PREFACE

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

References to average in this document will refer to the average of the historical record for the years 1981-2010, except for water year 2012 information which uses the years 1982-2011. 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 processes, an extensive network of Hydromet stations, control crest measurement weirs at gaging stations, SNOw TELemetry (SNOTEL) stations, and a snowmelt runoff forecasting procedure 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 efficiencies that increase 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 in the System include four off stream reservoirs known as the Inland Lakes in western Nebraska as shown in Figure 21.

Approximately 70 to 80 percent of the annual North Platte River streamflow above Seminoe Dam occurs from snowmelt runoff during the April-July period. Primary water demand is irrigation, and the period of delivery of irrigation water normally extends from May through September. Figure 20 represents historical watershed runoff above Pathfinder Reservoir from 1906 through 2011. The System furnishes irrigation water to over 440,000 acres of land in Wyoming and Nebraska.

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

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

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

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

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

Table 1 North Platte River Reservoir Data

Reservoir (Date Completed)	Dead Storage [1] Acre-feet (AF)	Active Storage [2] (AF)	Total Storage (AF)	Minimum Storage (AF)	Minimum Elevation (feet)
Seminoe (1939)	556	1,016,717	1,017,273	31,670 [4]	6239.00 [4]
Kortes (1951)	151	4,588	4,739	1,666 [4]	6092.00 [4]
Pathfinder (1909)	7	1,016,500	1,016,507	31,405 [4]	5746.00 [4]
Alcova (1938)	91	184,314	184,405	137,610 [5]	5479.50 [5]
Gray Reef (1961)	56	1,744	1,800	56 [6]	5312.00 [6]
Glendo (1958)	11,033	778,369	789,402 [3]	63,148	4570.00 [7]
Guernsey (1927)	0	45,612	45,612	0	4370.00 [8]
Total	11,894	3,047,844	3,059,738	265,555	

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

SYSTEM PLANNING AND CONTROL

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

The System's integrated operation is planned and coordinated by Reclamation's 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 optimum utilization of the available water resources in the System can be achieved only through careful budgeting of the anticipated water supply. The technical end product of this budgeting process is an Annual Operating Plan (AOP).

The System is operated on a water year basis (October 1 through September 30). Early in the water year an AOP is prepared, reviewed, and presented to the public. The AOP consists of three operation studies using reasonable minimum, reasonable maximum, and most probable inflow conditions determined from statistical analysis of historical inflow conditions. The AOP, as developed and reflected in the three operation studies, provides the flexibility to adjust operations as conditions change during the water year. Reclamation makes use of computer programs to revise and adjust the operating plan each month to reflect changing conditions. A computerized process of forecasting the anticipated water supply also aids the revision process during the months of February, March, April, and May. Figure 1 depicts North Platte Reservoirs Total Storage End of September Content for Water Years 1912 through 2011. Table 2 depicts A Summary of Reservoir Storage Content for Water Year 2011 (End of Month). Table 9 depicts the Actual Reservoir Operations for Water Year 2011.

Table 2 Summary of Reservoir Storage Content for Water Year 2011 (End of Month)

Seminoe Reservoir			Pathfinder Reservoir			Alcova Reservoir		
Month	Storage	Record [1]	Month	Storage	Record [1]	Month	Storage	Record [1]
October	842,798		October	766,068		October	156,200	
November	841,748		November	769,319		November	156,786	
December	848,414	3rd highest	December	778,589		December	156,809	
January	848,942	3rd highest	January	784,634		January	156,718	
February	793,917		February	845,902		February	156,786	
March	711,694		March	847,652		March	157,464	
April	520,012		April	915,457		April	180,596	
May	434,123		May	1,037,812	2nd highest	May	180,694	
June	799,437		June	1,057,644	3rd highest	June	180,938	
July	922,648		July	1,014,747	2nd highest	July	180,816	
August	905,842		August	796,091		August	180,767	
September	867,228		September	729,118		September	180,743	
Glendo Reservoir			Guernsey Reservoir			Total System [2]		
Month	Storage	Record [1]	Month	Storage	Record [1]	Month	Storage	Record [1]
October	281,588	2nd highest	October	5,745		October	2,058,932	
November	318,344	2nd highest	November	9,018		November	2,101,508	
December	360,010	2nd highest	December	12,002		December	2,161,770	
January	401,336		January	14,649		January	2,212,708	
February	434,288		February	21,380		February	2,258,801	
March	393,216		March	21,208		March	2,138,019	
April	433,760		April	22,325		April	2,079,183	
May	516,374		May	27,378		May	2,203,438	
June	580,874		June	27,417		June	2,653,242	
July	563,674	3rd highest	July	27,749		July	2,716,130	2nd highest
August	399,643	Highest	August	27,671		August	2,316,511	2nd highest
September	219,125	3rd highest	September	452	3rd lowest	September	2,003,172	

