



# ***Annual Operating Plans***

**North Platte River Area**

## ***Water Year 2001 Summary of Actual Operations and Water Year 2002 Annual Operating Plans***



A Century of Water for the West  
1902-2002

***U.S DEPARTMENT 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 1971-2000 unless noted otherwise. In each coming year this period will be advanced by one year to maintain a running 30-year average.

## INTRODUCTION

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

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

The System includes the Kendrick Project in Wyoming; the North Platte Project in Wyoming and Nebraska; and the Kortes and Glendo Units of the Pick-Sloan Missouri Basin Program in Wyoming and Nebraska. Major rivers which affect the water supply in the System are the North Platte River in Colorado and Wyoming, and the Medicine Bow, and Sweetwater Rivers in Wyoming.



The System has seven main stem reservoirs, six of which have powerplants with a generating capacity totaling 235.2 megawatts (MW). Table 2 depicts reservoir data.

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

Western Area Power Administration (WAPA) of the Department of Energy, headquartered in 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 Reservoirs.

### North Platte River Reservoirs Total Storage End of September

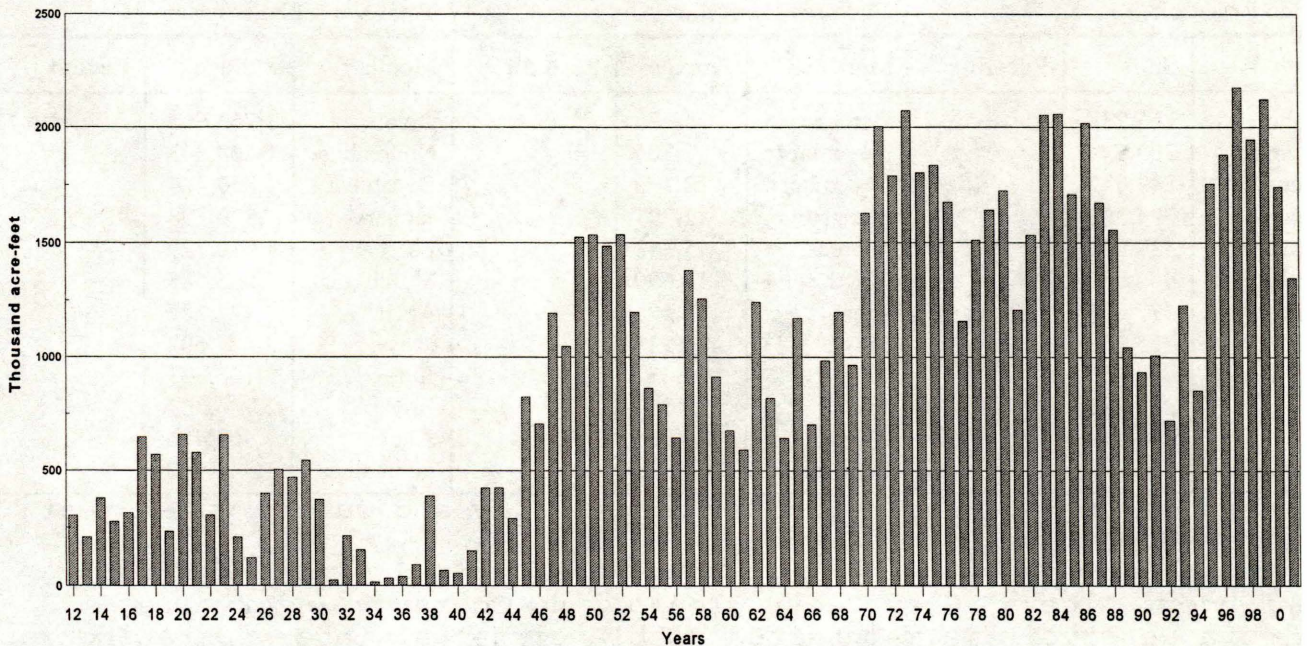


Figure 1



**Table 1**  
**Summary of Reservoir Storage Content**  
**Water Year 2001**  
**End of month**

Seminole Reservoir			Pathfinder Reservoir			Alcova Reservoir		
Month	Storage	Record <u>1</u> /	Month	Storage	Record <u>1</u> /	Month	Storage	Record <u>1</u> /
October	791,086		October	649,872		October	156,493	<u>3</u> /
November	753,441		November	672,748		November	157,238	
December	718,407		December	700,474		December	156,515	
January	681,489		January	728,078		January	156,696	
February	651,009		February	753,350		February	156,876	
March	646,764		March	770,948		March	156,493	
April	664,021		April	774,397		April	178,403	
May	751,687		May	797,951		May	180,132	
June	747,872		June	725,831		June	180,498	
July	705,181		July	606,262		July	179,133	
August	659,709		August	480,549		August	179,644	
September	617,806		September	423,895		September	180,376	

Glendo Reservoir			Guernsey Reservoir			Total North Platte System <u>2</u> /		
Month	Storage	Record <u>1</u> /	Month	Storage	Record <u>1</u> /	Month	Storage	Record <u>1</u> /
October	155,738		October	4,185		October	1,763,665	
November	203,539		November	7,305		November	1,800,243	
December	247,832		December	10,116		December	1,839,424	
January	294,505		January	12,791		January	1,879,798	
February	337,020		February	15,343		February	1,919,777	
March	406,951		March	18,630		March	2,005,485	
April	477,628		April	26,585		April	2,127,227	
May	455,756		May	35,921		May	2,227,602	
June	410,489		June	34,432		June	2,105,363	
July	259,286		July	30,220		July	1,786,304	
August	105,212		August	32,005		August	1,463,456	
September	116,292		September	2,376		September	1,347,142	

1/Record is the 30 year period from 1971-2000 and during water year 2001 there were no records.

2/Total North Platte system includes storage in Seminole, Kortes, Pathfinder, Alcova, Gray Reef, Glendo, and Guernsey Reservoirs

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



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
Seminole	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 <u>4</u> /	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	4570.00 <u>7</u> /
Guernsey	0	45,612	45,612	0	4370.00 <u>8</u> /
Total	11,894	3,047,844	3,059,738	265,555	

1/Storage capacity below elevation of lowest outlet

2/Total storage minus dead storage

3/Top of Conservation capacity 517,485 (elevation 4635.00), with an additional 271,917 AF allocated to flood control (elevation 4653.00)

4/Minimum water surface elevation and capacity required for power generation  
This level the top of inactive capacity

5/Content and minimum elevation required for power generation, however water cannot be delivered to Casper Canal when reservoir level is below 5487.00 (153,802), the elevation of the Casper Canal gate sill

6/Top of dead capacity - spillway crest

7/Minimum water surface elevation for power generation

8/Elevation of the north spillway crest



## SYSTEM OPERATIONS WATER YEAR 2001

### Seminoe Reservoir Inflow

Seminoe Reservoir inflows were below average for the entire water year. Inflows ranged from a low of 24 percent of average in July, 2001 to a high of only 89 percent in March, 2001. The inflow into Seminoe Reservoir for November, 2000, was the lowest November inflow in the past 30 years. The inflow into Seminoe Reservoir for December, 2000, was the 4th lowest December inflow in the past 30 years. The inflow into Seminoe Reservoir for January, 2001, was the 5th lowest January Seminoe inflow in the past 30 years. The inflows into Seminoe Reservoir for February, and June, were the 3rd lowest February, and June inflows in the past 30 years. The inflow into Seminoe Reservoir for July, 2001, was the 5th lowest July Seminoe inflow in the past 30 years. The inflows into Seminoe Reservoir for August and September, 2001, were the 2nd lowest August and September inflows in the past 30 years. The actual April-July inflows total 386,500 AF, which is 48 percent of average. The inflows peaked for the year on May 18, 2001, at 4,643 cubic feet per second (cfs). Figure 2 depicts a comparison of average, Water Year 2001 and Water Year 2000 monthly inflow.

### Seminoe Reservoir Inflow

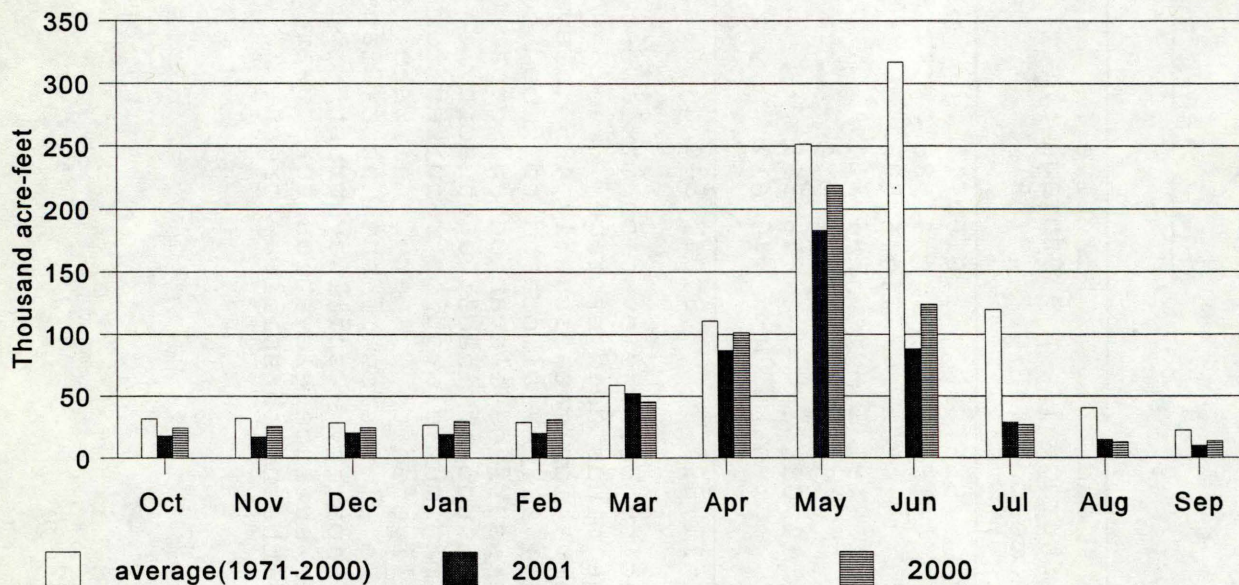


Figure 2



## Seminole Reservoir Storage and Releases

Seminole 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 45 MW at a full release capability of about 3,400 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 end of Water Year 2000, Seminole Reservoir had a storage content of 829,060 AF, which was 111 percent of average and 82 percent of capacity. Seminole storage continued above average until June, 2001. The maximum Seminole Reservoir content was reached on October 1, 2000, at 827,679 AF. The end of Water Year 2001, Seminole Reservoir storage content was 617,806 AF, which was 83 percent of average and 61 percent of capacity. See Figure 3 for an end of month storage comparison for the Water Year. Releases averaged near 900 cfs from October, 2000, through March, 2001. In anticipation of spring runoff the Seminole releases were increased to average approximately 1,100 cfs for April, and averaged approximately 1,460 cfs for May. The releases were decreased for the remainder of the Water Year and averaged approximately 800 cfs during September 2001.

### Seminole Reservoir Storage

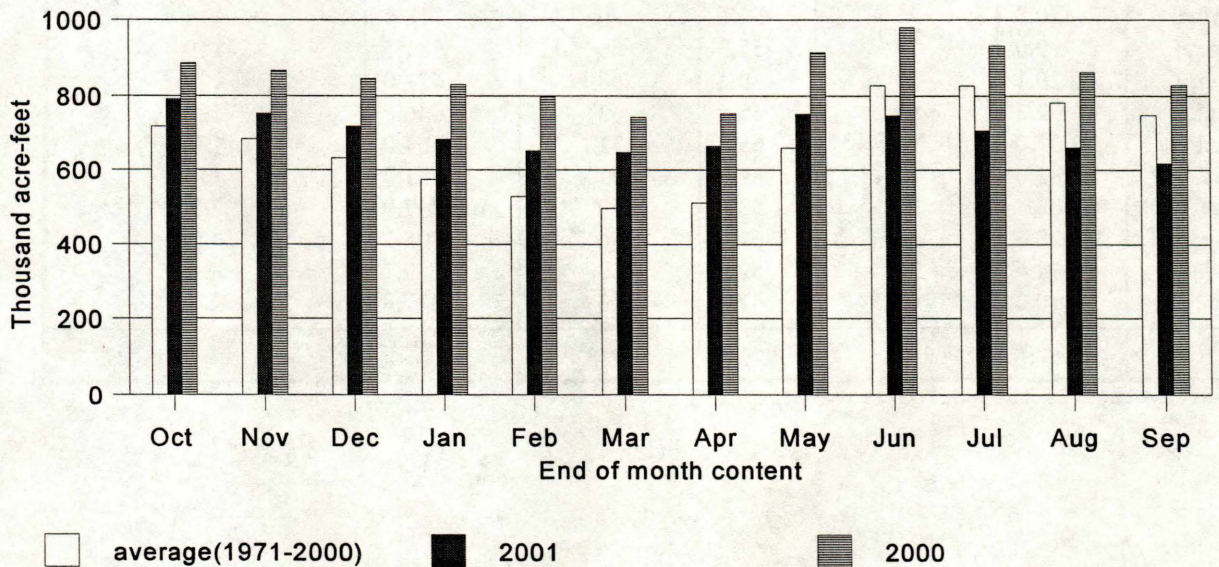


Figure 3



**Table 3**  
**Seminole Reservoir Hydrologic Data**  
**for Water Year 2001**

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	6346.97	829,060	Oct 1, 2000
End of Water Year	6333.22	617,806	Sept 30, 2001
Annual Low	6333.22	617,806	Sept 30, 2001
Historic Low <sup>1/</sup>	6253.30	56,390	Apr 20, 1961
Annual High	6346.89	827,679	Oct 1, 2000
Historic High <sup>1/</sup>	6359.29	1,073,050	Jun 20, 1949

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

Inflow-Outflow Data	Inflow <sup>2/</sup>	Date	Outflow	Date
Annual Total(AF)	557,600	Oct'00-Sep'01	722,800	Oct'00-Sep'01
Daily Peak (CFS)	4,643	May 18, 2001	1,545 <sup>3/</sup>	May 29, 2001
Daily Minimum (CFS)	10	Aug 19, 2001	532 <sup>3/</sup>	Dec 14, 2000
Peak Jet Flow Valve (CFS)				
Total Jet Flow Valve (AF)				

<sup>2/</sup>Inflows are a computed number    <sup>3/</sup>Daily peak and minimum are releases to the river.

Month	Inflow		Outflow		Content	
	KAF	% of avg <sup>4/</sup>	KAF	% of avg <sup>4/</sup>	KAF	% of avg <sup>4/</sup>
October	17.8	57	53.2	90	791.1	110
November	17.1	53	53.8	84	753.4	110
December	20.2	71	54.6	70	718.4	114
January	19.0	72	55.3	66	681.5	119
February	20.1	70	50.1	68	651.0	123
March	52.3	89	55.2	63	646.8	130
April	87.0	79	65.8	71	664.0	130
May	182.6	73	89.7	91	751.7	114
June	88.3	28	83.4	59	747.9	90
July	28.6	24	61.7	56	705.2	85
August	14.6	36	52.6	69	659.7	84
September	10.0	47	47.4	93	617.8	83
Annual	557.6	52	722.8	71		

<sup>4/</sup>30 year average is the period (1971-2000)



## 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 Seminole 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 Seminole 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 Seminole powerplant to maintain a full reservoir.

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

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

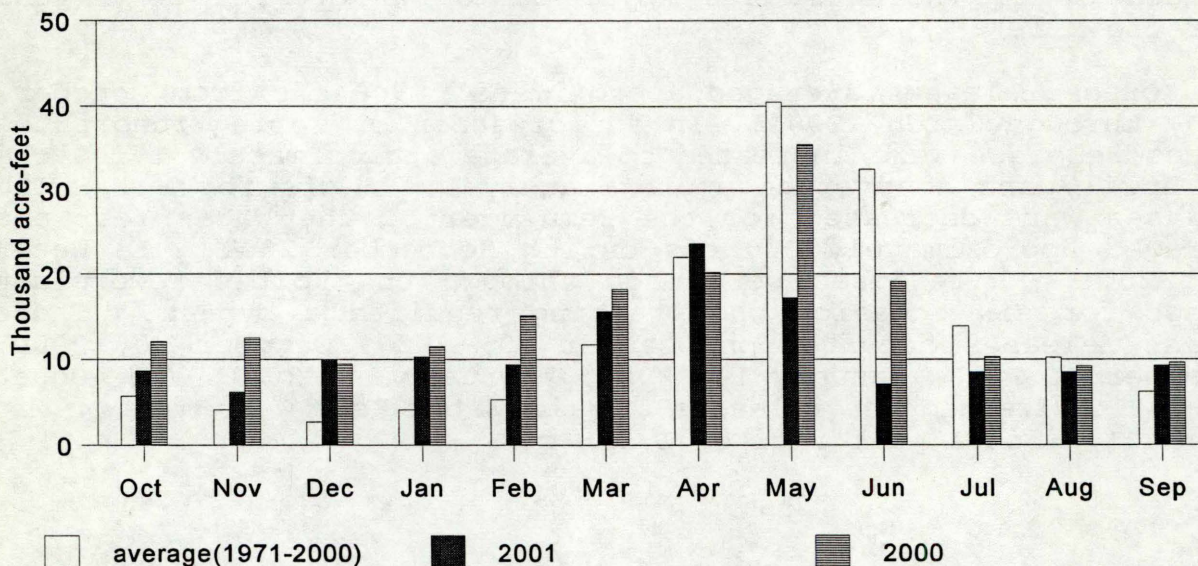
The Kortes releases averaged approximately 900 cfs from October, 2000, through March, 2001. In anticipation of spring runoff the Kortes releases were increased to average approximately 1,100 cfs for April, and to average approximately 1,460 cfs for May. The releases were decreased for the remainder of the Water Year and averaged approximately 800 cfs during September 2001. In Water Year 2001 all releases were made through the Kortes Powerplant except for six occasion when testing required a bypass. Those bypass releases occurred on October 10, 2000, October 20, 2000, December 5, 2000, January 10, 2001, February 14, 2001, and August 22, 2001. The highest releases for the Water Year were made on May 29, 2001, with a peak flow of 1,545 cfs.



Gains to the North Platte River  
Kortes Dam to Pathfinder Dam

Kortes Dam to Pathfinder Dam river gains were well above average from October, 2000 through April, 2001 and September, 2001, with the remaining months being below average during the Water Year. The Kortes to Pathfinder river gains for December 2000, were the highest of record since the completion of Kortes Dam in 1951. The Kortes to Pathfinder river gains for January, 2001, was the 4th highest of record since the completion of Kortes Dam in 1951. The Kortes Dam to Pathfinder Dam river gains ranged from 370 percent of average in December, 2000 to 22 percent in June, 2001. The actual April-July gain was 56,400 AF, which was 52 percent of average. 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 end of Water Year 2000, storage in Pathfinder Reservoir was 610,429 AF, which was 107 percent of average and 60 percent of capacity. Pathfinder storage was above average until June, 2001. (See figure 5). The maximum Pathfinder Reservoir content for the Water Year was reached on June 4, 2001, at 799,441 AF. The Water Year ended with 423,895 AF of water in storage in Pathfinder Reservoir, which is 74 percent of average and only 42 percent of capacity. A gradual drawdown of Alcova Reservoir to its winter operating range this year allowed for continual release of water from Pathfinder Reservoir during October. It was necessary to move water from Pathfinder Reservoir to Glendo Reservoir at a rate greater than the capacity of Fremont Canyon Powerplant, and therefore, a bypass at Pathfinder Dam was initiated on July 2, 2001, and continued until September 5, 2001, in order to move water through the system. Operation in 2001 required the release of 21,918 AF of water to the river below Pathfinder Dam which was a bypass of Fremont Canyon Powerplant.

