# Annual **O**perating Plans



North Platte River Area

Water Year 1999 Summary of Actual Operations and Water Year 2000 Annual Operating Plans



U.S. DEPT. OF THE INTERIOR BUREAU OF RECLAMATION **GREAT PLAINS REGION** Wyoming Area Office

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#### 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.

All references to average in this document will refer to the average of the historical record for the years 1969-1998 unless noted otherwise. In each coming year this period will be advanced by 1 year to maintain a running 30-year average.

## INTRODUCTION

The System of dams, reservoirs, and powerplants on the North Platte River (referred to as the "System" in this text) is monitored and in most cases operated and managed from the Wyoming Area Office 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 22.

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. 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. Table 2 depicts reservoir data, six of which have powerplants with a generating capacity totaling 235.2 megawatts (MW).

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 Golden, 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.

#### SYSTEM PLANNING AND CONTROL

The North Platte River storage, power generation, and water delivery facilities are operated for irrigation, hydroelectric power production, municipal and industrial water supply, providing instream 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 most probable runoff conditions. The System is operated to optimize the most probable 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 Basin.

## North Platte River System

Total End of September Storage

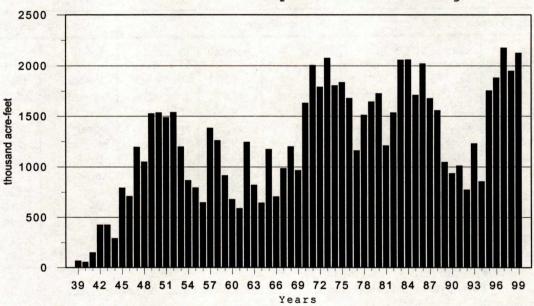


Figure 1

# Table 1 Summary of Reservoir Storage Content Water Year 1999 End of month

Seminoe Res	servoir		Pathfinder Reservoir			Alcova Reservoir			
Month	Storage	Record 1/	Month	Storage	Record 1/	Month	Storage	Record 1/	
October	853,882	5th highest	October	780,966		October	157,193	<u>3</u> /	
November	802,124		November	840,474	4th highest	November	156,718		
December	757,281		December	869,847	4th highest	December	156,583		
January	735,743	5th highest	January	889,022		January	155,840		
February	705,785	5th highest	February	916,690		February	157,826		
March	674,314	3rd highest	March	973,537	2nd highest	March	162,351		
April	720,401	3rd highest	April	995,305	highest	April	179,133		
May	843,498	4th highest	May	993,352	3rd highest	May	179,206		
June	968,869	4th highest	June	1,009,699	5th highest	June	181,330		
July	955,454		July	978,037	3rd highest	July	179,985		
August	935,319	4th highest	August	920,396	highest	August	180,694		
September	911,230	3rd highest	September	897,301	highest	September	179,644		

Glendo Reservoir			Guernsey Re	servoir		Total North Platte System 2/		
Month	Storage	Record 1/	Month	Storage	Record 1/	Month	Storage	Record 1/
October	233,825	3rd highest	October	6,831	4th highest	October	2,038,814	5th highest
November	306,031	3rd highest	November	11,200	3rd highest	November	2,122,573	5th highest
December	358,815	3rd highest	December	14,344	3rd highest	December	2,162,520	5th highest
January	415,070	4th highest	January	17,294	3rd highest	January	2,218,693	5th highest
February	461,899	2nd highest	February	19,376	5th highest	February	2,268,043	5th highest
March	516,497	2nd highest	March	29,856		March	2,362,722	2nd highest
April	538,781	2nd highest	April	37,235		April	2,476,764	highest
May	564,476		May	33,834		May	2,620,906	3rd highest
June	608,099	5th highest	June	36,292		June	2,810,515	3rd highest
July	370,427		July	9,139		July	2,498,988	4th highest
August	148,210		August	33,009		August	2,223,923	4th highest
September	130,471	4th highest	September	5	2nd lowest	September	2,124,365	2nd highest

1/Record is the 30 year period from 1969 to 1998

<sup>2/</sup>Total North Platte system includes storage from Seminoe, Kortes, Pathfinder, Alcova, Gray Reef, Glendo, and Guernsey Reservoirs

 $<sup>\</sup>underline{3}/\text{Alcova}$  Reservoir elevation is maintained between either a winter operating range (5488.00  $\pm$  one foot) or a summer operating range of (5498.00  $\pm$  one foot)

Table 2

North Platte River Reservoir Data

Reservoir	Dead Storage <u>1</u> / Acre-feet(AF)	Active Storage <u>2</u> / (AF)	Total Storage (AF)	Minimum Storage (AF)	Minimum Elevation
Seminoe	556	1,016,717	1,017,273	31,670 <u>4</u> /	6239.00 <u>4</u> /
Kortes	151	4,588	4,739	1,666 4/	6092.00 <u>4/</u>
Pathfinder	7	1,016,500	1,016,507	31,405 <u>4</u> /	5746.00 <u>4/</u>
Alcova	91	184,314	184,405	137,610 <u>5/</u>	5479.50 <u>5/</u>
Gray Reef	56	1,744	1,800	56 <u>6/</u>	5312.00 <u>6/</u>
Glendo	11,033	778,369	789,402 <u>3/</u>	63,148 7/	4570.00 <u>7</u> /
Guernsey	0	45,612	45,612	0 8/	4370.00 <u>8</u> /
Total	11,894	3,047,738	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 (elevation 4635.00), with an additional 271,917 AF allocated to flood control (elevation 4653.00)
- $\underline{4}/\text{Top}$  of inactive capacity, minimum water surface elevation for power generation.
- 5/Minimum water surface elevation for power generation. Elevation of Casper Canal gate sill is 5487.00 (153,802)
- 6/Top of dead capacity spillway crest 7/Minimum water surface elevation for power generation.
- 8/Zero capacity and North Spillway Crest

#### SYSTEM OPERATIONS WATER YEAR 1999

### Seminoe Reservoir Inflow

Except for the months of December 1998, and April 1999, all inflows into Seminoe Reservoir were above average. Inflows ranged from 149 percent of average in November 1998(Water Year 1999) to 88 percent in December 1998. The inflow into Seminoe Reservoir for November 1998 was the third highest November Seminoe inflow in the past 30 years with only Water Years 1987 and 1971 being higher. The Actual April-July inflows total 914,788 AF, which is 113 percent of average. The inflows peaked for the year on June 19, 1999, at 8,412 cubic feet per second (cfs). Figure 2 depicts comparison of average monthly inflow and Water Year 1999 and 1998 monthly inflows.

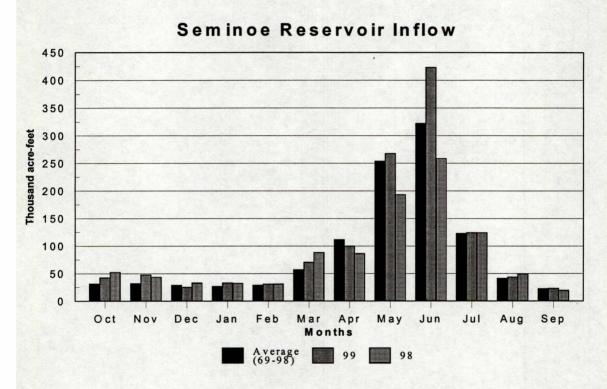


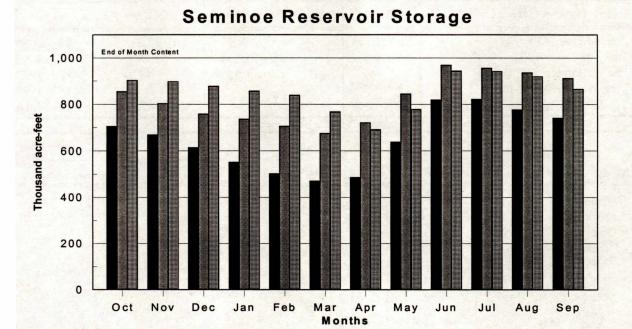
Figure 2

## 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 4,000 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 flow capacity of 3,450 cfs.

At the start of Water Year 1999 Seminoe Reservoir had a storage content of 864,546 AF which was 117 percent of average and 85 percent of capacity. Seminoe storage continued above average throughout the Water Year. The maximum Seminoe Reservoir content for the Water Year was reached on July 1, 1999 at 969,065 AF. The end of Water Year 1999 Seminoe Reservoir storage content of 911,230 AF, which was the highest end of September Seminoe storage since 1984. See Figure 3 for an end of month storage comparison for the Water Year. Kortes Powerplant had a transformer failure in September and the transformer was not replaced until late May 1999. Releases averaged 810 cfs for October. Seminoe releases for the remainder of the winter were dependent on the availability of Kortes Powerplant capacity in order to minimize bypassing water at Kortes Powerplant. Releases averaged approximately 2,230 cfs during May 1999. Releases were increased to average about 4,860 cfs during June 1999. The releases were decreased for the remainder of the Water Year and averaged approximately 700 cfs during September 1999.



Average (69-98)

Figure 3

TABLE 3
Seminoe Reservoir Hydrologic Data
for Water Year 1999

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	6348.99	864,546	October 1, 1998
End of Water Year	6351.55	911,230	September 30, 1999
Annual Low	6336.84	668,644	March 22, 1999
Historic Low1/	6253.30	56,390	April 20, 1961
Annual High	6354.58	969,065	July 1, 1999
Historic High 1/	6359.29	1,073,050	June 20, 1949

1/The daily records for this table are only available from Water Year 1946.

Inflow-Outflow Data	Inflow <u>2</u> /	Date	Outflow	Date
Annual Total(AF)	1,231,113	Oct'98-Sep'99	1,122,835	Oct'98-Sep'99
Daily Peak (CFS)	8,412	June19, 1999	5,215 <u>3</u> /	June 9, 1999
Daily Minimum (CFS)	7	Dec 28, 1998	449 3/	May 7, 1999
Peak Jet Flow Valve (CFS)			2,304	June 2, 1999
Total Jet Flow Valve (AF)			58,843	May27-Jul 6

2/Inflows are a computed number 3/daily peak and minimum are releases to the river.

	Inflow		0	outflow	Content			
Month	KAF	% of avg <u>4</u> /	KAF	% of avg <u>4</u> /	KAF	% of avg <u>4</u> /		
October	42.6	136	50.0	82	853.9	121		
November	47.6	149	95.5	145	802.1	120		
December	25.3	88	68.5	83	757.3	123		
January	33.1	125	53.2	60	735.7	134		
February	30.7	108	59.5	78	705.8	141		
March	70.6	124	98.0	112	674.3	143		
April	99.9	90	51.2	55	720.4	148		
May	267.6	105	137.3	141	843.5	132		
June	423.1	131	289.3	216	968.9	118		
July	124.2	101	125.5	114	955.5	116		
August	43.4	106	53.2	68	935.3	121		
September	23.0	104	41.6	80	911.2	123		
Annual	1231.1	114	1122.8	109		<b>7</b> 9.80多.621116		

<sup>4/30</sup> year average is the period (1969-1998)

## 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. This 4,700 AF Reservoir serves as the forebay for Kortes Powerplant which has three electrical generating units with a total capacity of 37 MW and a release capability of about 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 plant 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".

Releases averaged 810 cfs for October. Kortes releases for the remainder of the winter were dependent on the availability of Kortes powerplant capacity in order to minimize bypassing water at Kortes Powerplant. During May 13 through July 8, 1999, some of the releases made from Seminoe Reservoir to manage the rate of fill of Seminoe Reservoir exceeded the release capacity of Kortes Powerplant and required that a total of 229,832 AF of water bypass the Kortes Powerplant. Part of the bypass was required due to a transformer outage and part was due to the rate of release from Seminoe which was necessary to manage runoff. Additional bypass of 1,389 AF was required on six other days when testing at Kortes Powerplant was done. All other Kortes releases were made through the Powerplant in Water Year 1999. The highest releases for the Water Year were made on June 9, 1999, with a peak flow of 5,214 cfs.

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

Kortes Dam to Pathfinder Dam river gains were well above average for the entire Water Year. The Kortes to Pathfinder river gains for October and November 1998 were the highest of record since the completion of Kortes Dam in 1951. The Kortes to Pathfinder river gains for January and February 1999 were the 2nd highest of record since the completion of Kortes Dam in 1951 with only January and February 1998 being higher. The actual April-July gain was 174,200 AF, which was 165 percent of average. The average daily gain peaked for the year on May 5, 1999 at 2,035 cfs, with the daily computed inflow peaking on June 5, 1999, at 6,656 cfs. See Figure 4.

## Gains to the North Platte River

Kortes Dam to Pathfinder Dam

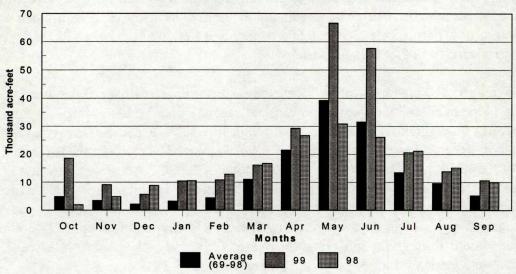
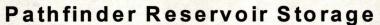


Figure 4

## 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. 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 two 60" and one 30" jet flow gates at the dam are capable of releasing 3,100 cfs, and 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. The uncontrolled spillway is a flat-crested weir of natural rock over the left abutment of the dam. It has an estimated capacity of 65,000 cfs, at water surface elevation 5858.10 feet or 8 feet above the spillway crest. Fremont Canyon Powerplant, located in the canyon below Pathfinder Dam, has been reconditioned to a capacity of 66.8 MW under full reservoir operating head.

At the start of Water Year 1999 storage in Pathfinder Reservoir was 760,494 AF, which was 141 percent of average. Pathfinder storage was well above average for the entire Water Year. (See figure 5). The maximum Pathfinder Reservoir content for the Water Year was reached on June 26, 1999, at 1,011,892 AF. The Water Year ended with 897,301 AF of water in storage in Pathfinder Reservoir, which is 166 percent of average. A gradual drawdown of Alcova Reservoir to its winter operating range this year allowed for continual release of water from Pathfinder Reservoir during October. The October through February Pathfinder releases averaged approximately 700 cfs. A release from the Pathfinder Dam outlet works was initiated on May 13, 1999, and continued until July 8, 1999, in order to move water through the system. Operation in 1999 required the release of 222,129 AF of water to the river below Pathfinder Dam which was a bypass of Fremont Canyon Powerplant.



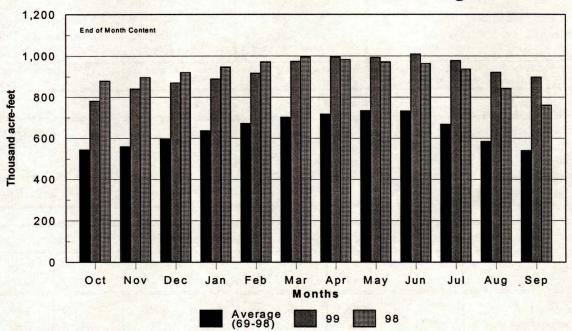


Figure 5

TABLE 4
Pathfinder Reservoir Hydrologic Data
for Water Year 1999

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	5837.30	760,494	October 1, 1998
End of Water Year	5844.46	897,301	September 30, 1999
Annual Low	5837.03	755,666	October 3, 1998
Historic Low <u>1</u> / <u>2</u> /	5690.00	0	September 9, 1958
Annual High	5849.89	1,011,892	June 26, 1999
Historic High <u>1</u> /	5853.11	1,083,755	July 7, 1983

1/The 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.

Inflow-Outflow Data	Inflow	Date	Outflow	Date
Annual Total(AF)	1,392,221	Oct'98-Sep'99	1,180,306	Oct'98-Sep'99
Daily Peak (CFS)	6,656	June 5, 1999	5,512	June 26, 1999
Daily Minimum (CFS)	52	Aug 27, 1999	10	Oct 9,1998
Peak Release to River (CFS)			2,769	June 27, 1999
Total Release to River (AF)			222,129	May 13-July 8

	Gain from	n Kortes	Inflo	ow <u>4</u> /	Out	low	Con	tent
Month	KAF	% of av <u>g3</u> /	KAF	% of avg <u>3</u> /	KAF	% of av <u>g3</u> /	KAF	% of av <u>g3</u> /
October	18.5	378	68.5	104	44.9	116	781.0	144
November	9.2	263	104.8	151	41.0	79	840.5	150
December	5.7	259	74.2	88	42.8	90	869.8	146
January	10.5	318	63.6	69	42.6	86	889.0	140
February	10.9	242	70.3	87	41.1	94	916.7	137
March	16.1	145	114.1	116	51.3	78	973.5	139
April	29.3	136	80.6	71	55.1	59	995.3	139
May	66.8	170	203.6	149	196.9	175	993.4	135
June	57.6	182	346.9	210	319.6	203	1009.7	138
July	20.6	154	146.2	118	164.0	92	978.0	146
August	13.8	142	67.0	76	112.4	69	920.4	157
September	10.7	202	52.4	91	68.8	72	897.3	166
Annual	269.7	179	1392.2	118	1180.3	107		

<sup>&</sup>lt;u>3</u>/30 year average is the period (1969-1998).

<sup>4/</sup>Inflow includes the gain from Kortes Dam to Pathfinder Dam.

## 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 5, 1998, and continued through October 23, 1998, when Alcova reached its normal winter operating range of  $5488.00 \pm 0$  one foot. The refill of Alcova Reservoir was initiated on March 29, 1999. The water surface elevation was raised above 5497 feet on April 7, 1999 and the reservoir was maintained within 1 foot of elevation 5498 throughout the summer. In February a bypass release of approximately 1800 AF was required to allow maintenance on the powerplant penstock. Releases greater than the capacity of the powerplant were made in May, June, and July which required use of the spillway gates and resulted in a total bypass release for water year 1999 of 131,461 AF.

Gray Reef Dam and Reservoir are 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, which provides 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 decreased to 1,000 cfs by October 4, 1998, in preparation for the flushing flow. At the request of the Wyoming Game and Fish Department, a series of flushing flows were initiated on October 5, 1997, and continued through October 9, 1998, 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 then decreased to 700 cfs and remained at that rate until February 28, 1999. Again, at the request of the Wyoming Game and Fish Department, a series of flushing flows were initiated on March 1, 1999, and continued through March 5, 1999. At the completion of the flushing flows, releases from Gray Reef were then decreased to 600 cfs and remained at that rate until April 25, 1999. 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 for the Water Year of 5,279 cfs occurred on June 23, 1999.

## Gains to the North Platte River Alcova Dam to Glendo Dam

River gains from Alcova Dam to Glendo Dam were well above average for October, November, and January and well below average for the months of December 1998, February and March 1999. The actual April-July gain was 224,612 AF, which was 139 percent of average. River gains peaked on May 1, 1999 at 4,017 cfs with the daily computed Glendo inflow peaking on June 4, 1999 at 6,311 cfs. See Figure 6.

## Gains to the North Platte River

Alcova Dam to Glendo Dam

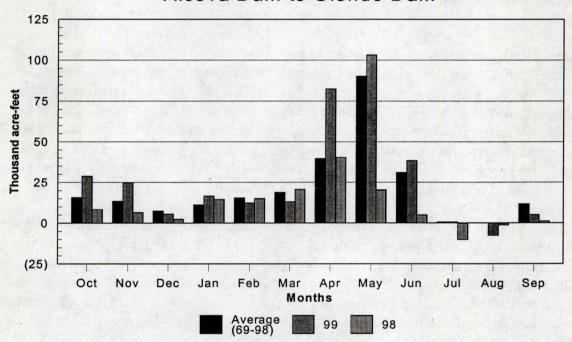


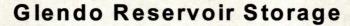
Figure 6

## 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 (elevation 4635 feet), the primary outlet works discharge should typically remain below 5,500 cfs. 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 124,063 AF at the beginning of Water Year 1999, which was about 28,863 AF above average. Water releases from Glendo Reservoir were initiated on March 25, 1999, in order to refill Guernsey Reservoir in preparation of releases. On April 10, 1999, Glendo Reservoir rose above elevation 4635 into the flood pool and remained above that elevation until July 12, 1999. The flood pool was evacuated as directed by the Army Corps of Engineers, with downstream water users making use of the flood water as much as possible. The reservoir reached a maximum storage for the year of 618,080 AF (elevation 4642.49 feet) on June 23, 1999. At the end of the Water Year, Glendo Reservoir contained 130,471 AF of water (water surface elevation 4687.21 feet) which was 137 percent of average. Figure 7 depicts 1999 and 1998 end of month reservoir storage compared to average.