[1] Record is the 30 year period from 1981-2010

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

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

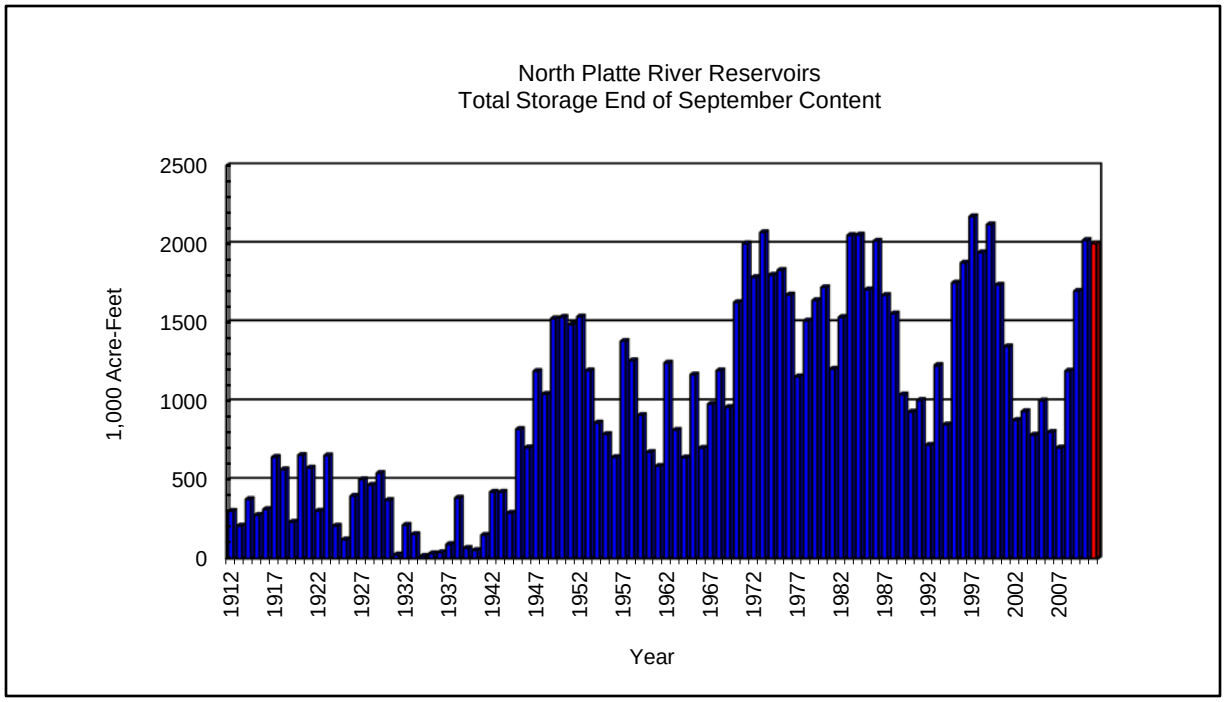


Figure 1 North Platte River Reservoirs Total Storage End of September Content (1912-2011)

SYSTEM OPERATIONS WATER YEAR 2011
Seminoe Reservoir Inflow

Seminoe Reservoir inflows were average or above average for the months of November through September. A total of 2,338,571 acre-feet (AF) or 242 percent of the 30 year average entered the system above Seminoe Reservoir during the water year. The monthly inflows ranged from a high of 550 percent of average in July 2011 to a low of 94 percent in October 2010. The actual April through July inflow totaled 1,969,402 AF, which was 276 percent of the 30 year average of 714,000 AF. The Seminoe computed inflow peaked for the water year on June 9, 2011, at 17,064 cubic feet per second (cfs). There were 44 consecutive days with inflows over 10,000 cfs. The total June inflow of 850,393 AF was the highest monthly inflow on record. Figure 2 depicts a comparison of average, water year 2011 and water year 2010 monthly inflow.