### Pathfinder Reservoir Storage

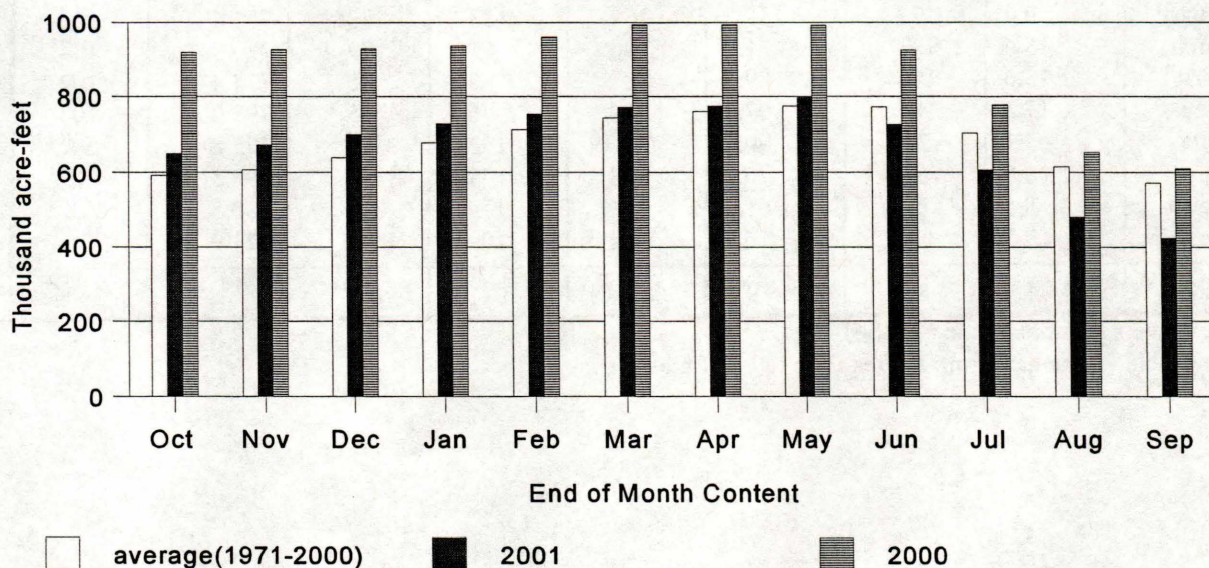


Figure 5



**Table 4**  
**Pathfinder Reservoir Hydrologic Data**  
**for Water Year 2001**

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	5828.16	610,429	Oct 1, 2000
End of Water Year	5813.55	423,895	Sep 30, 2001
Annual Low	5813.51	423,463	Sep 28&29, 2001
Historic Low <sup>1/</sup> <sup>2/</sup>	5690.00	0	Sep 9, 1958
Annual High	5839.43	799,441	Jun 4, 2001
Historic High <sup>1/</sup>	5853.11	1,083,755	Jul 7, 1983

<sup>1/</sup>The daily records for this table are only available from Water Year 1946. <sup>2/</sup>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)	856,900	Oct'2000-Sep'2001	991,200	Oct'2000-Sep'2001
Daily Peak (CFS)	2,503	May 2, 2001	3,043	Jul 10, 2001
Daily Minimum (CFS)	83	Jul 17, 2001	5	Oct 18,2000
Peak Release to River (CFS)			270	Sep 4, 2001
Total Release to River (AF)			21,918	Mar - Sep, 2001

Month	Gain from Kortes		Inflow <sup>4/</sup>		Outflow		Content	
	KAF	% of avg <sup>3/</sup>	KAF	% of avg <sup>3/</sup>	KAF	% of avg <sup>3/</sup>	KAF	% of avg <sup>3/</sup>
October	8.7	153	61.8	95	19.5	51	649.9	110
November	6.2	151	60.0	88	36.2	71	672.7	111
December	10.0	370	64.6	80	36.3	77	700.5	110
January	10.3	251	65.6	75	37.3	79	728.1	107
February	9.4	177	59.5	76	33.6	78	753.4	106
March	15.6	133	71.1	71	51.8	79	770.9	104
April	23.6	107	89.1	78	80.7	86	774.4	102
May	17.2	42	107.0	77	76.5	65	798.0	103
June	7.1	22	90.3	52	152.2	91	725.8	94
July	8.5	61	70.2	56	179.1	98	606.3	86
August	8.5	83	61.0	71	179.0	108	480.5	78
September	9.3	150	56.7	100	109.0	115	423.9	74
Annual	134.4	85	856.9	73	991.2	89		

<sup>3/</sup>30 year average is the period (1971-2000).

<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 2, 2000, and continued through October 18, 2000, when Alcova reached its normal winter operating range of 5488  $\pm$  one foot. The refill of Alcova Reservoir was initiated on April 19, 2001. The water surface elevation was raised above 5497 feet on April 30, 2001, and the reservoir was maintained within 1 foot of elevation 5498 throughout the summer. There were no bypass releases made at Alcova Reservoir during Water Year 2001.

Gray Reef Dam and Reservoir is part of the Glendo Unit, Oregon Trail Division, Pick-Sloan Missouri Basin Program. The dam which was completed in 1961, is a three-zoned rock and earthfill structure located about 2.5 miles below Alcova Dam. The reservoir has an active capacity of 1,744 AF. Gray Reef Reservoir is operated to reregulate widely fluctuating water releases from the Alcova Powerplant, 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 maintained at 600 cfs from October 1, 2000 until October 15, 2000. At the request of the Wyoming Game and Fish Department, a series of flushing flows were initiated on October 16, 2000, and continued through October 18, 2000, 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 set at to 600 cfs until March 11, 2001. Again, at the request of the Wyoming Game and Fish Department, a series of flushing flows were initiated on March 12, 2001, and continued through March 16, 2001. At the completion of the flushing flows, releases from Gray Reef were set at a 850 cfs and remained at that rate until April 6, 2001. 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 2,801 cfs occurred on July 17, 2001.



Gains to the North Platte River  
Alcova Dam to Glendo Dam

River gains from Alcova Dam to Glendo Dam were above average during the months of December, 2000, January, 2001, March, 2001, April, 2001, July, 2001, and August, 2001, with all other months being below average. The actual April-July gain was 112,900 AF, which was 72 percent of average. River gains peaked on April 30, 2001, at 1,948 cfs with the daily computed Glendo inflow peaking on July 11, 2001 at 2,949 cfs. See Figure 6.

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

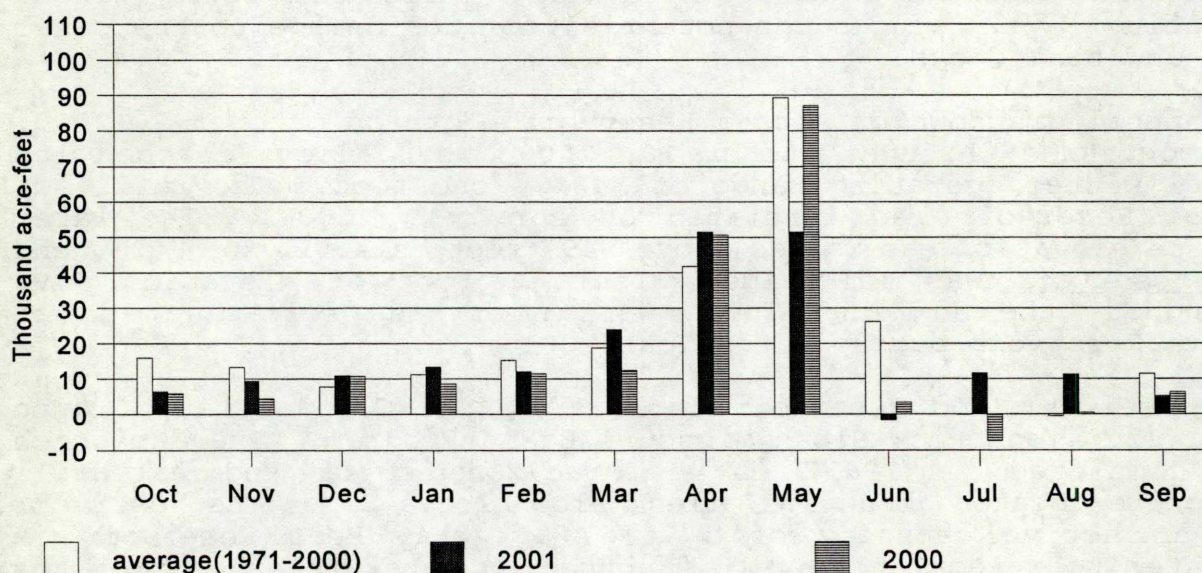


Figure 6

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. Releases are, however, restricted to 6,600 cfs as a precautionary practice. This precautionary practice is to minimize the potential for damage to the stilling basin and training walls. In order to exceed 6,600 cfs discharge through the primary outlet works, prior approval of the Director, Denver Technical Service Center and of the Great Plains Regional Director, Billings, Montana is required. The low-flow outlet works are operated to maintain a continuous release of approximately 25 cfs. This provides a reliable water source for the downstream wetland area and results in associated fish and wildlife benefits.

Glendo Reservoir storage was 104,173 AF at the end of Water Year 2000, which was 106 percent of average and only 20 percent of capacity. Water releases from Glendo Reservoir were initiated on April 16, 2001, in order to refill Guernsey Reservoir in preparation of releases. The reservoir reached a maximum storage for the year of 508,290 AF (elevation 4634.25 feet) on May 13 and 14, 2001. At the end of the Water Year, Glendo Reservoir contained 116,292 AF of water (water surface elevation 4584.14 feet) which was 117 percent of average and only 23 percent of capacity. Figure 7 depicts Water Year 2001 and Water Year 2000 end of month reservoir storage compared to average.

Glendo Reservoir Storage

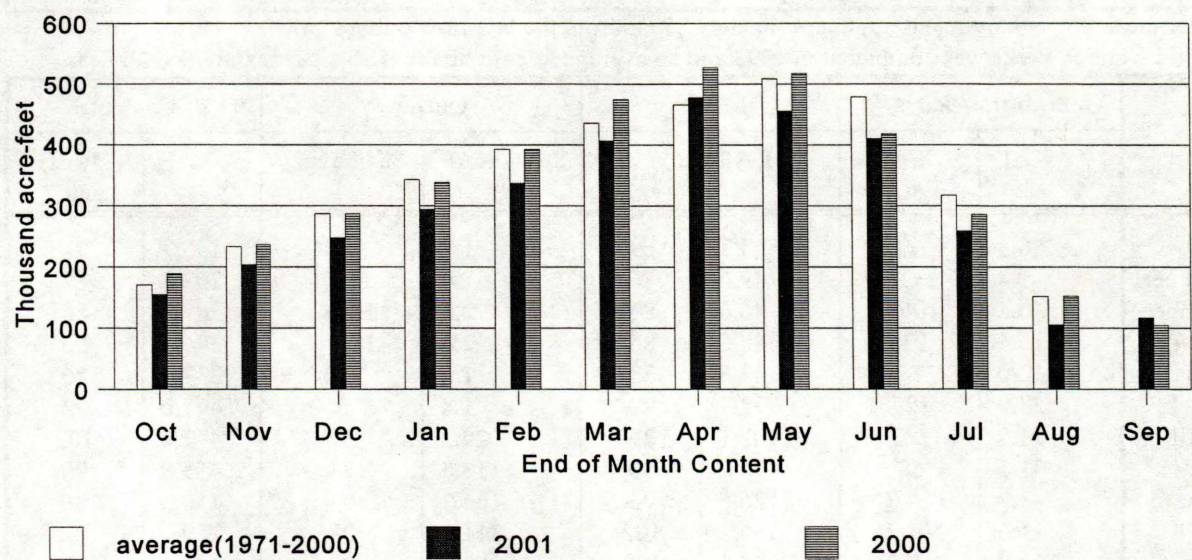


Figure 7



**Table 5**  
**Glendo Reservoir Hydrologic Data**  
**for Water Year 2001**

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	4581.32	104,173	Oct 1, 2000
End of Water Year	4584.14	116,292	Sep 30, 2001
Annual Low	4575.34	81,103	Sep 14, 2001
Historic Low	4548.10	15,140	Sep 28, 1966
Annual High	4630.96	508,290	Jun 13&14, 2001
Historic High	4650.94	758,830	May 28, 1973

Inflow-Outflow Data	Inflow	Date	Outflow	Date
Annual Total(AF)	1,075,800	Oct'2000-Sep'2001	1,037,400	Oct'2000-Sep'2001
Daily Peak (CFS)	2,949	Jul 11, 2001	7,838	Jul 25, 2001
Daily Minimum (CFS)	37	Oct 26, 2000	25 <u>4/</u>	Oct'2000-Sep2001
Peak Bypass Release (CFS)			4,079	Jul 25, 2001
Total Bypass Release (AF)			229,592 <u>1/</u>	Oct'2000-Sep'2001

1/Includes the average daily release of approximately 25 cfs from the low flow outlet works..

4/A low flow outlet works was completed in 1993 and an average release of about 25 cfs is maintained all year.

Month	Gains from Alcova		Inflow		Outflow		Content	
	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	6.4	40	54.1	69	1.7	53 <u>4/</u>	155.7	91
November	9.4	71	49.6	76	1.4	82 <u>4/</u>	203.5	87
December	10.8	140	46.6	84	2.0	105 <u>4/</u>	247.8	86
January	13.4	121	49.3	86	2.4	126 <u>4/</u>	294.5	86
February	12.0	78	44.5	78	1.6	62 <u>4/</u>	337.0	86
March	23.9	127	72.7	92	1.8	5	407.0	93
April	51.5	123	102.7	89	29.2	36	477.6	102
May	51.5	58	98.2	50	115.5	78	455.8	90
June	-1.7	NA <u>3/</u>	126.6	73	166.2	84	410.5	86
July	11.6	NA <u>3/</u>	166.2	102	311.9	98	259.3	82
August	11.2	NA <u>3/</u>	150.3	102	301.2	98	105.2	69
September	5.1	45	115.0	116	102.5	68	116.3	117
Annual	205.1	81	1075.8	84	1037.4	83		

2/30 year average is the period (1971-2000)

3/ Represents a negative number that makes the percentage meaningless

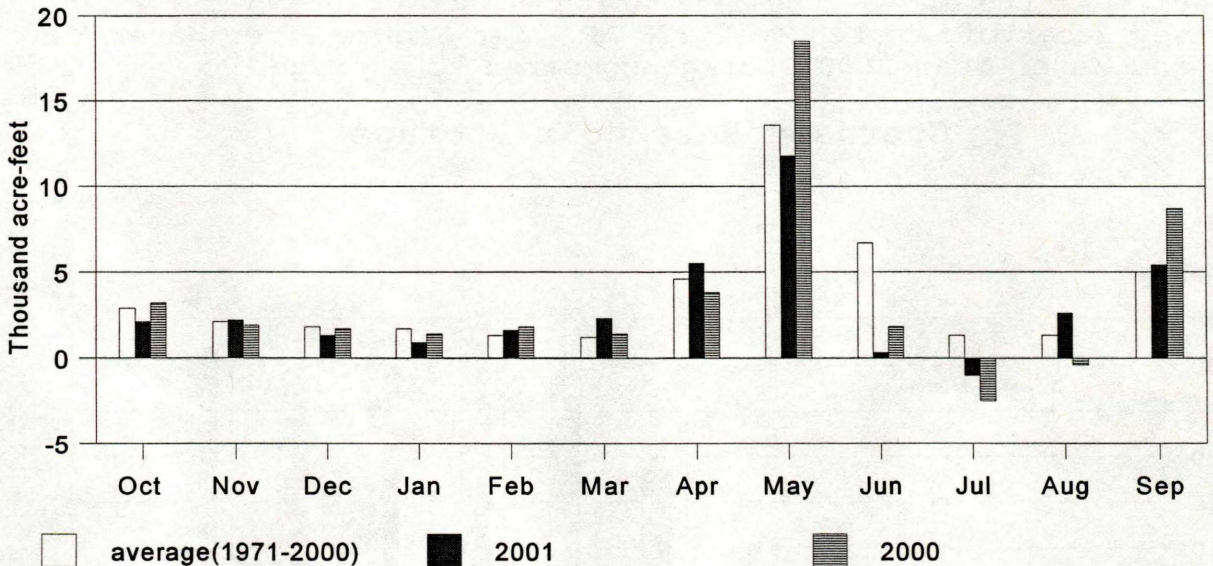
4/ 7 year average (1994-2000), represent an average to include only low flow outlet work numbers.



Gains to the North Platte River  
Glendo Dam to Guernsey Dam

The river gains between Glendo Dam and Guernsey Dam during Water Year 2001, were above average for the months of November, 2000, February, March, April, and September, 2001. The actual April-July gain was 16,600 AF, which was 63 percent of Average. On July 25, 2001, daily computed inflow to Guernsey Reservoir peaked at 7,925 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

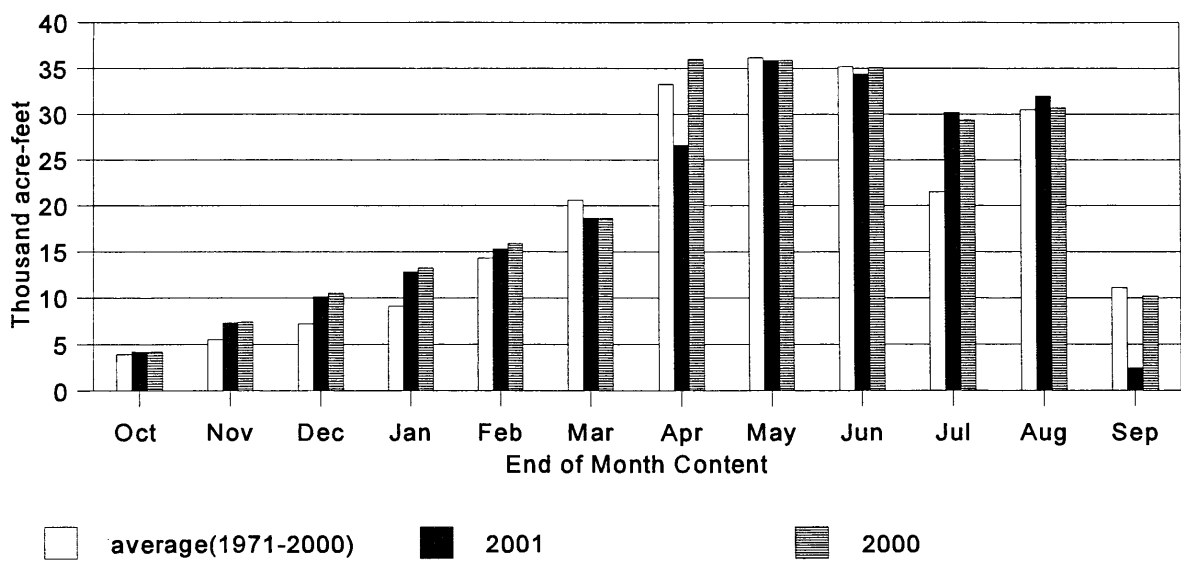
The Guernsey Dam, located about 25 miles below Glendo Dam, again stores and reregulates the flow of the river prior to delivery of storage water to project lands of the North Platte Project and Glendo Unit. Guernsey Powerplant, located on the right abutment of the dam, has two 3.2 MW electrical generating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



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

At the end of Water Year 2000, storage in Guernsey Reservoir was drawn down to 10,160 AF. Guernsey Reservoir releases were started on April 16, 2001, in preparation for moving water to the Inland Lakes. The annual "silt run" from the reservoir was initiated on July 10 and continued for 14 days. Reservoir storage was reduced to initiate the "silt run" and was maintained at a low level throughout the period. The minimum reservoir content during the "silt run" of 840 AF occurred on July 23, 2001. Following the "silt run," the reservoir was refilled to 30,220 AF by July 31, 2001. At the end of the irrigation season, September 30, 2001, Guernsey Reservoir contented 2,376 AF. See Figure 9 for Water Year 2001 and Water Year 2000 storage compared to average.

**Guernsey Reservoir Storage**



**Figure 9**



## Water Year 2001 Precipitation

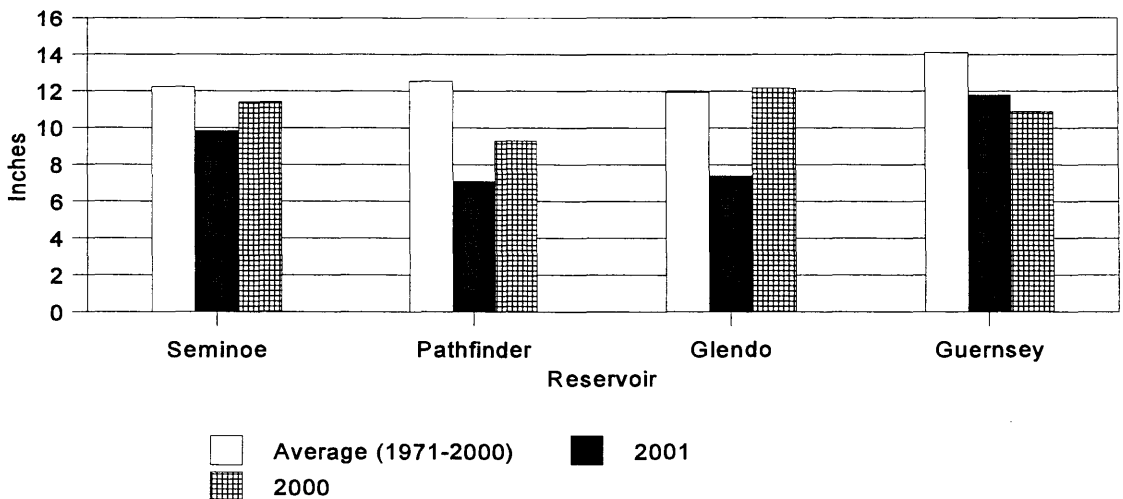
Although the precipitation was quite variable from month to month throughout the North Platte River Basin, all watersheds had below average total precipitation for the Water Year. October precipitation at the Walden, Colorado, weather station in the Seminoe watershed, was the lowest October precipitation in the last 30 years and the Elk Mountain, Wyoming, weather station recorded the 2nd lowest October precipitation in the last 30 years. October precipitation in the Casper and Glenrock, weather stations in the Glendo watershed both recorded the 3rd and 2nd lowest October precipitation, respectfully, in the last 30 years. November precipitation at the Spicer, Colorado, weather station in the Seminoe watershed was the 3rd lowest November precipitation in the last 30 years. The Casper, Wyoming, weather station, recorded the 3rd lowest November precipitation in the last 30 years. In the Guernsey watershed, the Glendo Dam, Wyoming, weather station recorded the 4th lowest November precipitation in the last 30 years and the Guernsey Dam, weather station recorded the highest precipitation of record in 57 years. January precipitation at the Spicer, Colorado, weather station, in the Seminoe watershed was the 5th lowest January precipitation in the last 30 years. January Precipitation at the Muddy Gap, weather station, in the Pathfinder watershed recorded the 2nd lowest January precipitation of record in 41 years. February precipitation at the Saratoga, Wyoming, weather station in the Seminoe watershed, was the 4th highest in the last 30 years. February precipitation at the Pathfinder Dam, Wyoming, weather station in the Pathfinder watershed, was the 5th highest in the last 30 years. February precipitation at the Glenrock, Wyoming, weather station in the Glendo watershed, was the 5th highest in the last 30 years. Precipitation at the Saratoga, Wyoming, weather station in the Seminoe watershed, was the lowest March precipitation in the last 30 years. Precipitation at the Casper, Wyoming, weather station in the Glendo watershed, was the lowest March precipitation in the last 30 years. Precipitation at the Guernsey Dam, Wyoming, weather station in the Guernsey watershed, tied the 2nd lowest March precipitation in the last 30 years. Precipitation at the Guernsey Dam, Wyoming, weather station in the Guernsey watershed, was the 5th highest April precipitation in the last 30 years. The Pathfinder Dam, and Muddy Gap, Wyoming, weather stations in the Pathfinder watershed, both recorded the 3rd lowest May precipitation in the last 30 years. The Pathfinder Dam, and Casper, Wyoming, weather stations in the Glendo watershed, both recorded the 3rd lowest May precipitation in the last 30 years. The Elk Mountain, Wyoming, weather station recorded the lowest June precipitation in the last 30 years and the Walden, Colorado, weather station recorded the 2nd lowest June precipitation in the last 30 years, both weather stations are in Seminoe Watershed. The Casper, Wyoming, weather station recorded the 5th lowest June precipitation in the last 30 years, and the Glenrock, Wyoming, weather station recorded the 2nd lowest June precipitation in the last 30 years, both weather stations are in the Glendo watershed. In the Pathfinder watershed, the Lander, Wyoming, weather station recorded the lowest July precipitation in the last 30 years. In the Seminoe watershed, the Walden, Colorado, weather station recorded the highest August precipitation of record in 78 years.