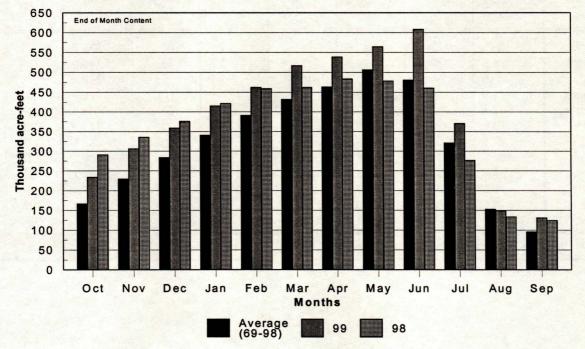


Figure 7

TABLE 5
Glendo Reservoir Hydrologic Data
for Water Year 1999

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 Excl. 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	4585.85	124,063	October 1, 98
End of Water Year	4587.21	130,471	September 30, 99
Annual Low	4583.85	115,006	September 14, 99
Historic Low	4548.10	15,140	September 28, 66
Annual High	4642.49	618,080	June 23, 99
Historic High	4650.94	758,830	May 28, 73

Inflow-Outflow Data	Inflow	Date	Outflow	Date
Annual Total(AF)	1,486,110	Oct'98-Sep'99	1,447,572	Oct'98-Sep'99
Daily Peak (CFS)	6,311	Jun 4, 99	8,208	Jun8-10,12,'99
Daily Minimum (CFS)	90	Dec 22, 98	19	Nov 27, 98
Peak Bypass Release (CFS)			4,448	Jun 12, 99
Total Bypass Release (AF)			365,271 <u>1</u> /	Oct'98-Sep'99

1/Includes the average day release of approximately 25 cfs from the low flow valve

	Gains from	Alcova	Inflo	ow	Outfl	low	Content		
Month	KAF	% of avg <u>2</u> /	KAF	% of avg <u>2</u> /	KAF	% of avg <u>2</u> /	KAF	% of avg <u>2</u> /	
October	28.8	183	112.6	143	1.9	40	233.8	141	
November	24.8	187	74.6	113	1.6	73	306.0	133	
December	5.5	74	55.6	100	2.1	350	358.8	127	
January	16.6	150	58.5	101	1.9	317	415.1	122	
February	12.2	79	49.4	86	1.6	25	461.9	118	
March	13.0	69	67.6	86	11.0	31	516.5	120	
April	82.5	208	117.1	103	92.5	116	538.8	116	
May	103.1	114	278.5	144	248.6	172	564.5	112	
June	38.4	124	343.2	202	292.3	154	608.1	127	
July	0.6	100	167.0	105	397.4	127	370.4	116	
August	-7.7	0	90.2	62	308.5	100	148.2	97	
September	5.5	43	71.9	72	88.3	57	130.5	137	
Annual	322.8	127	1486.2	117	1447.6	117			

2/30 year average is the period (1969-1998)

## Gains to the North Platte River Glendo Dam to Guernsey Dam

Except for the months of October, December, March, June and July, the river gains between Glendo Dam and Guernsey Dam were above average for the entire Water Year. The actual April-July gain was 35,600 AF, which was 130 percent of Average. On July 12, 1999, daily computed inflow to Guernsey Reservoir peaked at 8,377 cfs. See Figure 8 for the monthly total gains for the Water Year.

## Gains to the North Platte River

Glendo Dam to Guernsey Dam

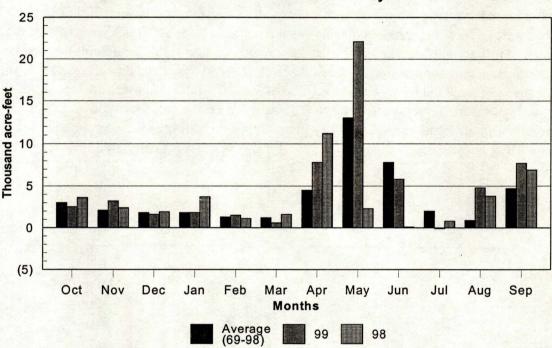


Figure 8

## Guernsey Reservoir Storage and Releases

The Guernsey Reservoir, 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 capacity tables show about 45,600 AF of available storage.

At the start of Water Year 1999, storage in Guernsey Reservoir was 13,165 AF, which was 114 percent of average. Guernsey Reservoir releases were started on March 31, 1999, to create space in the upstream reservoirs in anticipation of the expected above average runoff. The annual "silt run" from the Reservoir was initiated on July 16 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 630 AF occurred on July 28, 1999. Following the "silt run," the reservoir was refilled to 32,000 AF by August 5, 1999. At the end of the irrigation season, September 30, 1999, Guernsey Reservoir was drawn down to only 5 AF, in order to allow maintenance to the spillway gates after which storage was reinitiated. See Figure 9 for 1999 and 1998 end of month storage for the Water Year compared to average.

## Guernsey Reservoir Storage

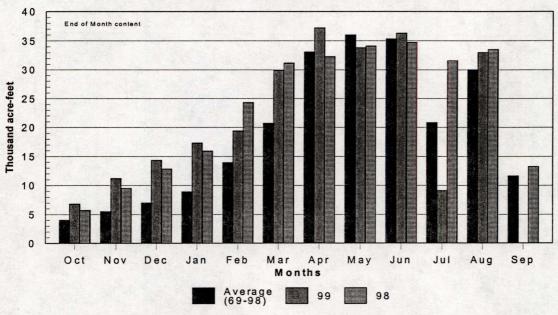


Figure 9

## 1999 Precipitation

Although the precipitation was quite variable from month to month throughout the North Platte River Basin, all four watersheds had above average total precipitation for Water Year 1999. In the Glendo watershed, the October precipitation at Pathfinder Dam, and Casper, Glenrock, and Douglas, Wyoming, weather stations all recorded the highest October precipitation of record. In the Guernsey watershed, the October precipitation at Glendo and Guernsey Dams, Wyoming, weather stations, also recorded the highest October precipitation of record. In the Glendo watershed, the December precipitation at the Casper, Wyoming, weather station recorded the lowest December precipitation in the last 30 years. In the Glendo watershed, the January precipitation at the Casper, Wyoming, weather station recorded the lowest January precipitation in the last 30 years. In the Pathfinder watershed, the Lander, Wyoming, weather station recorded the highest April precipitation of record in 98 years, and the Muddy Gap, Wyoming, weather station recorded the highest April precipitation of record in 38 years. See Figure 10 for a comparison of the last four Water Years to average. See table 6 for monthly comparison of precipitation.

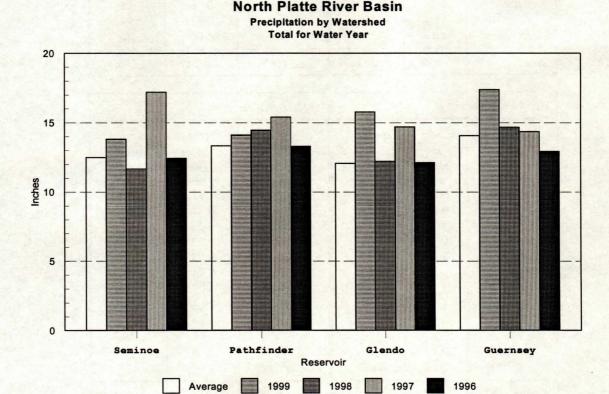


Figure 10

Table 6
North Platte River Basin
Summary of Precipitation by watershed
Water Year 1999
End of month

Seminoe Water	shed <u>1</u> /	Min.	Pathfinder Water	ershed 1/	
Month	Precip in inches	percent of average <u>2</u> /	Month	Precip in inches	percent of average <u>2</u> /
October	1.91	168	October	2.87	259
November	0.59	82	November	0.80	94
December	0.96	135	December	0.31	42
January	0.96	137	January	0.29	41
February	0.53	83	February	0.64	108
March	0.56	64	March	0.74	68
April	1.89	166	April	3.89	259
May	1.64	103	May	0.97	47
June	1.27	80	June	1.14	55
July	1.30	101	July	0.18	18
August	1.04	101	August	0.63	94
September	1.17	108	September	1.66	169
Total for WY 13.82 111		Total for WY	14.12	106	

Glendo Waters	hed <u>1</u> /		Guernsey Water	rshed 1/	
Month	Precip in inches	percent of average <u>2</u> /	Month	Precip in inches	percent of average 2/
October	3.96	408	October	3.91	387
November	0.44	64	November	0.42	68
December	0.26	54	December	0.28	67
January	0.30	68	January	0.09	25
February	0.30	61	February	0.05	12
March	0.52	63	March	0.23	29
April	3.16	207	April	3.27	196
May	1.73	78	May	2.01	79
June	2.47	169	June	4.14	191
July	0.30	23	July	0.69	39
August	0.16	21	August	0.16	14
September	2.17	233	September	2.14	188
Total for WY	Total for WY 15.77 131		Total for WY	17.39	124

<sup>1/</sup>Watershed precipitation is an average of the precipitation readings using several stations as indicators for each watershed.

<sup>2/30</sup> year average is the period (1969-1998)

## 1999 Ownerships

At the start of Water Year 1999, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 615,312 AF of water, which is 183 percent of average. The Kendrick ownership contained 1,148,619 AF of water, which is 126 percent of average; and the Glendo ownership contained 169,296 AF of water, which is 119 percent of average. The North Platte Inland Lakes ownership filled on November 11, 1998. The North Platte Guernsey ownership filled on February 20, 1999. The Glendo ownership filled on March 29, 1999. The North Platte Pathfinder ownership filled on April 20, 1999. The Kendrick ownership filled on April 30, 1999.

The total amount of water stored at the end of Water Year 1999 in the mainstem reservoirs for use in Water Year 2000 was 2,124,365 AF. This total does not include 36,914 AF of water remaining in the four Inland Lakes in Nebraska.

At the end of Water Year 1999, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 774,722 AF of water and the Glendo ownership contained 168,872 AF of water. The Kendrick ownership at the end of September of 1,161,431 AF, was the highest since 1984, and 10,222 AF was in the operational/excess water account. Also stored in the North Platte storage system was 7,118 AF for the City of Cheyenne and 2,000 AF for Pacific Power. See Figure 11 for the last three Water Years ownership carryover compared with average and capacity. Table number 7 shows a summary of ownership for Water Year 1999.

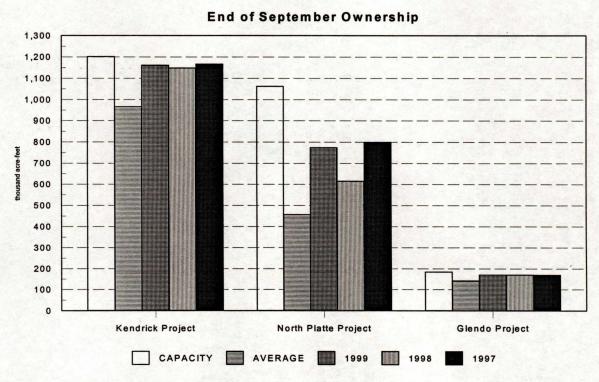


Figure 11

			Summar	y of Nort	h Platte	River Sys	tem Owner	ships for	· Water Ye	ear 1999 (	(AF)	PAGI	Table 7 E 1 OF 2	
MONTHS	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
PATHFINDER OWNERSHIP														
ACCRUAL A/		79323	63535	44448	42131	39062	95031	63466			<u>C</u> / 14108			<u>G</u> /467197
VAPORATION		2896		5229	1716	1546	5861	3721	8779			12823	6513	TO SECURITION OF THE PARTY OF T
DELIVERY B/	******	6797		0	0	0	0	0		A STATE OF THE PARTY OF THE PAR	Constitution of the		69623	A PROPERTY OF THE PROPERTY OF THE PARTY OF T
DWNERSHIP	615312	684942	747801	787020	827435	864951	954121	1013866	1016133	1016507	1016507	849166	774722	
CENDRICK OWNERSHIP														
ACCRUAL		0	0	0	0	0	0	62027	25863	<u>C</u> / 10575	<u>C</u> / 14293	<u>C</u> / 1388	<u>c</u> / 0	114096
EVAPORATION		4110	871	6459	2014	1753	6159	3751	9714	10575	14293	12152	6633	78484
ELIVERY B/		0	0	0	0	0	0	0	0	0	0	14994	7806	22800
DWNERSHIP	1148619	1144509	1143638	1137179	1135165	1133412	1127253	1185529	1201678	1201678	1201678	1175870	1161431	
GLENDO OWNERSHIP														
ACCRUAL		0	0	142	127	3596	10519	3978	<u>C</u> / 2169	C/ 4017	<u>c</u> / 3640	<u>C</u> / 243	<u>c</u> / 792	G/ 29223
VAPORATION		1025	226	684	206	700	463	1116	2169	4017	3640	3309	1749	19304
ELIVERY & LOSS B/		0	0	0	0	0	0	0	4	14	579	160	9586	10343
DWNERSHIP	169296	168271	168045	167503	167424	170320	180376	183238	183234	183220	182641	179415	168872	
PACIFIC POWER														
ACCRUAL		0	0	0	0	0	0	0	55	26	32	30	21	164
DELIVERY B/		0	0	0	0	0	0	0	0	0	0	0	0	0
EVAPORATION		7	0	5	0	3	6	18	16	26	32	30	21	164
IN STORAGE	2000	1993	1993	1988	1988	1985	1979	1961	2000	2000	2000	2000	2000	
GUERNSEY OWNERSHIP														
ACCRUAL		0	12427	6646	17684	9206	0	960					<u>c</u> / 0	50046
EVAPORATION		0	15	197	79	224	394	402	785	1082	1151	305	0	4634
DELIVERY B/		0	0	0	0	0	0	0	0	0	231	45181	0	45412
OWNERSHIP	0	0	12412	18861	36466	45448	45054	45612	45612	45612	45381	0	0	

TABLE 7

			Summary	of North	Platte R	iver Syst	em Owners	hips for	Water Ye	ar 1999 (/	AF)	PAGE	2 OF 2	
MONTHS	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
INLAND LAKES OWNERSHIP														
ACCRUAL EVAPORATION		30830 33	15216 39	0 120	0 33	0 75	0 134	0 76	0	0	0	0	0	46046 510
TRANSFER D/ OWNERSHIP	0	3398 27399	8302 <u>F</u> 34274		0 34121	0 34046	0 33912	31319 2517	2517 0	0	0	0	0	45536
CITY OF CHEYENNE														
ACCRUAL EVAPORATION		1095 9	2711 0	1480 39	367 10	1523 10	53 53	94 40	101 84	905 13	2333 29	2363 45	1738 37	14763 369
DELIVERY B/ OWNERSHIP	3019	34 4071	0 6782	16 8207	77 8487	10000	0 10000	54 10000	3748 6269	6004 1157	325 3136	0 5454	37 7118	10295
EXCESS WATER														
ACCRUAL EVAPORATION		0 46	0	0 20	0	286 12	2184 38	30686 134	155233 703	207863 2032	0 2381	18 250	5364 100	401634 5718
RELEASED OWNERSHIP	7675	7629	7628	7608	7607	7881	0 10027	6538 34041	22591 165980	11470 360341	310315 47645	35395 12018	7060 10222	393369

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 to make up for the winter direct flows that Pathfinder could have stored but allowed to pass downstream to Pacific Power. On April 20, 1999, Pathfinder ownership filled to 1,015,327 AF; this amount plus the remaining Pacific Power exchange water of 1,180 AF completed the fill of the ownership to 1,016,507 AF. The exchange water was returned to Pathfinder at a rate of 26 AF daily starting on May 1, 1999 until June 15, 1999, when the last 10 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/ In accordance with 1999 North Platte River Ownership and Natural Flow Accounting Procedures, ownerships were allowed to refill water lost to evaporation from excess until August 4, 1999.

D/ Transfer refers to Inland Lakes ownership water which was delivered from storage in Glendo or Guernsey. In October, 3,398 AF was delivered to the Inland Lakes. In April and May, 31,319 AF and 2,517 AF were delivered to the Inland Lakes respectively.

E/ In September of Water Year 1998, 1,505 AF of Pathfinder ownership was delivered to the Inland Lakes. In October of Water Year 1999, 6,797 of Pathfinder ownership was delivered to the Inland Lakes for a total of 8,302 AF of Pathfinder ownership water in the Inland Lakes.

E/ On November 12, 1999, 8,302 AF of Inland Lakes ownership was exchanged for the Pathfinder ownership in accounting.

G/ Not an actual accrual but a correction to the record.

## Water Year Beginning October 1998

Page 1 of 3

0	•	n		
Semi	inoe	Ke	Servo	nr

Initial Content 864.5 kaf

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Total Inflow	kaf	42.6	47.6	25.3	33.1	30.7	70.6	99.9	267.6	423.1	124.2	43.4	23.0	1231.1
Total Inflow	cfs	693	800	412	538	553	1148	1679	4352	7111	2019	705	387	
Turbine Release	kaf	50.0	95.6	68.5	53.2	59.5	97.7	51.1	133.5	237.2	122.5	53.2	41.6	1063.6
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.3	0.1	3.7	52.1	3.0	0.0	0.0	59.2
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Total Release	kaf	50.0	95.6	68.5	53.2	59.5	98.0	51.2	137.2	289.3	125.5	53.2	41.6	1122.8
Total Release	cfs	813	1606	1114	865	1071	1593	861	2233	4862	2040	865	700	
Evaporation	kaf	3.2	3.8	1.6	1.5	1.1	4.1	2.6	7.3	8.4	12.1	10.4	5.5	61.6
End-month content	kaf	853.9	802.1	757.3	735.7	705.8	674.3	720.4	843.5	968.9	955.5	935.3	911.2	
End-month elevation	ft	6348.4	6345.4	6342.7	6341.3	6339.4	6337.2	6340.3	6347.8	6354.8	6353.9	6352.83	6351.6	
Generation	gwh	8.4	16.8	12.3	9.3	10.6	16.6	8.7	23.2	35.0	21.5	9.5	7.5	179.4

Kortes Reservoir

Initial Content 4.7 kaf

		Oct Nov	Nov	Nov Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Total Inflow	kaf	50.0	95.6	68.5	53.2	59.5	98.0	51.2	137.3	289.3	125.5	53.2	41.6	1122.9
Turbine Release	kaf	50.0	95.6	68.5	53.2	59.5	97.7	51.2	72.0	141.1	107.9	53.2	41.6	891.5
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.3	0.1	64.9	148.2	17.7	0.0	0.0	231.2
Total Release	kaf	50.0	95.6	68.5	53.2	59.5	98.0	51.3	136.9	289.3	125.6	53.2	41.6	1122.7
Total Release	cfs	813	1606	1114	865	1071	1593	861	2226	4863	2043	865	699	
Generation	gwh	8.7	15.9	12.1	9.3	10.3	16.9	9.1	14.7	26.8	18.8	9.2	7.3	159.1