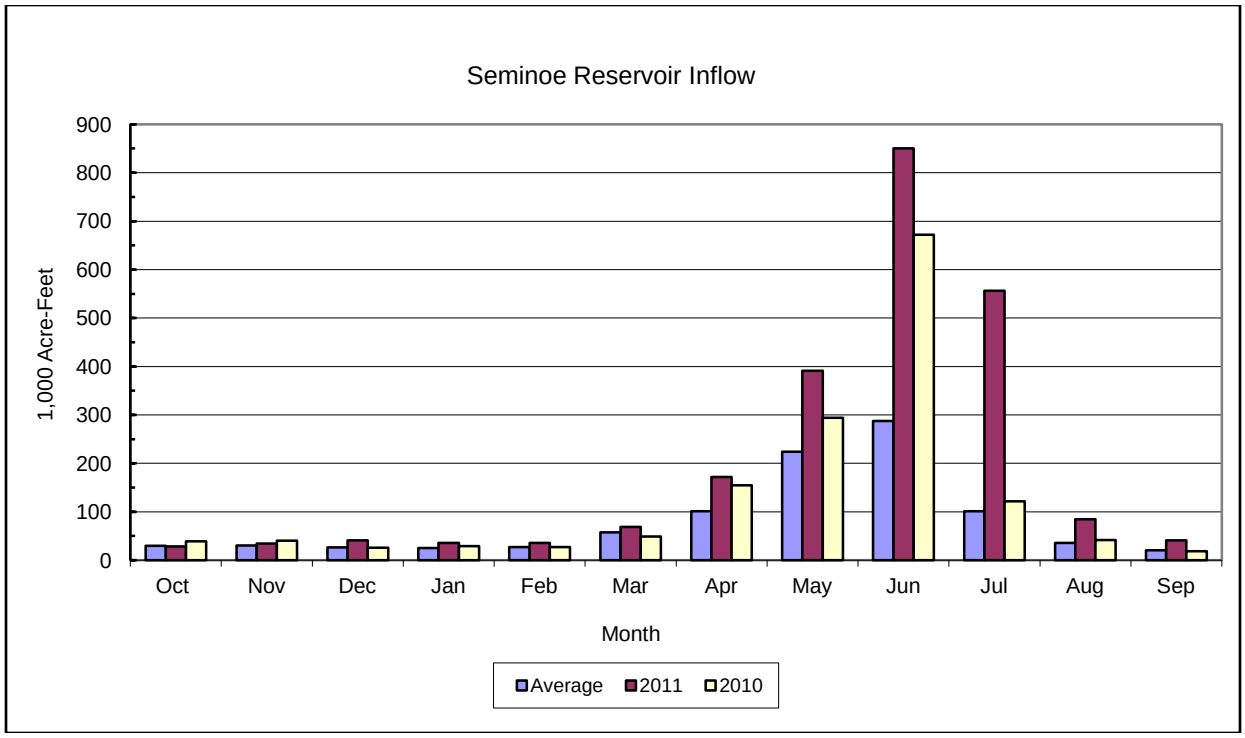


Figure 2 Seminoe [illegible]

Seminoe Reservoir Storage and Releases

Seminoe Dam and Reservoir, on the North Platte River, is the main storage facility for the Kendrick Project. Construction of the dam was completed in 1939, providing a storage capacity of 1,017,273 AF. The powerplant contains three electrical generating units with a total capacity of 51 mega-watts (MW) at a full release capability of about 4,050 cfs. The spillway consists of a concrete-lined tunnel through the right abutment controlled by three fixed-wheel gates with a release capability of close to 48,000 cfs. Two 60 inch jet flow valves provide a low level river outlet with a flow capacity of 3,420 cfs.