## Water Year 2001 Precipitation (Cont'd)

In the Pathfinder and Glendo watersheds, the Pathfinder Dam, Wyoming, weather station tied the 4th lowest August precipitation in the last 30 years. In the Guernsey watershed, the Guernsey Dam, Wyoming, weather station recorded the 5th lowest August precipitation in the last 30 years. In the Seminoe watershed, the Seminoe Dam, Wyoming, weather station recorded the lowest September precipitation in the last 30 years. See table 6 for monthly comparison of precipitation.

### **North Platte River Basin Precipitation by Watershed Total for Water Year**



**Figure 10**



**Table 6**  
**Summary of precipitation by Watershed**  
**Water Year 2001**  
**End of month**

Seminole Watershed 1/			Pathfinder Watershed 1/		
Month	precip in inches	percent of average 2/	Month	precip in inches	percent of average 2/
October	.38	37	October	.81	70
November	.71	80	November	.46	54
December	.71	99	December	.43	61
January	.35	49	January	.18	26
February	.72	108	February	.59	100
March	.53	60	March	.39	36
April	1.49	126	April	1.10	71
May	.98	59	May	.58	27
June	.10	10	June	.36	34
July	1.36	105	July	.45	46
August	1.76	169	August	.60	86
September	.74	67	September	1.14	108
Water Year Total	9.83	80	Water Year Total	7.09	56

Glendo Watershed 1/			Guernsey Watershed 1/		
Month	precip in inches	percent of average 2/	Month	precip in inches	percent of average 2/
October	.43	38	October	.98	90
November	.58	85	November	1.28	207
December	.44	94	December	.43	102
January	.35	80	January	.15	44
February	.63	124	February	.14	33
March	.22	28	March	.12	16
April	.99	65	April	2.83	161
May	.73	32	May	1.36	53
June	.23	18	June	.78	39
July	1.27	113	July	1.95	111
August	.40	55	August	.35	30
September	1.12	114	September	1.47	118
Water Year Total	7.39	62	Water Year Total	11.84	84

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

2/30 year average is the period (1971-2000)



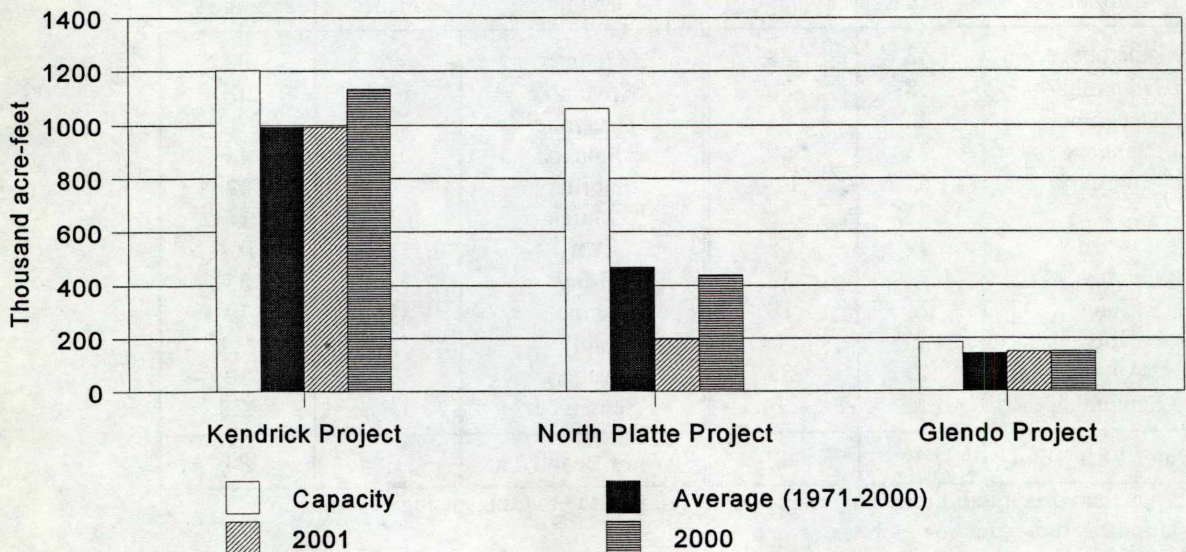
## 2001 Ownerships

At the end of Water Year 2000, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 439,338 AF of water, which is 93 percent of average. The Kendrick ownership contained 1,132,038 AF of water, which is 105 percent of average; and the Glendo ownership contained 149,441 AF of water, which is 105 percent of average. Only three ownerships filled to the permitted amount during water year 2001. The North Platte Guernsey ownership filled on March 8, 2001. The North Platte Inland Lakes ownership filled on April 20, 2001. The Glendo ownership filled on April 28, 2001.

The total amount of water stored at the end of Water Year 2001 in the mainstem reservoirs for use in Water Year 2002 was 1,347,142 AF . This total does not include 31,101 AF of water remaining in the four Inland Lakes in Nebraska.

At the end of Water Year 2001, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 196,501 AF of water and the Glendo ownership contained 148,153 AF of water. The Kendrick ownership at the end of September contained 992,355 AF, and 4,419 AF was in the operational/re-regulation water account. Also stored in the North Platte storage system was 3,751 AF for the City of Cheyenne and 1,963 AF for Pacific Power. See Figure 11 for the last two Water Years ownership carryover compared with average and capacity. Table number 7 shows a summary of ownership for Water Year 2001.

### **Ownership End of September**



**Figure 11**



Summary of North Platte River System Ownerships for Water Year 2001 (AF)

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL E/
<u>PATHFINDER OWNERSHIP</u>														
ACCRUAL		30081 E/	26974 E/	28685	27526	28148	64006	109754	120700 A/	1946 A/	242 A/	0	6987	445049
EVAPORATION		2287	660	450	514	459	1408	4396	6974	11134	11495	6913	2850	49540
DELIVERY B/		6230	5	0	0	0	0	0	0	152	261978	272853	97128	638346
OWNERSHIP	439338 E/	460902	487211	515446	542458	570147	632745	738103	851829	842489	569258	289492	196501	
<u>KENDRICK OWNERSHIP</u>														
ACCRUAL		0	0	0	0	0	0	0	0	0	0	0	0	0
EVAPORATION		3778	1215	780	844	728	2049	5736	7412	11187	12628	10390	6575	63322
DELIVERY B/		0	0	0	0	0	0	0	17360	15665	19288	17096	6952	76361
OWNERSHIP	1132038	1128260	1127045	1126265	1125421	1124693	1122644	1116908	1092136	1065284	1033368	1005882	992355	
<u>GLENDO OWNERSHIP</u>														
ACCRUAL		0	5 E/	0	0	0	16771	21453 C/	2413 C/	1778 C/	4 G/	0	56	42480
EVAPORATION		1242	410	290	215	245	626	1389	2413	2902	3687	3713	2404	19536
DELIVERY & LOSS B/		5 E/	0 E/	0	1	1	0	0	0	2175	6385	8492	7163	24222
OWNERSHIP	149441	148194	147789	147499	147283	147037	163182	183246	183246	179947	169879	157674	148163	
<u>PACIFIC POWER</u>														
ACCRUAL		0	0	0	0	0	0	0	48	0	64	31	0	143
DELIVERY B/		0	0	0	0	0	0	0	0	0	0	0	7	12
EVAPORATION		12	2	0	0	0	3	7	24	28	31	31	30	168
IN STORAGE	2000	1988	1986	1986	1986	1986	1983	1976	2000	1967	2000	2000	1963	
<u>GUERNSEY OWNERSHIP</u>														
ACCRUAL		0	0	11621	13761	12981	7436	734 C/	897 C/	808 C/	0	0	0	48238
EVAPORATION		0	0	30	60	73	244	514	897	1059	0	0	0	2877
DELIVERY B/		0	0	0	0	0	0	0	0	45361	0	0	0	45361
OWNERSHIP	0	0	0	11591	25292	38200	45392	45612	45612	0	0	0	0	



Summary of North Platte River System Ownerships for Water Year 2001 (AF)

MONTHS	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL E/
<u>INLAND LAKES OWNERSHIP</u>														
ACCRUAL		6328	11173	0	0	0	0	26915	0	0	0	0	0	44416
EVAPORATION		44	63	29	31	29	58	153	7	0	0	0	0	414
TRANSFER D/ OWNERSHIP	0	0	0	0	0	0	0	33766	10236	0	0	0	0	44002
	0	6284	17394	17365	17334	17305	17247	10243	0	0	0	0	0	
<u>CITY OF CHEYENNE</u>														
ACCRUAL		815	794	455	752	386	625	1267	0	0	712	769	814	7389
EVAPORATION		11	2	0	0	0	10	49	51	29	27	28	24	214
DELIVERY B/ OWNERSHIP	3727	0	0	0	0	0	0	6	5447	1360	112	175	34	7134
	3727	4531	5323	5778	6530	6916	7531	8743	3245	1856	2429	2995	3751	
<u>EXCESS WATER</u>														
ACCRUAL		0	0	0	0	0	1288	7723	27679	217	0	0	604	37511
EVAPORATION		72	11	1	0	1	20	78	541	577	314	235	103	1953
RELEASED		0	0	0	0	0	0	0	0	35354	4136	3722	1505	44717
OWNERSHIP	13578	13506	13495	13494	13494	13493	14761	22406	49544	13830	9380	5423	4419	

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. The exchange water was returned to Pathfinder at a rate of 26 AF daily starting on May 1, 2001 until July 10, 2001, when the last 8 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 2001 North Platte River Ownership and Natural Flow Accounting Procedures, ownerships were allowed to refill water lost to evaporation from excess until June 21, 2001.

D/ Transfer refers to Inland Lakes ownership water which was delivered from storage in Glendo or Guernsey. In April and May, 37,385 AF and 8,391 AF were delivered to the Inland Lakes respectively.

E/ Not an actual accrual or delivery but a correction to the ownership record which was made on November 28, 2000 to account for a delivery of Glendo Temporary service contracts water which taken prior to the end of the Water Year. The correction was also reflected on revised ownership accounting sheets for September 30 and October 31, 2000.

F/ Total accrual may appear greater than the capacity of the water right in some cases because evaporation which is replaced from daily inflows while the ownership is in priority is included, when in fact the portion of inflow which goes to replace evaporation each day is not technically an accrual. Likewise the total evaporation shown is all evaporation from the ownership including that which was replaced from inflow when the ownership was in priority.

G/ Not an actual accrual but a correction to Bridgeport ID made on July 11, 2001



## Seminole Reservoir

Initial Content 829.1 kaf

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Total Inflow kaf	17.8	17.1	20.2	19.0	20.1	52.3	87.0	182.6	88.3	28.6	14.6	10.0	557.6
Total Inflow cfs	290	287	328	308	362	851	1462	2970	1484	465	237	168	
Turbine Release kaf	53.2	53.8	53.0	55.3	50.1	55.2	65.8	89.7	83.4	61.7	52.6	47.3	721.1
Jetflow Release kaf	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.7
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	0
Total Release kaf	53.2	53.8	54.6	55.3	50.1	55.2	65.8	89.7	83.4	61.7	52.6	47.4	722.8
Total Release cfs	864	905	888	899	902	898	1105	1458	1402	1004	856	797	
Evaporation kaf	2.6	1.0	0.6	0.6	0.5	1.3	4.0	5.2	8.7	9.6	7.5	4.5	46.1
End-month content kaf	791.1	753.4	718.4	681.5	651.0	646.8	664.0	751.7	747.9	705.2	659.7	617.8	
End-month elevation ft	6344.73	6342.42	6340.18	6337.72	6335.61	6335.31	6336.52	6342.31	6342.07	6339.31	6336.22	6333.22	
Generation gwh	9.0	9.1	9.1	9.3	8.3	9.2	11.2	15.3	13.9	9.6	8.3	7.8	120.1

## Kortes Reservoir

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Total Inflow kaf	53.2	53.8	54.6	55.3	50.1	55.2	65.8	89.7	83.4	61.7	52.6	47.4	722.8
Turbine Release kaf	52.8	53.8	54.4	54.4	49.5	55.5	65.2	89.8	83.2	61.7	52.5	47.4	720.2
Spillway Release kaf	0.3	0.0	0.2	0.9	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0	2.3
Total Release ka	53.1	53.8	54.6	55.3	50.1	55.5	65.5	89.8	83.2	61.7	52.5	47.4	722.5
Total Release cfs	864	904	888	899	902	902	1101	1461	1399	1003	854	797	
Generation gwh	9.0	9.4	9.7	9.7	8.7	9.7	11.7	15.6	13.8	9.9	8.7	8.0	123.9



## Pathfinder Reservoir

Initial Content 610.4 kaf

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Sweetwater Inflow	kaf	2.4	2.8	3.3	3.9	1.2	1.6	9.0	8.2	2.2	1.2	0.6	0.8	37.2
Kortes-Path Gain	kaf	6.3	3.4	6.7	6.4	8.2	14.0	14.6	9.0	4.9	7.3	7.9	8.5	97.2
Inflow from Kortes	kaf	53.1	53.8	54.6	55.3	50.1	55.5	65.5	89.8	83.2	61.7	52.5	47.4	722.5
Total Inflow	kaf	61.8	60.0	64.6	65.6	59.5	71.1	89.1	107.0	90.3	70.2	61.0	56.7	856.9
Total Inflow	cfs	1005	1009	1051	1067	1071	1157	1498	1740	1518	1142	993	953	
Turbine Release	kaf	19.5	36.2	36.3	37.3	33.6	50.9	77.8	76.5	150.7	173.3	170.1	107.0	969.2
Jetflow Release	kaf	0.0	0.0	0.0	0.0	0.0	0.9	2.9	0.0	1.5	5.8	8.9	2.0	22
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	19.5	36.2	36.3	37.3	33.6	51.8	80.7	76.5	152.2	179.1	179.0	109.0	991.2
Total Release	cfs	317	609	590	607	605	843	1356	1244	2558	2912	2912	1831	
Evaporation	ka	2.8	1.0	0.5	0.7	0.6	1.8	4.9	6.9	10.3	10.6	7.8	4.3	52.2
End-month content	ka	649.9	672.7	700.5	728.1	753.4	770.9	774.4	798.0	725.8	606.3	480.5	423.9	
End-month elevation	ft	5830.73	5832.16	5833.84	5835.46	5836.90	5837.88	5838.07	5839.35	5835.33	5827.88	5818.50	5813.55	
Generation Fremont	gwh	4.4	9.7	9.6	10.3	8.9	14.2	22.0	21.5	41.3	46.3	44.6	27.6	260.4

## Alcova Reservoir

Initial Content 180.0 kaf

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Total Inflow	kaf	19.5	36.2	36.3	37.3	33.6	51.8	80.7	76.5	152.2	179.1	179.0	109.0	991.2
Total Inflow	cfs	317	609	590	607	605	843	1356	1244	2558	2912	2912	1831	
Turbine Release	kaf	42.5	35.4	36.9	37.0	33.3	52.0	58.1	56.5	135.1	159.5	160.0	100.3	906.6
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	0.0
Casper Canal Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4	15.3	19.3	17.1	7.0	76.1
Total Release	kaf	42.5	35.4	36.9	37.0	33.3	52.0	58.1	73.9	150.4	178.8	177.1	107.3	982.7
Total Release	cfs	691	594	601	602	600	845	976	1202	2528	2908	2880	1803	
Evaporation	ka	0.5	0.1	0.1	0.1	0.1	0.2	0.7	0.9	1.4	1.7	1.4	0.9	8.1
End-month content	ka	156.5	157.2	156.5	156.7	156.9	156.5	178.4	180.1	180.5	179.1	179.6	180.4	
End-month elevation	ft	5488.20	5488.53	5488.21	5488.29	5488.37	5488.20	5497.55	5498.26	5498.41	5497.85	5498.06	5498.36	
Generation	gwh	5.0	4.1	4.2	4.3	3.8	6.6	7.8	7.5	18.7	21.7	21.8	13.4	118.9

## Gray Reef Reservoir

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Total Inflow	ka	42.5	35.4	36.9	37.0	33.3	52.0	58.1	56.5	135.1	159.5	160.0	100.3	906.6
Total Inflow	cfs	691	594	601	602	600	845	976	919	2271	2594	2603	1686	
Total Release	ka	42.5	35.7	36.8	36.9	33.4	52.2	57.8	56.3	135.1	159.4	159.9	100.2	906.2
Total Release	cfs	691	600	599	600	601	849	972	916	2271	2593	2600	1684	



## Glendo Reservoir

Initial Content 104.2 ka

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Alcova-Glendo Gain ka	6.4	9.4	10.8	13.4	12.0	23.9	51.5	51.5	-1.7	11.6	11.2	5.1	205.1
Infl from Gray Reef ka	42.5	35.7	36.8	36.9	33.4	52.2	57.8	56.3	135.1	159.4	159.9	100.2	906.2
Total Inflow ka	54.1	49.6	46.6	49.3	44.5	72.7	102.7	98.2	126.6	166.2	150.3	115.0	1075.8
Total Inflow cfs	880	833	758	802	801	1183	1726	1596	2128	2703	2445	1933	
Turbine Release ka	0.0	0.0	0.0	0.0	0.0	0.0	27.1	113.9	139.8	221.8	212.3	92.9	807.8
Low Flow Release ka	1.7	1.4	2.0	2.4	1.6	1.8	2.1	1.6	1.5	1.6	1.6	1.5	20.8
Spillway Release ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Irrigation Release ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.9	88.5	87.3	8.1	208.8
Total Release ka	1.7	1.4	2.0	2.4	1.6	1.8	29.2	115.5	166.2	311.9	301.2	102.5	1037.4
Total Release cfs	28	23	33	38	29	29	491	1878	2793	5073	4898	1723	
Evaporation ka	0.9	0.4	0.3	0.2	0.4	0.9	2.9	4.5	5.7	5.5	3.2	1.4	26.3
End-month content ka	155.7	203.5	247.8	294.5	337.0	407.0	477.6	455.8	410.5	259.3	105.2	116.3	
End-month elevation ft	4592.19	4600.19	4606.57	4612.61	4617.62	4625.04	4631.65	4629.69	4625.39	4608.11	4581.57	4584.14	
Generation gwh	0.0	0.0	0.0	0.0	0.0	0.0	1.9	12.3	14.9	20.7	17.1	5.7	72.6

## Guernsey Reservoir

Initial Content 10.2 ka

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Glendo-Guerns Gain ka	2.1	2.2	1.3	0.9	1.6	2.3	5.5	11.8	0.3	-1.0	2.6	5.4	35
Inflow from Glendo cfs	1.7	1.4	2.0	2.4	1.6	1.8	29.2	115.5	166.2	311.9	301.2	102.5	1037.4
Total Inflow ka	3.8	3.6	3.3	3.3	3.2	4.1	34.7	127.3	166.5	310.9	303.8	107.9	1072.4
Total Inflow cfs	62	60	53	53	58	68	584	2069	2799	5057	4940	1815	
Turbine Release ka	6.8	0.0	0.0	0.0	0.0	0.0	26.2	56.6	59.1	12.3	61.7	41.1	263.8
Seepage ka	0.7	0.3	0.5	0.6	0.6	0.7	0.2	0.0	0.0	0.0	0.0	0.0	3.6
Spillway Release ka	2.3	0.0	0.0	0.0	0.0	0.0	0.0	60.5	107.8	281.3	239.3	96.1	787.3
Total Release ka	9.8	0.3	0.5	0.6	0.6	0.7	26.4	117.1	166.9	314.6	301.0	137.2	1075.7
Total Release cfs	159	6	7	9	11	12	444	1904	2805	5117	4895	2306	
Evaporation ka	0.0	0.2	0.0	0.0	0.1	0.1	0.3	0.9	1.1	0.5	1.0	0.3	4.5
End-month content ka	4.2	7.3	10.1	12.8	15.3	18.6	26.6	35.9	34.4	30.2	32.0	2.4	
End-month elevation ft	4393.10	4397.52	4400.40	4402.66	4404.54	4406.70	4411.19	4415.74	4415.05	4413.03	4413.90	4389.09	
Generation gwh	0.4	0.0	0.0	0.0	0.0	0.0	1.8	4.1	4.4	2.2	4.5	2.8	20.2



### Flood Benefits

The Corps of Engineers, Omaha District, estimates that in Water Year 2001 flood damages of \$1,611,100.00 were prevented 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 2001	PRIOR TO 2001	ACCUMULATED TOTAL
SEMINOE	\$0	\$27,642,800	\$27,642,800
PATHFINDER	\$0	\$8,760,200	\$8,760,200
ALCOVA	\$0	\$477,500	\$477,500
GLENDON	\$1,611,100	\$60,080,000	\$61,691,100
GUERNSEY	\$0	\$439,000	\$439,000
TOTAL	\$1,611,100	\$97,399,500	\$99,010,600

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 2001 except for Glendo Dam, which is 1965 through 2001.