## Water Year Beginning October 1998

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					al Content		Kai		T				
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Sweetwater Inflow kaf	4.4	5.4	4.3	3.4	4.0	6.1	12.3	36.6	38.6	10.4	3.4	2.8	131.
Kortes-Path Gain kaf	18.5	9.2	5.7	10.4	10.8	16.1	29.3	66.7	57.6	20.6	13.8	10.8	269.
Inflow from Kortes kaf	50.0	95.6	68.5	53.2	59.5	98.0	51.3	136.9	289.3	125.6	53.2	41.6	1122.
Total Inflow kaf	68.5	104.8	74.2	63.6	70.3	114.1	80.6	203.6	346.9	146.2	67.0	52.4	1392.
Total Inflow cfs	1114	1761	1207	1035	1266	1856	1354	3312	5830	2378	1089	880	
Turbine Release kaf	44.9	41.0	42.8	42.6	41.1	51.3	55.1	152.6	162.3	144.2	112.4	68.1	958.
Jetflow Release kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.3	157.3	19.8	0.0	0.7	222.
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	44.9	41.0	42.8	42.6	41.1	51.3	55.1	196.9	319.6	164.0	112.4	68.8	1180.
Total Release cfs	731	688	696	693	739	834	925	3202	5371	2667	1828	1157	
Evaporation kaf	3.1	4.3	2.1	1.8	1.5	6.0	3.7	8.6	11.0	13.9	12.2	6.7	74.
End-month content kaf	781.0	840.5	869.8	889.0	916.7	973.5	995.3	993.4	1009.7	978.0	920.4	897.3	
End-month elevation ft	5838.4	5841.6	5843.1	5844.1	5845.4	5848.1	5849.1	5849.0	5849.8	5848.3	5845.6	5844.5	
Generation Fremont gwh	11.9	12.2	13.3	13.1	12.3	15.6	15.4	43.2	47.1	41.3	31.8	18.3	275
Total Inflow kaf	44.9	41.0	42.8	42.6	41.1	51.3	55.1	196.9	319.6				
Total Inflow cfs										164.0	112.4	68.8	1160
	731	688	696	693	739	834	925	3202	5371	2667	1828	1157	1180.
Turbine Release kaf	731 65.2	40.9	696 42.7	693 43.1	739 37.1	834 46.1							
Turbine Release kaf Spillway Release kaf							925	3202	5371	2667	1828	1157	973.
	65.2	40.9	42.7	43.1	37.1	46.1	925 37.8	3202 168.3	5371	2667 136.6	1828 92.7	1157 61.2	973.
Spillway Release kaf	0.0	40.9	42.7 0.0	43.1	37.1	46.1	925 37.8 0.0	3202 168.3 20.7	5371 201.4 100.3	2667 136.6 8.6	1828 92.7 0.0	1157 61.2 0.0	973. 131. 65.
Spillway Release kaf  Casper Canal Release kaf	65.2 0.0 0.0	0.0	0.0 0.0	0.0	37.1 1.8 0.0	46.1 0.0 0.0	925 37.8 0.0	3202 168.3 20.7 6.8	5371 201.4 100.3 14.5	2667 136.6 8.6 18.5	1828 92.7 0.0 17.6	1157 61.2 0.0 7.9	973. 131. 65.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf	65.2 0.0 0.0 65.2	40.9 0.0 0.0 40.9	0.0 0.0 42.7	43.1 0.0 0.0 43.1	37.1 1.8 0.0 38.9	46.1 0.0 0.0 46.1	925 37.8 0.0 0.0 37.8	3202 168.3 20.7 6.8 195.8	5371 201.4 100.3 14.5 316.2	2667 136.6 8.6 18.5 163.7	1828 92.7 0.0 17.6 110.3	1157 61.2 0.0 7.9 69.1	973. 131. 65.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf  Total Release cfs	65.2 0.0 0.0 65.2	40.9 0.0 0.0 40.9 688	42.7 0.0 0.0 42.7 694	43.1 0.0 0.0 43.1 702	37.1 1.8 0.0 38.9	46.1 0.0 0.0 46.1 749	925 37.8 0.0 0.0 37.8 636	3202 168.3 20.7 6.8 195.8 3184	5371 201.4 100.3 14.5 316.2 5314	2667 136.6 8.6 18.5 163.7 2662	1828 92.7 0.0 17.6 110.3	1157 61.2 0.0 7.9 69.1 1161	973. 131. 65.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf  Total Release cfs  Evaporation kaf	65.2 0.0 0.0 65.2 1060 0.3	40.9 0.0 0.0 40.9 688 0.6	42.7 0.0 0.0 42.7 694 0.2	43.1 0.0 0.0 43.1 702	37.1 1.8 0.0 38.9 700 0.2	46.1 0.0 0.0 46.1 749 0.6	925 37.8 0.0 0.0 37.8 636 0.6	3202 168.3 20.7 6.8 195.8 3184	5371 201.4 100.3 14.5 316.2 5314	2667 136.6 8.6 18.5 163.7 2662	1828 92.7 0.0 17.6 110.3 1794 1.4	1157 61.2 0.0 7.9 69.1 1161 0.8	973. 131. 65.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf  Total Release cfs  Evaporation kaf  End-month content kaf	65.2 0.0 0.0 65.2 1060 0.3	40.9 0.0 0.0 40.9 688 0.6	42.7 0.0 0.0 42.7 694 0.2	43.1 0.0 0.0 43.1 702 0.3	37.1 1.8 0.0 38.9 700 0.2	46.1 0.0 0.0 46.1 749 0.6	925 37.8 0.0 0.0 37.8 636 0.6	3202 168.3 20.7 6.8 195.8 3184 1.0	5371 201.4 100.3 14.5 316.2 5314 1.3	2667 136.6 8.6 18.5 163.7 2662 1.6	1828 92.7 0.0 17.6 110.3 1794 1.4 180.7 5498.5	1157 61.2 0.0 7.9 69.1 1161 0.8 179.6 5498.0	973. 131. 65. 1169.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf  Total Release cfs  Evaporation kaf  End-month content kaf  End-month elevation ft	65.2 0.0 0.0 65.2 1060 0.3 157.2 5488.5	40.9 0.0 0.0 40.9 688 0.6 156.7 5488.3	42.7 0.0 0.0 42.7 694 0.2 156.6 5488.2	43.1 0.0 0.0 43.1 702 0.3 155.8 5487.9 5.2	37.1 1.8 0.0 38.9 700 0.2 157.8 5488.8	46.1 0.0 0.0 46.1 749 0.6 162.4 5490.8	925 37.8 0.0 0.0 37.8 636 0.6 179.1 5497.9 4.6	3202 168.3 20.7 6.8 195.8 3184 1.0 179.2 5497.9	5371 201.4 100.3 14.5 316.2 5314 1.3 181.3	2667 136.6 8.6 18.5 163.7 2662 1.6 180.0	1828 92.7 0.0 17.6 110.3 1794 1.4 180.7 5498.5	1157 61.2 0.0 7.9 69.1 1161 0.8 179.6	973. 131. 65. 1169.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf  Total Release cfs  Evaporation kaf  End-month content kaf  End-month elevation ft  Generation gwh	65.2 0.0 0.0 65.2 1060 0.3 157.2 5488.5	40.9 0.0 0.0 40.9 688 0.6 156.7 5488.3	42.7 0.0 0.0 42.7 694 0.2 156.6 5488.2	43.1 0.0 0.0 43.1 702 0.3 155.8 5487.9 5.2	37.1 1.8 0.0 38.9 700 0.2 157.8 5488.8 4.5	46.1 0.0 0.0 46.1 749 0.6 162.4 5490.8	925 37.8 0.0 0.0 37.8 636 0.6 179.1 5497.9 4.6	3202 168.3 20.7 6.8 195.8 3184 1.0 179.2 5497.9	5371 201.4 100.3 14.5 316.2 5314 1.3 181.3	2667 136.6 8.6 18.5 163.7 2662 1.6 180.0	1828 92.7 0.0 17.6 110.3 1794 1.4 180.7 5498.5	1157 61.2 0.0 7.9 69.1 1161 0.8 179.6	973. 131. 65. 1169.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf  Total Release cfs  Evaporation kaf  End-month content kaf  End-month elevation ft  Generation gwh	65.2 0.0 0.0 65.2 1060 0.3 157.2 5488.5 8.2	40.9 0.0 0.0 40.9 688 0.6 156.7 5488.3	42.7 0.0 0.0 42.7 694 0.2 156.6 5488.2 5.4	43.1 0.0 0.0 43.1 702 0.3 155.8 5487.9 5.2 Initial	37.1  1.8  0.0  38.9  700  0.2  157.8  5488.8  4.5	46.1 0.0 0.0 46.1 749 0.6 162.4 5490.8 5.7	925 37.8 0.0 0.0 37.8 636 0.6 179.1 5497.9 4.6	3202 168.3 20.7 6.8 195.8 3184 1.0 179.2 5497.9 22.5	5371 201.4 100.3 14.5 316.2 5314 1.3 181.3 5498.8 26.1	2667 136.6 8.6 18.5 163.7 2662 1.6 180.0 5498.2	1828 92.7 0.0 17.6 110.3 1794 1.4 180.7 5498.5	1157 61.2 0.0 7.9 69.1 1161 0.8 179.6 5498.0 7.4	973. 131. 65. 1169. 8.
Spillway Release kaf  Casper Canal Release kaf  Total Release kaf  Total Release cfs  Evaporation kaf  End-month content kaf  End-month elevation ft  Generation gwh	65.2 0.0 0.0 65.2 1060 0.3 157.2 5488.5 8.2	40.9 0.0 0.0 40.9 688 0.6 156.7 5488.3 5.3	42.7 0.0 0.0 42.7 694 0.2 156.6 5488.2 5.4	43.1 0.0 0.0 43.1 702 0.3 155.8 5487.9 5.2 Initial Jan	37.1 1.8 0.0 38.9 700 0.2 157.8 5488.8 4.5   Content Feb	46.1 0.0 0.0 46.1 749 0.6 162.4 5490.8 5.7 1.1 kar	925 37.8 0.0 0.0 37.8 636 0.6 179.1 5497.9 4.6 f	3202 168.3 20.7 6.8 195.8 3184 1.0 179.2 5497.9 22.5	5371 201.4 100.3 14.5 316.2 5314 1.3 181.3 5498.8 26.1	2667 136.6 8.6 18.5 163.7 2662 1.6 180.0 5498.2 17.9	1828 92.7 0.0 17.6 110.3 1794 1.4 180.7 5498.5 11.6 Aug 92.7	1157 61.2 0.0 7.9 69.1 1161 0.8 179.6 5498.0 7.4 Sep 61.2	973. 131. 65. 1169.
Spillway Release kaf Casper Canal Release kaf Total Release kaf Total Release cfs Evaporation kaf End-month content kaf End-month elevation ft Generation gwh Fray Reef Reservoir	65.2 0.0 0.0 65.2 1060 0.3 157.2 5488.5 8.2	40.9 0.0 0.0 40.9 688 0.6 156.7 5488.3 5.3	42.7 0.0 0.0 42.7 694 0.2 156.6 5488.2 5.4 Dec 42.7	43.1 0.0 0.0 43.1 702 0.3 155.8 5487.9 5.2 Initial Jan 43.1	37.1 1.8 0.0 38.9 700 0.2 157.8 5488.8 4.5 Content Feb 38.9	46.1 0.0 0.0 46.1 749 0.6 162.4 5490.8 5.7 1.1 kar Mar 46.1	925 37.8 0.0 0.0 37.8 636 0.6 179.1 5497.9 4.6 f Apr 37.8	3202 168.3 20.7 6.8 195.8 3184 1.0 179.2 5497.9 22.5	5371 201.4 100.3 14.5 316.2 5314 1.3 181.3 5498.8 26.1  Jun 301.7	2667 136.6 8.6 18.5 163.7 2662 1.6 180.0 5498.2 17.9 Jul 145.2	1828 92.7 0.0 17.6 110.3 1794 1.4 180.7 5498.5 11.6 Aug 92.7	1157 61.2 0.0 7.9 69.1 1161 0.8 179.6 5498.0 7.4 Sep 61.2	973. 131. 65. 1169. 8

Glendo Reservoir		Initial Content 124.1 kaf											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Alcova-Glendo Gain kaf	28.8	24.8	5.5	16.6	12.2	13.0	82.5	103.1	38.4	0.6	-7.7	5.0	322.8
Infl from Gray Reef kaf	64.8	41.0	43.0	43.1	38.1	46.3	38.0	188.7	301.8	145.2	92.2	61.8	1104
Total Inflow kaf	112.6	74.6	55.6	58.5	49.4	67.6	117.1	278.5	343.2	167.0	90.2	71.9	1486.2
Total Inflow cfs	1831	1253	904	952	890	1099	1967	4529	5767	2716	1467	1209	
Turbine Release kaf	0.0	0.0	0.0	0.0	0.0	9.2	90.5	214.9	211.9	220.0	251.7	83.5	1081.7
Low Flow Release kaf	1.9	1.6	2.1	1.9	1.6	1.8	2.0	1.5	1.5	1.5	1.5	1.5	20.4
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	0
Irrigation Release kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.2	78.9	176.0	55.2	3.3	345.6
Total Release kaf	1.9	1.6	2.1	1.9	1.6	11.0	92.5	248.6	292.3	397.4	308.5	88.3	1447.7
Total Release cfs	31	27	34	31	29	179	1555	4043	4911	6464	5016	1483	
Evaporation kaf	1.0	0.8	0.7	0.3	1.0	2.0	2.3	4.2	7.3	7.3	3.9	1.3	32.1
End-month content kaf	233.8	306.0	358.8	415.1	461.9	516.5	538.8	564.5	608.1	370.4	148.2	130.5	
End-month elevation ft	4604.6	4614.0	4620.0	4625.8	4630.3	4634.9	4636.7	4638.7	4641.8	4621.3	4590.8	4587.2	
Generation gwh	0.0	0.0	0.0	0.0	0.0	0.9	10.7	25.8	25.7	23.9	19.6	6.0	112.6
										CONTRACTOR			
Guernsey Reservoir				Initia	l Content	13.2 k	af						
	Oct	Nov	Dec	Jan	Feb	Mar	A	May	Jun	Jul		C	
Glendo-Guerns Gain kaf	2.5					14.44	Apr	May	Juli	Jui	Aug	Sep	Total
	2.5	3.2	1.6	1.8	1.5	0.5	7.9	23.2	5.8	-0.1	Aug 4.7	7.7	Total 60.3
Inflow from Glendo cfs	1.9	3.2 1.6	1.6 2.1									Section 19	
Inflow from Glendo cfs  Total Inflow kaf				1.8	1.5	0.5	7.9	23.2	5.8	-0.1	4.7	7.7	60.3
	1.9	1.6	2.1	1.8	1.5	0.5	7.9 92.5	23.2	5.8	-0.1 397.4	4.7 308.5	7.7 88.3	60.3
Total Inflow kaf	1.9	1.6	3.7	1.8 1.9 3.7	1.5 1.6 3.1	0.5 11.0 11.5	7.9 92.5 100.4	23.2 248.6 271.8	5.8 292.3 298.1	-0.1 397.4 397.3	4.7 308.5 313.2	7.7 88.3 96.0	60.3 1447.7 1508
Total Inflow kaf  Total Inflow cfs	1.9 4.4 71	1.6 4.8 81	2.1 3.7 60	1.8 1.9 3.7 60	1.5 1.6 3.1 55	0.5 11.0 11.5	7.9 92.5 100.4 1687	23.2 248.6 271.8 4420	5.8 292.3 298.1 5009	-0.1 397.4 397.3 6462	4.7 308.5 313.2 5094	7.7 88.3 96.0 1612	60.3 1447.7 1508 341.2
Total Inflow kaf  Total Inflow cfs  Turbine Release kaf	1.9 4.4 71 8.0	1.6 4.8 81 0.0	2.1 3.7 60 0.0	1.8 1.9 3.7 60 0.0	1.5 1.6 3.1 55	0.5 11.0 11.5 188 0.0	7.9 92.5 100.4 1687 57.9	23.2 248.6 271.8 4420 64.6	5.8 292.3 298.1 5009 62.8	-0.1 397.4 397.3 6462 34.4	4.7 308.5 313.2 5094 65.6	7.7 88.3 96.0 1612 47.9	60.3 1447.7 1508 341.2
Total Inflow kaf  Total Inflow cfs  Turbine Release kaf  Seepage kaf	1.9 4.4 71 8.0 0.0	1.6 4.8 81 0.0	2.1 3.7 60 0.0	1.8 1.9 3.7 60 0.0	1.5 1.6 3.1 55 0.0	0.5 11.0 11.5 188 0.0	7.9 92.5 100.4 1687 57.9	23.2 248.6 271.8 4420 64.6	5.8 292.3 298.1 5009 62.8 0.0	-0.1 397.4 397.3 6462 34.4 0.0	4.7 308.5 313.2 5094 65.6 0.0	7.7 88.3 96.0 1612 47.9	60.3 1447.7 1508 341.2 3.2
Total Inflow kaf  Total Inflow cfs  Turbine Release kaf  Seepage kaf  Spillway Release kaf	1.9 4.4 71 8.0 0.0	1.6 4.8 81 0.0 0.4 0.0	2.1 3.7 60 0.0 0.5	1.8 1.9 3.7 60 0.0 0.7	1.5 1.6 3.1 55 0.0 0.8	0.5 11.0 11.5 188 0.0 0.8	7.9 92.5 100.4 1687 57.9 0.0	23.2 248.6 271.8 4420 64.6 0.0	5.8 292.3 298.1 5009 62.8 0.0	-0.1 397.4 397.3 6462 34.4 0.0	4.7 308.5 313.2 5094 65.6 0.0	7.7 88.3 96.0 1612 47.9 0.0	60.3 1447.7 1508 341.2 3.2
Total Inflow kaf  Total Inflow cfs  Turbine Release kaf  Seepage kaf  Spillway Release kaf  Total Release kaf	1.9 4.4 71 8.0 0.0 2.6	1.6 4.8 81 0.0 0.4 0.0	2.1 3.7 60 0.0 0.5 0.0	1.8 1.9 3.7 60 0.0 0.7 0.0	1.5 1.6 3.1 55 0.0 0.8 0.0	0.5 11.0 11.5 188 0.0 0.8 0.0	7.9 92.5 100.4 1687 57.9 0.0 34.7	23.2 248.6 271.8 4420 64.6 0.0 209.9 274.5	5.8 292.3 298.1 5009 62.8 0.0 231.8	-0.1 397.4 397.3 6462 34.4 0.0 389.5 423.9	4.7 308.5 313.2 5094 65.6 0.0 222.6 288.2	7.7 88.3 96.0 1612 47.9 0.0 80.6	60.3 1447.7 1508 341.2 3.2 1171.7
Total Inflow kaf  Total Inflow cfs  Turbine Release kaf  Seepage kaf  Spillway Release kaf  Total Release kaf  Total Release cfs	1.9 4.4 71 8.0 0.0 2.6 10.6	1.6 4.8 81 0.0 0.4 0.0 0.4	2.1 3.7 60 0.0 0.5 0.0 0.5	1.8 1.9 3.7 60 0.0 0.7 0.0 0.7	1.5 1.6 3.1 55 0.0 0.8 0.0	0.5 11.0 11.5 188 0.0 0.8 0.0	7.9 92.5 100.4 1687 57.9 0.0 34.7 92.6	23.2 248.6 271.8 4420 64.6 0.0 209.9 274.5	5.8 292.3 298.1 5009 62.8 0.0 231.8 294.6 4951	-0.1 397.4 397.3 6462 34.4 0.0 389.5 423.9	4.7 308.5 313.2 5094 65.6 0.0 222.6 288.2 4687	7.7 88.3 96.0 1612 47.9 0.0 80.6 128.5 2160	60.3 1447.7 1508 341.2 3.2
Total Inflow kaf  Total Inflow cfs  Turbine Release kaf  Seepage kaf  Spillway Release kaf  Total Release kaf  Total Release cfs  Evaporation kaf	1.9 4.4 71 8.0 0.0 2.6 10.6 173	1.6 4.8 81 0.0 0.4 0.0 0.4 6	2.1 3.7 60 0.0 0.5 0.0 0.5 7	1.8 1.9 3.7 60 0.0 0.7 0.0 0.7 11	1.5 1.6 3.1 55 0.0 0.8 0.0 0.8 15	0.5 11.0 11.5 188 0.0 0.8 0.0 0.8	7.9 92.5 100.4 1687 57.9 0.0 34.7 92.6 1555	23.2 248.6 271.8 4420 64.6 0.0 209.9 274.5 4465	5.8 292.3 298.1 5009 62.8 0.0 231.8 294.6 4951	-0.1 397.4 397.3 6462 34.4 0.0 389.5 423.9 6895 0.6	4.7 308.5 313.2 5094 65.6 0.0 222.6 288.2 4687	7.7 88.3 96.0 1612 47.9 0.0 80.6 128.5 2160	60.3 1447.7 1508 341.2 3.2 1171.7

## Flood Benefits

The Corps of Engineers, Omaha District, estimates that in Water Year 1999 flood damages of \$8,074,300.00 were prevented in Wyoming and Nebraska because of the existence of dams in the North Platte System. Guernsey Dam is the only North Platte River Dam to which flood benefits were not assigned for the year (see table 9).

Table 9

Flood Damage Prevented by Dams
In the North Platte River System 1/

DAMS	WATER YEAR 1999	PRIOR TO 1999	ACCUMULATED TOTAL
SEMINOE	\$3,273,100	\$24,176,400	\$27,449,500
PATHFINDER	\$315,500	\$8,416,300	\$8,731,800
ALCOVA	\$51,600	\$424,500	\$476,100
GLENDO	\$4,434,100	\$53,053,800	\$57,487,900
GUERNSEY	\$0	\$439,000	\$439,000
TOTAL	\$8,074,300	\$86,510,000	\$94,584,300

1/This data is received from the Army Corps of Engineers Omaha District Office and is revised every October. The period of assessment is 1970 through 1999 except for Glendo Dam, which is 1965 through 1999.

Table 10

#### Power Generation Water Year 1999

Powerplant	Gross generation	Percent of average 1/
Seminoe	179.4 <u>2</u> /	121
Kortes	159.1	101
Fremont Canyon	275.5	106
Alcova	124.4	96
Glendo	112.5	127
Guernsey	23.8	106
Total Basin	874.8	109

<sup>1/ 30</sup> year average (1969-1998).

Table 11

#### Most Probable Power Generation Water Year 2000

<u>Powerplant</u>	Gross generation 1/	Percent of average 2/
Seminoe	165.2 <u>3</u> /	110
Kortes	157.4	100
Fremont Canyon	293.9	114
Alcova	140.7	109
Glendo	112.8	126
Guernsey	22.0	98
Total Basin	892.0	111

<sup>1/</sup> Gross generation based on October 1999 storage and 786,000 AF April-July Most Probable expected inflow plan.

<sup>2/</sup> Generation is in Giga-watt hours.

<sup>2/ 30</sup> year average (1970-1999).

<sup>3/</sup> Generation is in Giga-watt hours.

See Table 12 for Powerplant data for the North Platte System. See Table 13 for the proposed unit maintenance schedule for Water Year 2000.

Table 12

North Platte River Powerplant Data

1/	Number of	Capacity each Unit	Total installed Capacity	Normal operating Head	Output at rated Head	30 Year Average
<u>1</u> / Powerplant	Units	(GWH)	(GWH)	(Ft)	(Ft³/s)	(GWH)
Seminoe	3	15.0	45.0	97-227	4,050	148.8
Kortes	3	12.2	36.6	192-204	2,910	157.6
Fremont Canyon	2	33.4	66.8	247-363	3,080	258.9
Alcova	2	18.0	36.0	153-165	4,100	129.1
Glendo	2	19.0	38.0	73-156	3,400	88.4
Guernsey	2	3.2	6.4	89-91	1,340	22.5
Total <u>1</u> /1969-1998	14		235.2			805.3

## Table 13

# Proposed Generating Unit Maintenance Schedule North Platte River System October 1999 Through September 2000

Facility and Unit No.	Scheduled Per	riod <u>Descri</u>	tion of Work
Seminoe Unit #3	09-07-99 thro	ough Annual	Maintenance
Kortes Unit #3	09-07-99 thro	ough Annual	Maintenance
Fremont Unit #2	09-27-99 thro	ough Annual	. Maintenance
Kortes Unit #2	10-18-99 thro	ough Annual	Maintenance
Guernsey Unit #1	10-18-99 thro	ough Annual	. Maintenance
Glendo Unit #1	11-01-99 thro 12-16-99	ough Annual	Maintenance
Fremont Unit #1	11-04-99 thro 12-16-99	ough Annual	Maintenance
Alcova Unit #2	01-03-00 thro	ough Annual	Maintenance
Glendo Unit #2	01-03-00 thro	ough Annual	Maintenance
Seminoe Unit #1	01-05-00 thro	ough Annual	Maintenance
Guernsey Unit #2	01-18-00 thro	ough Annual	Maintenance
Kortes Unit #1	02-14-00 thro	ough Annual	Maintenance
Alcova Unit #1	02-14-00 th	rough Annual	Maintenance
Seminoe Unit #2	03-07-00 thro	ough Annual	Maintenance

## PROPOSED OPERATIONS FOR WATER YEAR 2000

Three operation studies were developed for the System to establish an AOP for Water Year 2000. Each of the studies conformed to the established operating criteria but used different inflow conditions and different demand conditions.

The three inflow conditions were determined from a statistical analysis of historic inflows and were labeled reasonable minimum, reasonable maximum, and most probable. Reservoir inflow during Water Year 2000 has a one-in-ten chance of being less than the reasonable minimum. Statistically, inflows in 2000 will have an eight-in-ten chance of falling between the two extremes. The most probable inflow is based on long-term averages and approximates a 50 percent chance of occurrence. The three studies for Water Year 2000 are summarized numerically in tables 14A, 14B, and 14C.