At the start of water year 2011, Seminoe Reservoir had a storage content of 850,880 AF, which was 137 percent of average and 84 percent of capacity. Due to the large expected spring runoff, Seminoe Reservoir was partially evacuated in the spring to create storage space. For this reason Reservoir content was lowest in May, but reservoir content was above average all other months. The maximum Seminoe Reservoir content was reached on August 8, 2011, at 931,712 AF. At the end of water year 2011, Seminoe Reservoir storage content was 867,228 AF, which was 140 percent of average and 85 percent of capacity. See Figure 3 for a comparison of average, water year 2011 and water year 2010 monthly storage.

Releases from Seminoe Dam averaged approximately 550 cfs from October 2010 through January 2011. The release was increased to approximately 2,000 cfs by the mid February; to 5,000 cfs by early April; and 9,000 cfs in early May. The release was decreased to 1,500 cfs at the end of July.

The water release was reduced to approximately 530 cfs on September 30, 2011, which would be the flow for the winter. Table 3 depicts a summary of Seminoe Reservoir information for water year 2011.

Table 3 Seminoe Reservoir Hydrologic Data for Water Year 2011

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

Storage-Elevation Data	Elevation (FT)	Storage (AF)	Date
Beginning of water year	6348.22	850,880	Oct 1, 2010 [2]
End of water year	6349.14	867,228	Sep 30, 2011
Annual Low	6313.08	387,760	May 17, 2011
Historic Low [1]	6253.30	56,390	Apr 20, 1961
Annual High	6352.82	935,129	Jul 20, 2011
Historic High [1]	6359.29	1,073,050	Jun 20, 1949

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

Inflow-Outflow Data	Inflow [3]	Date	Outflow	Date
Annual Total (AF)	2,338,572	Oct' 10 – Sep' 11	2,277,068	Oct' 10 – Sep' 11
Daily Peak (CFS)	17,064	Jun 9, 2011	9,335 [4]	May 3, 2011
Daily Minimum (CFS)	32	Oct 25, 2010	499 [4]	Oct 1, 2010
Peak Jet Flow Valve (CFS)				
Total Jet Flow Valve (CFS)				

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

Month	Inflow		Outflow		Content [6]	
	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]
October	28.3	94	33.4	76	842.8	140
November	34.5	114	33.1	68	841.7	144
December	41.3	157	34.0	62	848.4	153
January	35.5	140	34.3	60	848.9	163
February	35.7	131	89.6	166	793.9	161
March	68.5	119	148.5	219	711.7	148
April	171.7	170	360.2	414	520.0	106
May	391.1	174	474.6	451	434.1	72
June	850.4	296	479.4	319	799.4	108
July	556.2	550	424.3	346	922.6	130
August	84.5	237	92.0	109	905.8	139
September	41.0	197	73.8	150	867.2	140
Annual	2338.7	242	2277.2	246		