Table 10

**Power Generation Water Year 2001**

<u>Powerplant</u>	<u>Gross generation (Giga-watt Hours)</u>	<u>Percent of average 1/</u>
Seminole	120.1	81
Kortes	123.9	80
Fremont Canyon	260.8	99
Alcova	118.8	91
Glendo	72.6	81
Guernsey	20.3	90
Total Basin	716.5	89

1/ 30 year average (1971-2000).

Table 11

**Most Probable Power Generation Water Year 2002**

<u>Powerplant</u>	<u>Gross generation (giga-watt hours)1/</u>	<u>Percent of average 2/</u>
Seminole	150.3	102
Kortes	157.1	101
Fremont Canyon	241.9	87
Alcova	116.0	89
Glendo	87.0	98
Guernsey	21.8	99
Total Basin	774.1	94

1/ Gross generation based on October 2001 storage and a Most Probable expected inflow plan.

2/ 30 year average (1972-2001).



Table 12

North Platte River Powerplant Data

Powerplant	Number of Units	Capacity each Unit (Kw)	Total <u>2</u> / installed Capacity (Kw)	Normal operating Head (Ft)	Output at rated Head (Ft <sup>3</sup> /s)	30 Year Average <u>1</u> / (Kw)
Seminole	3	15,000	45,000	97-227	4,050	147,900
Kortes	3	12,000	36,000	192-204	2,910	155,200
Fremont Canyon	2	33,000	66,800	247-363	3,080	261,900
Alcova	2	18,000	36,000	153-165	4,100	129,800
Glendo	2	19,000	38,000	73-156	3,400	89,400
Guernsey	2	3,200	6,400	89-91	1,340	22,200
Total	14	-----	228,200	-----	-----	806,400

1/1971-20002/Installed capacity from Monthly Report of Power Operations - Powerplant (Form 59)



Table 13

**Proposed Generating Unit Maintenance Schedule**  
**North Platte River System**  
**October 2001 Through September 2002**

<u>Facility and Unit No.</u>	<u>Scheduled Period</u>	<u>Description of Work</u>
Seminole Unit #1	09-10-01 through 10-11-01	Annual Maintenance
Alcova Unit #1	09-17-01 through 03-08-02	Annual Maintenance/rewind And commissioning
Fremont Unit #1	10-01-01 through 11-08-01	Annual Maintenance
Seminole Unit #2	10-15-01 through 11-08-01	Annual Maintenance
Guernsey Unit #1	10-19-01 through 11-08-01	Annual Maintenance
Glendo Unit #1	10-29-01 through 12-06-01	Annual Maintenance
Seminole Unit #3	11-12-01 through 12-06-01	Annual Maintenance
Fremont Unit #2	11-12-01 through 12-20-01	Annual Maintenance
Kortes Unit #1	12-10-01 through 01-10-02	Annual Maintenance
Glendo Unit #2	01-02-02 through 01-23-02	Annual Maintenance
Guernsey Unit #2	01-07-02 through 02-14-02	Annual Maintenance
Kortes Unit #2	01-14-02 through 02-07-02	Annual Maintenance
Kortes Unit #3	02-11-02 through 03-14-02	Annual Maintenance
Alcova Unit #2	03-11-02 through 04-19-02	Annual Maintenance



Three operation studies were developed for the System to establish an AOP for Water Year 2002. 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 2002 has a one-in-ten chance of being less than the reasonable minimum. Statistically, inflows in 2002 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 2002 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 1,347,142 AF at the beginning of the Water Year 2002. This amount was 85 percent of the 30 year average (1972-2001) and only 48 percent of capacity.



## Seminole Reservoir

### Most Probable Condition - 2002

October through March -- Seminole Reservoir storage of 617,806 AF, at the beginning of the Water Year, is 83 percent of the 30-year average and 61 percent of capacity. Planned turbine releases from Seminole Reservoir are 800 cfs for October through March. Reservoir storage will decrease to about 500,100 AF by March 31. These releases are projected based on a statistically estimated Seminole inflow for the October through March period of 175,800 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 1,200 cfs in April; 2,300 cfs in May; 2,400 cfs in June and July, and then decrease to 1,000 cfs in August; and 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 807,900 AF by the end of June. Projected carryover storage of about 669,900 AF at the end of the Water Year would be 91 percent of average and 66 percent of capacity.

### Reasonable Minimum Condition - 2002

October through March -- Planned water releases for this period under a reasonable minimum inflow condition are 800 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 are expected to be 151,300 AF for the period, which is 24,500 AF less than in the most probable condition. The March 31 reservoir content is expected to be approximately 474,500 AF under these conditions.

April through September -- Seminole water releases will remain at approximately 800 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 1,800 cfs in June and 2,000 cfs in July and then decrease to approximately 1,000 cfs, for August and 600 cfs in September. Under these conditions the Water Year will end with a Seminole Reservoir content of 388,200 AF (53 percent of average). The end of month content under these conditions will be approximately 556,000 AF at the end of June.

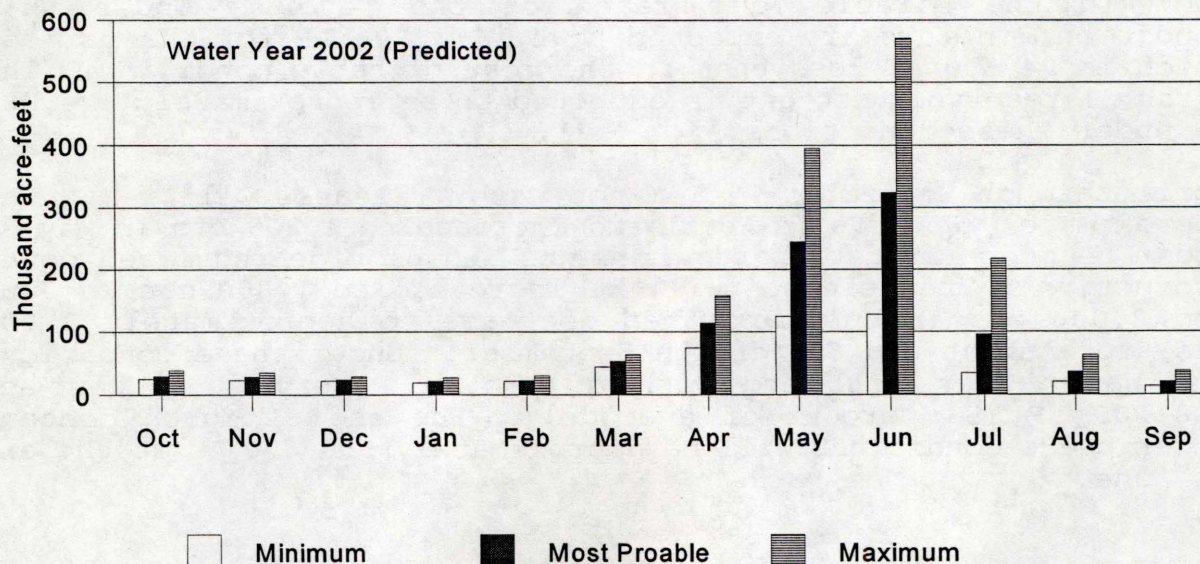


## Reasonable Maximum Condition - 2002

October through March -- Planned water releases for this period under a reasonable maximum inflow condition are similar to the most probable condition as water is moved downstream to generate power and make room in Seminole Reservoir for spring runoff. Although inflows to Seminole Reservoir are higher under these conditions, actual changes in winter operations are made gradually until it is evident that the inflow quantities being experienced are 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 45,300 AF more than the most probable runoff condition. The reservoir content would decrease from 617,800 AF at the end of September to 429,300 AF by the end of March under these conditions.

April through September -- Seminole Reservoir release for April and May will be 2,610 cfs. Releases will average approximately 4,340 cfs for June, and decrease to about 3,360 cfs in July, and then decrease further to a release of about 1,700 cfs in August. The September Seminole Reservoir release should average 1,000 cfs. Inflows for the April through July period will be 1,340,900 AF, which is 562,500 AF more than the most probable runoff condition. Seminole Reservoir will reach its maximum end of month content for the year in June with approximately 960,600 AF in storage. This plan of operation would result in an end of year carryover storage of 881,000 AF, which would be 119 percent of average.

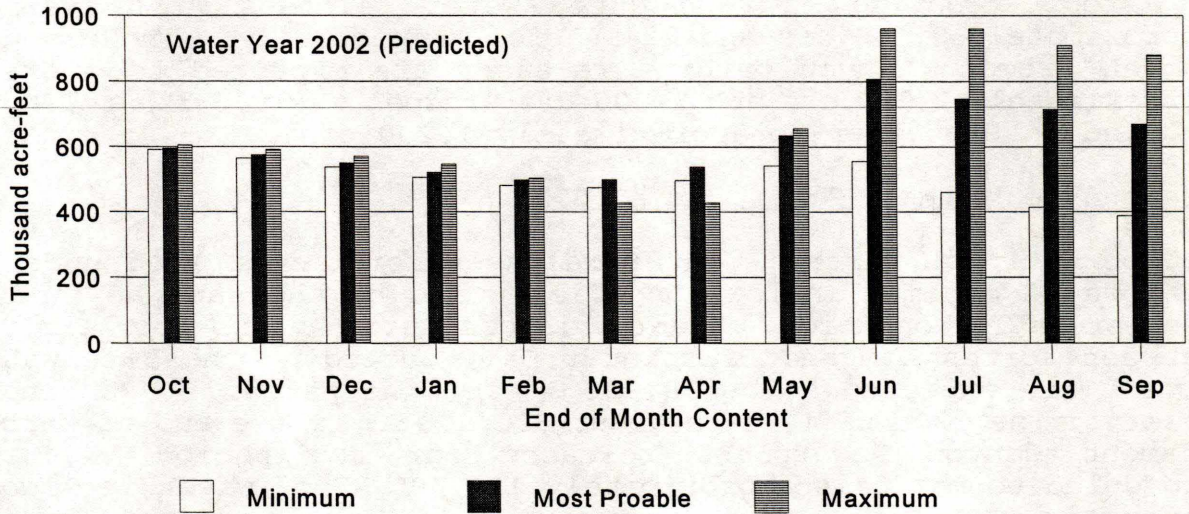
### **Seminole Reservoir Inflow**



**Figure 12**



## Seminoe Reservoir Storage



**Figure 13**

### Pathfinder Reservoir

#### Most Probable Condition - 2002

October through March -- At the end of the Water Year, Pathfinder Reservoir storage is 423,895 AF or 76 percent of the 1972-2001 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 528,500 AF at the end of March.

April through September -- Pathfinder Reservoir storage will reach a maximum of about 601,500 AF by the end of June and be drawn down to a storage content of about 493,300 AF by the end of the Water Year, which would be 88 percent of average. River gain between Kortes and Pathfinder Reservoirs, including the Sweetwater River, is estimated at about 84,400 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  $5498 \pm 1$  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 2,060 cfs and 2,410 cfs, respectively. In July and August Fremont Canyon turbine releases are expected to average approximately 2,720 cfs and 2,300 cfs, respectively, with releases reduced in September to approximately 1,200 cfs.

#### Reasonable Minimum Condition - 2002

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 520,600 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 2,750 cfs during July, then end the Water Year at approximately 960 cfs during September. If reasonable minimum runoff develops, the reservoir content at the end of the Water Year will be about 304,900 AF or 55 percent of average.

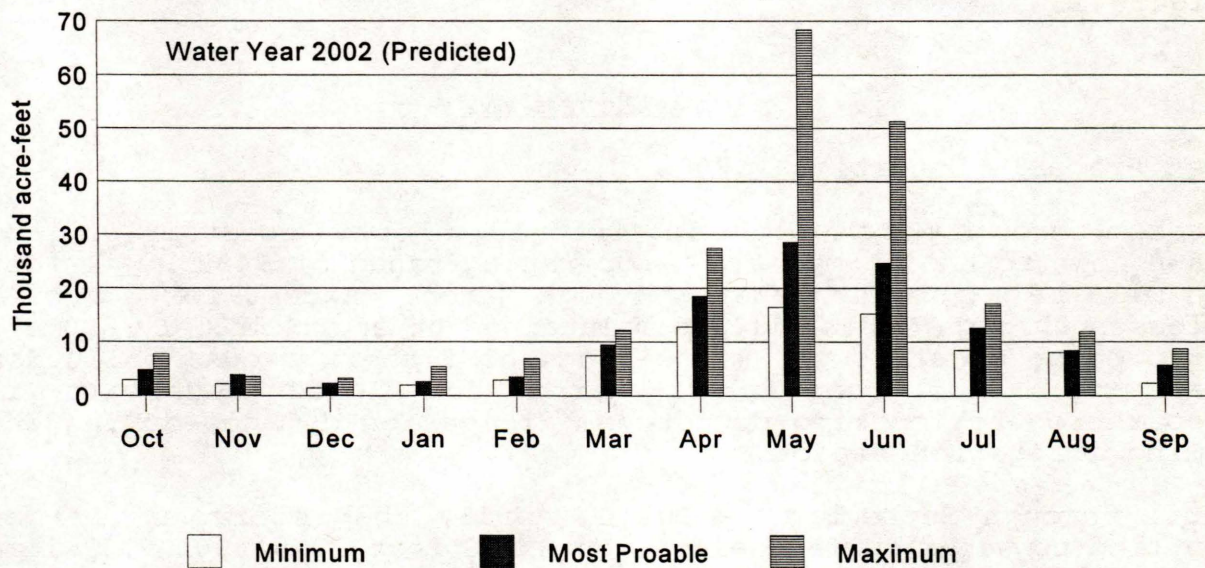
#### Reasonable Maximum Condition - 2002

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 and April when releases would be increased in anticipation of runoff. Under this condition, gains between Kortes Dam and Pathfinder Dam would be expected to be 39,100 AF for the period. Pathfinder Reservoir content increases through this period from 458,100 AF at the end of October to 655,500 AF by the end of March as releases from Seminole 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  $5498 \pm 1$  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 991,300 AF during June while releases average about 3,030 cfs in June and then increase to approximately 4,020 cfs in July and then decreased to 2,750 cfs by August ending the Water Year with flows of approximately 1,100 cfs. A bypass release through the jet flow valves of 95,000 AF would be required during the months of June through July under maximum conditions. The Pathfinder Reservoir end of year storage content is projected to be about 882,400 AF, which would be 158 percent of average.

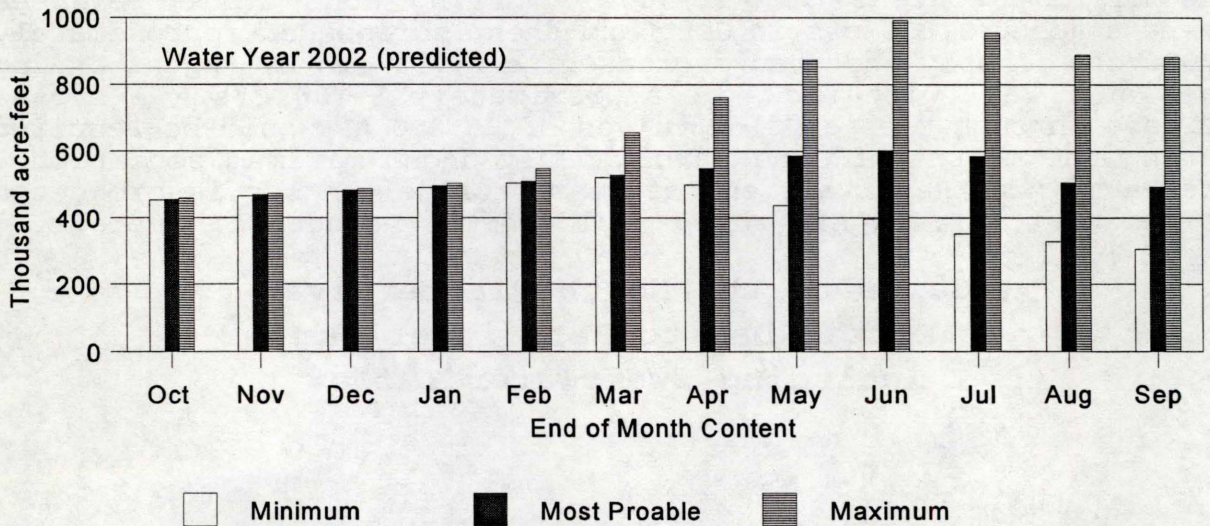
### Gains to the North Platte River Kortes Dam to Pathfinder Dam Including Sweetwater Inflow



**Figure 14**



## Pathfinder Reservoir Storage



**Figure 15**

### Alcova Reservoir

#### Most Probable Condition - 2002

October through March -- During October, Alcova Reservoir will be drawn down to the normal winter operating range of  $5488.0 \pm 1$  foot and will be maintained there through March. Except for October, releases through March will be maintained at approximately 600 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  $\pm 1$  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.



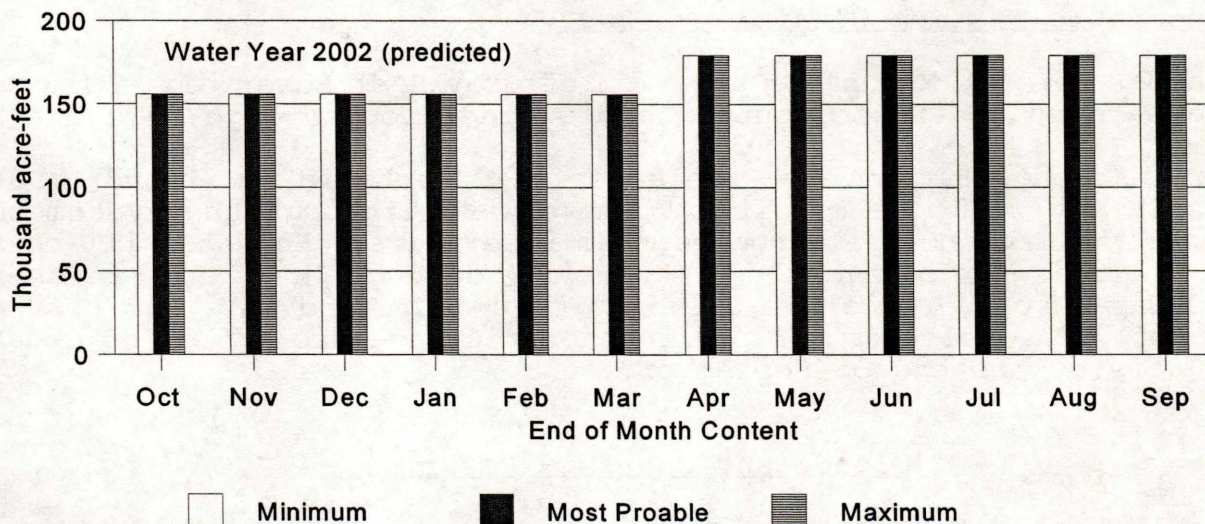
### Reasonable Minimum Condition - 2002

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 - 2002

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 - 2002

October through March -- Except for October, releases through March from Gray Reef Dam will be maintained at approximately 600 cfs. This will result in a winter river level the same as last year. The 30-year average flow below Gray Reef ranges between 750 cfs and 990 cfs for the months of October through March.



April through September -- Releases from Gray Reef Reservoir will average about 700 cfs in the month of April. The May through September releases are expected to be approximately 1,800 cfs in May; 2,100 cfs in June; 2,400 cfs in July; 2,000 cfs in August; and 1,080 cfs in September as project irrigation water is moved downstream.

#### Reasonable Minimum Condition - 2002

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

April through September -- Releases from Gray Reef Reservoir will average approximately 900 cfs in April; increasing to 2,100 cfs in May; and 2,300 cfs in June. The releases will be further increased in July to 2,400 cfs and then decreased to 1,100 cfs in August. The September releases will be reduced to average 800 cfs. These predicted flows may be redistributed as the irrigators adjust their use of water from storage.