The AOP, as developed and reflected in the three studies, provides the flexibility to adjust operations as conditions change during the Water Year. Forecasts of the April-July reservoir inflow will be made at the beginning of each month for February through May. Projected operating schedules will be adjusted, as required, throughout the Water Year as changes occur in the forecasted inflows, irrigation demands, maintenance schedules, and power loads.

The total storage in mainstem reservoirs on the North Platte River in Wyoming (including Kortes Reservoir and Gray Reef Reservoir) was 2,124,365 AF at the beginning of the Water Year 2000. This amount was 135 percent of average.

## Seminoe Reservoir

## Most Probable Condition - 2000

October through March -- Seminoe Reservoir storage of 911,230 AF, at the beginning of the Water Year, is 123 percent of the 30-year average. Planned turbine releases from Seminoe Reservoir of 700 cfs for October through January, increasing to 1000 cfs in February and then increasing again to 1,400 cfs by March, will lower the reservoir storage to about 764,800 AF by March 31. These releases are projected based on a statistically estimated Seminoe inflow for the October through March period of 178,900 AF. A Kortes release of at least 500 cfs is required to maintain the minimum flow in the Miracle Mile reach of the river.

April through September -- Turbine releases are expected to average approximately 1,600 cfs in April; 2,400 cfs in May and 2,600 cfs in June and decreasing to 1,400 in July; 1,300 cfs August; and 600 cfs in September. The total release from the reservoir during the April to September period will be scheduled through the power generators to provide storage space for the April-July inflow and meet downstream requirements. With most probable inflow, storage will reach a maximum of 970,000 AF by the end of June. Projected carryover storage of about 896,900 AF at the end of the Water Year would be 121 percent of average.

## Reasonable Minimum Condition - 2000

October through March -- Water releases for this period under a reasonable minimum inflow condition would be 700 cfs from October through January and then reduced to 500 cfs. A release of at least 500 cfs is required to maintain the minimum flow in the Miracle Mile reach of the river. Under this condition inflows would be expected to be 150,800 AF for the period, which is 28,100 AF less than in the most probable condition. The March 31 reservoir content would be expected to be approximately 819,700 AF under these conditions.

April through September -- Seminoe water releases will remain at approximately 500 cfs in April and increase to 1,200 cfs in May in order to meet irrigation requirements and provide increased power production. The releases will be increased to 1,900 cfs in June, and decreased to 1,500 cfs in July and then decrease to approximately 1,000 cfs, for August and 500 cfs in September. Under these conditions the Water Year will end with a Seminoe Reservoir content of 771,400 AF (104 percent of average). The maximum end of month content under these conditions will be approximately 909,300 AF at the end of June.

## Reasonable Maximum Condition - 2000

October through March -- Water releases for this period under a reasonable maximum inflow condition would be similar to the most probable condition as water is moved downstream to generate power and make room in Seminoe Reservoir for spring runoff. Although inflows to Seminoe Reservoir would be higher under these conditions, actual changes in winter operations would be made gradually until it was evident that the inflow quantities being experienced were showing a trend towards the reasonable maximum inflows for the Water Year. October through March inflows under this condition will be 221,100 AF, which is 42,200 AF more than the most probable runoff condition. The reservoir content would decrease from 911,200 AF at the beginning of October to 726,000 AF by the end of March under these conditions.

April through September -- Seminoe Reservoir release for the months of April and May will be set at an average of 3,900 cfs. Releases will average approximately 6,500 cfs for June, and decrease to about 3,400 cfs in July, and then decrease further to a release of about 1,100 cfs in August. The September Seminoe Reservoir release should average 900 cfs. Inflows for the April through July period will be 1,341,000 AF, which is 555,000 AF more than the most probable runoff condition. Seminoe Reservoir will reach its maximum end of month content for the year in June with approximately 970,000 AF in storage. This plan of operation would result in an end of year carryover storage of 931,400 AF, which would be 121 percent of average.

# Seminoe Reservoir Inflow

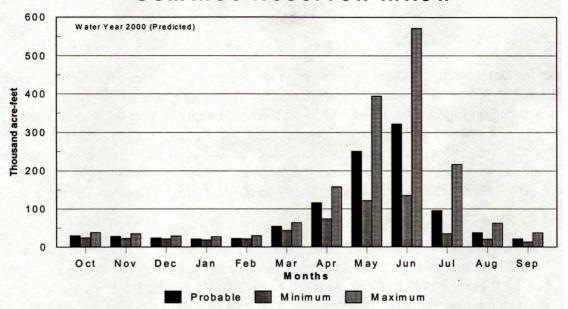


Figure 12

# Seminoe Reservoir Storage

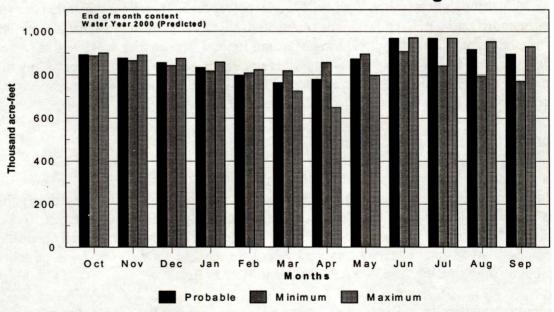


Figure 13

#### Pathfinder Reservoir

# Most Probable Condition - 2000

October through March -- At the beginning of the Water Year, Pathfinder Reservoir storage is 897,301 AF or 166 percent of the 1969-1998 average. Fremont Canyon Powerplant releases will be reduced during October to allow Alcova Reservoir water surface level to be lowered to  $5488.0 \pm 1.0$  foot, which is the normal elevation range for winter operation. After the Alcova winter operating range is reached, releases from Pathfinder Reservoir will be adjusted to meet Gray Reef Reservoir releases and maintain the Alcova Reservoir content between 153,800 and 158,300 AF. Pathfinder Reservoir storage is projected to be about 977,400 AF at the end of March.

April through September -- Pathfinder Reservoir storage will reach a maximum of about 992,700 AF by the end of June and be drawn down to a storage content of about 809,800 AF by the end of the Water Year. River gain between Kortes and Pathfinder Reservoirs, including the Sweetwater River, is estimated at about 83,600 AF for the April-July period under most probable inflow conditions. In April, Fremont Canyon Powerplant releases will be coordinated with Alcova releases to refill Alcova Reservoir to its normal summer operating range of 5498 ± 1 foot.

During May through September, Fremont Canyon power releases will be scheduled to meet downstream irrigation deliveries and maintain Alcova Reservoir within its normal summer operating range of  $5498 \pm 1$  foot. During May and June, water releases will average approximately 2,700 cfs and 3,700 cfs, respectively. In July and August Fremont Canyon turbine releases are expected to average approximately 2,700 cfs and 2,200 cfs, respectively, with releases reduced in September to approximately 1,200 cfs.

# Reasonable Minimum Condition - 2000

October through March -- Water releases for this period under a reasonable minimum inflow condition would be the same as in the most probable condition. Under this condition, gains to the river between Kortes Dam and Pathfinder Dam, including the Sweetwater River, are expected to be 18,800 AF for the period. Pathfinder Reservoir storage will reach about 887,900 AF by the end of March. Fremont Canyon Powerplant releases for the period will be scheduled to maintain approximately 156,000 AF of water in Alcova Reservoir.

April through September -- River gains between Kortes Dam and Pathfinder Reservoir, including the Sweetwater River, are estimated at about 52,900 AF for the April-July period under reasonable minimum inflow conditions. In April, releases will be coordinated with Alcova releases to refill Alcova Reservoir to its normal summer operating range of 5498 ft  $\pm$  1 foot by the end of April.

During April through September, Fremont Canyon power releases will be scheduled to meet

Kendrick Project and downstream irrigation deliveries and maintain a storage content of approximately 179,400 AF in Alcova Reservoir. Summer releases will increase to average approximately 2,700 cfs during the months of May through August, then end the Water Year with approximately 900 cfs during September. If reasonable minimum runoff develops, the reservoir content at the end of the Water Year will be about 463,000 AF or 86 percent of average.

# Reasonable Maximum Condition - 2000

October through March -- Water releases for this period under a reasonable maximum inflow condition would be similar to the most probable condition except for March when release would be increased in anticipation of runoff. Under this condition, gains between Kortes Dam and Pathfinder Dam would be expected to be 35,800 AF for the period. Pathfinder Reservoir content increases through this period from 911,700 AF at the end of October to 965,800 AF by the end of March as releases from Seminoe Reservoir are increased to generate power during the winter.

April through September -- In April, water releases from Fremont Canyon Powerplant will be increased as Alcova Reservoir is refilled to water surface elevation 5498 ± one foot. The rate of release will be increased through the summer as needed to meet downstream irrigation demands. Pathfinder Reservoir would fill to its maximum content of 999,800 AF during June while releases average about 5,700 cfs in June and then decrease to approximately 3,500 cfs in July and further decrease to 2,500 cfs by August ending the Water Year with flows of approximately 1,000 cfs. A bypass release through the jet flow valves of 485,100 AF would be required during the months of April through July under maximum conditions. The Pathfinder Reservoir end of year storage content is projected to be about 907,500 AF, which would be 168 percent of average.

# Gains to the North Platte River

Kortes Dam to Pathfinder Reservoir including Sweetwater inflow

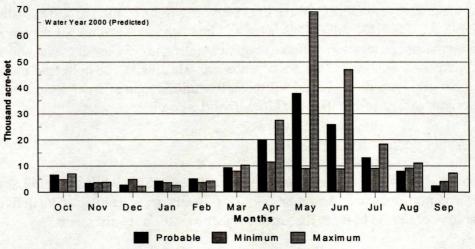


Figure 14

# Pathfinder Reservoir Storage Index of month content Water Year 2000 (Predicted) And Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

Figure 15

# Alcova Reservoir

Probable

Months

Minimum

Maximum

# Most Probable Condition - 2000

October through March -- During October, Alcova Reservoir will be drawn down to the normal winter operating range of  $5488.0 \pm 1.0$  foot and will be maintained there through March. Except for October, the releases through March will be maintained at approximately 700 cfs for production of power, maintenance of fishery flows, pollution abatement, and transfer of water to Glendo Reservoir in preparation for meeting downstream irrigation demands during the coming irrigation season.

April through September -- During April, the reservoir will be refilled to water surface elevation 5,498 feet (179,400 AF). This level will be maintained within ± 1 foot to provide the necessary water surface elevation to make irrigation deliveries to Casper Canal and for recreational purposes. About 74,000 AF of water are scheduled to be delivered during the May-September period to meet Kendrick Project irrigation requirements. Releases from Alcova Reservoir will be re-regulated in Gray Reef Reservoir.

# Reasonable Minimum Condition - 2000

October through September -- Operation of Alcova Reservoir would be the same as under the most probable condition, except about 84,000 AF of water are scheduled to be delivered during the May-September period to meet Kendrick Project irrigation requirements.

## Reasonable Maximum Condition - 2000

October through September -- Operation of Alcova Reservoir would be the same as under the most probable condition except that March releases would be increased in anticipation of runoff and water delivered through the Casper Canal to the Kendrick Project for irrigation is estimated to be 74,000 AF for the irrigation season.

# Alcova Reservoir Storage

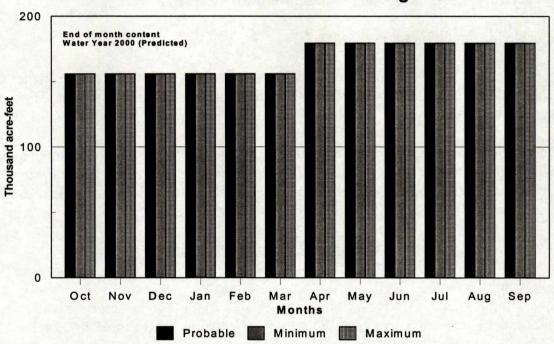


Figure 16

# Gray Reef Reservoir

#### Most Probable Condition - 2000

October through March -- Except for the month of October, the water releases from Gray Reef Dam will be maintained at approximately 700 cfs through March. This will result in a winter river level the same as last year. The 30-year average flow below Gray Reef ranges between 780 cfs and 1,050 cfs for the months of October through March.

April through September -- Releases from Gray Reef Reservoir will average about 1,300 cfs in the month of April. The May through September releases are expected to be approximately 2,400 cfs in May; 3,400 cfs in June; 2,400 cfs in July; 1,900 cfs in August; and 1,100 cfs in September as project irrigation water is moved downstream.

# Reasonable Minimum Condition - 2000

October through March -- Operation of Gray Reef Reservoir would be the same as under the most probable condition.

April through September -- Releases from Gray Reef Reservoir will average approximately 1,700 cfs in April, increasing to 2,400 cfs in May with releases maintained at that rate until August. The September releases will be reduced to average 700 cfs. These predicted flows may be redistributed as the irrigators adjust their use of water from storage.

# Reasonable Maximum Condition - 2000

October through March -- Operation of Gray Reef Reservoir would be the same as under the most probable condition, except for March when releases would be increased in anticipation of runoff.

April through September -- Releases of 4,600 cfs in April and May would be required to move water through the system to avoid filling and spilling upstream reservoirs. Release will then be increased to average 5,400 cfs during June and decreased to 3,200 cfs in July. The releases will be further decreased to a flow of about 800 cfs by the end of September.

# Glendo and Guernsey Reservoirs

# Most Probable Condition - 2000

October through March -- Carryover storage of 130,471 AF in Glendo Reservoir on September 30, 1999 was 137 percent of average. With restorage of North Platte Project water released from Alcova and with North Platte River gains below Alcova Dam estimated to be near normal, Glendo Reservoir storage will increase to about 451,100 AF by the end of March.

A constant release of 25 cfs is planned for the Glendo Dam Outlet works which will provide the necessary water to maintain a year round fishery in the North Platte River between Glendo Dam and Guernsey Reservoir. The water released will be restored in Guernsey Reservoir.

Guernsey Reservoir contained 5 AF of water at the end of Water Year 1999. Natural inflow, as well as the low flow releases from Glendo Dam, will be stored during the winter which will increase storage to 22,000 AF by March 31.

April through September -- Glendo Reservoir storage will be about 517,000 AF by the end of April. During April releases from Glendo Reservoir will be scheduled to refill Guernsey Reservoir. Releases from Glendo Reservoir during the April through September period will be based upon meeting a full irrigation demand of 1,010,000 AF for the North Platte Project and 28,000 AF for the Glendo Unit. Maximum Glendo Reservoir storage for the Water Year will be 517,000 AF at the end of April, May and June which is essentially a full reservoir at elevation of 4635.0 ft.

Guernsey Reservoir content will be maintained near 35,000 AF during April, May and June and lowered to 30,000 AF during July and August. Provision is made in the plan for a possible silt run in July, which will require close coordination of Glendo and Guernsey release schedules as Guernsey is drawn down to about 1,000 AF in July and refilled to about 30,000 AF in August. During September, releases from Gray Reef will be scheduled to complete Glendo drawdown to about 65,000 AF. During September Guernsey Reservoir will be lowered to approximately 10,000 AF.

#### Reasonable Minimum Condition - 2000

October through March -- Guernsey Reservoir contained 5 AF of water at the end of Water Year 1999. Under the reasonable minimum inflow conditions the natural inflow will be stored during the winter, as well as the low flow release from Glendo Dam, which will increase the Guernsey Reservoir content to 15,600 AF by March 31. Glendo Reservoir content will increase from the carryover storage of 130,471 AF to a March 31 content of 433,300 AF.

April through September -- Glendo Reservoir storage will increase to about 500,000 AF by the end of May, which will be the largest end of month content for the year. At this level, it would take approximately 17,500 AF of water to fill the Reservoir to the flood pool elevation of 4635 ft. During April and May releases from Glendo Reservoir will be scheduled to refill Guernsey Reservoir.

The operation of Glendo and Guernsey Reservoirs will be based upon making full irrigation deliveries to the Glendo Unit and the North Platte Project. The total combined North Platte System reservoir storage would be approximately 480,500 AF less by the end of the Water Year under reasonable minimum water supply conditions than under the most probable conditions.

Guernsey Reservoir content will be maintained near 35,000 AF during May and June and lowered to 30,000 AF during July and August. Provision is made in the plan for a possible silt run in July, which will require close coordination of Glendo and Guernsey release schedules as Guernsey is drawn down to about 1,000 AF in July and refilled in August. September releases will be made to meet irrigation requirements leaving 65,000 AF of water in Glendo Reservoir at years end. Guernsey Reservoir content on September 30 will be 1,800 AF under minimum conditions.

#### Reasonable Maximum Condition - 2000

October through March -- Guernsey Reservoir contained 5 AF of water at the end of Water Year 1999. Under the reasonable maximum inflow conditions, the natural inflow as well as the 25 cfs river maintenance release from Glendo will be stored during the winter, which will increase the reservoir content to 27,000 AF by March 31. Glendo Reservoir content is expected to increase from the starting content of 130,471 AF to an end of March content of 355,000 AF.

April through September -- Under maximum conditions an evacuation of excess water above the irrigation demand would be required. A total of 1,130,000 AF of water would be released from the system starting as early as March, 2000. Guernsey Reservoir content reaches a maximum end of month content of 35,000 AF in April through June. Under reasonable maximum conditions Glendo Reservoir will reach near conservation capacity of 517,000 AF during May. Provision is made in the plan for a possible silt run in July, which will require close coordination of Glendo and Guernsey release schedules as Guernsey is drawn down to about 1,000 AF in July and refilled to 32,000 AF by the end of the month. During September releases will be scheduled to lower Guernsey Reservoir to approximately 5,000 AF.

The operating plan shown assumes no downstream flow restrictions and normal irrigation deliveries. Glendo storage is projected to decrease to about 360,000 AF by the end of July and will be about 65,000 AF by the end of September. This end of year Glendo storage would be 69 percent of average and the total System storage at the end of the Water Year of 2,094,200 AF which includes about 5,900 AF of storage in Kortes and Gray Reef Reservoirs, would be 133 percent of average.

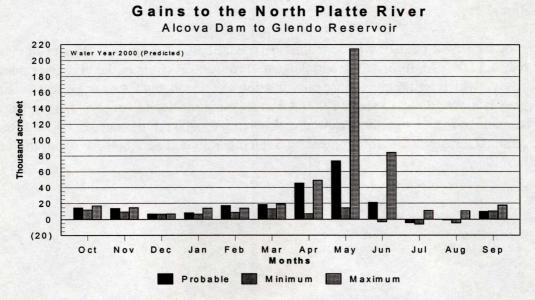


Figure 17

# Glendo Reservoir Storage

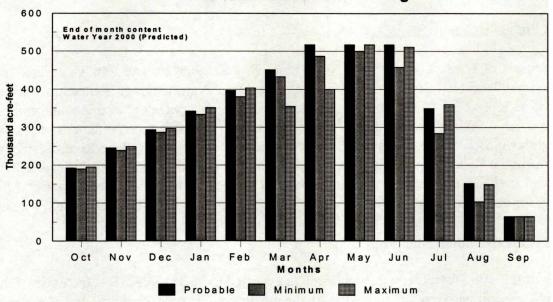


Figure 18

# **Guernsey Reservoir Storage**

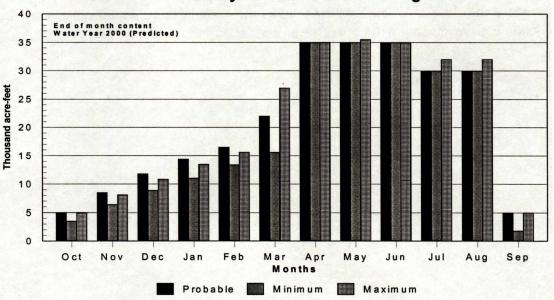


Figure 19

# **Ownerships**

# Most Probable Condition - 2000

At the close of Water Year 2000 the North Platte Project storage ownership is expected to be near 688,100 AF (151 percent of average); the Kendrick Project storage ownership is expected to be near 1,114,600 AF (115 percent of average). Glendo storage ownership at the end of Water Year 2000 is expected to be near average with an end-of-season content of 155,800 AF (110 percent of average). All storage water ownerships in the North Platte River System will fill during the Water Year under most probable conditions. Also 500,000 AF of water will be captured in the reservoirs as excess to ownership. All excess will be released as natural flow except for approximately 15,000 AF which will be retained and used as operational water.

## Reasonable Minimum Condition - 2000

The North Platte Project storage ownership is expected to be 353,900 AF at the close of the Water Year compared to 862,600 AF with the most probable runoff conditions. The North Platte Project ownership will not fill under minimum conditions. The Kendrick Project storage ownership is expected to be near 988,500 AF which is 102 percent of average at the close of the Water Year. The Kendrick Project ownership will not accrue any water under the reasonable minimum conditions. Glendo storage ownership is expected to be near 135,300 AF (96 percent of average) at the close of Water Year 2000 under the reasonable minimum runoff conditions. The Glendo Unit ownership will not accrue any water during the Water Year.

# Reasonable Maximum Condition - 2000

All storage water ownerships in the North Platte River System will fill during the Water Year. About 1,324,400 AF of water, will be captured in the reservoirs as excess to ownership in the North Platte System. The excess water will be released from the System to meet irrigation demands and approximately 15,000 AF will be retained and used as operational water, if the reasonable maximum runoff develops in the pattern that was assumed.