[5] The 30 year average is the period (1981-2010)
[6] End of month

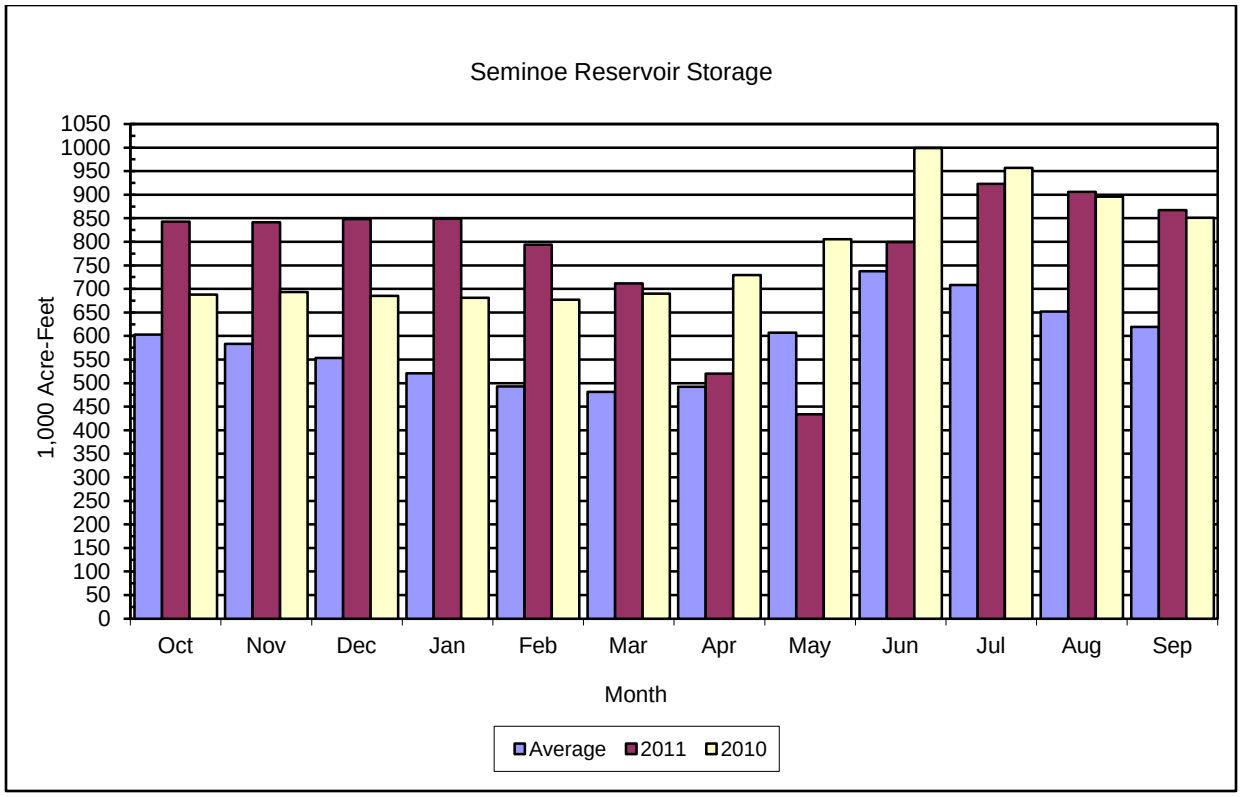


Figure 3 Seminoe Reservoir Storage

Kortes Reservoir Storage and Releases

Completed in 1951, Kortes Dam, Reservoir, and Powerplant of the Kortes Unit (Pick-Sloan Missouri Basin Project) are located about 2 miles below Seminoe Dam. It was the first unit initiated by the Bureau of Reclamation under the Missouri River Basin Project. Kortes Reservoir provides a total storage capacity of 4,739 AF at elevation 6142.0 feet which is the level of the spillway crest. Kortes Powerplant has three electrical generating units with a total capacity of 36 MW and a release capability of approximately 3,000 cfs. Water released from Seminoe Dam to Pathfinder Reservoir passes through the Kortes turbines to generate power. Maximum benefits are obtained when Kortes Reservoir remains full and the power releases are coordinated with those from Seminoe Powerplant to maintain a full reservoir.

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

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

Kortes releases averaged approximately 550 cfs from October 2010 through January 2011. The release was increased to approximately 2,000 cfs in mid February, and to 4,000 cfs by the first of April. Flows were further increased to an average release of approximately 8,000 cfs for the months of May and June. The release was decreased to 1,500 cfs in late July. The water release was reduced to approximately 530 cfs on September 30, 2011, which would be the flow for the winter. In water year 2011, most releases were made through the Kortes Spillway, due to high spring runoff and the need to move water through the system at rates in excess of the Kortes Powerplant capacity.

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

Kortes Dam to Pathfinder Dam river gains were below average except for December 2010 and June 2011. The Kortes Dam to Pathfinder Dam river gains ranged from 148 percent in December 2010 to 11 percent of average in October 2010. The actual April through July river gains were 41,072 AF, which is 52 percent of the 30 year average of 79,700 AF. Figure 4 depicts a comparison of average, water year 2010 and water year 2011 monthly river gains.