#### Reasonable Maximum Condition - 2002

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

April through September -- Releases of 800 cfs in April and 1,500 cfs in May would be required to move water through the system to avoid filling and spilling upstream reservoirs. Release will then be increased to average 2,720 cfs during June and further increased to 3,700 cfs in July and then decreased to 2,440 cfs in August. The releases will be further decreased to a flow of about 980 cfs by the end of September.

### Glendo and Guernsey Reservoirs

#### Most Probable Condition - 2002

October through March -- Carryover storage of 116,292 AF in Glendo Reservoir on September 30, 2001 was 118 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 401,400 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 2,376 AF of water at the end of Water Year 2001. Natural inflow, as well as the low flow releases from Glendo Dam, will be stored during the winter which will increase storage to 19,800 AF by March 31.

April through September -- Glendo Reservoir storage will be about 507,900 AF by the end of June. 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 507,900 AF at the end of June which is approximately 0.80 feet below a full reservoir at elevation of 4634.2 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 around the end of July. 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 1,800 AF.

#### Reasonable Minimum Condition - 2002

October through March -- Guernsey Reservoir contained 2,376 AF of water at the end of Water Year 2001. 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 18,400 AF by March 31. Glendo Reservoir content will increase from the carryover storage of 116,292 AF to a March 31 content of 382,100 AF.

April through September -- Glendo Reservoir storage will increase to about 396,000 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 121,500 AF of water to bring Glendo to a full Reservoir at elevation of 4635 ft. During April 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 453,800 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 to 30,000 AF by July 31. September releases will be made to meet irrigation requirements leaving 81,300 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 - 2002

October through March -- Guernsey Reservoir contained 2,376 AF of water at the end of Water Year 2001. 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 19,300 AF by March 31. Glendo Reservoir content is expected to increase from the starting content of 116,292 AF to an end of March content of 410,700 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 during April, 2002. 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 513,600 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 30,000 AF by the end of the month. During September releases will be scheduled to lower Guernsey Reservoir to approximately 1,800 AF.

The operating plan shown assumes no downstream flow restrictions and normal irrigation deliveries. Glendo storage is projected to decrease to about 365,000 AF by the end of July and will be about 100,000 AF by the end of September. This end of year Glendo storage would be 101 percent of average and the total System storage at the end of the Water Year of 2,050,300 AF which includes about 6,300 AF of storage in Kortes and Gray Reef Reservoirs, would be 129 percent of average.



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

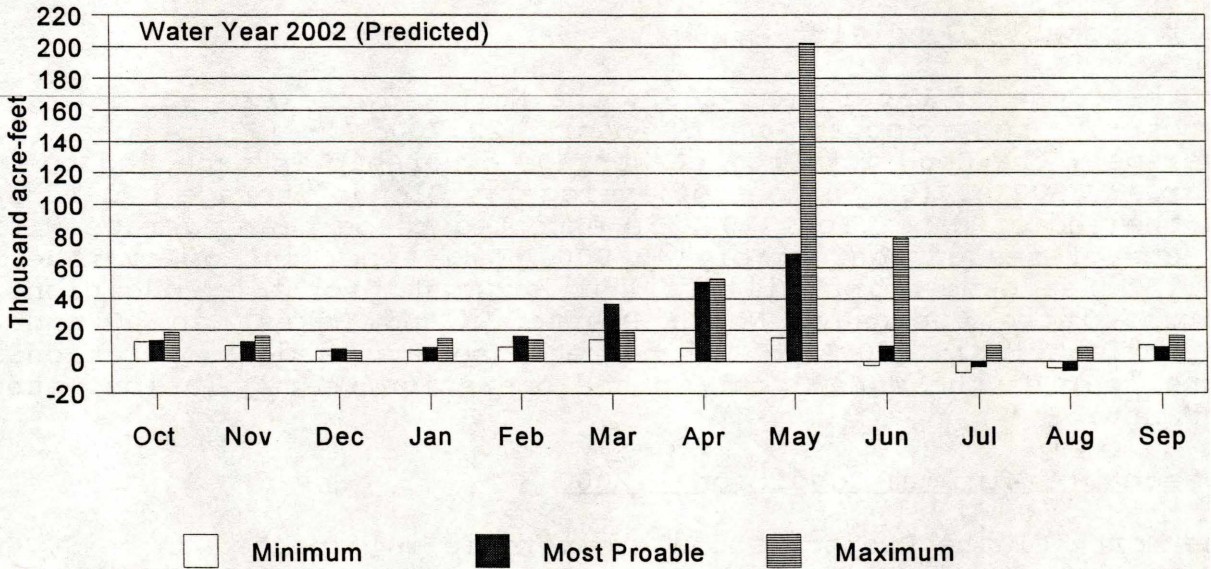


Figure 17

## Glendo Reservoir Storage

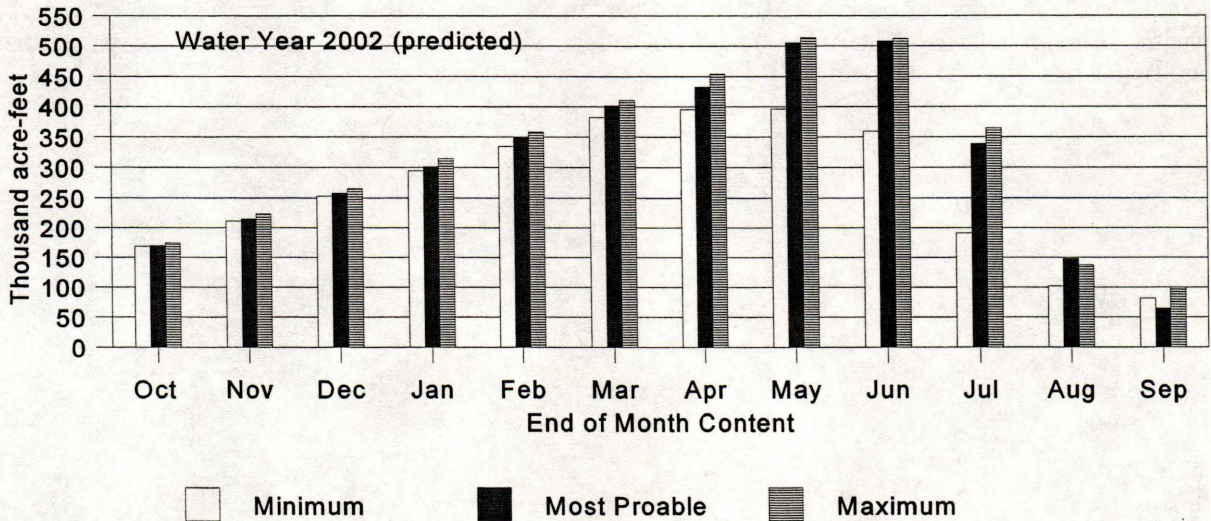


Figure 18



## Ownerships

### Most Probable Condition - 2002

At the close of Water Year 2002, the North Platte Project storage ownership is expected to be near 422,700 AF (93 percent of average); the Kendrick Project storage ownership is expected to be near 837,800 AF (85 percent of average). Glendo storage ownership at the end of Water Year 2002 is expected to be near average with an end-of-season content of 145,900 AF (104 percent of average). Only three ownerships will fill under most probable conditions; North Platte Guernsey, North Platte Inland Lakes, and Glendo. Approximately 15,000 AF will be retained and used as operational water during the water year in the operation/re-regulation water account.

### Reasonable Minimum Condition - 2002

The North Platte Project storage ownership is expected to be 9,700 AF at the close of the Water Year compared to 422,700 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 826,300 AF which is 84 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 114,900 AF (82 percent of average) at the close of Water Year 2002 under the reasonable minimum runoff conditions. The Glendo Unit ownership will not accrue any water during the Water Year.



## Reasonable Maximum Condition - 2002

All storage water ownerships in the North Platte River System will fill during the Water Year. About 532,300 AF of water, will be captured in the reservoirs as excess to ownership in the North Platte System. The water in the operational/re-regulation water account 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.

### Ownership End of September Water Year 2002 (Predicted)

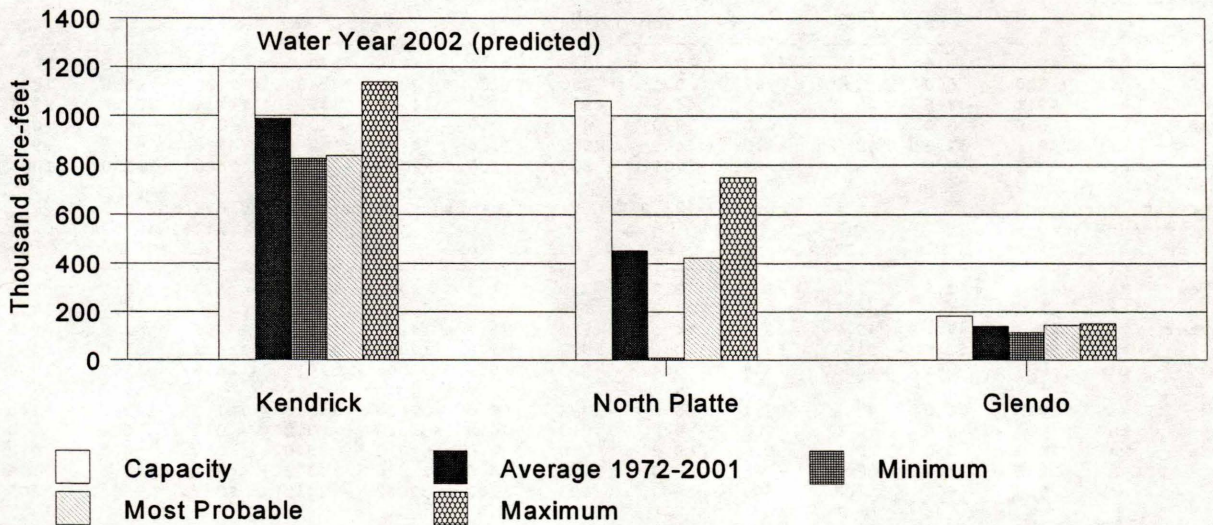


Figure 19



NORTH PLATTE RIVER OPERATING PLAN  
Year Beginning Oct 2001

HYDROLOGY OPERATIONS

Seminole Reservoir Operations		Initial Content 617.8 Ka						Operating Limits: Max 1017.3 Ka, 6357.00 Ft. Min 31.7 Ka, 6239.02 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	ka	29.0	27.9	23.5	20.7	22.1	52.6	114.1	244.3	324.2	95.8	35.8	19.8
Total Inflow	cfs	472.	469.	382.	337.	398.	855.	1918.	3973.	5448.	1558.	582.	333.
Turbine Release	ka	49.2	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Jetflow Release	ka	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	ka	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	ka	49.2	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Total Release	cfs	800.	800.	800.	802.	801.	800.	1200.	2300.	2400.	2400.	1000.	1000.
Evaporation	ka	3.8	2.0	1.0	1.0	1.0	2.1	3.9	4.2	7.9	9.3	7.6	5.3
End-month content	ka	595.9	575.5	550.2	522.1	498.7	500.1*	539.0*	635.3*	807.9*	747.3*	714.6*	669.9*
End-month elevation	ft	6331.6	6330.0	6328.0	6325.7	6323.7	6323.8	6327.1	6334.5	6345.7	6342.0	6339.9	6336.9
Kortes Reservoir Operations		Initial Content 4.7 Ka						Operating Limits: Max 4.8 Ka, 6142.73 Ft. Min 1.7 Ka, 6092.73 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	ka	49.2	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Total Inflow	cfs	800.	800.	800.	802.	801.	800.	1200.	2300.	2400.	2400.	1000.	1000.
Turbine Release	ka	49.1	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Spillway Release	ka	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	ka	49.1	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Total Release	cfs	799.	800.	800.	802.	801.	800.	1200.	2300.	2400.	2400.	1000.	1000.
Pathfinder Reservoir Operations		Initial Content 423.9 Ka						Operating Limits: Max 1016.5 Ka, 5850.10 Ft. Min 31.4 Ka, 5746.00 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Sweetwater Inflow	ka	2.7	2.9	2.8	3.1	3.2	3.9	11.8	20.1	19.0	6.3	2.7	1.5
Kortes-Path Gain	ka	2.1	1.0	-0.5	-0.5	0.3	5.6	6.7	8.5	5.7	6.3	5.7	4.2
Inflow from Kortes	ka	49.1	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Total Inflow	ka	53.9	51.5	51.5	51.9	48.0	58.7	89.9	170.0	167.5	160.2	69.9	65.2
Total Inflow	cfs	877.	865.	838.	844.	864.	955.	1511.	2765.	2815.	2605.	1137.	1096.
Turbine Release	ka	19.5	36.0	37.1	37.1	33.5	37.2	65.6	126.8	143.5	167.3	141.6	71.6
Jetflow Release	ka	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	ka	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	ka	19.5	36.0	37.1	37.1	33.5	37.2	65.6	126.8	143.5	167.3	141.6	71.6
Total Release	cfs	317.	605.	603.	603.	603.	605.	1102.	2062.	2412.	2721.	2303.	1203.
Evaporation	ka	3.1	1.8	1.1	1.1	1.1	2.3	4.4	5.5	8.6	9.5	7.9	5.6
End-month content	ka	455.2	468.9	482.2	495.9	509.3	528.5	548.4	586.1	601.5	584.9	505.3	493.3
End-month elevation	ft	5816.4	5817.5	5818.6	5819.8	5820.8	5822.3	5823.8	5826.5	5827.6	5826.4	5820.5	5819.5
Alcova Reservoir Operations		Initial Content 180.4 Ka						Operating Limits: Max 184.4 Ka, 5500.00 Ft. Min 100.0 Ka, 5459.92 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	ka	19.5	36.0	37.1	37.1	33.5	37.2	65.6	126.8	143.5	167.3	141.6	71.6
Total Inflow	cfs	317.	605.	603.	603.	603.	605.	1102.	2062.	2412.	2721.	2303.	1203.
Turbine Release	ka	43.3	35.7	36.9	36.9	33.3	36.8	41.3	110.8	125.1	147.7	123.2	64.1
Spillway Release	ka	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	ka	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	ka	43.3	35.7	36.9	36.9	33.3	36.8	41.3	125.8	142.1	165.7	140.2	71.1
Total Release	cfs	704.	600.	600.	600.	600.	598.	694.	2046.	2388.	2695.	2280.	1195.
Evaporation	ka	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	ka	155.9*	155.9*	155.9*	155.9*	155.9*	155.9*	179.4*	179.4*	179.4*	179.4*	179.4*	178.8*
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	5497.7



NORTH PLATTE RIVER OPERATING PLAN  
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Gray Reef Reservoir Operations

Gray Reef Reservoir Operations			Initial Content					1.7 Ka		Operating Limits: Max		1.8 Ka, 5332.00 Ft.		
-----										Min		0.0 Ka, 5306.00 Ft.		
			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Inflow	ka		43.3	35.7	36.9	36.9	33.3	36.8	41.3	110.8	125.1	147.7	123.2	64.1
Total Inflow	cfs		704.	600.	600.	600.	600.	598.	694.	1802.	2102.	2402.	2004.	1077.
Total Release	ka		43.1	35.7	36.9	36.9	33.3	36.8	41.2	110.7	125.0	147.6	123.1	64.0
Total Release	cfs		701.	600.	600.	600.	600.	598.	692.	1800.	2101.	2400.	2002.	1076.

Glendo Reservoir Operations

Glendo Reservoir Operations		Initial Content					116.3 Ka		Operating Limits:			Max 789.4 Ka, 4653.00 Ft.	
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	63.2 Ka, 4570.02 Ft.	Jul	Aug Sep
Alcova-Glendo Gain	ka	13.2	12.6	8.0	9.0	16.2	19.6	50.6	69.0	9.7	-3.5	-6.0	9.1
Infl from Gray Reef	ka	43.1	35.7	36.9	36.9	33.3	36.8	41.2	110.7	125.0	147.6	123.1	64.0
Total Inflow	ka	56.3	48.3	44.9	45.9	49.5	56.4	91.8	179.7	134.7	144.1	117.1	73.1
Total Inflow	cfs	916.	812.	730.	746.	891.	917.	1543.	2923.	2264.	2344.	1904.	1228.
Turbine Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	55.7	100.9	123.6	231.5	221.4	152.8
Low Flow Release	ka	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	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.0	79.8	0.0
Total Release	ka	1.5	1.5	1.5	1.5	1.5	1.5	57.2	102.4	125.1	304.0	302.7	154.3
Total Release	cfs	24.	25.	24.	24.	27.	24.	961.	1665.	2102.	4944.	4923.	2593.
Evaporation	ka	1.1	0.8	0.7	0.7	0.8	1.9	3.1	4.8	7.1	6.9	4.3	1.9
End-month content	ka	169.4*	215.2	257.8	301.4	348.5	401.4*	432.8*	505.4*	507.9*	339.5*	148.1*	65.0*
End-month elevation	ft	4594.6	4601.9	4607.9	4613.5	4618.9	4624.5	4627.6	4634.0	4634.2	4617.9	4590.8	4570.6

Guernsey Reservoir Operations

Guernsey Reservoir Operations		Initial Content					2.4 Ka					Operating Limits: Max			45.6 Ka, 4419.99 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	0.0 Ka, 4370.00 Ft.						
											Jul	Aug	Sep				
Glendo-Guerns Gain	ka	3.5	2.3	2.1	1.6	1.1	0.8	4.1	8.5	3.1	2.4	1.2	5.2				
Inflow from Glendo	ka	1.5	1.5	1.5	1.5	1.5	1.5	57.2	102.4	125.1	304.0	302.7	154.3				
Total Inflow	ka	5.0	3.8	3.6	3.1	2.6	2.3	61.3	110.9	128.2	306.4	303.9	159.5				
Total Inflow	cfs	81.	64.	59.	50.	47.	37.	1030.	1804.	2154.	4983.	4942.	2680.				
Turbine Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	45.2	52.6	50.9	52.9	53.3	55.4				
Seepage	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.2	73.1	255.0	247.2	129.5				
Total Release	ka	0.3	0.2	0.3	0.4	0.3	0.3	45.6	110.0	127.0	311.0	303.0	187.0				
Total Release	cfs	5.	3.	5.	7.	5.	5.	766.	1789.	2134.	5058.	4928.	3143.				
Evaporation	ka	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.2	0.4	0.9	0.7				
End-month content	ka	7.0	10.4	13.5	16.0	18.1#	19.8#	35.0*	35.0*	35.0*	30.0*	30.0*	1.8*				
End-month elevation	ft	4397.2	4400.7	4403.2	4405.0	4406.4	4407.4	4415.3	4415.3	4415.3	4412.9	4412.9	4387.3				



NORTH PLATTE RIVER OPERATING PLAN  
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OWNERSHIP OPERATIONS

North Platte Pathfinder

Initial Ownership 196.5 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	32.5	31.0	25.2	22.7	24.9	60.6	129.5	235.4	224.5	0.0	0.0	0.0
Evaporation	ka	1.3	0.8	0.6	0.6	0.7	1.5	3.1	5.0	10.2	12.8	9.8	5.2
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	141.5	255.6	135.2
End-month Ownership	ka	229.0	260.0	285.2	307.9	332.8	393.4	522.9	758.3	982.8	828.5	563.1	422.7

North Platte Guernsey

Initial Ownership 0.0 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	0.0	0.0	9.8	10.2	17.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	ka	0.0	0.0	0.3	0.4	0.3	0.5	0.3	0.4	0.6	0.6	0.0	0.0
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.7	0.0	0.0
End-month Ownership	ka	0.0	0.0	9.8	20.0	37.0	45.6	45.3	44.9	44.3	0.0	0.0	0.0

Inland Lakes

Initial Ownership 0.0 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	16.4	14.6	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	ka	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	ka	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	ka	16.4	31.0	30.9	30.8	30.7	30.6	0.0	0.0	0.0	0.0	0.0	0.0

Kendrick

Initial Ownership 992.4 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	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	ka	6.6	3.6	2.2	2.1	2.2	4.4	7.7	9.1	12.7	11.8	10.3	7.9
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	17.0	18.0	17.0	7.0
End-month Ownership	ka	985.8	982.2	980.0	977.9	975.7	971.3	963.6	939.5	909.8	880.0	852.7	837.8

Glendo Unit

Initial Ownership 148.2 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Accrual	ka	0.0	0.0	0.0	0.0	0.0	11.3	26.9	0.0	0.0	0.0	0.0	0.0
Evaporation	ka	0.9	0.6	0.3	0.4	0.3	0.7	1.3	1.7	2.5	2.3	2.0	1.5
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	8.0	12.0
End-month Ownership	ka	147.3	146.7	146.4	146.0	145.7	156.3	181.9	180.2	177.7	169.4	159.4	145.9

Excess to Ownership

Initial Ownership 0.5 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Accrual	ka	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0
Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0
End-month total	ka	0.5	0.5	0.5	0.5	0.5	0.5	13.0	12.9	12.7	0.0	0.0	0.0



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City of Cheyenne

Initial Ownership 3.7 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	2.1	1.3	1.4	1.5	0.0	0.1	0.1	0.3	0.0	0.5	0.6	0.3
Evaporation	ka	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	ka	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	ka	5.8	7.1	8.5	10.0	10.0	10.0	10.0	7.5	6.5	6.9	7.4	7.6