# **End of September Ownership**

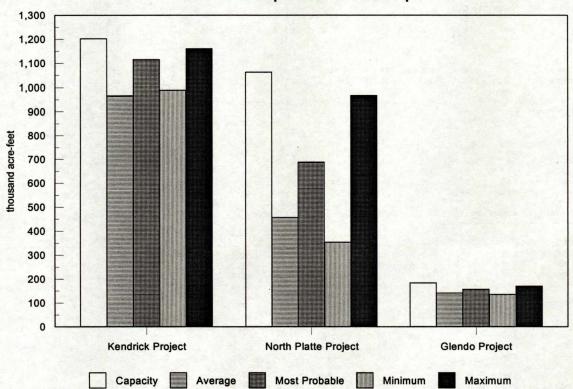


Figure 20

HYDROLOGY OPERATIONS

Seminoe Reservoir Or	erati	ons		initial	Content	911.2	Kaf	Operat	ing Limi	ts: Max Min		Kaf, 635 Kaf, 623	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	29.8	28.2	23.7	20.9	22.0	54.3	116.2	251.3	322.3	95.6	37.3	21.3
Total Inflow	cfs	485.	474.	385.	340.	382.	883.	1953.	4087.	5416.	1555.	607.	358.
Turbine Release	kaf	43.0	41.6	43.1	43.0	57.4	85.5	95.9	148.5	176.7	85.0	81.0	35.7
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.7	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	43.0	41.6	43.1	43.0	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
Total Release	cfs	699.	699.	701.	699.	998.	1391.	1612.	2415.	3637.	1382.	1317.	600.
Evaporation	kaf	5.2	2.8	1.5	1.4	1.4	2.8	5.3	5.5	9.6	11.1	9.3	6.6
End-month content	kaf	893.9	878.0	857.5	834.5*	798.3*	764.8*	780.0*	874.6*	970.0*	970.0	917.6*	896.9
End-month elevation	ft	6350.6	6349.7	6348.6	6347.3	6345.2	6343.1	6344.1	6349.6	6354.6	6354.6	6351.9	6350.8
Kortes Reservoir Ope	ratio	ns		Initial	Content	4.7	Kaf	Operat	ing Limi	ts: Max	4.8	Kaf, 614	2.73 Ft
			Man	2		Esh				Min		Kaf, 609	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	43.0	41.6	43.1	43.0	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
Total Inflow	cfs	699.	699.	701.	699.	998.	1391.	1612.	2415.	3637.	1382.	1317.	600.
Turbine Release	kaf	42.9	41.6	43.1	43.0	57.4	85.5	95.9	148.5	155.3	85.0	81.0	35.7
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.1	0.0	0.0	0.0
Total Release	kaf	42.9	41.6	43.1	43.0	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
Total Release	cfs	698.	699.	701.	699.	998.	1391.	1612.	2415.	3637.	1382.	1317.	600.
Pathfinder Reservoir	Oper	ations		Initial	Content	897.3	Kaf	Operat	ing Limi	ts: Max	1016.5	Kaf, 585	0.10 Ft.
		0-+	N	2		Tab	V			Min		Kaf, 574	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Sweetwater Inflow	kaf	2.9	3.2	3.0	3.3	3.4	4.4	12.1	18.7	20.1	7.5	2.6	1.3
Kortes-Path Gain	kaf	1.6	0.6	-0.7	-0.9	-0.3	4.7	5.9	10.4	4.5	4.4	5.8	4.2
Inflow from Kortes	kaf	42.9	41.6	43.1	43.0	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
Total Inflow	kaf	47.4	45.4	45.4	45.4	60.5	94.6	113.9	177.6	241.0	96.9	89.4	41.2
Total Inflow	cfs	771.	763.	738.	738.	1052.	1539.	1914.	2888.	4050.	1576.	1454.	692.
Turbine Release	kaf	28.6	42.0	43.2	43.3	40.5	43.4	103.7	166.5	163.6	167.3	138.1	70.9
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.2	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	28.6	42.0	43.2	43.3	40.5	43.4	103.7	166.5	218.8	167.3	138.1	70.9
Total Release	cfs	465.	706.	703.	704.	704.	706.	1743.	2708.	3677.	2721.	2246.	1192.
Evaporation	kaf	5.7	3.1	1.7	1.7	1.7	3.7	7.0	8.5	12.7	13.8	11.7	8.6
End-month content	kaf	910.4	910.7	911.2	911.6	929.9	977.4	980.6	983.2	992.7	908.5	848.1	809.8
End-month elevation	ft	5845.1	5845.1	5845.1	5845.2	5846.1	5848.3	5848.5	5848.6	5849.0	5845.0	5842.0	5840.0
Alcova Reservoir Ope	ratio	ns		Initial	Content	179.6	Kaf	Operat	ing Limi			Kaf, 550	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 545 Aug	9.92 Ft. Sep
Total Inflow	kaf	28.6	42.0	43.2	43.3	40.5	43.4	103.7	166.5	218.8	167.3	138.1	70.9
Total Inflow	cfs	465.	706.	703.	704.	704.	706.	1743.	2708.	3677.	2721.	2246.	1192.
Turbine Release	kaf	51.6	41.7	43.0	43.1	40.3	43.0	79.4	150.5	190.4	147.7	119.7	62.8
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0
Casper Canal Release		0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	17.0	18.0	17.0	7.0
Total Release	kaf	51.6	41.7	43.0	43.1	40.3	43.0	79.4	165.5	217.4	165.7	136.7	69.8
Total Release	cfs	839.	701.	699.	701.	701.	699.	1334.	2692.	3654.	2695.	2223.	1173.
Evaporation	kaf	0.7	0.3	0.2	0.2	0.2	0.4	0.8	1.0	1.4	1.6	1.4	1.1
End-month content	kaf	155.9*	155.9*		155.9*	155.9*	155.9*	179.4*	179.4*	179.4*	179.4	179.4*	179.4
End-month elevation	ft	5487.9	5487.9	5487.9	5487.9	5487.9	5487.9	5498.0	5498.0	5498.0	5498.0	5498.0	5498.0

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## NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

Gray Reef Reservoir	Opera	tions		Initial	Content	1.0	Kaf	Operat:	ing Limi	ts: Max Min		Kaf, 5332 Kaf, 5306	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	51.6	41.7	43.0	43.1	40.3	43.0	79.4	150.5	200.4	147.7	119.7	62.8
Total Inflow	cfs	839.	701.	699.	701.	701.	699.	1334.	2448.	3368.	2402.	1947.	1055.
Total Release	kaf	50.7	41.7	43.0	43.1	40.3	43.0	79.3	150.4	200.3	147.6	119.6	62.7
Total Release	cfs	825.	701.	699.	701.	701.	699.	1333.	2446.	3366.	2400.	1945.	1054.
Glendo Reservoir Ope	ratio	ns		Initial	Content	130.5	Kaf	Operat	ing Limi			Kaf, 4653	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 4570 Aug	Sep
Alcova-Glendo Gain	kaf	14.7	13.9	6.9	8.5	17.2	18.6	45.7	73.7	21.2	-4.5	-9.8	10.0
Infl from Gray Reef	kaf	50.7	41.7	43.0	43.1	40.3	43.0	79.3	150.4	200.3	147.6	119.6	62.7
Total Inflow	kaf	65.4	55.6	49.9	51.6	57.5	61.6	125.0	224.1	221.5	143.1	109.8	72.7
Total Inflow	cfs	1064.	934.	812.	839.	1000.	1002.	2101.	3645.	3722.	2327.	1786.	1222.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	4.2	54.0	217.8	213.0	232.5	221.4	155.8
Low Flow Release	kaf	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	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	0.0	69.9	80.4	0.0
Total Release	kaf	1.5	1.5	1.5	1.5	1.5	5.7	55.5	219.3	214.5	303.9	303.3	157.3
Total Release	cfs	24.	25.	24.	24.	26.	93.	933.	3567.	3605.	4942.	4933.	2644.
Evaporation	kaf	1.2	0.8	0.8	0.9	1.0	1.9	3.5	5.3	7.2	6.9	4.3	1.9
End-month content	kaf	192.6*	245.7	293.2	342.3	397.2	451.1*	517.0*	517.0*	517.0*	349.3	151.5*	65.0
End-month elevation	ft	4598.5	4606.3	4612.5	4618.2	4624.1	4629.3	4635.0	4635.0	4635.0	4619.0	4591.4	4570.6
Guernsey Reservoir C	perat	ions		Initial	Content	0.0	Kaf	Operat	ing Limi	ts: Max Min		Kaf, 4419	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Kaf, 4370 Aug	Sep
Glendo-Guerns Gain	kaf	3.9	2.4	2.3	1.7	1.1	0.4	3.6	7.8	3.7	2.5	0.6	4.0
Inflow from Glendo	kaf	1.5	1.5	1.5	1.5	1.5	5.7	55.5	219.3	214.5	303.9	303.3	157.3
Total Inflow	kaf	5.4	3.9	3.8	3.2	2.6	6.1	59.1	227.1	218.2	306.4	303.9	161.3
Total Inflow	cfs	88.	66.	62.	52.	45.	99.	993.	3693.	3667.	4983.	4942.	2711.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.2	52.6	50.9	52.9	53.3	53.9
Seepage	kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	1.2	3.0	3.1	2.5	2.1
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172.4	163.1	255.0	247.2	124.6
Total Release	kaf	0.3	0.2	0.3	0.4	0.3	0.3	45.6	226.2	217.0	311.0	303.0	180.6
Total Release	cfs	5.	3.	5.	7.	5.	5.	766.	3679.	3647.	5058.	4928.	3035
TOTAL Release													
Evaporation	kaf	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.2	0.4	0.9	0.7
	kaf kaf	0.1 5.0#	0.2 8.5	0.2	0.2	0.2 16.5#		0.5 35.0*	0.9 35.0*	1.2 35.0*	0.4 30.0		0.7

OWNERSHIP OPERATIONS

North Platte Pathfir				Interat	Ownershi	P //4.6	Mal,	Accrued t	s wate	r rear:	0.0 K	aı	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sej
Net Accrual	kaf	29.6	29.3	24.3	21.6	23.4	59.8	53.9	0.0	0.0	0.0	0.0	0.
Evaporation	kaf	4.7	2.7	1.7	1.7	1.7	3.6	7.0	8.7	12.2	12.1	10.8	7.
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	143.0	134.
End-month Ownership	kaf	804.2	833.5	857.8	879.4	902.8	962.6	1016.5	1007.8	995.6	983.5	829.7	688.
North Platte Guernse	-			Initial	Ownershi	p 0.0	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
Net Accrual	kaf	0.0	0.0	8.9	9.8	17.9	9.0	0.0	0.0	0.0	0.0	0.0	0.
Evaporation/Seepage	kaf	0.0	0.0	0.3	0.4	0.4	0.5	0.3	0.4	0.4	0.4	0.0	0.
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.1	0.0	0.
End-month Ownership	kaf	0.0	0.0	8.9	18.7	36.6	45.6	45.3	44.9	44.5	0.0	0.0	0.
Inland Lakes				Initial	Ownershi	p 0.0	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sej
Net Accrual	kaf	18.3	16.1	0.0	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	kaf	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.
Trnsfr fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.6	0.0	0.0	0.0	0.0	0.
End-month Ownership	kaf	18.3	34.4	34.3	34.2	34.1	34.0	0.0	0.0	0.0	0.0	0.0	0.
Kendrick				Initial	Ownershi	p1161.4	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sej
Net Accrual	kaf	0.0	0.0	0.0	0.0	0.0	0.0	62.6	0.0	0.0	0.0	0.0	0.0
Evaporation	kaf	7.1	3.8	2.3	2.3	2.3	4.5	8.2	10.2	14.8	14.8	13.2	10.
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	7.0
End-month Ownership	kaf	1154.3	1150.5	1148.2	1145.9	1143.6	1139.1	1201.7	1191.5	1176.7	1161.9	1131.7	1114.
Glendo Unit				Initial	Ownershi	p 169.0	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sej
Accrual	kaf	0.0	0.0	0.0	0.0	0.0	9.5	4.7	0.0	0.0	0.0	0.0	0.0
Evaporation	kaf	1.1	0.6	0.3	0.3	0.3	0.6	1.3	1.5	2.2	2.2	2.0	1.
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	5.
End-month Ownership	kaf	167.9	167.3	167.0	166.7	166.4	175.3	178.7	177.2	175.0	172.8	162.8	155.
Excess to Ownership				Initial	Ownershi	p 10.2	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sej
Accrual	kaf	0.0	0.0	0.0	0.0	0.0	0.0	35.3	236.9	227.8	0.0	0.0	0.
Evaporation/Seepage	kaf	0.1	0.1	0.0	0.0	0.0	0.0		0.4	2.9	4.7	1.6	0.
Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	116.2	90.0	179.0	115.1	0.
End-month total	kaf	10.1	10.0	10.0	10.0	10.0	10.0	45.2	165.5	300.4	116.7	0.0	0.

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					ASSESSED TO A								
City of Cheyenne				Initial	Ownership	7.1	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
Inflow	kaf	1.1	0.3	0.4	0.5	0.6	0.1	0.1	0.0	0.0	0.5	0.6	0.
Evaporation	kaf	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.
Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.9	0.0	0.0	0.
Ownership	kaf	8.2	8.5	8.9	9.4	10.0	10.0	10.0	7.7	6.7	7.1	7.6	7.
Pacificorp				Initial	Ownership	2.0	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
Inflow	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.
Evaporation	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Release	kaf	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.
Ownership	kaf	1.4	1.2	1.1	1.0	0.9	0.8	0.7	1.2	1.4	1.4	1.4	1.
Other				Initial	Ownership	0.0	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
Inflow	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Evaporation	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
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.
Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
IRRIGATION DELIVERY													
Kendrick (Casper Ca	nal)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
Requested	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	17.0	18.0	17.0	7.
Delivered	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	17.0	18.0	17.0	7.
Kendrick (River)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
Requested	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Delivered	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Guernsey Deliveries		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
North Platte Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110.0	125.0	305.0	295.0	175.
Glendo Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	8.0	5.
Inland Lakes Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.6	0.0	0.0	0.0	0.0	0.
Total Requirement	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.6	110.0	127.0	311.0	303.0	180.
Seepage	kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	1.2	3.0	3.1	2.5	2.
Actual Release	kaf	0.3	0.2	0.3	0.4	0.3	0.3	45.6	226.2	217.0	311.0	303.0	180.
Waste	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	116.2	90.0	0.0	0.0	0.

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#### POWER GENERATION

Seminoe	Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine	Release	kaf	43.0	41.6	43.1	43.0	57.4	85.5	95.9	148.5	176.7	85.0	81.0	35.7
Bypass		kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.7	0.0	0.0	0.0
	generation	qwh	27.821	31.772	32.933	22.827	23.939	33.416	32.319	33.233	31.577	32,202	32.381	25.329
	generation	gwh	7.654	7.368	7.599	7.568	10.001	14.773	16.495	25.988	31.577	15.300	14.499	6.355
Percent	max generati		28.	23.	23.	33.	42.	44.	51.	78.	100.	48.	45.	25.
Average	kwh/af		178.	177.	176.	176.	174.	173.	172.	175.	179.	180.	179.	178.
Kortes P	Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine	Peleses	kaf	42.9	41.6	43.1	43.0	57.4	85.5	95.9	148.5	155.3	85.0	81.0	35.7
Bypass	кетеяве	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.1	0.0	0.0	0.0
	generation	qwh	28.346	24.046	21.362	18.989	18.094	27.004	26.712	27.606	26.712	27.606	27.606	26.712
	generation	qwh	7.379	7.155	7.413	7.396	9.873	14.706	16.495	25.542	26.712	14.620	13.932	6.140
	max generati		26.	30.	35.	39.	55.	54.	62.	93.	100.	53.	50.	23.
Average		·On	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.
Fremont	Canvon		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine	Release	kaf	28.6	42.0	43.2	43.3	40.5	43.4	103.7	166.5	163.6	167.3	138.1	70.9
Bypass		kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.2	0.0	0.0	0.0
and the second second second second second	generation	qwh	23.613	22.078	35.074	47.259	44.219	47.289	45.769	47.309	45.775	47.287	47.235	26.182
	generation	gwh	7.992	11.738	12.073	12.101	11.320	12.137	29.011	46.582	45.775	46.784	38.576	19.790
	max generati	The state of the s	34.	53.	34.	26.	26.	26.	63.	98.	100.	99.	82.	76.
Average			279.	279.	279.	279.	280.	280.	280.	280.	280.	280.	279.	279.
Alcova P	Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
					40.0		40.3	43.0		150.5	190.4	147.7	119.7	62.8
Turbine	Kerease	kaf kaf	51.6	41.7	43.0	43.1	0.0	0.0	79.4	150.5	10.0	0.0	0.0	0.0
Bypass			27.162	26.588	27.472	14.620	14.185	17.286	26.275	27.552	26.656	27.552	27.552	26.656
	generation	gwh		5.671	5.848	5.862	5.481	5.848	10.957	21.070	26.656	20.678	16.758	8.792
	generation	gwh	7.122	21.	21.	40.	39.	34.	42.	76.	100.	75.	61.	33.
Average	max generati kwh/af	on	138.	136.	136.	136.	136.	136.	138.	140.	140.	140.	140.	140.
Glendo P	Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine	Release	kaf	0.0	0.0	0.0	0.0	0.0	4.2	54.0	217.8	213.0	232.5	221.4	155.8
Bypass		kaf	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	71.4	81.9	1.5
Maximum	generation	gwh	16.103	9.363	15.490	11.895	18.463	25.395	26.285	28.156	27.245	25.656	20.306	12.618
Actual	generation	gwh	0.000	0.000	0.000	0.000	0.000	0.461	6.171	25.446	24.885	25.656	20.306	9.884
Percent	max generati	on	0.	0.	0.	0.	0.	2.	23.	90.	91.	100.	100.	78.
Average	kwh/af		0.	0.	0.	0.	0.	110.	114.	117.	117.	110.	92.	63.
Guernsey	Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine	Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.2	52.6	50.9	52.9	53.3	53.9
Bypass		kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	173.6	166.1	258.1	249.7	126.7
	generation	qwh	1.339	2.584	3.341	2.671	3.306	3.654	3.683	3.840	3.716	3.835	3.838	3.557
	generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	3.214	3.840	3.716	3.835	3.838	3.557
	max generati		0.	0.	0.	0.	0.	0.	87.	100.	100.	100.	100.	100.
Average			0.	0.	0.	0.	0.	0.	71.	73.	73.	72.	72.	66.

NPRAOP VI.1I 04-Aug-1998 Run: 7-Oct-1999 15:57 Based on October 1999 786000 April-July Most Probable Inflow

#### NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

#### PROJECT GENERATION SUMMARY

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
gwh	0.000	0.000	0.000	0.000	0.000	0.461	6.171	25.446	24.885	25.656	20.306	9.884
gwh	0.000	0.000	0.000	0.000	0.000	0.000	3.214	3.840	3.716	3.835	3.838	3.557
gwh	0.000	0.000	0.000	0.000	0.000	0.461	9.385	29.286	28.601	29.491	24.144	13.441
ation	1:											
gwh	7.654	7.368	7.599	7.568	10.001	14.773	16.495	25.988	31.577	15.300	14.499	6.355
gwh	7.379	7.155	7.413	7.396	9.873	14.706	16.495	25.542	26.712	14.620	13.932	6.140
gwh	7.992	11.738	12.073	12.101	11.320	12.137	29.011	46.582	45.775	46.784	38.576	19.790
gwh	7.122	5.671	5.848	5.862	5.481	5.848	10.957	21.070	26.656	20.678	16.758	8.792
4515												
gwh	30.147	31.932	32.933	32.927	36.675	47.464	72.958	119.182	130.720	97.382	83.765	41.077
gwh	30.147	31.932	32.933	32.927	36.675	47.925	82.343	148.468	159.321	126.873	107.909	54.518
gwh	124.384	116.431	135.672	118.261	122.206	154.044	161.043	167.696	161.681	164.138	158.918	121.054
	gwh gwh ration gwh gwh gwh gwh gwh	gwh 0.000 gwh 0.000 gwh 0.000 gwh 7.000 ration: gwh 7.654 gwh 7.379 gwh 7.992 gwh 7.122 gwh 30.147	gwh 0.000 0.000 gwh 0.000 0.000 gwh 0.000 0.000 gwh 7.000 0.000 ration: gwh 7.654 7.368 gwh 7.379 7.155 gwh 7.992 11.738 gwh 7.122 5.671 gwh 30.147 31.932 gwh 30.147 31.932	gwh 0.000 0.000 0.000 gwh 0.000 0.000 0.000 0.000 gwh 0.000 0.000 0.000 0.000 gwh 0.000 0.	gwh 0.000 0.000 0.000 0.000 gwh 0.000 0.000 0.000 0.000 0.000 0.000 gwh 0.000	gwh 0.000 0.000 0.000 0.000 0.000 gwh 0.000 0.000 0.000 0.000 0.000 0.000 gwh 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 gwh 7.379 7.155 7.413 7.396 9.873 gwh 7.992 11.738 12.073 12.101 11.320 gwh 7.122 5.671 5.848 5.862 5.481 0.001 0.000 0.	gwh 0.000 0.000 0.000 0.000 0.000 0.461 gwh 0.000 0.000 0.000 0.000 0.000 0.000 gwh 0.000 0.000 0.000 0.000 0.000 0.461  ration: gwh 7.654 7.368 7.599 7.568 10.001 14.773 gwh 7.379 7.155 7.413 7.396 9.873 14.706 gwh 7.992 11.738 12.073 12.101 11.320 12.137 gwh 7.122 5.671 5.848 5.862 5.861 5.848 gwh 30.147 31.932 32.933 32.927 36.675 47.464 gwh 30.147 31.932 32.933 32.927 36.675 47.925	gwh 0.000 0.000 0.000 0.000 0.000 0.461 6.171 gwh 0.000 0.000 0.000 0.000 0.000 3.214 gwh 0.000 0.000 0.000 0.000 0.000 0.461 9.385 sation:  gwh 7.654 7.368 7.599 7.568 10.001 14.773 16.495 gwh 7.379 7.155 7.413 7.396 9.873 14.706 16.495 gwh 7.992 11.738 12.073 12.101 11.320 12.137 29.011 gwh 7.122 5.671 5.848 5.862 5.481 5.848 10.957 gwh 30.147 31.932 32.933 32.927 36.675 47.464 72.958 gwh 30.147 31.932 32.933 32.927 36.675 47.925 82.343	gwh 0.000 0.000 0.000 0.000 0.000 0.461 6.171 25.446 gwh 0.000 0.000 0.000 0.000 0.000 3.214 3.840 gwh 0.000 0.000 0.000 0.000 0.000 0.461 9.385 29.286 sation:  gwh 7.654 7.368 7.599 7.568 10.001 14.773 16.495 25.988 gwh 7.379 7.155 7.413 7.396 9.873 14.706 16.495 25.542 gwh 7.992 11.738 12.073 12.101 11.320 12.137 29.011 46.582 gwh 7.122 5.671 5.848 5.862 5.481 5.848 10.957 21.070 gwh 30.147 31.932 32.933 32.927 36.675 47.464 72.958 119.182 gwh 30.147 31.932 32.933 32.927 36.675 47.925 82.343 148.468	gwh 0.000 0.000 0.000 0.000 0.000 0.461 6.171 25.446 24.885 gwh 0.000 0.000 0.000 0.000 0.000 3.214 3.840 3.716 gwh 0.000 0.000 0.000 0.000 0.000 0.461 9.385 29.286 28.601 ration:  gwh 7.654 7.368 7.599 7.568 10.001 14.773 16.495 25.988 31.577 gwh 7.379 7.155 7.413 7.396 9.873 14.706 16.495 25.542 26.712 gwh 7.992 11.738 12.073 12.101 11.320 12.137 29.011 46.582 45.775 gwh 7.122 5.671 5.848 5.862 5.481 5.848 10.957 21.070 26.656 gwh 30.147 31.932 32.933 32.927 36.675 47.464 72.958 119.182 130.720 gwh 30.147 31.932 32.933 32.927 36.675 47.925 82.343 148.468 159.321	gwh 0.000 0.000 0.000 0.000 0.000 0.000 0.461 6.171 25.446 24.885 25.656 gwh 0.000 0.000 0.000 0.000 0.000 3.214 3.840 3.716 3.835 gwh 0.000 0.000 0.000 0.000 0.000 0.461 9.385 29.286 28.601 29.491 ration:  gwh 7.654 7.368 7.599 7.568 10.001 14.773 16.495 25.988 31.577 15.300 gwh 7.379 7.155 7.413 7.396 9.873 14.706 16.495 25.542 26.712 14.620 gwh 7.992 11.738 12.073 12.101 11.320 12.137 29.011 46.582 45.775 46.748 gwh 7.122 5.671 5.848 5.862 5.481 5.848 10.957 21.070 26.656 20.678 gwh 30.147 31.932 32.933 32.927 36.675 47.464 72.958 119.182 130.720 97.382 gwh 30.147 31.932 32.933 32.927 36.675 47.464 72.958 119.182 130.720 97.382	gwh 0.000 0.000 0.000 0.000 0.000 0.000 3.214 3.840 3.716 3.835 3.838 gwh 0.000 0.000 0.000 0.000 0.000 0.000 3.214 3.840 3.716 3.835 3.838 gwh 0.000 0.000 0.000 0.000 0.000 0.461 9.385 29.286 28.601 29.491 24.144 ration:  gwh 7.654 7.368 7.599 7.568 10.001 14.773 16.495 25.988 31.577 15.300 14.499 gwh 7.379 7.155 7.413 7.396 9.873 14.706 16.495 25.542 26.712 14.620 13.932 gwh 7.992 11.738 12.073 12.101 11.320 12.137 29.011 46.582 45.775 46.784 38.576 gwh 7.122 5.671 5.848 5.862 5.481 5.848 10.957 21.070 26.656 20.678 16.758 gwh 30.147 31.932 32.933 32.927 36.675 47.464 72.958 119.182 130.720 97.382 83.765