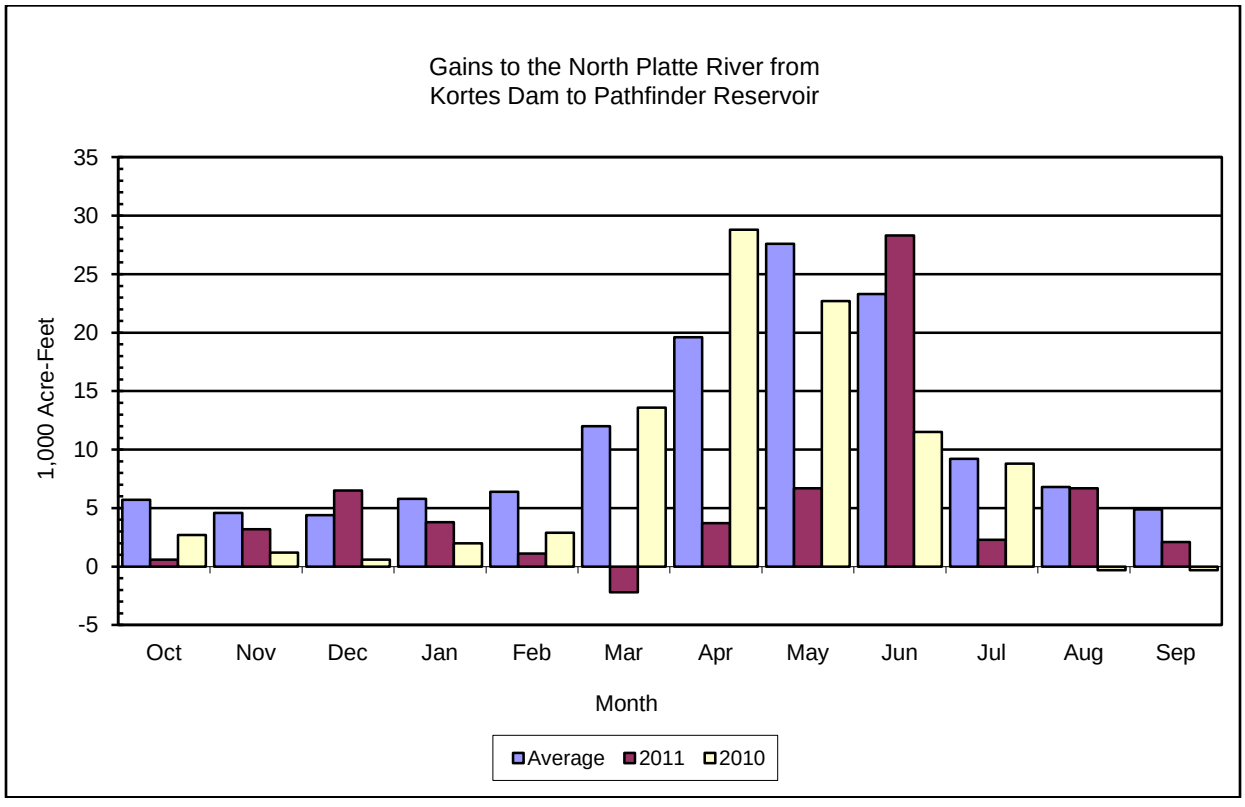


Figure 4 Gains to the North Platte River from Kortes Dam to Pathfinder Reservoir

Pathfinder Reservoir Storage and Releases

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

At the start of water year 2011, storage in Pathfinder Reservoir was 743,616 AF, which was 151 percent of average and 73 percent of capacity. Pathfinder storage remained above average all year (See Figure 5). The maximum Pathfinder Reservoir content for the water year was reached on June 11, 2011, at 1,060,598 AF which is 104 percent of capacity. The water year ended with 729,118 AF of water in storage in Pathfinder Reservoir, which was 148 percent of average and 72 percent of capacity. A continual release of water from Pathfinder Reservoir during October was maintained during the gradual drawdown of Alcova Reservoir to its winter operating range. At the request of the Wyoming Game and Fish Department a year round flow of 75 cfs was provided through the Pathfinder Reservoir 30 inch Jet-Flow Valve to the river below Pathfinder Dam. The exception was when flood releases were needed and reached a maximum flow below Pathfinder Dam of approximately 7,100 cfs. Table 4 depicts a summary of Pathfinder Reservoir information for water year 2011.

