	512.	503.	509.	648.	880.	1263.	2412.	1797.	1035.	631.
Turbine Release	kaf	30.7	29.5	30.9	30.6	28.7	39.7	29.7	63.4	125.4	93.7	44.6	29.7
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	12.6	15.3	16.1	18.0	8.3
Total Release	kaf	30.7	29.5	30.9	30.6	28.7	39.7	29.7	76.0	140.7	109.8	62.6	38.0
Total Release	cfs	499.	496.	502.	498.	499.	646.	500.	1236.	2364.	1786.	1018.	639.
Evaporation	kaf	0.5	0.1	0.2	0.1	0.4	0.4	0.7	0.8	0.8	0.7	0.9	0.7
End-month content	kaf	158.2	156.1	156.5	156.7	156.9	156.6	178.5	179.4	181.4	181.4	181.5	180.4
End-month elevation	ft	5488.9	5489.0	5488.2	5488.3	5488.4	5488.2	5497.6	5498.0	5498.8	5498.8	5498.8	5498.4

Actual Reservoir Operations for water year 2004 (Continued)

NORTH PLATTE RIVER ACTUAL RESERVOIR OPERATIONS
Year Beginning Oct 2003

Gray Reef Reservoir Operations — Initial Content 1.6 Kaf — Operating Limits: Max 1.8 Kaf, 5332.00 Ft. Min 0.0 Kaf, 5306.00 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	30.7	29.5	30.9	30.6	28.7	39.7	29.7	63.4	125.4	93.7	44.6	29.7
Total Inflow	cfs	499.	496.	502.	498.	499.	646.	500.	1032.	2107.	1524.	725.	500.
Total Release	kaf	30.8	29.8	30.7	30.8	28.8	39.7	29.8	63.1	125.2	93.7	44.5	29.7
Total Release	cfs	501.	501.	500.	500.	500.	646.	500	1026.	2104.	1525.	724.	500.

Glendo Reservoir Operations — Initial Content 145.4 *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	6.7	4.8	4.5	1.9	6.5	11.1	13.2	-9.9	-7.2	0.0	2.8	8.3
Infl from Gray Reef	kaf	30.8	29.8	30.7	30.8	28.8	39.7	29.8	63.1	125.2	93.7	44.5	29.7
Total Inflow	kaf	37.5	34.6	35.2	32.7	35.3	50.8	43.0	53.2	118.0	93.7	47.3	38.0
Total Inflow	cfs	610.	582.	572.	532.	613.	827.	722.	865.	1983.	1524.	769.	639.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	99.2	224.6	150.1	0.0
Low Flow Release	kaf	1.5	1.5	1.8	1.7	1.7	1.6	1.6	1.8	1.5	1.5	1.5	1.8
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	0.0	36.6	57.4	0.0
Total Release	kaf	1.5	1.5	1.8	1.7	1.7	1.6	1.6	25.4	100.7	262.7	209.0	1.8
Total Release	cfs	25.	25.	29.	27.	29.	26.	27.	412.	1693.	4273.	3399.	30.
Evaporation	kaf	1.3	0.7	0.3	0.3	0.7	1.8	2.7	4.6	5.3	5.1	2.4	1.3
End-month content	kaf	180.1	212.5	245.6	276.3	309.2	356.6	395.3	418.5	430.5	256.4	92.3	127.2
End-month elevation	ft	4596.4	4601.5	4606.3	4610.3	4614.4	4619.8	4623.9	4626.2	4627.3	4607.7	4578.3	4586.5

Guernsey Reservoir Operations — Initial Content 5.2 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	1.7	1.4	1.1	1.1	1.2	1.3	1.0	0.8	0.4	5.6	4.9	2.2
Inflow from Glendo	kaf	1.5	1.5	1.8	1.7	1.7	1.6	1.6	25.4	100.7	262.7	209.0	1.8
Total Inflow	kaf	3.2	2.9	2.9	2.8	2.9	2.9	2.6	26.2	101.1	268.3	213.9	4.0
Total Inflow	cfs	52.	49.	48.	46.	51.	47.	43.	425.	1700.	4363.	3479.	67.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	60.9	18.3	53.1	0.0
Seepage	kaf	0.2	0.1	0.1	0.2	0.5	0.7	0.4	0.0	0.0	0.0	0.0	0.5
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	39.6	270.1	161.8	0.0
Total Release	kaf	0.2	0.1	0.1	0.2	0.5	0.7	0.4	18.5	100.5	288.4	214.9	0.5
Total Release	cfs	4.	2.	2.	4.	9.	11.	7.	301.	1690.	4691.	3496.	94.
Evaporation	kaf	0.2	0.2	0.0	0.1	0.2	0.3	0.5	0.8	1.0	0.4	0.7	0.3
End-month content	kaf	8.0	10.6	13.4	16.0	18.2	20.1	21.8	28.7	28.3	7.8	6.1	9.3
End-month elevation	ft	4398.3	4400.9	4403.1	4405.0	4406.5	4407.6	4408.6	4412.2	4412.1	4398.1	4396.0	4399.6

Flood Benefits for water year 2004

Because of the existence of dams on the North Platte River, The Corps of Engineers, Omaha District, estimates that in water year 2004 flood damages of 1,390,200 were prevented. Table 8 is a breakdown of flood damage prevented by Dams.