Pacificorp

Initial Ownership 2.0 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Evaporation	ka	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	ka	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	ka	1.4	1.2	1.1	1.0	0.9	0.8	0.7	0.8	0.8	0.8	0.8	0.8

Other

Initial Ownership 3.9 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	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	ka	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.5	0.0
Ownership	ka	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.7	2.1	0.6	0.6

IRRIGATION DELIVERY

Kendrick (Casper Canal)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Requested	ka	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	ka	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	Sep
Requested	ka	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	ka	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	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	8.0	12.0
Inland Lakes Req	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	45.6	110.0	127.0	311.0	303.0	187.0
Seepage	ka	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	ka	0.3	0.2	0.3	0.4	0.3	0.3	45.6	110.0	127.0	311.0	303.0	187.0



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POWER GENERATION

Seminoe Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	49.2	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Bypass	ka	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 generation	gwh	22.188	21.238	28.912	30.422	27.046	29.749	29.155	31.379	32.402	33.410	33.473	32.256
Actual generation	gwh	8.039	7.711	7.872	7.803	6.973	7.655	11.210	22.907	24.276	25.445	10.455	9.996
Percent max generation		36.	36.	27.	26.	26.	26.	38.	73.	75.	76.	31.	31.
Average kwh/af		163.	162.	160.	158.	157.	156.	157.	162.	170.	172.	170.	168.
Kortes Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	49.1	47.6	49.2	49.3	44.5	49.2	71.4	141.4	142.8	147.6	61.5	59.5
Bypass	ka	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 generation	gwh	28.346	26.712	21.053	19.298	17.510	23.426	26.712	27.606	26.712	27.606	27.606	26.712
Actual generation	gwh	8.445	8.187	8.462	8.480	7.654	8.462	12.281	24.321	24.562	25.387	10.578	10.234
Percent max generation		30.	31.	40.	44.	44.	36.	46.	88.	92.	92.	38.	38.
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	19.5	36.0	37.1	37.1	33.5	37.2	65.6	126.8	143.5	167.3	141.6	71.6
Bypass	ka	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 generation	gwh	21.646	23.206	29.631	43.921	39.806	44.274	43.058	44.847	43.692	45.154	44.584	42.610
Actual generation	gwh	4.995	9.282	9.601	9.636	8.733	9.740	17.265	33.628	38.324	44.673	37.334	18.648
Percent max generation		23.	40.	32.	22.	22.	22.	40.	75.	88.	99.	84.	44.
Average kwh/af		256.	258.	259.	260.	261.	262.	263.	265.	267.	267.	264.	260.
Alcova Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	43.3	35.7	36.9	36.9	33.3	36.8	41.3	110.8	125.1	147.7	123.2	64.1
Bypass	ka	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 generation	gwh	13.588	13.301	13.736	13.736	12.403	14.185	18.395	27.552	26.656	27.552	27.552	26.646
Actual generation	gwh	5.979	4.855	5.018	5.018	4.529	5.005	5.699	15.512	17.514	20.678	17.248	8.971
Percent max generation		44.	37.	37.	37.	37.	35.	31.	56.	66.	75.	63.	34.
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	0.0	0.0	55.7	100.9	123.6	231.5	221.4	152.8
Bypass	ka	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	72.5	81.3	1.5
Maximum generation	gwh	14.311	8.664	17.952	14.005	20.403	23.985	24.374	26.709	26.942	25.376	20.105	12.525
Actual generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	6.077	11.414	14.341	25.376	20.105	9.637
Percent max generation		0.	0.	0.	0.	0.	0.	25.	43.	53.	100.	100.	77.
Average kwh/af		0.	0.	0.	0.	0.	0.	109.	113.	116.	110.	91.	63.
Guernsey 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	0.0	0.0	45.2	52.6	50.9	52.9	53.3	55.4
Bypass	ka	0.3	0.2	0.3	0.4	0.3	0.3	0.4	57.4	76.1	258.1	249.7	131.6
Maximum generation	gwh	2.159	2.729	3.407	2.096	3.241	3.644	3.656	3.840	3.716	3.835	3.838	3.429
Actual generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	3.184	3.840	3.716	3.835	3.838	3.429
Percent max generation		0.	0.	0.	0.	0.	0.	87.	100.	100.	100.	100.	100.
Average kwh/af		0.	0.	0.	0.	0.	0.	70.	73.	73.	72.	72.	62.



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HYDROLOGY OPERATIONS

Seminole Reservoir Operations

		Initial Content 617.8 Ka						Operating Limits: Max 1017.3 Ka, 6357.00 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	31.7 Jul	Aug	Sep
Total Inflow	ka	24.6	22.5	21.3	18.1	20.9	43.9	74.2	124.6	128.2	33.4	19.9	13.0
Total Inflow	cfs	400.	378.	346.	294.	376.	714.	1247.	2026.	2154.	543.	324.	218.
Turbine Release	ka	49.2	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Jetflow Release	ka	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	ka	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	ka	49.2	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Total Release	cfs	800.	800.	800.	800.	801.	800.	800.	1200.	1800.	2000.	1000.	602.
Evaporation	ka	3.8	2.0	1.0	1.0	1.0	1.9	3.7	3.8	6.3	6.6	5.1	3.5
End-month content	ka	590.5	564.7	537.2	506.2	481.6	474.5	497.5*	542.1*	556.0*	460.3*	414.2*	388.2*
End-month elevation	ft	6331.2	6329.2	6327.0	6324.3	6322.2	6321.6	6323.6	6327.4	6328.5	6320.2	6315.8	6313.1

Kortes Reservoir Operations

		Initial Content 4.7 Ka						Operating Limits: Max 4.8 Ka, 6142.73 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	1.7 Jul	Aug	Sep
Total Inflow	ka	49.2	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Total Inflow	cfs	800.	800.	800.	800.	801.	800.	800.	1200.	1800.	2000.	1000.	602.
Turbine Release	ka	49.1	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Spillway Release	ka	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	ka	49.1	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Total Release	cfs	799.	800.	800.	800.	801.	800.	800.	1200.	1800.	2000.	1000.	602.

Pathfinder Reservoir Operations

		Initial Content 423.9 Ka						Operating Limits: Max 1016.5 Ka, 5850.10 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	31.4 Jul	Aug	Sep
Sweetwater Inflow	ka	1.2	1.3	1.3	1.3	1.3	2.4	9.3	7.2	4.4	1.6	1.0	0.8
Kortes-Path Gain	ka	1.7	0.9	0.1	0.7	1.6	5.0	3.5	9.3	10.8	6.8	7.0	1.5
Inflow from Kortes	ka	49.1	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Total Inflow	ka	52.0	49.8	50.6	51.2	47.4	56.6	60.4	90.3	122.3	131.4	69.5	38.1
Total Inflow	cfs	846.	837.	823.	833.	853.	921.	1015.	1469.	2055.	2137.	1130.	640.
Turbine Release	ka	19.4	36.0	37.1	37.1	33.5	37.3	78.0	147.2	157.4	169.1	88.3	57.3
Jetflow Release	ka	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	ka	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	ka	19.4	36.0	37.1	37.1	33.5	37.3	78.0	147.2	157.4	169.1	88.3	57.3
Total Release	cfs	316.	605.	603.	603.	603.	607.	1311.	2394.	2645.	2750.	1436.	963.
Evaporation	ka	3.1	1.8	1.1	1.1	1.1	2.3	4.2	4.7	6.2	6.3	5.2	3.8
End-month content	ka	453.4	465.4	477.8	490.8	503.6	520.6	498.8	437.2	395.9	351.9	327.9	304.9
End-month elevation	ft	5816.2	5817.2	5818.3	5819.3	5820.4	5821.7	5820.0	5814.8	5810.9	5806.3	5803.6	5800.9

Alcova Reservoir Operations

		Initial Content 180.4 Ka						Operating Limits: Max 184.4 Ka, 5500.00 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	145.3 Jul	Aug	Sep
Total Inflow	ka	19.4	36.0	37.1	37.1	33.5	37.3	78.0	147.2	157.4	169.1	88.3	57.3
Total Inflow	cfs	316.	605.	603.	603.	603.	607.	1311.	2394.	2645.	2750.	1436.	963.
Turbine Release	ka	43.2	35.7	36.9	36.9	33.3	36.9	53.7	129.2	137.0	147.5	67.9	47.8
Spillway Release	ka	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	ka	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	ka	43.2	35.7	36.9	36.9	33.3	36.9	53.7	146.2	156.0	167.5	86.9	56.8
Total Release	cfs	703.	600.	600.	600.	600.	600.	902.	2378.	2622.	2724.	1413.	955.
Evaporation	ka	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	ka	155.9*	155.9*	155.9*	155.9*	155.9*	155.9*	179.4*	179.4*	179.4*	179.4*	179.4*	178.8*
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	5497.7



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Gray Reef Reservoir Operations

		Initial Content 1.7 Ka						Operating Limits: Max			1.8 Ka, 5332.00 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	0.0 Ka, 5306.00 Ft.	Jul	Aug Sep
Total Inflow	ka	43.2	35.7	36.9	36.9	33.3	36.9	53.7	129.2	137.0	147.5	67.9	47.8
Total Inflow	cfs	703.	600.	600.	600.	600.	600.	902.	2101.	2302.	2399.	1104.	803.
Total Release	ka	43.0	35.7	36.9	36.9	33.3	36.9	53.6	129.1	136.9	147.4	67.8	47.7
Total Release	cfs	699.	600.	600.	600.	600.	600.	901.	2100.	2301.	2397.	1103.	802.

Glendo Reservoir Operations

		Initial Content 116.3 Ka						Operating Limits: Max			789.4 Ka, 4653.00 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	63.2 Ka, 4570.02 Ft.	Jul	Aug Sep
Alcova-Glendo Gain	ka	12.4	9.9	6.6	7.2	9.2	13.8	8.5	15.0	-2.5	-7.2	-4.2	10.5
Infl from Gray Reef	ka	43.0	35.7	36.9	36.9	33.3	36.9	53.6	129.1	136.9	147.4	67.8	47.7
Total Inflow	ka	55.4	45.6	43.5	44.1	42.5	50.7	62.1	144.1	134.4	140.2	63.6	58.2
Total Inflow	cfs	901.	766.	707.	717.	765.	825.	1044.	2344.	2259.	2280.	1034.	978.
Turbine Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	44.3	137.9	163.5	221.4	148.2	75.7
Low Flow Release	ka	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	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.9	0.0	0.0
Total Release	ka	1.5	1.5	1.5	1.5	1.5	1.5	45.8	139.4	165.0	303.8	149.7	77.2
Total Release	cfs	24.	25.	24.	24.	27.	24.	770.	2267.	2773.	4941.	2435.	1297.
Evaporation	ka	1.1	0.8	0.7	0.7	0.8	1.7	2.9	4.2	5.6	5.1	3.0	1.7
End-month content	ka	168.5*	211.6	252.8	294.6	334.7	382.1*	395.4*	396.0*	359.8*	191.1*	102.0*	81.3*
End-month elevation	ft	4594.5	4601.4	4607.2	4612.6	4617.4	4622.5	4623.9	4623.9	4620.2	4598.3	4580.8	4575.4

Guernsey Reservoir Operations

		Initial Content 2.4 Ka						Operating Limits: Max			45.6 Ka, 4419.99 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	0.0 Ka, 4370.00 Ft.	Jul	Aug Sep
Glendo-Guerns Gain	ka	2.0	2.1	1.9	1.3	1.5	1.2	0.6	1.5	-1.6	-2.7	-1.8	2.3
Inflow from Glendo	ka	1.5	1.5	1.5	1.5	1.5	1.5	45.8	139.4	165.0	303.8	149.7	77.2
Total Inflow	ka	3.5	3.6	3.4	2.8	3.0	2.7	46.4	140.9	163.4	301.1	147.9	79.5
Total Inflow	cfs	57.	60.	55.	46.	54.	44.	780.	2292.	2746.	4897.	2405.	1336.
Turbine Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	33.9	52.9	50.9	52.9	53.3	55.4
Seepage	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.9	108.1	249.0	91.2	49.5
Total Release	ka	0.3	0.2	0.3	0.4	0.3	0.3	34.3	135.0	162.0	305.0	147.0	107.0
Total Release	cfs	5.	3.	5.	7.	5.	5.	576.	2196.	2722.	4960.	2391.	1798.
Evaporation	ka	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	ka	5.5	8.7	11.6	13.8	16.3#	18.4#	30.0*	35.0*	35.2*	30.0*	30.0*	1.8*
End-month elevation	ft	4395.2	4399.0	4401.7	4403.4	4405.2	4406.6	4412.9	4415.3	4415.4	4412.9	4412.9	4387.3



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OWNERSHIP OPERATIONS

North Platte Pathfinder

Initial Ownership 196.5 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	26.2	23.9	22.1	19.5	23.2	49.9	84.2	18.5	0.0	0.0	0.0	0.0
Evaporation	ka	1.3	0.8	0.6	0.6	0.6	1.4	2.8	4.1	6.1	6.3	2.6	0.8
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	248.5	118.1	71.9
End-month Ownership	ka	222.7	246.6	268.7	288.2	311.4	361.3	445.5	464.0	457.9	203.1	82.4	9.7

North Platte Guernsey

Initial Ownership 0.0 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	0.0	0.0	8.2	8.1	10.4	14.6	0.0	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	ka	0.0	0.0	0.3	0.4	0.3	0.4	0.3	0.4	0.5	0.3	0.0	0.0
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	19.6	0.0	0.0
End-month Ownership	ka	0.0	0.0	8.2	16.3	26.7	41.3	41.0	40.6	19.9	0.0	0.0	0.0

Inland Lakes

Initial Ownership 0.0 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	14.1	11.7	0.0	0.0	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	ka	0.3	0.3	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Trnsfr fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	34.3	0.0	0.0	0.0	0.0	0.0
End-month Ownership	ka	14.1	25.8	25.7	25.6	25.5	25.4	0.0	0.0	0.0	0.0	0.0	0.0

Kendrick

Initial Ownership 992.4 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Net Accrual	ka	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	ka	6.6	3.6	2.2	2.2	2.2	4.3	7.6	8.8	12.2	12.4	11.3	8.7
Deliv fm Ownership	ka	0.0	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	ka	985.8	982.2	980.0	977.8	975.6	971.3	963.7	937.9	906.7	874.3	844.0	826.3

Glendo Unit

Initial Ownership 148.2 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Accrual	ka	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	ka	0.9	0.6	0.3	0.3	0.4	0.6	1.2	1.3	1.8	1.9	1.7	1.3
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	5.0	7.0	7.0
End-month Ownership	ka	147.3	146.7	146.4	146.1	145.7	145.1	143.9	142.6	138.8	131.9	123.2	114.9

Excess to Ownership

Initial Ownership 0.5 Ka, Accrued this water year: 0.0 Ka

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Accrual	ka	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	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
End-month total	ka	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0



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City of Cheyenne

Initial Ownership 3.7 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	1.1	1.3	1.4	1.1	0.0	0.1	0.1	0.3	0.0	0.5	0.6	0.3
Evaporation	ka	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	ka	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	ka	4.8	6.1	7.5	8.6	8.6	8.6	8.6	6.1	5.1	5.5	6.0	6.2

Pacificorp

Initial Ownership 2.0 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Evaporation	ka	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	ka	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	ka	1.4	1.2	1.1	1.0	0.9	0.8	0.7	0.8	0.8	0.8	0.8	0.8

Other

Initial Ownership 3.9 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	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	ka	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Release	ka	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	ka	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.7	3.7	3.7

IRRIGATION DELIVERY

Kendrick (Casper Canal)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Requested	ka	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	ka	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	ka	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	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	135.0	160.0	300.0	140.0	100.0
Glendo Req	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	5.0	7.0	7.0
Inland Lakes Req	ka	0.0	0.0	0.0	0.0	0.0	0.0	34.3	0.0	0.0	0.0	0.0	0.0
Total Requirement	ka	0.0	0.0	0.0	0.0	0.0	0.0	34.3	135.0	162.0	305.0	147.0	107.0
Seepage	ka	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	ka	0.3	0.2	0.3	0.4	0.3	0.3	34.3	135.0	162.0	305.0	147.0	107.0



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POWER GENERATION

Seminoe Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	49.2	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Bypass	ka	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 generation	gwh	22.151	21.134	28.711	30.160	26.775	29.353	28.550	30.128	29.682	29.901	28.592	26.990
Actual generation	gwh	8.025	7.685	7.861	7.724	6.899	7.549	7.342	11.587	17.091	19.246	9.245	5.251
Percent max generation		36.	36.	27.	26.	26.	26.	26.	38.	58.	64.	32.	19.
Average kwh/af		163.	161.	160.	157.	155.	153.	154.	157.	160.	156.	150.	147.
Kortes Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	49.1	47.6	49.2	49.2	44.5	49.2	47.6	73.8	107.1	123.0	61.5	35.8
Bypass	ka	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 generation	gwh	28.346	26.712	27.606	20.778	16.632	24.338	26.712	27.606	26.712	27.606	27.606	26.712
Actual generation	gwh	8.445	8.187	8.462	8.462	7.654	8.462	8.187	12.694	18.421	21.156	10.578	6.158
Percent max generation		30.	31.	31.	41.	46.	35.	31.	46.	69.	77.	38.	23.
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	19.4	36.0	37.1	37.1	33.5	37.3	78.0	147.2	157.4	169.1	88.3	57.3
Bypass	ka	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 generation	gwh	21.640	23.189	29.600	43.865	39.748	44.194	42.729	43.672	41.607	42.429	41.935	40.187
Actual generation	gwh	4.968	9.276	9.591	9.624	8.720	9.748	20.372	38.016	40.031	42.429	21.898	14.075
Percent max generation		23.	40.	32.	22.	22.	22.	48.	87.	96.	100.	52.	35.
Average kwh/af		256.	258.	259.	259.	260.	261.	261.	258.	254.	251.	248.	246.
Alcova Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	43.2	35.7	36.9	36.9	33.3	36.9	53.7	129.2	137.0	147.5	67.9	47.8
Bypass	ka	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 generation	gwh	13.588	13.301	13.736	13.736	12.403	14.185	18.395	27.552	26.656	27.552	27.552	26.646
Actual generation	gwh	5.965	4.855	5.018	5.018	4.529	5.018	7.411	18.088	19.180	20.650	9.506	6.690
Percent max generation		44.	37.	37.	37.	37.	35.	40.	66.	72.	75.	35.	25.
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	0.0	0.0	44.3	137.9	163.5	221.4	148.2	75.7
Bypass	ka	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	82.4	1.5	1.5
Maximum generation	gwh	14.292	8.604	17.834	13.887	20.100	23.517	23.596	24.574	23.294	21.068	15.244	11.697
Actual generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	4.736	14.817	17.343	21.068	10.646	4.527
Percent max generation		0.	0.	0.	0.	0.	0.	20.	60.	74.	100.	70.	39.
Average kwh/af		0.	0.	0.	0.	0.	0.	107.	107.	106.	95.	72.	60.
Guernsey 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	0.0	0.0	33.9	52.9	50.9	52.9	53.3	55.4
Bypass	ka	0.3	0.2	0.3	0.4	0.3	0.3	0.4	82.1	111.1	252.1	93.7	51.6
Maximum generation	gwh	1.868	2.651	3.341	2.049	3.175	3.592	3.590	3.835	3.717	3.836	3.838	3.429
Actual generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	2.323	3.835	3.717	3.836	3.838	3.429
Percent max generation		0.	0.	0.	0.	0.	0.	65.	100.	100.	100.	100.	100.
Average kwh/af		0.	0.	0.	0.	0.	0.	69.	72.	73.	73.	72.	62.



NORTH PLATTE RIVER OPERATING PLAN  
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HYDROLOGY OPERATIONS

Seminole Reservoir Operations

		Initial Content 617.8 Ka						Operating Limits: Max 1017.3 Ka, 6357.00 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	31.7 Jul	Aug	Sep
Total Inflow	ka	37.9	34.5	28.7	26.5	29.7	63.8	158.3	394.4	571.9	216.3	62.5	37.3
Total Inflow	cfs	616.	580.	467.	431.	535.	1038.	2660.	6414.	9611.	3518.	1016.	627.
Turbine Release	ka	49.2	47.7	49.3	49.2	72.2	136.2	155.3	160.5	185.2	179.6	104.5	59.3
Jetflow Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.3	26.8	0.0	0.0
Spillway Release	ka	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	ka	49.2	47.7	49.3	49.2	72.2	136.2	155.3	160.5	258.5	206.4	104.5	59.3
Total Release	cfs	800.	802.	802.	800.	1300.	2215.	2610.	2610.	4344.	3357.	1700.	997.
Evaporation	ka	3.8	2.0	1.0	1.0	1.0	1.9	3.3	3.8	8.7	11.0	9.3	6.6
End-month content	ka	604.8	590.9	570.7	547.0*	503.5*	429.3*	429.1*	656.8*	960.6*	960.0*	909.3*	881.0*
End-month elevation	ft	6332.3	6331.2	6329.6	6327.8	6324.1	6317.3	6317.3	6336.0	6354.2	6354.1	6351.5	6349.9

Kortes Reservoir Operations

		Initial Content 4.7 Ka						Operating Limits: Max 4.8 Ka, 6142.73 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	1.7 Jul	Aug	Sep
Total Inflow	ka	49.2	47.7	49.3	49.2	72.2	136.2	155.3	160.5	258.5	206.4	104.5	59.3
Total Inflow	cfs	800.	802.	802.	800.	1300.	2215.	2610.	2610.	4344.	3357.	1700.	997.
Turbine Release	ka	49.1	47.7	49.3	49.2	72.2	136.2	155.3	160.5	155.3	160.5	104.5	59.3
Spillway Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	103.2	45.9	0.0	0.0
Total Release	ka	49.1	47.7	49.3	49.2	72.2	136.2	155.3	160.5	258.5	206.4	104.5	59.3
Total Release	cfs	799.	802.	802.	800.	1300.	2215.	2610.	2610.	4344.	3357.	1700.	997.