Releases from Seminoe/Kortes were utilized to intentionally raise the level of Pathfinder Reservoir to initiate a spillway release. This served two purposes: the spillway provides greater release capability to move water downstream, and the depth of water temporarily stored above the spillway crest level provided temporary additional storage capacity in the System. Because flow over the spillway is a function of reservoir level, releases from the jet flow gates and the powerplant were adjusted to control the total downstream release. On May 22, 2011, water began passing over the uncontrolled spillway at Pathfinder for the second consecutive year. The reservoir's maximum elevation of 5852.07 was the highest since 1984. The highest flow on the spillway was over 4,400 cfs on June 11, 2011. On July 31, 2011, the reservoir dropped below 5850.10 feet and the uncontrolled spill stopped.

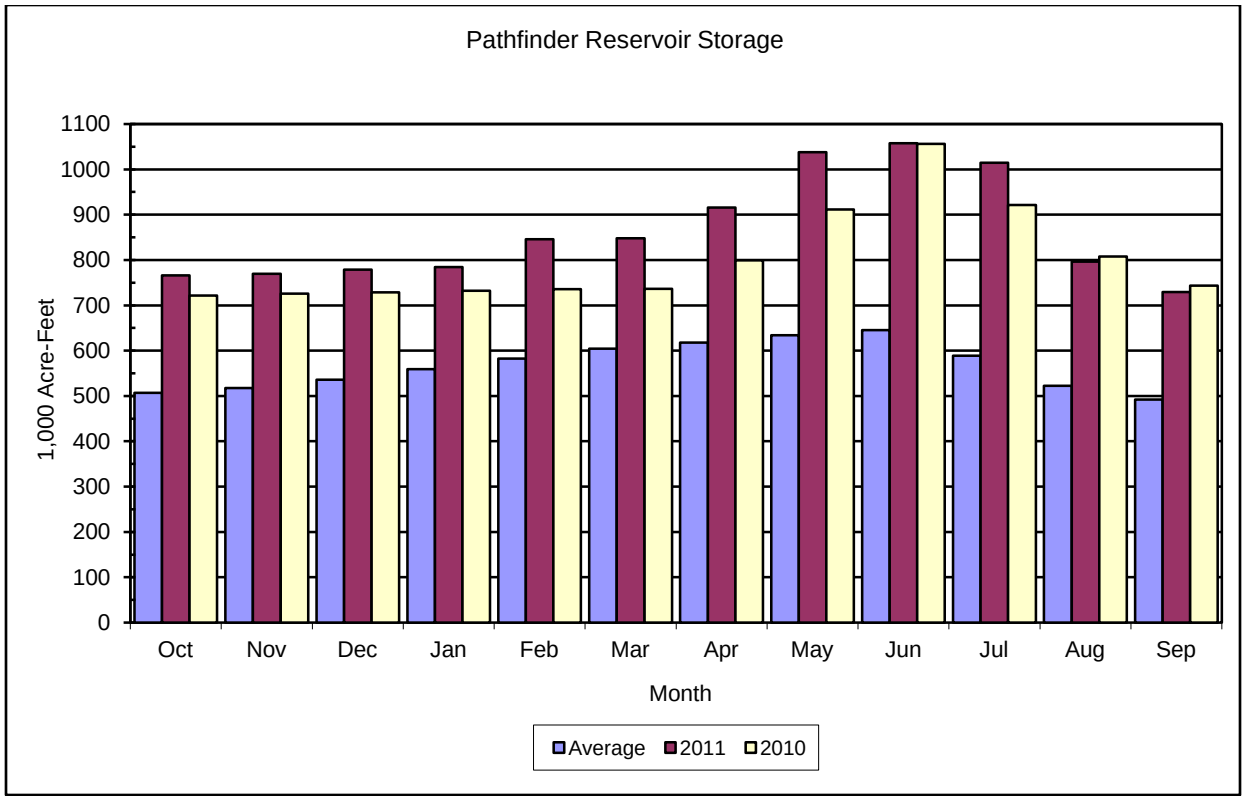


Figure 5 Pathfinder Reservoir Storage

Table 4 Pathfinder Reservoir Hydrologic Data for Water Year 2011

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	5836.35	743,616	Oct 1, 2010[3]
End of water year	5835.52	729,118	Sep 30, 2011
Annual Low	5835.52	729,118	Sep 29, 2011
Historic Low [2, 3]	5690.00	0	Sep 9, 1958
Annual High	5852.07	1,060,598	Jun 11, 2011
Historic High [1]	5853.11	1,083,755	Jul 7, 1983

[1] Daily records for this table are only available from water year 1946
[2] From September 1958 through January 1959, Pathfinder Reservoir was drained for construction of Fremont Canyon tunnel.
[3] Represents 0001 hours on October 1.