Table 8 Flood Damage Prevented by Dams for water year 2004 (on the North Platte River Basin System

DAMS	WATER YEAR 2004	PRIOR TO 2004	ACCUMULATED TOTAL 2/
SEMINOE	$0	$27,846,200	$27,846,200
PATHFINDER	$0	$8,760,200	$8,760,200
ALCOVA	$0	$481,100	$481,100
GLENDO	$1,390,200	$67,996,300	$69,386,500
GUERNSEY	$0	$439,000	$439,000
TOTAL	$1,390,200	$105,522,800	$106,913,000

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 2004 except for Glendo Dam, which is 1965 through 2004.

Generation for water year 2004

Power generation was well below average for all powerplants on the North Platte River Basin in water year 2004. See Table 9 for a breakdown of generation by powerplant.

Table 9 Power Generation water year 2004

Powerplant	Gross generation 1/ (GWh)	Percent of Average 2/
Seminoe	63.6	47
Kortes	84	59
Fremont Canyon	144.7	58
Alcova	70.3	57
Glendo	46.4	57
Guernsey	10.2	52
Total Basin	419.2	57

1/ Generation is reported in giga-watt hours (GWh).
2/ 30 year average (1974-2003)

The number of generation units at each powerplant, their capacity and output at rated head is shown in Table 10.

Table 10 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/ (kw)
Seminoe	3	17,000	51,000	97-227	4,050	139.5
Kortes	3	12,000	36,000	192-204	2,910	146.8
Fremont Canyon	2	33,400	66,800	247-363	3,080	250.9
Alcova	2	19,500	39,000	153-165	4,100	124.2
Glendo	2	19,000	38,000	73-156	3,400	84.2
Guernsey	2	3,200	6,400	89-91	1,340	20.7
Total	14	---	237,200	---	---	766.3

1/1974-2003
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 Wattt 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.

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 Natural Resources Conservation Service 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.

Water year - October 1 through September 30

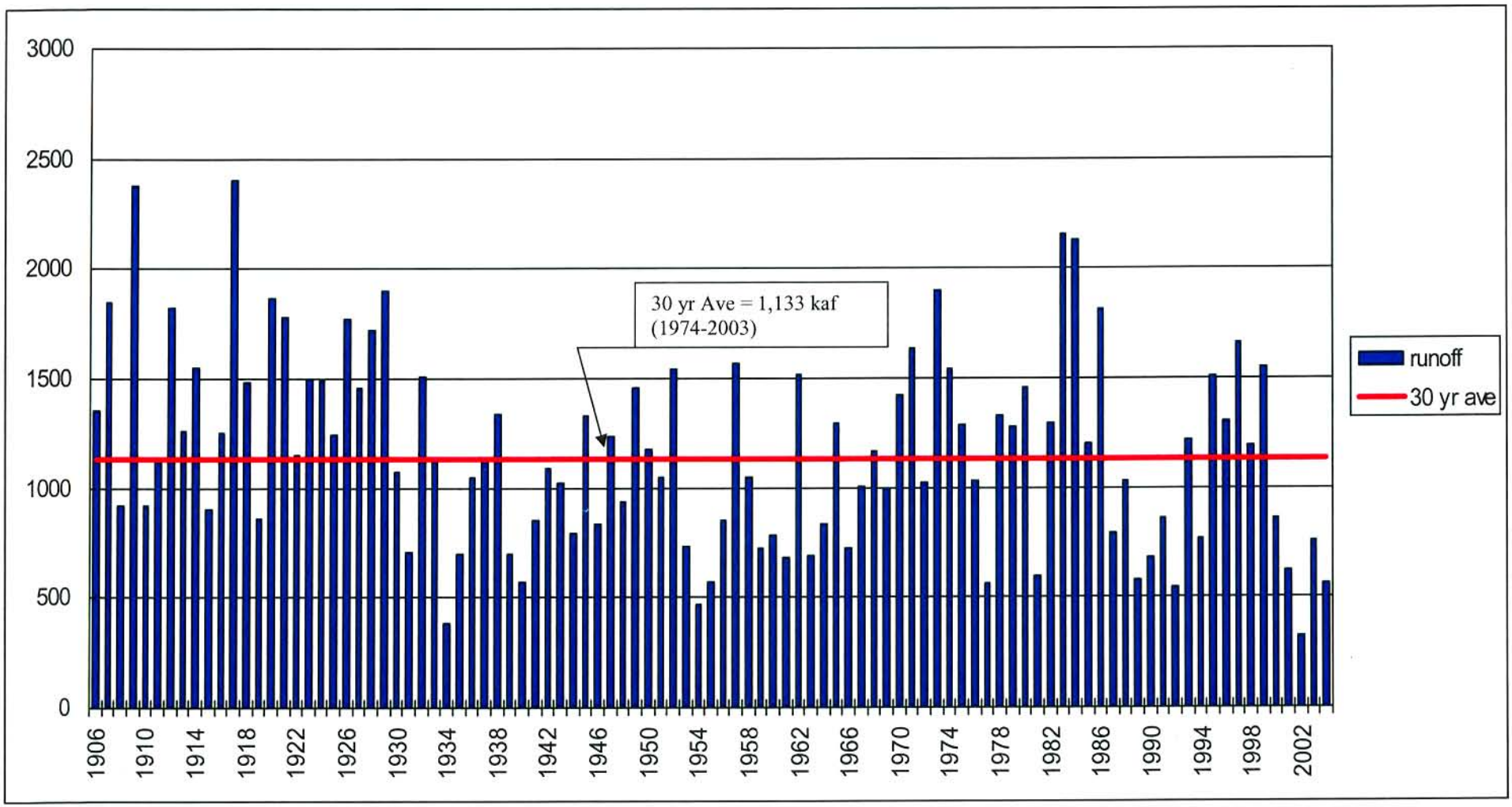

Figure 20 Pathfinder Watershed Runoff 1906-2004