## PROJECT RELEASE FLEXIBILITY

			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Seminoe	Min	kaf	30.9	29.8	30.8	30.8	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
	Max		79.3	78.2	79.2	79.2	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
	Min	gwh	5.500	5.278	5.430	5.421	10.001	14.773	16.495		31.577	15.300	14.499	6.355
	Max	gwh	14.115	13.850	13.963	13.939	10.001	14.773	16.495	25.988	31.577	15.300	14.499	6.355
Kortes	Min	kaf	30.8	29.8	30.8	30.8	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
	Max	kaf	79.2	78.2	79.2	79.2	57.4	85.5	95.9	148.5	216.4	85.0	81.0	35.7
	Min	gwh	5.298	5.126	5.298	5.298	9.873	14.706	16.495	25.542	26.712	14.620	13.932	6.140
	Max	gwh	13.622	13.450	13.622	13.622	9.873	14.706	16.495	25.542	26.712	14.620	13.932	6.140
Fremont Canyon	Min	kaf	28.6	30.1	30.9	30.9	29.0	31.1	103.7	166.5	218.8	167.3	138.1	70.9
	Max	kaf	28.6	90.5	91.3	91.3	40.5	91.5	103.7	166.5	218.8	167.3	138.1	70.9
	Min	gwh	7.992	8.412	8.636	8.636	8.106	8.697	29.011	46.582	45.775	46.784	38.576	19.790
	Max	gwh	7.992	22.078	25.516	25.516	11.320	25.588	29.011	46.582	45.775	46.784	38.576	19.790
Alcova	Min		51.6	29.8	30.7	30.7	28.8	30.7	79.4	150.5	200.4	147.7		62.8
	Max	kaf	51.6	90.2	91.1	91.1	40.3	91.1	79.4	150.5	200.4	147.7	119.7	62.8
	Min	gwh	7.122	4.053	4.175	4.175	3.917	4.175	10.957	21.070	26.656	20.678	16.758	8.792
	Max	gwh	7.122	12.267	12.390	12.390	5.481	12.390	10.957	21.070	26.656	20.678	16.758	8.792
Load Following					23.539							97.382		41.077
	Max	gwh	42.851	61.645	65.491	65.467	36.675	67.457	72.958	119.182	130.720	97.382	83.765	41.077
Total Project													107.909	
	Max	gwh	42.851	61.645	65.491	65.467	36.675	67.918	82.343	148.468	159.321	126.873	107.909	54.518

GENERATION CAPACITY AND DURATION

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Project Generation													
Base Generation:													
Glendo	mw	0.0	0.0	0.0	0.0	0.0	0.6	8.6	34.2	34.6	34.5	27.3	13.7
Guernsey	mw	0.0	0.0	0.0	0.0	0.0	0.0	4.5	5.2	5.2	5.2	5.2	4.9
Total Base Load	mw	0.0	0.0	0.0	0.0	0.0	0.6	13.1	39.4	39.8	39.7	32.5	18.6
Load Following Ger	eratio	n:											
Seminoe													
Min Capacity	mw	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.6	12.5	10.4	7.1	12.5	12.3	12.0
Max Capacity	mw	11.6	11.0	11.6	11.6	17.0	28.4	32.8	45.0	45.0	28.3	26.9	8.7
Duration	mw	12.0	12.0	12.0	12.0	12.0	11.4	11.5	13.6	16.9	11.5	11.7	12.0
Kortes													
Min Capacity	mw	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Duration	mw	11.4	11.4	11.4	11.4	11.9	11.9	11.8	4.2	3.0	11.9	11.8	11.2
Max Capacity	mw	12.2	11.7	12.3	12.3	18.4	29.6	33.6	36.0	36.0	29.3	27.2	9.2
Duration	mw	12.6	12.6	12.6	12.6	12.1	12.1	12.2	19.9	21.0	12.1	12.2	12.8
Fremont Canyon													
Min Capacity	mw	7.5	7.5	7.5	7.5	7.5	7.5	7.5	66.0	66.0	66.0	7.5	7.5
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	10.2	12.0	12.0	12.0	4.3	12.0
Max Capacity	mw	15.2	27.3	28.4	28.5	26.0	28.6	65.9	66.0	66.0	66.0	66.0	51.0
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	13.8	12.0	12.0	12.0	19.7	12.0
Alcova													
Min Capacity	mw	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	12.0	7.8	3.0	8.2	11.6	12.0
Max Capacity	mw	15.8	12.6	13.2	13.2	12.1	13.2	24.1	36.0	36.0	36.0	36.0	18.8
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	12.0	16.2	21.0	15.8	12.4	12.0
Total Load Followi	ng												
Min Capacity	mw	23.8	23.8	23.8	23.8	23.8	23.8	23.8	82.3	82.3	82.3	23.8	23.8
Max Capacity	mw	54.8	62.6	65.5	65.6	73.5	99.8	156.4	183.0	183.0	159.6	156.1	87.7
Total Project Capa	city												
Min Capacity	mw	23.8	23.8	23.8	23.8	23.8	24.4	36.9	121.7	122.1	122.0	56.3	42.4
				65.5		73.5		169.5	222.4	222.8	199.3		106.3

NPRAOP VI.1I 04-Aug-1998 Run: 7-Oct-1999 16: 3 Based on October 1999 366000 April-July Reasonable Minimum Inflow

#### NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

#### HYDROLOGY OPERATIONS

Seminoe Reservoir Ope				Initial	Content	911.2	Kaf	Operat	ing Limi	ts: Max Min		Kaf, 635 Kaf, 623	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	24.2	22.4	21.4	18.3	21.2	43.3	73.8	122.0	135.3	34.6	20.5	13.4
Total Inflow	cfs	394.	376.	348.	298.	369.	704.	1240.	1984.	2274.	563.	333.	225.
Turbine Release	kaf	43.1	41.7	43.1	43.0	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
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 Total Release	kaf	43.1 701.	41.7 701.	43.1 701.	43.0 699.	28.8	30.8 501.	29.8 501.	74.2 1207.	113.1 1901.	92.2 1499.	61.4 999.	29.8 501.
								-					
Evaporation	kaf	5.2 888.2	2.8 866.4	1.5 843.6	1.4	1.4	2.9 819.7	5.7 858.2#	5.8 897.5*	9.5 909.3*	10.2 842.0	8.3	5.9 771.4
End-month content End-month elevation	kaf ft	6350.3	6349.1	6347.8	6346.3	6345.8	6346.4	6348.6	6350.8	6351.5	6347.7	793.4* 6344.9	6343.5
Kortes Reservoir Open	ratio	ne		Initial	Content	4.7	Kaf	Operati	ing Limi			Kaf, 614	
										Min	1.7	Kaf, 609	2.73 Ft.
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	43.1	41.7	43.1	43.0	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
Total Inflow	cfs	701.	701.	701.	699.	501.	501.	501.	1207.	1901.	1499.	999.	501.
Turbine Release	kaf	43.0	41.7	43.1	43.0	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
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
Total Release	kaf	43.0	41.7	43.1	43.0	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
Total Release	cfs	699.	701.	701.	699.	501.	501.	501.	1207.	1901.	1499.	999.	501.
Pathfinder Reservoir				Initial	Content	897.3	Kaf	Operat	ing Limi			Kaf, 585	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 574 Aug	6.00 Ft
O													
Sweetwater Inflow Kortes-Path Gain	kaf kaf	1.2	1.2	0.3	1.0	1.3	2.6	8.9	6.8 9.7	5.9 9.3	1.9	1.2 6.8	0.9
Inflow from Kortes	kaf	43.0	41.7	43.1	43.0	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
Total Inflow	kaf	45.9	43.9	44.5	45.0	31.7	38.2	42.6	90.7	128.3	100.6	69.4	32.1
Total Inflow	cfs	746.	738.	724.	732.	551.	621.	716.	1475.	2156.	1636.	1129.	539.
Turbine Release	kaf	28.7	42.0	43.3	43.3	40.5	43.4	126.1	165.3	163.4	164.2	169.1	53.9
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	28.7	42.0	43.3	43.3	40.5	43.4	126.1	165.3	163.4	164.2	169.1	53.9
Total Release	cfs	467.	706.	704.	704.	704.	706.	2119.	2688.	2746.	2670.	2750.	906.
Evaporation	kaf	5.7	3.1	1.7	1.7	1.7	3.5	6.3	7.1	9.8	10.1	7.9	5.4
End-month content	kaf	908.8	907.6	907.1	907.1	896.6	887.9	798.1	716.4	671.5	597.8	490.2	463.0
End-month elevation	ft	5845.0	5845.0	5844.9	5844.9	5844.4	5844.0	5839.4	5834.8	5832.1	5827.3	5819.3	5817.0
Alcova Reservoir Open				Initial	Content	179.6	Kaf	Operat	ing Limi			Kaf, 550	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 548 Aug	3.12 Ft Sep
Total Inflow	kaf	28.7	42.0	43.3	43.3	40.5	43.4	126.1	165.3	163.4	164.2	169.1	53.9
Total Inflow	cfs	467.	706.	704.	704.	704.	706.	2119.	2688.	2746.	2670.	2750.	906.
Turbine Release	kaf	51.7	41.7	43.1	43.1	40.3	43.0	101.8	147.3	143.0	142.6	148.7	43.8
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
Casper Canal Release		0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	19.0	20.0	19.0	9.0
Total Release	kaf	51.7	41.7	43.1	43.1	40.3	43.0	101.8	164.3	162.0	162.6	167.7	52.8
	cfs	841.	701.	701.	701.	701.	699.	1711.	2672.	2722.	2644.	2727.	887.
Total Release	CLS												
Evaporation	kaf	0.7	0.3	0.2	0.2	0.2	0.4	0.8	1.0	1.4	1.6	1.4	1.1
					0.2 155.9*	0.2 155.9					1.6 179.4		

					cur begi	mixing oc	. 1333						
Gray Reef Reservoir				Initial	Content	1.0	Kaf	Operat	ing Limi			Kaf, 533	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 530 Aug	Sep
Total Inflow	kaf	51.7	41.7	43.1	43.1	40.3	43.0	101.8	147.3	143.0	142.6	148.7	43.8
Total Inflow	cfs	841.	701.	701.	701.	701.	699.	1711.	2396.	2403.	2319.	2418.	736.
Total Release	kaf	50.8	41.7	43.1	43.1	40.3	43.0	101.7	147.2	142.9	142.5	148.6	43.7
Total Release	cfs	826.	701.	701.	701.	701.	699.	1709.	2394.	2402.	2318.	2417.	734.
Glendo Reservoir Ope	ratio	ons		Initial	Content	130.5	Kaf	Operat	ing Limi	ts: Max	789.4	Kaf, 465	3.00 Ft
				200					7	Min		Kaf, 457	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Alcova-Glendo Gain	kaf	12.1	9.6	6.8	6.7	9.1	13.3	7.1	14.6	-3.3	-6.4	-4.7	10.5
Infl from Gray Reef	kaf	50.8	41.7	43.1	43.1	40.3	43.0	101.7	147.2	142.9	142.5	148.6	43.7
Total Inflow	kaf	62.9	51.3	49.9	49.8	49.4	56.3	108.8	161.8	139.6	136.1	143.9	54.2
Total Inflow	cfs	1023.	862.	812.	810.	859.	916.	1828.	2631.	2346.	2213.	2340.	911.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	50.3	142.7	174.0	226.2	219.1	89.8
Low Flow Release	kaf	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	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	0.0	76.0	100.0	0.0
Total Release	kaf	1.5	1.5	1.5	1.5	1.5	1.5	51.8	144.2	175.5	303.7	320.6	91.3
Total Release	cfs	24.	25.	24.	24.	26.	24.	871.	2345.	2949.	4939.	5214.	1534.
Evaporation	kaf	1.2	0.8	0.8	0.9	1.0	1.9	3.3	5.0	6.7	6.2	3.7	1.6
End-month content	kaf	190.1*	238.9	286.4	333.7	380.5	433.3*	486.9*	500.0*	457.6*	284.0*	103.6*	65.0
End-month elevation	ft	4598.1	4605.3	4611.6	4617.2	4622.4	4627.6	4632.5	4633.6	4629.9	4611.3	4581.2	4570.6
Guernsey Reservoir C	perat	ions		Initial	Content	0.0	Kaf	Operat	ing Limi			Kaf, 441	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	0.0 Jul	Kaf, 437 Aug	0.00 Ft. Sep
Glendo-Guerns Gain	kaf	2.4	1.8	1.5	1.2	1.4	1.3	0.7	1.7	-1.3	-2.4	-2.6	1.8
Inflow from Glendo	kaf	1.5	1.5	1.5	1.5	1.5	1.5	51.8	144.2	175.5	303.7	320.6	91.3
Total Inflow	kaf	3.9	3.3	3.0	2.7	2.9	2.8	52.5	145.9	174.2	301.3	318.0	93.1
Total Inflow	cfs	63.	55.	49.	44.	50.	46.	882.	2373.	2928.	4900.	5172.	1565.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	32.2	52.6	50.9	52.9	53.3	55.4
Seepage	kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	1.2	3.0	3.1	2.5	2.1
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.2	119.1	249.0	261.3	63.1
Total Release	kaf	0.3	0.2	0.3	0.4	0.3	0.3	32.6	145.0	173.0	305.0	317.1	120.6
Total Release	cfs	5.	3.	5.	7.	5.	5.	548.	2358.	2907.	4960.	5157.	2027.
Evaporation	kaf	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.2	1.3	0.9	0.7
End-month content	kaf	3.5	6.4	8.9	11.0	13.4#	15.6#	35.0*	35.0*	35.0*	30.0*	30.0*	1.8
End-month elevation	ft	4391.8	4396.4	4399.2	4401.2	4403.1	4404.7	4415.3	4415.3	4415.3	4412.9	4412.9	4387.3

NPRAOP VI.1I 04-Aug-1998 Run: 7-Oct-1999 16: 3
Based on October 1999 366000 April-July Reasonable Minimum Inflow

#### NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

#### OWNERSHIP OPERATIONS

									A SHELL ST	A PARTY			
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Net Accrual	kaf	22.4	22.0	21.1	18.6	22.4	47.2	79.9	1.3	0.0	0.0	0.0	0.0
Evaporation	kaf	4.7	2.6	1.7	1.7	1.7	3.5	6.7	8.5	12.4	13.0	8.6	4.1
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	241.6	288.9	87.0
End-month Ownership	kaf	797.0	819.0	840.1	858.7	881.1	928.3	1008.2	1009.5	997.1	742.5	445.0	353.9
North Platte Guernse	-			Initial	Ownershi	p 0.0	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Net Accrual	kaf	0.0	0.0	8.0	7.5	10.2	14.2	0.0	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	kaf	0.0	0.0	0.3	0.4	0.3	0.4	0.3	0.3	0.5	0.3	0.0	0.0
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	24.2	0.0	0.0
End-month Ownership	kaf	0.0	0.0	8.0	15.5	25.7	39.9	39.6	39.3	24.5	0.0	0.0	0.0
Inland Lakes				Initial	Ownershi	p 0.0	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Net Accrual	kaf	14.2	11.2	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	kaf	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Trnsfr fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	32.6	0.0	0.0	0.0	0.0	0.0
End-month Ownership	kaf	14.2	25.4	25.3	25.2	25.1	25.0	0.0	0.0	0.0	0.0	0.0	0.0
Kendrick				Initial	Ownershi	p1161.4	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		0-1				Tab					7.1		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Net Accrual	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
Evaporation	kaf	7.1	3.9	2.3	2.3	2.3	4.5		9.5	13.6	14.0	11.9	9.3
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0		17.0	19.0	20.0	19.0	9.0
End-month Ownership	kaf	1154.3	1150.4	1148.1	1145.8	1143.5	1139.0	1130.8	1104.3	1071.7	1037.7	1006.8	988.
Glendo Unit				Initial	Ownershi	p 169.0	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Accrual	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
Evaporation	kaf	1.1	0.6	0.3	0.3	0.4	0.7	1.2	1.4	2.0	2.1	1.7	1.3
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	5.0	7.0	5.0
End-month Ownership	kaf	167.9	167.3	167.0	166.7	166.3	165.6	164.4	163.0	158.0	150.9	142.2	135.3
Excess to Ownership				Initial	Ownershi	p 10.2	Kaf,	Accrued t	his Wate	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sen
Accrual	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
Evaporation/Seepage	kaf	0.1	0.1	0.0	0.0	0.0	0.0		0.1	0.1	0.0	0.0	0.0
Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0		0.0	9.8	0.0	0.0	0.0
	17.00		10.0	10.0	The second secon	A STATE OF THE PARTY OF THE PAR		10.0	The second secon		0.0	0.0	0.0

				ıe	ar seginn	ing Oct	1999						
City of Cheyenne				Initial	Ownership	7.1	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	kaf	1.1	0.3	0.4	0.5	0.6	0.1	0.1	0.0	0.0	0.5	0.6	0.3
Evaporation	kaf	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.9	0.0	0.0	0.0
Ownership	kaf	8.2	8.5	8.9	9.4	10.0	10.0	10.0	7.7	6.7	7.1	7.6	7.8
Pacificorp				Initial	Ownership	2.0	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.2	0.0	0.1
Evaporation	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
Release	kaf	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Ownership	kaf	1.4	1.2	1.1	1.0	0.9	0.8	0.7	1.2	1.4	1.6	1.6	1.7
Other				Initial	Ownership	0.0	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	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
Evaporation	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
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
Ownership	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
Ownership	Au.	0.0	0.0				0.0				0.0	0.0	0.0
IRRIGATION DELIVER													
Kendrick (Casper C	anall	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Requested	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	19.0	20.0	19.0	9.0
Delivered	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	19.0	20.0	19.0	9.0
Kendrick (River)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Requested	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
Delivered	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
Guernsey Deliveries		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
North Platte Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	145.0	170.0	300.0	305.0	115.0
Glendo Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	5.0	7.0	5.6
Inland Lakes Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	32.6	0.0	0.0	0.0	0.0	0.0
Total Requirement	kaf	0.0	0.0	0.0	0.0	0.0	0.0	32.6	145.0	173.0	305.0	312.0	120.6
Seepage	kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	1.2	3.0	3.1	2.5	2.1
Actual Release	kaf	0.3	0.2	0.3	0.4	0.3	0.3	32.6	145.0	173.0	305.0	317.1	120.6
Waste	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0