Pathfinder Reservoir Operations

		Initial Content 423.9 Ka						Operating Limits: Max 1016.5 Ka, 5850.10 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	31.4 Jul	Aug	Sep
Sweetwater Inflow	ka	2.6	3.0	2.3	1.9	2.0	5.2	17.7	48.4	46.3	13.2	4.5	3.1
Kortes-Path Gain	ka	5.1	0.6	1.0	3.5	4.9	7.0	9.8	20.0	5.0	3.9	7.4	5.6
Inflow from Kortes	ka	49.1	47.7	49.3	49.2	72.2	136.2	155.3	160.5	258.5	206.4	104.5	59.3
Total Inflow	ka	56.8	51.3	52.6	54.6	79.1	148.4	182.8	228.9	309.8	223.5	116.4	68.0
Total Inflow	cfs	924.	862.	855.	888.	1424.	2413.	3072.	3723.	5206.	3635.	1893.	1143.
Turbine Release	ka	19.4	36.0	37.1	37.1	33.5	37.3	72.0	108.2	163.6	169.1	169.1	65.3
Jetflow Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	78.3	0.0	0.0
Spillway Release	ka	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	ka	19.4	36.0	37.1	37.1	33.5	37.3	72.0	108.2	180.3	247.4	169.1	65.3
Total Release	cfs	316.	605.	603.	603.	603.	607.	1210.	1760.	3030.	4024.	2750.	1097.
Evaporation	ka	3.2	1.8	1.1	1.1	1.1	2.5	5.5	7.5	12.2	14.0	12.0	9.0
End-month content	ka	458.1	471.6	486.0	502.4	546.9	655.5	760.8	874.0	991.3	953.4	888.7	882.4
End-month elevation	ft	5816.6	5817.8	5819.0	5820.3	5823.7	5831.1	5837.3	5843.3	5849.0	5847.2	5844.0	5843.7

Alcova Reservoir Operations

		Initial Content 180.4 Ka						Operating Limits: Max 184.4 Ka, 5500.00 Ft.					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min Jun	100.0 Jul	Aug	Sep
Total Inflow	ka	19.4	36.0	37.1	37.1	33.5	37.3	72.0	108.2	180.3	247.4	169.1	65.3
Total Inflow	cfs	316.	605.	603.	603.	603.	607.	1210.	1760.	3030.	4024.	2750.	1097.
Turbine Release	ka	43.2	35.7	36.9	36.9	33.3	36.9	47.7	92.2	161.9	196.8	150.1	58.4
Spillway Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0
Casper Canal Release	ka	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	ka	43.2	35.7	36.9	36.9	33.3	36.9	47.7	107.2	178.9	245.8	167.1	65.4
Total Release	cfs	703.	600.	600.	600.	600.	600.	802.	1743.	3007.	3998.	2718.	1099.
Evaporation	ka	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	ka	155.9*	155.9*	155.9*	155.9*	155.9*	155.9*	179.4*	179.4*	179.4*	179.4*	180.0*	178.8*
End-month elevation	ft	5487.9	5487.9	5487.9	5487.9	5487.9	5487.9	5498.0	5498.0	5498.0	5498.0	5498.2	5497.7



NORTH PLATTE RIVER OPERATING PLAN  
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Gray Reef Reservoir Operations

		Initial Content 1.7 Ka						Operating Limits:		Max	1.8 Ka, 5332.00 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min	0.0 Ka, 5306.00 Ft.	Jul	Sep
		-----	-----	-----	-----	-----	-----	-----	-----	Jun	-----	-----	-----
Total Inflow	ka	43.2	35.7	36.9	36.9	33.3	36.9	47.7	92.2	161.9	227.8	150.1	58.4
Total Inflow	cfs	703.	600.	600.	600.	600.	600.	802.	1499.	2721.	3705.	2441.	981.
Total Release	ka	43.0	35.7	36.9	36.9	33.3	36.9	47.6	92.1	161.8	227.7	150.0	58.3
Total Release	cfs	699.	600.	600.	600.	600.	600.	800.	1498.	2719.	3703.	2440.	980.

Glendo Reservoir Operations

		Initial Content 116.3 Ka						Operating Limits:		Max	789.4 Ka, 4653.00 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min	63.2 Ka, 4570.02 Ft.	Jul	Sep
		-----	-----	-----	-----	-----	-----	-----	-----	Jun	-----	-----	-----
Alcova-Glendo Gain	ka	18.3	16.1	6.8	14.5	13.9	18.5	52.9	202.3	79.2	10.0	8.7	16.3
Infl from Gray Reef	ka	43.0	35.7	36.9	36.9	33.3	36.9	47.6	92.1	161.8	227.7	150.0	58.3
Total Inflow	ka	61.3	51.8	43.7	51.4	47.2	55.4	100.5	294.4	241.0	237.7	158.7	74.6
Total Inflow	cfs	997.	871.	711.	836.	850.	901.	1689.	4788.	4050.	3866.	2581.	1254.
Turbine Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	52.4	228.6	232.8	233.1	221.4	108.2
Low Flow Release	ka	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	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	143.5	159.4	0.0
Total Release	ka	1.5	1.5	1.5	1.5	1.5	1.5	53.9	230.1	235.2	378.1	382.3	109.7
Total Release	cfs	24.	25.	24.	24.	27.	24.	906.	3742.	3953.	6149.	6218.	1844.
Evaporation	ka	1.1	0.8	0.7	0.7	1.0	1.9	3.1	4.9	7.1	6.9	4.3	2.0
End-month content	ka	174.4*	223.7	265.1	314.2	358.8	410.7*	454.1*	513.6*	512.3*	365.0*	137.1*	100.0*
End-month elevation	ft	4595.5	4603.2	4608.9	4615.0	4620.0	4625.4	4629.5	4634.7	4634.6	4620.7	4588.6	4580.3

Guernsey Reservoir Operations

		Initial Content 2.4 Ka						Operating Limits:		Max	45.6 Ka, 4419.99 Ft.		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Min	0.0 Ka, 4370.00 Ft.	Jul	Sep
		-----	-----	-----	-----	-----	-----	-----	-----	Jun	-----	-----	-----
Glendo-Guerns Gain	ka	3.6	1.9	1.6	2.0	1.2	0.6	7.9	30.8	26.2	8.1	1.6	5.7
Inflow from Glendo	ka	1.5	1.5	1.5	1.5	1.5	1.5	53.9	230.1	235.2	378.1	382.3	109.7
Total Inflow	ka	5.1	3.4	3.1	3.5	2.7	2.1	61.8	260.9	261.4	386.2	383.9	115.4
Total Inflow	cfs	83.	57.	50.	57.	49.	34.	1039.	4243.	4393.	6281.	6244.	1939.
Turbine Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	45.2	52.6	50.9	52.9	53.3	55.4
Seepage	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	206.2	206.1	335.0	327.2	85.4
Total Release	ka	0.3	0.2	0.3	0.4	0.3	0.3	45.6	260.0	260.0	391.0	383.0	142.9
Total Release	cfs	5.	3.	5.	7.	5.	5.	766.	4228.	4369.	6359.	6229.	2402.
Evaporation	ka	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.9	1.2	0.4	0.9	0.7
End-month content	ka	7.1	10.1	12.7	15.6	17.8#	19.3#	35.0*	35.0*	35.2*	30.0*	30.0*	1.8*
End-month elevation	ft	4397.3	4400.4	4402.6	4404.7	4406.2	4407.1	4415.3	4415.3	4415.4	4412.9	4412.9	4387.3



NORTH PLATTE RIVER OPERATING PLAN  
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OWNERSHIP OPERATIONS

North Platte Pathfinder												
Initial Ownership 196.5 Ka, Accrued this water year: 0.0 Ka												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Sep
Net Accrual	ka	44.3	37.2	31.4	31.2	35.8	74.3	182.2	383.6	0.0	0.0	0.0
Evaporation	ka	1.3	0.9	0.6	0.7	0.8	1.7	3.6	6.2	13.8	12.7	7.4
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	159.3	62.9
End-month Ownership	ka	240.8	278.0	309.4	340.6	376.4	450.7	632.9	1016.5	1002.7	990.0	749.3
North Platte Guernsey												
Initial Ownership 0.0 Ka, Accrued this water year: 0.0 Ka												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Sep
Net Accrual	ka	0.0	0.0	8.1	16.1	14.7	6.7	0.0	0.0	0.0	0.0	0.0
Evaporation/Seepage	ka	0.0	0.0	0.3	0.4	0.4	0.5	0.4	0.4	0.6	0.6	0.0
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1	0.0
End-month Ownership	ka	0.0	0.0	8.1	24.2	38.9	45.6	45.2	44.8	44.2	43.6	0.0
Inland Lakes												
Initial Ownership 0.0 Ka, Accrued this water year: 0.0 Ka												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Sep
Net Accrual	ka	21.6	17.7	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0
Evaporation/Seepage	ka	0.3	0.3	0.1	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0
Trnsfr fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	45.6	0.0	0.0	0.0	0.0
End-month Ownership	ka	21.6	39.3	39.2	39.1	39.0	38.9	0.0	0.0	0.0	0.0	0.0
Kendrick												
Initial Ownership 992.4 Ka, Accrued this water year: 0.0 Ka												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Sep
Net Accrual	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.6	189.4	0.0	0.0
Evaporation	ka	6.6	3.6	2.2	2.1	2.2	4.3	7.7	9.4	13.7	15.2	10.5
Deliv fm Ownership	ka	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	ka	985.8	982.2	980.0	977.9	975.7	971.4	963.7	1012.3	1201.7	1186.5	1138.7
Glendo Unit												
Initial Ownership 148.2 Ka, Accrued this water year: 0.0 Ka												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Sep
Accrual	ka	0.0	0.0	0.0	0.0	0.0	11.9	26.1	0.0	0.0	0.0	0.0
Evaporation	ka	1.0	0.5	0.3	0.3	0.3	0.6	1.2	1.8	2.4	2.3	1.5
Deliv fm Ownership	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	12.0
End-month Ownership	ka	147.2	146.7	146.4	146.1	145.8	157.1	182.0	180.2	177.8	175.5	152.0
Excess to Ownership												
Initial Ownership 0.5 Ka, Accrued this water year: 0.0 Ka												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Sep
Accrual	ka	0.0	0.0	0.0	0.0	0.0	0.0	27.7	123.1	381.5	0.0	0.0
Evaporation/Seepage	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	3.1	0.0
Release	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	133.0	157.5	87.9
End-month total	ka	0.5	0.5	0.5	0.5	0.5	0.5	28.2	1.0	249.5	88.9	0.0



NORTH PLATTE RIVER OPERATING PLAN  
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City of Cheyenne  
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Initial Ownership 3.7 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	2.1	1.3	1.4	0.0	0.0	0.1	0.1	0.3	0.0	0.5	0.6	0.3
Evaporation	ka	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	ka	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	ka	5.8	7.1	8.5	8.5	8.5	8.5	8.5	6.0	5.0	5.4	5.9	6.1

Pacificorp  
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Initial Ownership 2.0 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Evaporation	ka	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	ka	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	ka	1.4	1.2	1.1	1.0	0.9	0.8	0.7	0.8	0.8	0.8	0.8	0.8

Other  
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Initial Ownership 3.9 Ka,

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inflow	ka	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	ka	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Release	ka	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	ka	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.7	3.7	3.7

IRRIGATION DELIVERY  
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Kendrick (Casper Canal)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Requested	ka	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	ka	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	Sep
Requested	ka	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	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110.0	125.0	305.0	295.0	130.9
Glendo Req	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	8.0	12.0
Inland Lakes Req	ka	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	ka	0.0	0.0	0.0	0.0	0.0	0.0	45.6	110.0	127.0	311.0	303.0	142.9
Seepage	ka	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	ka	0.3	0.2	0.3	0.4	0.3	0.3	45.6	260.0	260.0	391.0	383.0	142.9
Waste	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	133.0	80.0	80.0	0.0



NORTH PLATTE RIVER OPERATING PLAN  
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POWER GENERATION

Seminoe Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	49.2	47.7	49.3	49.2	72.2	136.2	155.3	160.5	185.2	179.6	104.5	59.3
Bypass	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.3	26.8	0.0	0.0
Maximum generation	gwh	22.249	21.384	29.233	30.848	27.305	29.129	27.526	30.553	32.225	32.328	32.506	31.809
Actual generation	gwh	8.061	7.751	7.976	7.872	11.349	20.739	23.220	25.514	32.225	32.328	18.706	10.555
Percent max generation		36.	36.	27.	26.	42.	71.	84.	84.	100.	100.	58.	33.
Average kwh/af		164.	162.	162.	160.	157.	152.	150.	159.	174.	180.	179.	178.
Kortes Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	49.1	47.7	49.3	49.2	72.2	136.2	155.3	160.5	155.3	160.5	104.5	59.3
Bypass	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	103.2	45.9	0.0	0.0
Maximum generation	gwh	28.346	26.712	21.053	19.298	17.510	23.426	26.712	27.606	26.712	27.606	27.606	26.712
Actual generation	gwh	8.445	8.204	8.480	8.462	12.418	23.426	26.712	27.606	26.712	27.606	17.974	10.200
Percent max generation		30.	31.	40.	44.	71.	100.	100.	100.	100.	100.	65.	38.
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	19.4	36.0	37.1	37.1	33.5	37.3	72.0	108.2	163.6	169.1	169.1	65.3
Bypass	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	78.3	0.0	0.0
Maximum generation	gwh	21.656	23.224	29.657	43.982	40.042	45.248	44.843	47.191	45.736	47.302	47.266	45.704
Actual generation	gwh	4.972	9.289	9.609	9.649	8.785	9.981	19.735	30.196	45.736	47.302	47.266	18.242
Percent max generation		23.	40.	32.	22.	22.	22.	44.	64.	100.	100.	100.	40.
Average kwh/af		256.	258.	259.	260.	262.	268.	274.	279.	280.	280.	280.	279.
Alcova Power Plant		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Turbine Release	ka	43.2	35.7	36.9	36.9	33.3	36.9	47.7	92.2	161.9	196.8	150.1	58.4
Bypass	ka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0
Maximum generation	gwh	13.588	13.301	13.736	13.736	12.403	14.185	18.395	27.552	26.656	27.552	27.552	26.656
Actual generation	gwh	5.965	4.855	5.018	5.018	4.529	5.018	6.583	12.908	22.666	27.552	21.014	8.176
Percent max generation		44.	37.	37.	37.	37.	35.	36.	47.	85.	100.	76.	31.
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	0.0	0.0	52.4	228.6	232.8	233.1	221.4	108.2
Bypass	ka	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.4	145.0	160.9	1.5
Maximum generation	gwh	14.450	8.861	18.169	14.208	20.698	24.263	24.804	27.150	27.125	25.821	20.326	13.205
Actual generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	5.779	26.121	27.125	25.821	20.326	7.108
Percent max generation		0.	0.	0.	0.	0.	0.	23.	96.	100.	100.	100.	54.
Average kwh/af		0.	0.	0.	0.	0.	0.	110.	114.	117.	111.	92.	66.
Guernsey 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	0.0	0.0	45.2	52.6	50.9	52.9	53.3	55.4
Bypass	ka	0.3	0.2	0.3	0.4	0.3	0.3	0.4	207.4	209.1	338.1	329.7	87.5
Maximum generation	gwh	2.183	2.724	3.387	2.081	3.229	3.634	3.655	3.840	3.717	3.836	3.838	3.429
Actual generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	3.177	3.840	3.717	3.836	3.838	3.429
Percent max generation		0.	0.	0.	0.	0.	0.	87.	100.	100.	100.	100.	100.
Average kwh/af		0.	0.	0.	0.	0.	0.	70.	73.	73.	73.	72.	62.



## Glossary

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

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

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

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

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

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

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

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

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.

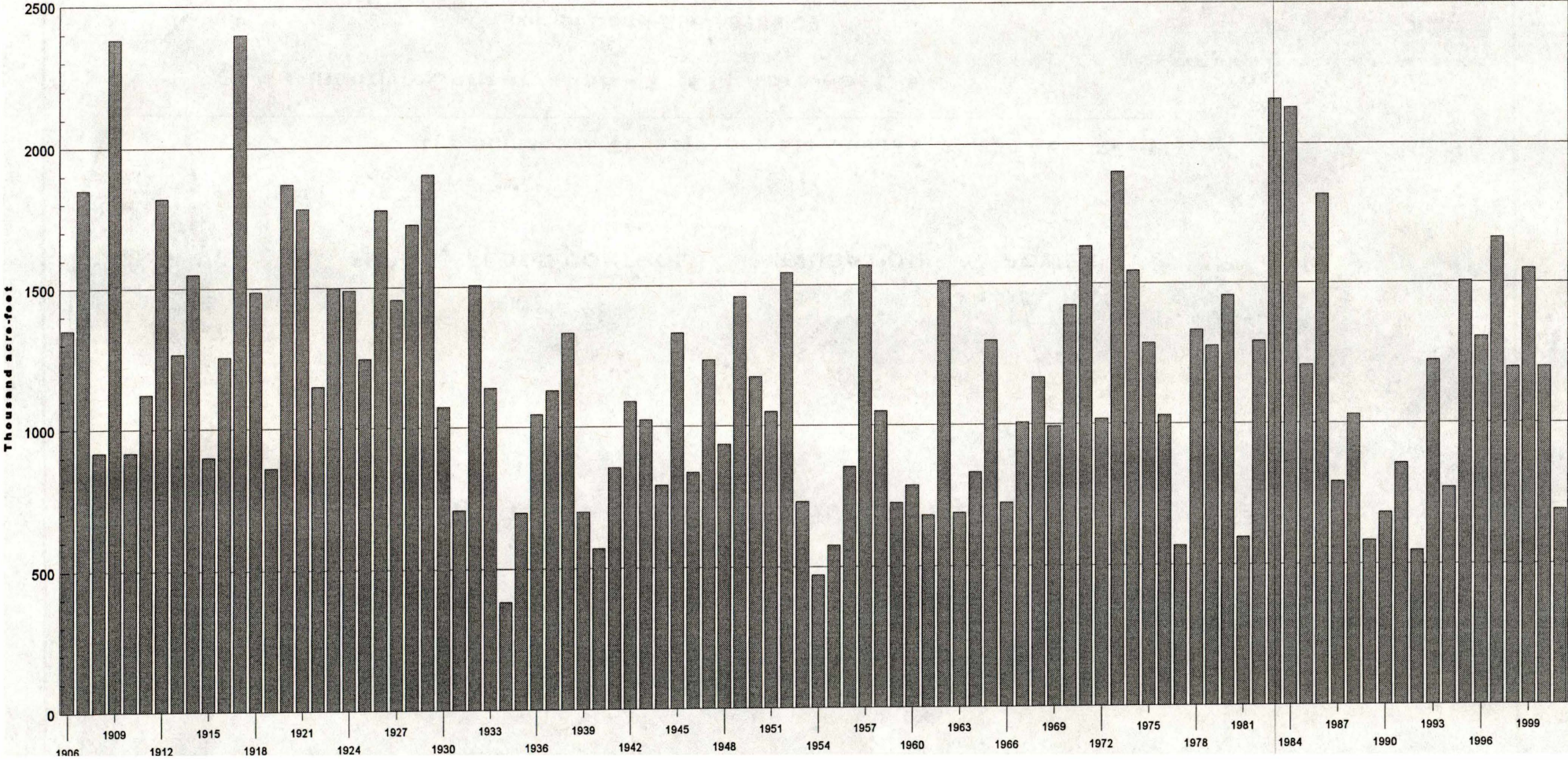
SNOTEL - Snowpack telemetry network. A network of Natural Resources Conservation Service automated sites which continually monitor snowpack and weather conditions and transmit data to a data retrieval center in Portland, Oregon.

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

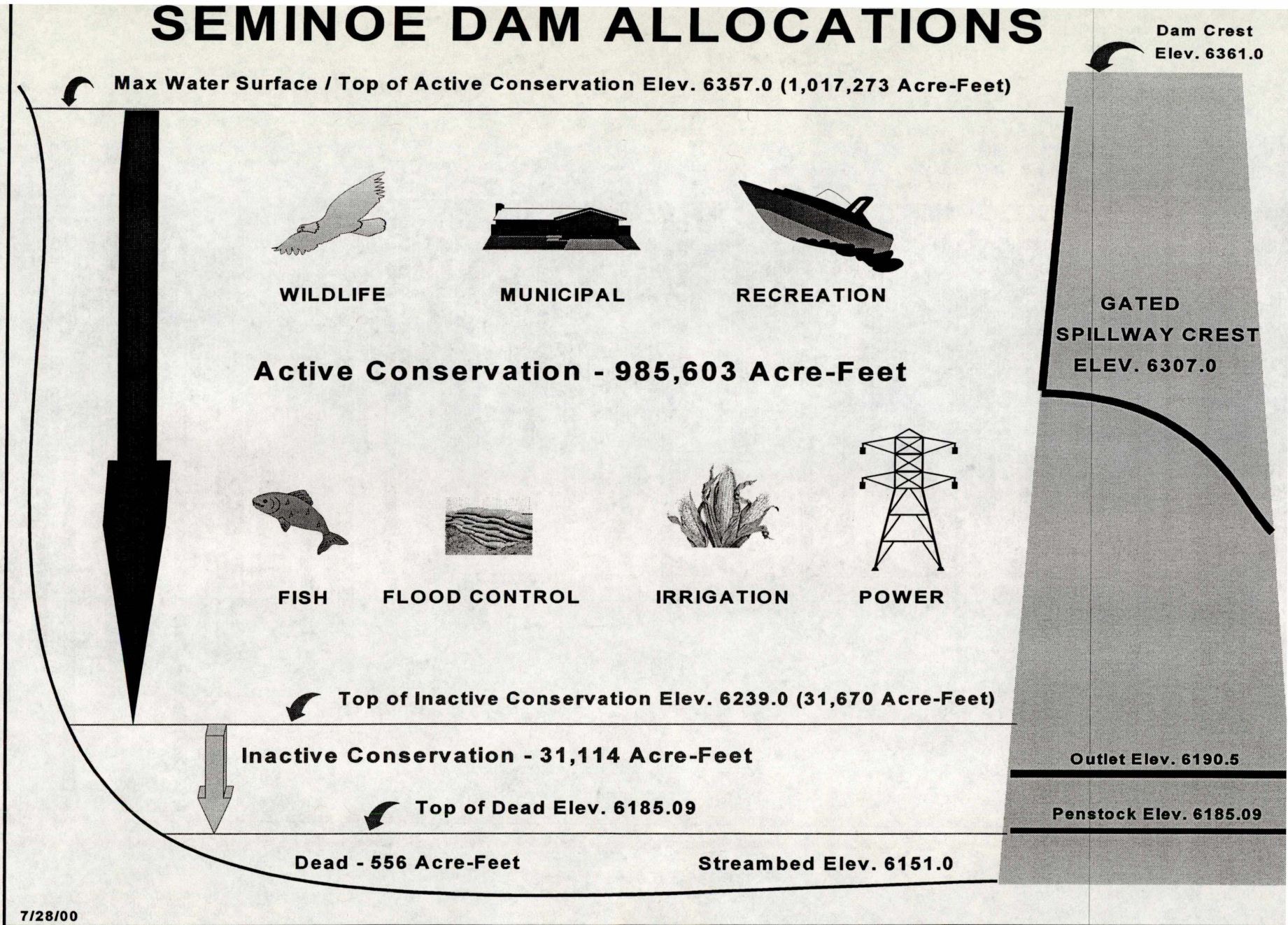


# Pathfinder Watershed Runoff





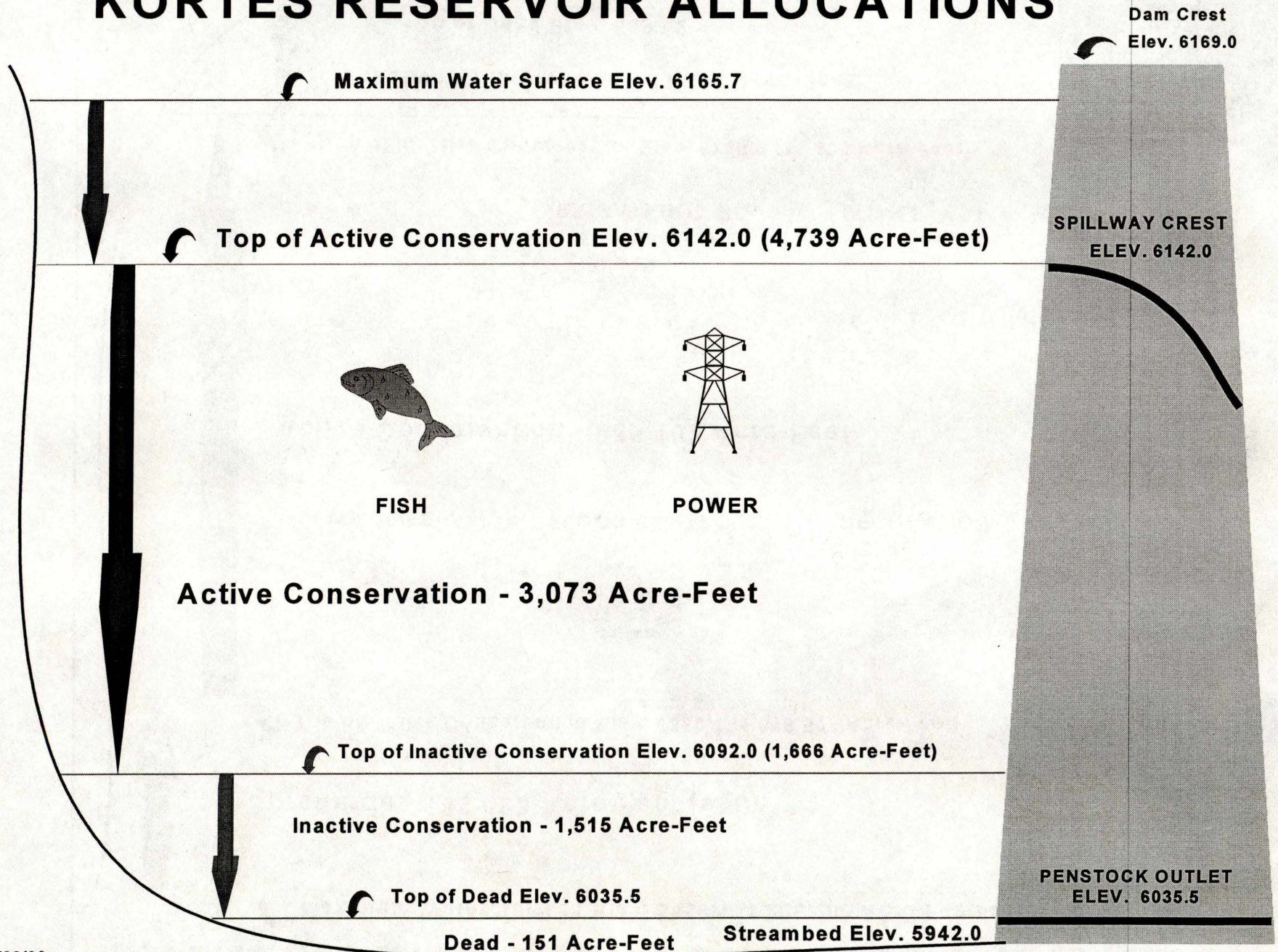
# SEMINOE DAM ALLOCATIONS



Note: Symbols represent typical reservoir uses.



# KORTES RESERVOIR ALLOCATIONS



7/28/00

Note: Symbols represent typical reservoir uses. 65



# PATHFINDER RESERVOIR ALLOCATIONS

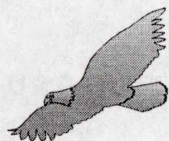
Dam Crest  
Elev. 5858.1

Maximum Water Surface Elev. 5858.1 (1,205,000 Acre-Feet, est.)

Surcharge - 188,493 Acre-Feet (est.)

Top of Active Conservation Elev. 5850.1 (1,016,507 Acre-Feet)

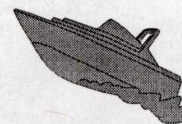
Uncontrolled  
Spillway Crest  
Elev. 5850.1



WILDLIFE

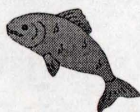


FLOOD CONTROL



RECREATION

Active Conservation - 985,102 Acre-Feet



FISH



IRRIGATION



POWER

Top of Inactive Conservation Elev. 5746.0 (31,405 Acre-Feet)

Inactive Conservation - 31,398 Acre-Feet

Fremont Canyon Power  
Tunnel Elev. 5715.0

Top of Dead Elev. 5693.2

Invert of Jet Flow Valve

Dead - 7 Acre-Feet

Streambed Elev. 5658.0

North Outlet Elev. 5693.2

7/28/00

Note: Symbols represent typical reservoir uses. 66



# ALCOVA RESERVOIR ALLOCATIONS

Dam Crest  
Elev. 5510.0

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

Active Conservation - 30,603 Acre-Feet



FISH



RECREATION



IRRIGATION



POWER

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

CASPER CANAL  
ELEV. 5487.0

Inactive Conservation - 153,711 Acre-Feet

GATED SPILLWAY  
CREST ELEV. 5460.0

Top of Dead Elev. 5334.08

PENSTOCK OUTLET  
ELEV. 5334.08

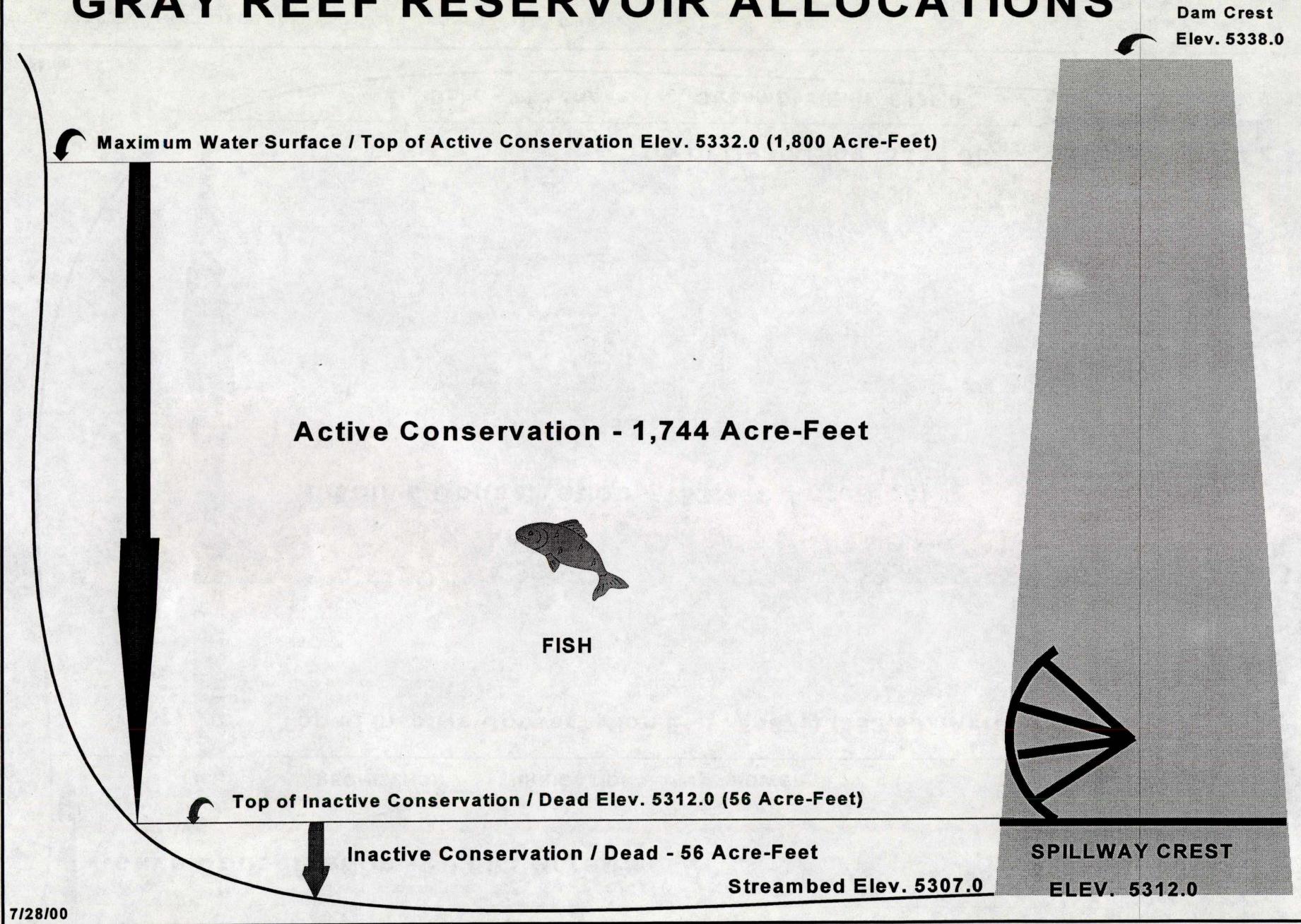
Dead - 91 Acre-Feet      Streambed Elev. 5325.0

7/28/00

Note: Symbols represent typical reservoir uses.



# GRAY REEF RESERVOIR ALLOCATIONS



Note: Symbols represent typical reservoir uses.



# GLEND0 RESERVOIR ALLOCATIONS

Dam Crest  
Elev. 4675.0

Maximum Water Surface / Top of Surge 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**

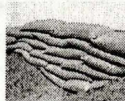
Top of Active Conservation Elev. 4635.0 (517,485 Acre-Feet)



WILDLIFE



IRRIGATION



FLOOD CONTROL



RECREATION

**Active Conservation - 454,337 Acre-Feet**



FISH



INDUSTRIAL



MUNICIPAL



POWER

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

**Inactive Conservation - 52,115 Acre-Feet**

Top of Dead Elev. 4545.0

River & Penstock Outlets  
Elev. 4545.0

Dead - 11,033 Acre-Feet

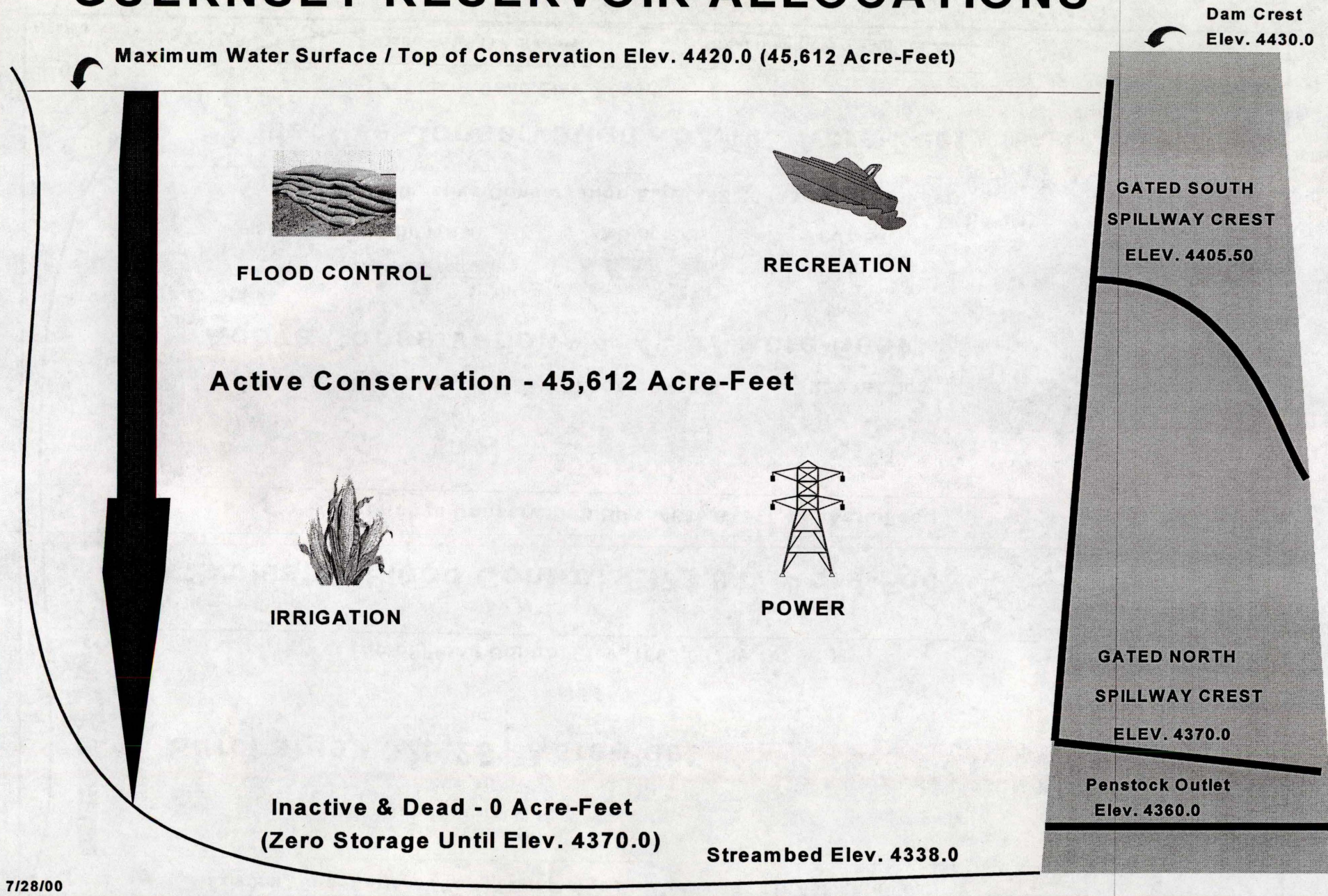
Streambed Elev. 4508.0

7/28/00

Note: Symbols represent typical reservoir uses.



# GUERNSEY RESERVOIR ALLOCATIONS



Note: Symbols represent typical reservoir uses.



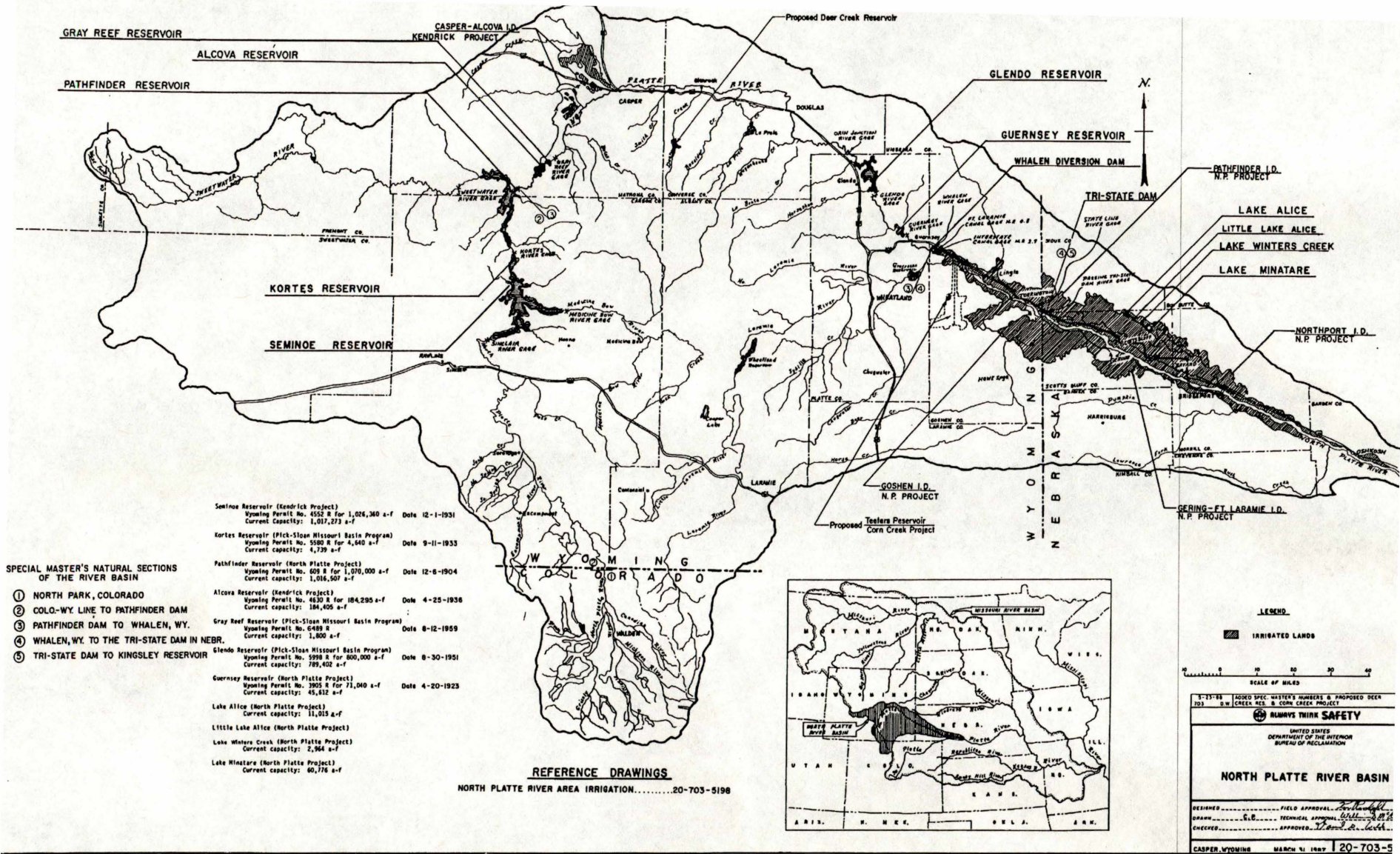


Figure 21