NPRAOP VI.1I 04-Aug-1998 Run: 7-Oct-1999 16: 3 Based on October 1999 366000 April-July Reasonable Minimum Inflow

#### NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

#### POWER GENERATION

Seminoe Power	Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Releas	e	kaf	43.1	41.7	43.1	43.0	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
Bypass		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
Maximum genera	ation	gwh	27.857	31.878	33.053	22.838	23.942	33.227	32.092	32.922	31.702	32.957	33.250	25.878
Actual genera	tion	gwh	7.672	7.381	7.586	7.525	5.011	5.361	5.229	13.133	20.132	16.319	10.705	5.151
Percent max ge		-	28.	23.	23.	33.	21.	16.	16.	40.	64.	50.	32.	20.
Average kwh/af			178.	177.	176.	175.	174.	174.	175.	177.	178.	177.	174.	173.
Kortes Power I	Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Releas	e	kaf	43.0	41.7	43.1	43.0	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
Bypass		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
Maximum genera	ation	qwh	28.346	24.046	21.362	18.989	18.094	27.004	26.712	27.606	26.712	27.606	27.606	26.712
Actual genera		gwh	7.396	7.172	7.413	7.396	4.954	5.298	5.126	12.762	19.453	15.858	10.561	5.126
Percent max ge		-	26.	30.	35.	39.	27.	20.	19.	46.	73.	57.	38.	19.
Average kwh/ai			172.	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.
Fremont Canyon	1		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Releas	se	kaf	28.7	42.0	43.3	43.3	40.5	43.4	126.1	165.3	163.4	164.2	169.1	53.9
Bypass	and the second	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
Maximum genera	tion	gwh	23.612	22.077	35.072	47.256	44.206	47.245	45.674	46.793	44.719	45.644	44.571	39.528
Actual genera		gwh	8.020	11.737	12.100	12.100	11.317	12.126	35.205	45.742	44.664	44.322	44.571	13.953
Percent max ge		-	34.	53.	35.	26.	26.	26.	77.	98.	100.	97.	100.	35.
Average kwh/af			279.	279.	279.	279.	279.	279.	279.	277.	273.	270.	264.	259.
Alcova Power I	Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Releas		h-6	51.7	41.7	43.1	43.1	40.3	43.0	101.8	147.3	143.0	142.6	148.7	43.8
	se	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
Bypass		kaf	A STATE OF THE STA											
Maximum genera		gwh	27.162	26.588	27.472	14.620	14.185	17.286	26.275	27.552	26.656	27.552	27.552	26.656
Actual genera		gwh	7.135	5.671	5.862	5.862	5.481	5.848	14.048	20.622	20.020	19.964	20.818	6.132
Percent max ge Average kwh/ai		on	26. 138.	21. 136.	21. 136.	40. 136.	39. 136.	34. 136.	53. 138.	75. 140.	75. 140.	72. 140.	76. 140.	23. 140.
Glendo Power I	Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Releas	se	kaf	0.0	0.0	0.0	0.0	0.0	0.0	50.3	142.7	174.0	226.2	219.1	89.8
Bypass		kaf	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	77.5	101.5	1.5
Maximum genera	ation	gwh	16.030	18.561	10.339	16.406	11.690	20.613	25.589	27.441	26.135	23.870	17.996	11.245
Actual genera	ation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	5.655	16.412	19.814	23.870	17.996	5.202
Percent max ge	enerati	on	0.	0.	0.	0.	0.	0.	22.	60.	76.	100.	100.	46.
Average kwh/ai			0.	0.	0.	0.	0.	0.	112.	115.	114.	106.	82.	58.
Guernsey Power	Plant	1	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Releas	e	kaf	0.0	0.0	0.0	0.0	0.0	0.0	32.2	52.6	50.9	52.9	53.3	55.4
Bypass		kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	92.4	122.1	252.1	263.8	65.2
Maximum genera	ation	gwh	0.946	2.354	3.196	2.577	3.195	3.497	3.611	3.840	3.716	3.835	3.838	3.429
Actual genera	ation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	2.228	3.840	3.716	3.835	3.838	3.429
Percent max ge	enerati	-	0.	0.	0.	0.	0.	0.	62.	100.	100.	100.	100.	100.

#### PROJECT GENERATION SUMMARY

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Base Generation:													
Glendo	gwh	0.000	0.000	0.000	0.000	0.000	0.000	5.655	16.412	19.814	23.870	17.996	5.202
Guernsey	gwh	0.000	0.000	0.000	0.000	0.000	0.000	2.228	3.840	3.716	3.835	3.838	3.429
Total	gwh	0.000	0.000	0.000	0.000	0.000	0.000	7.883	20.252	23.530	27.705	21.834	8.631
Load Following Gene	ration	<b>1</b> :											
Seminoe	gwh	7.672	7.381	7.586	7.525	5.011	5.361	5.229	13.133	20.132	16.319	10.705	5.151
Kortes	gwh	7.396	7.172	7.413	7.396	4.954	5.298	5.126	12.762	19.453	15.858	10.561	5.126
Fremont Canyon	gwh	8.020	11.737	12.100	12.100	11.317	12.126	35.205	45.742	44.664	44.322	44.571	13.953
Alcova	gwh	7.135	5.671	5.862	5.862	5.481	5.848	14.048	20.622	20.020	19.964	20.818	6.132
Total	gwh	30.223	31.961	32.961	32.883	26.763	28.633	59.608	92.259	104.269	96.463	86.655	30.362
Total Generation	gwh	30.223	31.961	32.961	32.883	26.763	28.633	67.491	112.511	127.799	124.168	108.489	38.993
Total Capability	gwh	123.953	125.504	130.494	122.686	115.312	148.872	159.953	166.154	159.640	161.464	154.813	133.448

#### PROJECT RELEASE FLEXIBILITY

			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Seminoe	Min	kaf	30.9	29.8	30.8	30.8	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
	Max	kaf	79.5	78.4	79.4	79.4	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
	Min	gwh	5.500	5.275	5.421	5.390	5.011	5.361	5.229					5.151
	Max	gwh	14.151	13.877	13.974	13.895	5.011	5.361	5.229	13.133	20.132	16.319	10.705	5.151
Kortes	Min	kaf	30.8	29.8	30.8	30.8	28.8	30.8	29.8	74.2	113.1		61.4	29.8
	Max	kaf	79.4	78.4	79.4	79.4	28.8	30.8	29.8	74.2	113.1	92.2	61.4	29.8
	Min	gwh	5.298	5.126	5.298	5.298	4.954	5.298	5.126			15.858		5.126
	Max	gwh	13.657	13.485	13.657	13.657	4.954	5.298	5.126	12.762	19.453	15.858	10.561	5.126
Fremont Canyon	Min	kaf	28.7	30.1	30.9	30.9	29.0	31.1	126.1		163.4	164.2	169.1	53.9
	Max	kaf	28.7	90.6	91.4	91.4	89.5	91.6	126.1	165.3	163.4	164.2	169.1	53.9
	Min	gwh	8.020	8.412	8.635	8.635	8.104	8.689	35.205			44.322		13.953
	Max	gwh	8.020	22.077	25.542	25.542	25.009	25.592	35.205	45.742	44.664	44.322	44.571	13.953
Alcova	Min		51.7	29.8	30.7	30.7	28.8	30.7	101.8				148.7	43.8
	Max	kaf	51.7	90.3	91.2	91.2	89.3	91.2	101.8	147.3	143.0	142.6	148.7	43.8
	Min	gwh	7.135	4.053	4.175	4.175	3.917		14.048			19.964		6.132
	Max	gwh	7.135	12.281	12.403	12.403	12.145	12.403	14.048	20.622	20.020	19.964	20.818	6.132
Load Following			25.953		23.529		21.986					96.463		30.362
	Max	gwh	42.963	61.720	65.576	65.497	47.119	48.654	59.608	92.259	104.269	96.463	86.655	30.362
Total Project														38.993
	Max	gwh	42.963	61.720	65.576	65.497	47.119	48.654	67.491	112.511	127.799	124.168	108.489	38.993

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Based on October 1999 366000 April-July Reasonable Minimum Inflow

#### NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

#### GENERATION CAPACITY AND DURATION

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Project Generation													
Base Generation:													
Glendo	mw	0.0	0.0	0.0	0.0	0.0	0.0	7.9	22.1	27.5	32.1	24.2	7.2
Guernsey	mw	0.0	0.0	0.0	0.0	0.0	0.0	3.1	5.2	5.2	5.2	5.2	4.8
Total Base Load	mw	0.0	0.0	0.0	0.0	0.0	0.0	11.0	27.3	32.7	37.3	29.4	12.0
Load Following Ger	eratio	on:											
Seminoe													
Min Capacity	mw	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.7	12.0	12.0
Max Capacity	mw	11.6	11.1	11.6	11.6	5.9	6.7	6.3	24.4	39.8	31.1	18.6	6.3
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.3	12.0	12.0
Kortes													
Min Capacity	mw	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Duration	mw	11.4	11.4	11.4	11.4	12.0	11.0	12.0	11.6	10.1	11.9	12.0	12.0
Max Capacity	mw	12.3	11.7	12.3	12.3	7.0	7.1	7.0	23.8	36.0	32.6	19.9	7.0
Duration	mw	12.6	12.6	12.6	12.6	12.0	13.0	12.0	12.4	14.0	12.1	12.0	12.0
Fremont Canyon													
Min Capacity	mw	7.5	7.5	7.5	7.5	7.5	7.5	7.5	66.0	66.0	66.0	66.0	7.5
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	6.2	12.0	12.0	12.0	12.0	12.0
Max Capacity	mw	15.3	27.3	28.5	28.5	26.0	28.6	66.0	66.0	66.0	66.0	66.0	37.1
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	17.8	12.0	12.0	12.0	12.0	12.0
Alcova	1												
Min Capacity	mw	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	12.0	8.2	8.8	8.8	8.1	12.0
Max Capacity	mw	15.8	12.6	13.2	13.2	12.1	13.2	32.7	36.0	36.0	36.0	36.0	13.5
Duration	mw	12.0	12.0	12.0	12.0	12.0	12.0	12.0	15.8	15.2	15.2	15.9	12.0
Total Load Followi	ng								- 1-105			474 751	
Min Capacity	mw	23.8	23.8	23.8	23.8	23.8	23.8	23.8	82.3	82.3	82.3	82.3	23.8
Max Capacity	mw	55.0	62.7	65.6	65.6	51.0	55.6	112.0	150.2	177.8	165.7	140.5	63.9
Total Project Capa	city								2	S. Thomas			
Min Capacity	mw	23.8	23.8	23.8	23.8	23.8	23.8	34.8	109.6	115.0	119.6	111.7	35.8
Max Capacity	mw	55.0	62.7	65.6	65.6	51.0	55.6	123.0	177.5	210.5	203.0	169.9	75.9

HYDROLOGY OPERATIONS

Seminoe Reservoir Op				initial	Content	911.2	Kai	Operat	ing Limi	ts: Max Min		Kaf, 635 Kaf, 623	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	37.9	34.5	28.7	26.5	29.7	63.8	158.3	394.4	571.9	216.9	62.5	37.3
Total Inflow	cfs	616.	580.	467.	431.	516.	1038.	2660.	6414.	9611.	3528.	1016.	627.
Turbine Release	kaf	43.0	41.6	43.0	43.1	63.2	160.5	191.6	196.9	179.5	178.8	69.1	53.9
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	38.1	42.9	195.2	29.4	0.0	0.0
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0	0.0	0.0
Total Release	kaf	43.0	41.6	43.0	43.1	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
Total Release	cfs	699.	699.	699.	701.	1099.	2610.	3860.	3900.	6500.	3386.	1124.	906.
Evaporation	kaf	5.2	2.8	1.5	1.5	1.5	2.8	4.8	4.9	9.3	11.1	9.5	6.8
End-month content	kaf	902.0	892.4	877.0	859.4*	825.0*	726.0*	650.0*	797.0*	971.9#	970.0	954.5*	931.4
End-month elevation	ft	6351.1	6350.5	6349.7	6348.7	6346.7	6340.7	6335.5	6345.1	6354.7	6354.6	6353.8	6352.6
Kortes Reservoir Ope				Initial	Content	4.7	Kaf	Operat	ing Limi			Kaf, 614	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 609 Aug	Sep
Total Inflow	kaf	43.0	41.6	43.0	43.1	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
Total Inflow	cfs	699.	699.	699.	701.	1099.	2610.	3860.	3900.	6500.	3386.	1124.	906.
Turbine Release	kaf	42.9	41.6	43.0	43.1	63.2	160.5	155.3	160.5	155.3	160.5	69.1	53.9
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	74.4	79.3	231.5	47.7	0.0	0.0
Total Release	kaf	42.9	41.6	43.0	43.1	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
Total Release	cfs	698.	699.	699.	701.	1099.	2610.	3860.	3900.	6500.	3386.	1124.	906.
Pathfinder Reservoir				Initial	Content	897.3	Kaf	Operat	ing Limi	ts: Max Min		Kaf, 585 Kaf, 574	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Sweetwater Inflow	kaf	2.2	2.5	1.9	1.6	1.7	4.6	19.0	49.2	45.4	12.8	4.5	2.9
Kortes-Path Gain	kaf	3.8	0.6	1.1	3.5	5.2	7.1	6.9	16.2	4.6	5.0	6.9	5.8
Inflow from Kortes	kaf	42.9	41.6	43.0	43.1	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
Total Inflow	kaf	48.9	44.7	46.0	48.2	70.1	172.2	255.6	305.2	436.8	226.0	80.5	62.6
Total Inflow	cfs	795.	751.	748.	784.	1219.	2801.	4295.	4964.	7341.	3676.	1309.	1052.
Turbine Release	kaf	28.7	42.0	43.3	43.2	40.5	146.2	163.6	169.1	163.6	169.1	153.2	58.4
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	136.0	130.9	173.1	45.1	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	28.7	42.0	43.3	43.2	40.5	146.2	299.6	300.0	336.7	214.2	153.2	58.4
Total Release	cfs	467.	706.	704.	703.	704.	2378.	5035.	4879.	5658.	3484.	2492.	981.
Evaporation	kaf	5.8	3.1	1.7	1.7	1.7	3.7	6.8	8.1	12.4	14.2	12.3	9.1
End-month content	kaf	911.7	911.3	912.3	915.6	943.5	965.8	915.0	912.1	999.8	997.4	912.4	907.5
End-month elevation	ft	5845.2	5845.2	5845.2	5845.4	5846.7	5847.8	5845.3	5845.2	5849.3	5849.2	5845.2	5845.0
Alcova Reservoir Ope				Initial	Content	179.6	Kaf	Operat	ing Limi	ts: Max		Kaf, 550	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 545 Aug	9.92 Ft Sep
Total Inflow	kaf	28.7	42.0	43.3	43.2	40.5	146.2	299.6	300.0	336.7	214.2	153.2	58.4
Total Inflow	cfs	467.	706.	704.	703.	704.	2378.	5035.	4879.	5658.	3484.	2492.	981.
Turbine Release	kaf	51.7	41.7	43.1	43.0	40.3	127.1	190.4	196.8	190.4	194.6	134.8	50.3
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	18.7	84.9	87.2	127.9	0.0	0.0	0.0
Casper Canal Release		0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	17.0	18.0	17.0	7.0
Total Release	kaf	51.7	41.7	43.1	43.0	40.3	145.8	275.3	299.0	335.3	212.6	151.8	57.3
Total Release	cfs	841.	701.	701.	699.	701.	2371.	4627.	4863.	5635.	3458.	2469.	963.
Evaporation	kaf	0.7	0.3	0.2	0.2	0.2	0.4	0.8	1.0	1.4	1.6	1.4	1.1
End-month content	kaf	155.9*	155.9*		155.9*	155.9*	155.9*	179.4*	179.4*		179.4		

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#### NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

Gray Reef Reservoir				Initial	Content	1.0	Kaf	Operat	ing Limi	ts: Max Min		Kaf, 533 Kaf, 530	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	51.7	41.7	43.1	43.0	40.3	145.8	275.3	284.0	318.3	194.6	134.8	50.3
Total Inflow	cfs	841.	701.	701.	699.	701.	2371.	4627.	4619.	5349.	3165.	2192.	845.
Total Release	kaf	50.8	41.7	43.1	43.0	40.3	145.8	275.2	283.9	318.2	194.5	134.7	50.2
Total Release	cfs	826.	701.	701.	699.	701.	2371.	4625.	4617.	5348.	3163.	2191.	844.
Glendo Reservoir Ope				Initial	Content	130.5	Kaf	Operat	ing Limi			Kaf, 465	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	63.2 Jul	Kaf, 457	0.02 Ft Sep
Alcova-Glendo Gain	kaf	17.0	15.0	7.0	14.2	14.1	19.2	49.2	214.7	84.3	11.2	10.8	17.7
	kaf	50.8	41.7	43.1	43.0	40.3	145.8	275.2	283.9	318.2	194.5	134.7	50.2
Infl from Gray Reef Total Inflow	kaf	67.8	56.7	50.1	57.2	54.4	165.0	324.4	498.6	402.5	205.7	145.5	67.9
Total Inflow	cfs	1103.	953.	815.	930.	946.	2683.	5452.	8109.	6764.	3345.	2366.	1141.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	209.8	219.6	235.1	232.9	232.7	221.4	148.5
Low Flow Release	kaf	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
			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
Irrigation Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	55.3	140.8	167.1	115.6	129.2	0.0
Total Release	kaf	1.5	1.5	1.5	1.5	1.5	211.3	276.4	377.4	401.5	349.8	352.1	150.0
Total Release	cfs	24.	25.	24.	24.	26.	3436.	4645.	6138.	6747.	5689.	5726.	2521.
Evaporation	kaf	1.2	0.9	0.8	0.9	1.0	1.9	2.9	4.7	7.2	6.9	4.4	1.9
End-month content	kaf	195.0*	249.1	296.8	351.5	403.3*		400.0*	517.0*	511.0*	360.0*	149.0*	65.0
End-month elevation	ft	4598.9	4606.7	4612.9	4619.2	4624.7	4619.6	4624.4	4635.0	4634.5	4620.2	4590.9	4570.6
Guernsey Reservoir C	•			Initial	Content	0.0	Kaf	Operat	ing Limi			Kaf, 441	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	Jul	Kaf, 437	Sep
Glendo-Guerns Gain	kaf	3.9	2.0	1.7	1.8	1.1	0.4	7.7	33.5	26.7	8.6	2.0	4.3
Inflow from Glendo	kaf	1.5	1.5	1.5	1.5	1.5	211.3	276.4	377.4	401.5	349.8	352.1	150.0
Total Inflow	kaf	5.4	3.5	3.2	3.3	2.6	211.7	284.1	410.9	428.2	358.4	354.1	154.3
Total Inflow	cfs	88.	59.	52.	54.	45.	3443.	4774.	6683.	7196.	5829.	5759.	2593.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.0	55.2	51.4	52.6	50.9	52.8	53.0	54.5
Seepage	kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	1.2	3.0	3.1	2.5	2.1
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	144.5	223.8	356.2	373.1	305.1	297.5	124.0
Total Release	kaf	0.3	0.2	0.3	0.4	0.3	200.0	275.6	410.0	427.0	361.0	353.0	180.6
Total Release	cfs	5.	3.	5.	7.	5.	3253.	4632.	6668.	7176.	5871.	5741.	3035.
Evaporation	kaf	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.2	0.4	1.1	0.7
End-month content	kaf	5.0	8.1	10.8	13.5	15.6#	27.0*	35.0*	35.0*	35.0*	32.0*	32.0*	5.0
End-month elevation	ft	4394.5	4398.4	4401.0	4403.2	4404.7			4415.3			4413.9	

OWNERSHIP OPERATIONS

North Platte Pathfir				Initial	Ownersh	ip 774.6	Kaf,	Accrued t	his Water	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	kaf	39.2	34.9	30.0	29.9	34.8	71.8	1.3	0.0	0.0	0.0	0.0	0.0
Evaporation	kaf	4.7	2.7	1.7	1.7	1.8	3.7	7.3	9.2	11.7	11.3	10.0	7.7
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.0	0.0	0.0	0.0	0.0
End-month Ownership	kaf	813.8	848.7	878.7	908.6	943.4	1015.2	1016.5	903.3	891.6	880.3	870.3	862.6
North Platte Guernse	∍y			Initial	Ownersh	ip 0.0	Kaf,	Accrued t	his Water	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	kaf	0.0	0.0	8.4	15.6	14.8	6.8		0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	kaf	0.0	0.0	0.3	0.4	0.4	0.2	0.3	0.4	0.0	0.0	0.0	0.0
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.9	0.0	0.0	0.0	0.0
End-month Ownership	kaf	0.0	0.0	8.4	24.0	38.8	45.6	45.3	0.0	0.0	0.0	0.0	0.0
Inland Lakes				Initial	Ownersh	ip 0.0	Kaf,	Accrued t	his Water	Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	kaf	20.6	16.7	0.0	0.0	0.0	0.0	8.7	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	kaf	0.3	0.3	0.1	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0
Trnsfr fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.6	0.0	0.0	0.0	0.0	0.0
End-month Ownership	kaf	20.6	37.3	37.2	37.1	37.0	36.9	0.0	0.0	0.0	0.0	0.0	0.0
Kendrick				Initial	Ownersh	ip1161.4	Kaf,	Accrued t	his Water	Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	kaf	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Evaporation	kaf	7.2	3.9	2.3	2.3	2.3	4.4		7.0	10.0	9.7	8.5	6.6
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
End-month Ownership	kaf	1154.2	1150.3	1148.0	1145.7	1143.4	1139.0	781.8	774.8	764.8	755.1	746.6	740.0
Glendo Unit				Initial	Ownersh	ip 169.0	Kaf,	Accrued t	his Water	r Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Accrual	kaf	0.0	0.0	0.0	0.0	0.0	12.6	1.6	0.0	0.0	0.0	0.0	0.0
Evaporation	kaf	1.1	0.6	0.3	0.4	0.3	0.6		1.6	2.3	2.2	2.0	1.5
Deliv fm Ownership	kaf	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
End-month Ownership	kaf	167.9	167.3	167.0	166.6	166.3	178.3		177.1	174.8	172.6	170.6	169.1
Excess to Ownership				Initial	Ownersh	ip 10.2	Kaf,	Accrued t	his Water	Year:	0.0 K	af	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Accrual	kaf	0.0	0.0	0.0	0.0	0.0	0.0	152.5	583.0	588.9	0.0	0.0	0.0
Evaporation/Seepage	kaf	0.1	0.0	0.0	0.0	0.0	0.0	CO. LOUIS BUT	1.4	7.5	11.0	8.2	3.8
Release	kaf	0.0	0.0	0.0	0.0	0.0	200.0		151.1	300.0	124.5	283.3	119.6
	The second					0.0	200.0	103.3		200.0		200.0	
End-month total	kaf	10.1	10.1	10.1	10.1	10.1	-189.9	152.5	583.0	864.4	728.9	437.4	314.0

NPRAOP VI.1I 04-Aug-1998 Run: 12-Oct-1999 8:38 Based on October 1999 1341000 April-July Reasonable Maximum Inflow

## NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

					ear begin	ing oc	. 1333						
City of Cheyenne				Initial	Ownership	p 7.1	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sej
Inflow	kaf	1.1	0.3	0.4	0.5	0.6	0.1	0.1	0.0	0.0	0.5	0.6	0.3
Evaporation	kaf	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.9	0.0	0.0	0.0
Ownership	kaf	8.2	8.5	8.9	9.4	10.0	10.0	10.0	7.7	6.7	7.1	7.6	7.8
Pacificorp				Initial	Ownershi	p 2.0	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.0
Evaporation	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
Release	kaf	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Ownership	kaf	1.4	1.2	1.1	1.0	0.9	0.8	0.7	1.2	1.4	1.4	1.4	1.4
Other				Initial	Ownershi	0.0	Kaf,						
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Inflow	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
Evaporation	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
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
Ownership	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 DELIVER													
Kendrick (Casper C	anal)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Requested	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	17.0	18.0	17.0	7.0
Delivered	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	17.0	18.0	17.0	7.0
Kendrick (River)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
Requested	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
Delivered	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
Guernsey Deliverie	s	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Ser
North Platte Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110.0	125.0	305.0	295.0	175.0
Glendo Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	8.0	5.0
Inland Lakes Req	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.6	0.0	0.0	0.0	0.0	0.0
Total Requirement	kaf	0.0	0.0	0.0	0.0	0.0	0.0	45.6	110.0	127.0	311.0	303.0	180.
Seepage	kaf	0.3	0.2	0.3	0.4	0.3	0.3	0.4	1.2	3.0	3.1	2.5	2.:
Actual Release	kaf	0.3	0.2	0.3	0.4	0.3	200.0	275.6	410.0	427.0	361.0	353.0	180.
Waste	kaf	0.0	0.0	0.0	0.0	0.0	199.7	230.0	300.0	300.0	50.0	50.0	0.0

NPRAOP V1.1I 04-Aug-1998 Run: 12-Oct-1999 8:38 Based on October 1999 1341000 April-July Reasonable Maximum Inflow

## NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

#### POWER GENERATION

Seminoe Power Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release ka	£ 43.0	41.6	43.0	43.1	63.2	160.5	191.6	196.9	179.5	178.8	69.1	53.9
Bypass ka:	E 0.0	0.0	0.0	0.0	0.0	0.0	38.1	42.9	207.3	29.4	0.0	0.0
Maximum generation gw	n 27.768	31.791	32.834	22.661	23.906	33.387	32.189	33.473	31.772	32.184	32.310	25.078
Actual generation gw	n 7.654	7.405	7.611	7.601	11.109	27.636	32.189	33.473	31.772	32.184	12.438	9.648
Percent max generation	28.	23.	23.	34.	46.	83.	100.	100.	100.	100.	38.	38.
Average kwh/af	178.	178.	177.	176.	176.	172.	168.	170.	177.	180.	180.	179.
Kortes Power Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mushing Polesco bar	£ 42.9	41.6	43.0	43.1	63.2	160.5	155.3	160 5	155.0	160.5		53.9
Turbine Release ka: Bypass ka:			0.0	0.0	0.0	0.0	74.4	160.5	155.3		69.1	And the second s
		0.0	21.362	18.989	18.094	27.606	26.712	79.3	231.5	47.7	27.606	0.0 26.712
Maximum generation gwl Actual generation gwl		7.155	7.396	7.413	10.870	27.606	26.712	27.606	26.712	27.606	11.885	9.271
	26.	30.	35.	39.	60.	100.	100.	100.				CONTRACTOR OF THE PARTY OF THE
Percent max generation				172.					100.	100.	43.	35.
Average kwh/af	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.	172.
Fremont Canyon	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release ka	£ 28.7	42.0	43.3	43.2	40.5	146.2	163.6	169.1	163.6	169.1	153.2	58.4
Bypass ka:		0.0	0.0	0.0	0.0	0.0	136.0	130.9	173.1	45.1	0.0	0.0
Maximum generation gw		22.078	35.074	47.261	44.225	47.290	45.742	47.260	45.753	47.321	47.290	24.286
Actual generation gw		11.738	12.101	12.074	11.322	40.886	45.742	47.260	45.753	47.321	42.843	16.321
Percent max generation	34.	53.	35.	26.	26.	86.	100.	100.	100.	100.	91.	67.
Average kwh/af	279.	279.	279.	279.	280.	280.	280.	279.	280.	280.	280.	279.
Alcova Power Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release kar	51.7	41.7	43.1	43.0	40.3	127.1	190.4	196.8	190.4	194.6	134.8	50.3
Bypass kar		0.0	0.0	0.0	0.0	18.7	84.9	87.2	127.9	0.0	0.0	0.0
Maximum generation gw		26.588	27.472	14.620	14.185	17.286	26.275	27.552	26.656	27.552	27.552	26.656
Actual generation gw		5.671	5.862	5.848	5.481	17.286	26.275	27.552	26.656	27.244	18.872	7.042
Percent max generation	26.	21.	21.	40.	39.	100.	100.	100.	100.	99.	68.	26.
Average kwh/af	138.	136.	136.	136.	136.	136.	138.	140.	140.	140.	140.	140.
Glendo Power Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release ka		0.0	0.0	0.0	0.0	209.8	219.6	235.1	232.9	232.7	221.4	148.5
Bypass ka		1.5	1.5	1.5	1.5	1.5	56.8	142.3	168.6	117.1	130.7	1.5
Maximum generation gw		9.405	15.569	11.999	18.631	24.101	23.287	26.403	27.156	25.720	20.431	12.551
Actual generation gwl		0.000	0.000	0.000	0.000	22.275	23.287	26.403	27.156	25.720	20.431	9.380
Percent max generation	0.	0.	0.	0.	0.	92.	100.	100.	100.	100.	100.	75.
Average kwh/af	0.	0.	0.	0.	0.	106.	106.	112.	117.	111.	92.	63.
Guernsey Power Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release kar	E 0.0	0.0	0.0	0.0	0.0	55.2	51.4	52.6	50.9	52.8	53.0	54.5
Bypass ka:	0.3	0.2	0.3	0.4	0.3	144.8	224.2	357.4	376.1	308.2	300.0	126.1
Maximum generation gw	1.339	2.573	3.294	2.640	3.276	3.686	3.711	3.840	3.716	3.839	3.837	3.515
Actual generation gw		0.000	0.000	0.000	0.000	3.686	3.711	3.840	3.716	3.839	3.837	3.515
Percent max generation	0.	0.	0.	0.	0.	100.	100.	100.	100.	100.	100.	100.
Average kwh/af	0.	0.	0.	0.	0.	67.	72.	73.	73.	73.	72.	64.

NPRAOP V1.1I 04-Aug-1998 Run: 12-Oct-1999 8:38 Based on October 1999 1341000 April-July Reasonable Maximum Inflow

#### NORTH PLATTE RIVER OPERATING PLAN Year Beginning Oct 1999

#### PROJECT GENERATION SUMMARY

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Base Generation:													
Glendo	qwh	0.000	0.000	0.000	0.000	0.000	22.275	23.287	26.403	27.156	25.720	20.431	9.380
Guernsey	gwh	0.000	0.000	0.000	0.000	0.000	3.686	3.711	3.840	3.716	3.839	3.837	3.515
Total	gwh	0.000	0.000	0.000	0.000	0.000	25.961	26.998	30.243	30.872	29.559	24.268	12.895
Load Following Gene	eration	n:											
Seminoe	gwh	7.654	7.405	7.611	7.601	11.109	27.636	32.189	33.473	31.772	32.184	12.438	9.648
Kortes	qwh	7.379	7.155	7.396	7.413	10.870	27.606	26.712	27.606	26.712	27.606	11.885	9.271
Fremont Canyon	gwh	8.020	11.738	12.101	12.074	11.322	40.886	45.742	47.260	45.753	47.321	42.843	16.321
Alcova	gwh	7.135	5.671	5.862	5.848	5.481	17.286	26.275	27.552	26.656	27.244	18.872	7.042
Total	gwh	30.188	31.969	32.970	32.936	38.782	113.414	130.918	135.891	130.893	134.355	86.038	42.282
Total Generation	gwh	30.188	31.969	32.970	32.936	38.782	139.375	157.916	166.134	161.765	163.914	110.306	55.177
Total Capability	qwh	124.402	116.481	135.605	118.170	122.317	153.356	157.916	166.134	161.765	164.222	159.026	118.798

#### PROJECT RELEASE FLEXIBILITY

			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Seminoe	Min	kaf	30.9	29.8	30.8	30.8	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
Seminoe .		kaf	79.3	78.2	79.2	79.2	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
	Min	awh	5.500	5.304	5.452	5.431	11.109	27.636	32.189	33.473	31.772	32.184	12.438	9.648
		gwh	14.115	13.920	14.018		11.109			33.473				9.648
Kortes	Min	kaf	30.8	29.8	30.8	30.8	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
	Max	kaf	79.2	78.2	79.2	79.2	63.2	160.5	229.7	239.8	386.8	208.2	69.1	53.9
	Min	gwh	5.298	5.126	5.298	5.298	10.870	27.606	26.712	27.606	26.712	27.606	11.885	9.271
	Max	gwh	13.622	13.450	13.622	13.622	10.870	27.606	26.712	27.606	26.712	27.606	11.885	9.271
Fremont Canyon	Min	kaf	28.7	30.1	30.9	30.9	29.0	146.2	299.6	300.0	336.7	214.2	153.2	58.4
	Max	kaf	28.7	78.2	79.0	79.0	77.1	146.2	299.6	300.0	336.7	214.2	153.2	58.4
	Min	gwh	8.020	8.412	8.636	8.636	8.107	40.886	45.742	47.260	45.753	47.321	42.843	16.321
	Max	gwh	8.020	21.855	22.078	22.079	21.553	40.886	45.742	47.260	45.753	47.321	42.843	16.321
Alcova	Min	kaf	51.7	29.8	30.7	30.7	28.8	145.8	275.3	284.0	318.3	194.6	134.8	50.3
	Max	kaf	51.7	77.9	78.8	78.8	76.9	145.8	275.3	284.0	318.3	194.6	134.8	50.3
	Min	gwh	7.135	4.053	4.175	4.175	3.917	17.286	26.275	27.552	26.656	27.244	18.872	7.042
	Max	gwh	7.135	10.594	10.717	10.717	10.458	17.286	26.275	27.552	26.656	27.244	18.872	7.042
Load Following	Min	gwh	25.953	22.895	23.561	23.540	34.003	113.414	130.918	135.891	130.893	134.355	86.038	42.282
	Max	gwh	42.892	59.819	60.435	60.385	53.990	113.414	130.918	135.891	130.893	134.355	86.038	42.282
Total Project													110.306	
	Max	gwh	42.892	59.819	60.435	60.385	53.990	139.375	157.916	166.134	161.765	163.914	110.306	55.177

GENERATION CAPACITY AND DURATION

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												Aug	sep
Project Generation													
Base Generation:													
Glendo	mw	0.0	0.0	0.0	0.0	0.0	29.9	32.3	35.5	37.7	34.6	27.5	13.0
Guernsey	mw	0.0	0.0	0.0	0.0	0.0	5.0	5.2	5.2	5.2	5.2	5.2	4.9
Total Base Load	mw	0.0	0.0	0.0	0.0	0.0	34.9	37.5	40.7	42.9	39.8	32.7	17.9
Load Following Ger	neratio	n:											
Seminoe													
Min Capacity	mw	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Duration	mw	12.0	12.0	12.0	12.0	12.0	8.9	6.8	6.8	6.8	6.8	12.0	12.0
Max Capacity	mw	11.6	11.0	11.6	11.6	19.5	45.0	45.0	45.0	45.0	45.0	22.1	15.7
Duration	mw	12.0	12.0	12.0	12.0	12.0	15.1	17.2	17.2	17.2	17.2	12.0	12.0
Kortes													
Min Capacity	mw	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Duration	mw	11.4	11.4	11.4	11.4	11.9	2.1	3.0	2.1	3.0	2.1	11.8	11.8
Max Capacity	mw	12.2	11.7	12.3	12.3	20.5	36.0	36.0	36.0	36.0	36.0	22.2	16.9
Duration	mw	12.6	12.6	12.6	12.6	12.1	21.9	21.0	21.9	21.0	21.9	12.2	12.2
Fremont Canyon													
Min Capacity	mw	7.5	7.5	7.5	7.5	7.5	7.5	66.0	66.0	66.0	66.0	66.0	7.5
Duration	mw	12.0	12.0	12.0	12.0	12.0	3.1	12.0	12.0	12.0	12.0	12.0	12.0
Max Capacity	mw	15.3	27.3	28.5	28.4	26.0	66.0	66.0	66.0	66.0	66.0	66.0	40.7
Duration	mw	12.0	12.0	12.0	12.0	12.0	20.9	12.0	12.0	12.0	12.0	12.0	12.0
Alcova													
Min Capacity	mw	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Duration	mw	12.0	12.0	12.0	12.0	12.0	10.7	3.0	1.9	3.0	2.4	9.8	12.0
Max Capacity	mw	15.8	12.6	13.2	13.2	12.1	36.0	36.0	36.0	36.0	36.0	36.0	15.4
Duration	mw	12.0	12.0	12.0	12.0	12.0	13.3	21.0	22.1	21.0	21.6	14.2	12.0
Total Load Followi	ng												
Min Capacity	mw	23.8	23.8	23.8	23.8	23.8	23.8	82.3	82.3	82.3	82.3	82.3	23.8
Max Capacity	mw	54.9	62.6	65.6	65.5	78.1	183.0	183.0	183.0	183.0	183.0	146.3	88.7
Total Project Capa	city									Truck.	17 20 10		
Min Capacity	mw	23.8	23.8	23.8	23.8	23.8	58.7	119.8	123.0	125.2	122.1	115.0	41.7
Max Capacity	mw	54.9	62.6	65.6	65.5	78.1	217.9	220.5	223.7	225.9	222.8	179.0	106.6

#### **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 riverflow exiting the lower end of the reach the net gain is negative (loss of water in the reach).

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.

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) - 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.

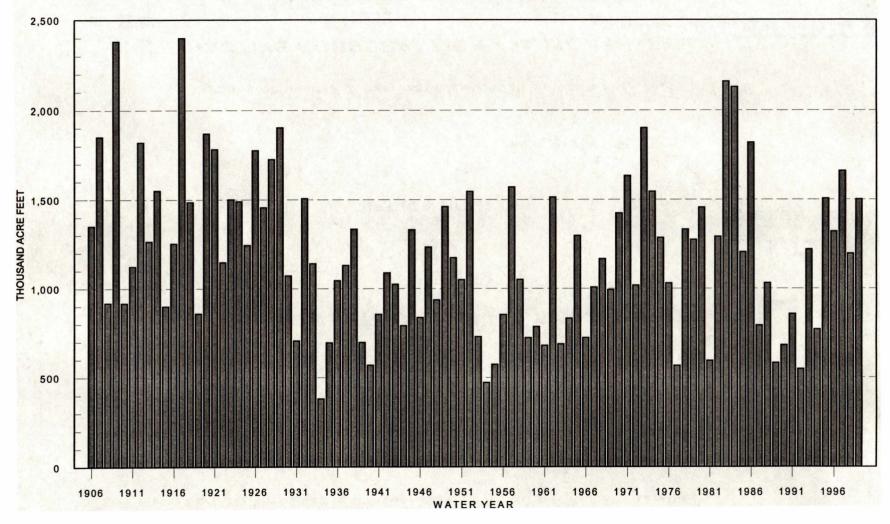
Silt Run - The name given to the practice of flushing silt from Guernsey Reservoir into the North Platte River downstream where the silt laden water is diverted by irrigators. The silt tends to settle in the slower moving water of canals and laterals helping to seal the wetted perimeter and reduce seepage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

# PATHFINDER WATERSHED RUNOFF



# SEMINOE DAM ALLOCATIONS

Dam Crest

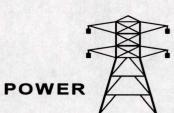
Max Water Surface/Top of Active Conservation Elev. 6357.0 (1,017,273 Acre-Feet)





ACTIVE CONSERVATION - 985,603 Acre-Feet





GATED SPILLWAY CREST

**ELEV. 6307.0** 

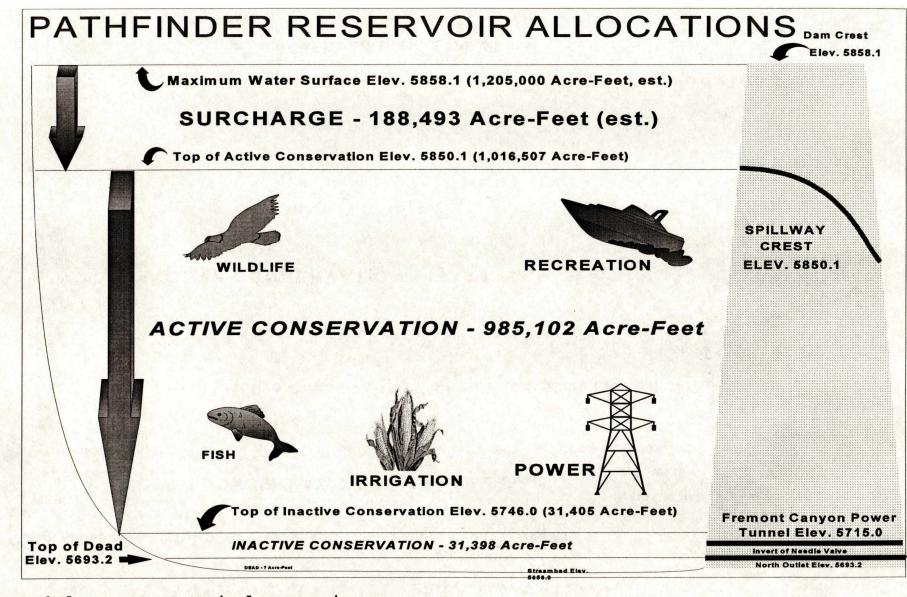


op of Inactive Conservation Elev. 6239.0 (31,670 Acre-Feet)

Top of Dead **INACTIVE CONSERVATION - 31,114 Acre-Feet** 

**OUTLET ELEV 6190.5** 

PENSTOCK ELEV. 6185.09



# ALCOVA RESERVOIR ALLOCATIONS

Dam Crest

CASPER CANAL ELEV. 5487.0

Elev. 5510.0

Max Water Surface/Top of Active Conservation Elev. 5500.0 (184,405 AF)

FISH

WILDLIFE

ACTIVE CONSERVATION - 30,603 Acre-Feet

IRRIGATION

POWER

RECREATION

**FLOOD CONTROL** 

Top of Inactive Conservation Elev. 5487.0 (153,802 Acre-Feet)

**INACTIVE CONSERVATION - 153,711 Acre-Feet** 

GATED SPILLWAY
CREST ELEV. 5460.0

PENSTOCK OUTLET ELEV. 5334.08

Top of Dead Elev. 5334.08

**DEAD - 91 Acre-Feet** 

Streambed Elev. 5325.0

# **GLENDO RESERVOIR ALLOCATIONS**

Dam Crest

Maximum Surface or Top of Surcharge Elev. 4669.0 (1,118,653 Acre-Feet)

SURCHARGE - 329,251 Acre-Feet

Top of Flood Control Elev. 4653.0 (789,402 AF)

Uncontrolled Spillway Crest Elev. 4653.0

**EXCLUSIVE FLOOD CONTROL - 271,917 Acre-Feet** 

Top of Active Conservation Elev. 4635.0 (517,485 Acre-Feet)







RECREATION

IRRIGATION

ACTIVE CONSERVATION - 454,337 Acre-Feet











River & Penstock Outlets

Elev. 4545.0

Top of Inactive Conservation Elev. 4570.0 (63,148 Acre-Feet)

INACTIVE CONSERVATION - 52,115 Acre-Feet

DEAD - 11,033 Acre-Feet Streambead Elev. 4508.0

Top of Dead Elev. 4545.0

# **GUERNSEY RESERVOIR ALLOCATIONS**

Dam Crest Elev. 4430.0

Maximum Water Surface or Top of Conservation Elev. 4420.0 (45,612 Acre-Feet)







WILDLIFE

ACTIVE CONSERVATION - 45,612 Acre-Feet







FLOOD CONTROL

Inactive & Dead - 0 Acre-Feet (Zero Storage Until Elev. 4370.0)

Streambed Elev. 4338.0

**GATED SOUTH** SPILLWAY CREST **ELEV. 4405.5** 

**GATED NORTH** SPILLWAY CREST **ELEV. 4370.0** 

PENSTOCK OUTLET