Inflow-Outflow Data	Inflow	Date	Outflow	Date
Annual Total (AF)	2,339,790	Oct, 2010 – Sep, 2011	2,287,160	Oct, 2010 – Sep, 2011
Daily Peak (CFS)	10,056	June 6, 2011	8,586	Jun 9, 2011
Daily Minimum (CFS)	72	October 6, 2010	25	Oct 5, 2010
Peak Jet Flow Valve (CFS)			7,113 [4]	Jun 15, 2011
Total Jet Flow Valve (AF)			1,316,678[5]	Oct, 2010 – Sep, 2011

[4] At the request of the Wyoming Game and Fish Department a yearly flow of 75 cfs will be provided through the Pathfinder Reservoir 30 inch Jet-Flow Valve to the river below Pathfinder Dam.
[5] Includes water that flowed over the uncontrolled spillway from May 22 – July 31, 2011.

Month	Gain from Kortes		Inflow [6]		Outflow		Content [8]	
	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]
October	0.6	11	33.8	68	7.1	27	766.1	151
November	3.2	70	36.3	68	30.5	75	769.3	149
December	6.5	148	40.6	69	30.7	78	778.6	145
January	3.8	66	38.0	60	31.2	80	784.6	140
February	1.1	17	90.6	150	28.1	78	845.9	145
March	-2.2	NA [7]	146.1	183	141.6	256	847.7	140
April	3.7	19	363.7	341	290.7	324	915.5	148
May	6.7	24	481.3	362	352.5	318	1,037.8	164
June	28.3	121	507.8	293	477.1	309	1,057.6	164
July	2.3	25	427.0	324	456.8	255	1,014.7	172
August	6.7	99	98.6	108	305.5	203	796.1	152
September	2.1	43	75.8	140	135.5	170	729.1	148
Annual	62.8	48	2339.6	222	2287.3	228		

[5] 30 year average is the period (1981-2010)
[6] The inflow includes the gain from Kortes Dam to Pathfinder Dam.
[7] Represents a negative number that makes the percentage meaningless.
[8] End of Month

Alcova and Gray Reef Reservoirs Storage and Releases

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

The annual drawdown of Alcova Reservoir began on October 1, 2010, and continued through October 29, 2010, when the reservoir reached its normal winter operating range of 5488 $\pm$ one foot. The refill of Alcova Reservoir was initiated on April 1, 2011. The water surface elevation was raised above 5497 feet on April 22, 2011, and the reservoir was maintained within 1 foot of elevation 5498 throughout the summer.

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

The Gray Reef releases were maintained at 500 cfs from October 2010 until March 6, 2011. No flushing flows were initiated in water year 2011. The largest daily release of water for the water year occurred on June 20, 2011, at 8,016 cfs.

The maximum release of 8,000 cfs out of Gray Reef was the highest since 1984. In addition, there were 53 consecutive days with releases over 7,000 cfs. Releases had not been this high in 26 years as well. As a result, the city of Casper had not seen flows through town that high since 1984. The city and county emergency management crews provided sand bags for businesses and residents to put around their property to avoid damage. The gage in Casper recorded a maximum daily flow of 8,460 cfs on June 20.

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

River gains from Alcova Dam to Glendo Reservoir were above average all water year except for November 2010 which was below average. The Alcova Dam to Glendo Reservoir river gains ranged from a low of 83 percent in November to a high of 197 percent in December 2010. The actual April through July gain was 181,636 AF, which was 138 percent of average. The maximum computed daily river gain of 2,795 cfs occurred on May 30, 2011, and the daily computed Glendo Reservoir inflow peaked on May 30, 2011, at 9,107 cfs. Figure 6 depicts a comparison of average, water year 2011 and water year 2010 monthly river gains.

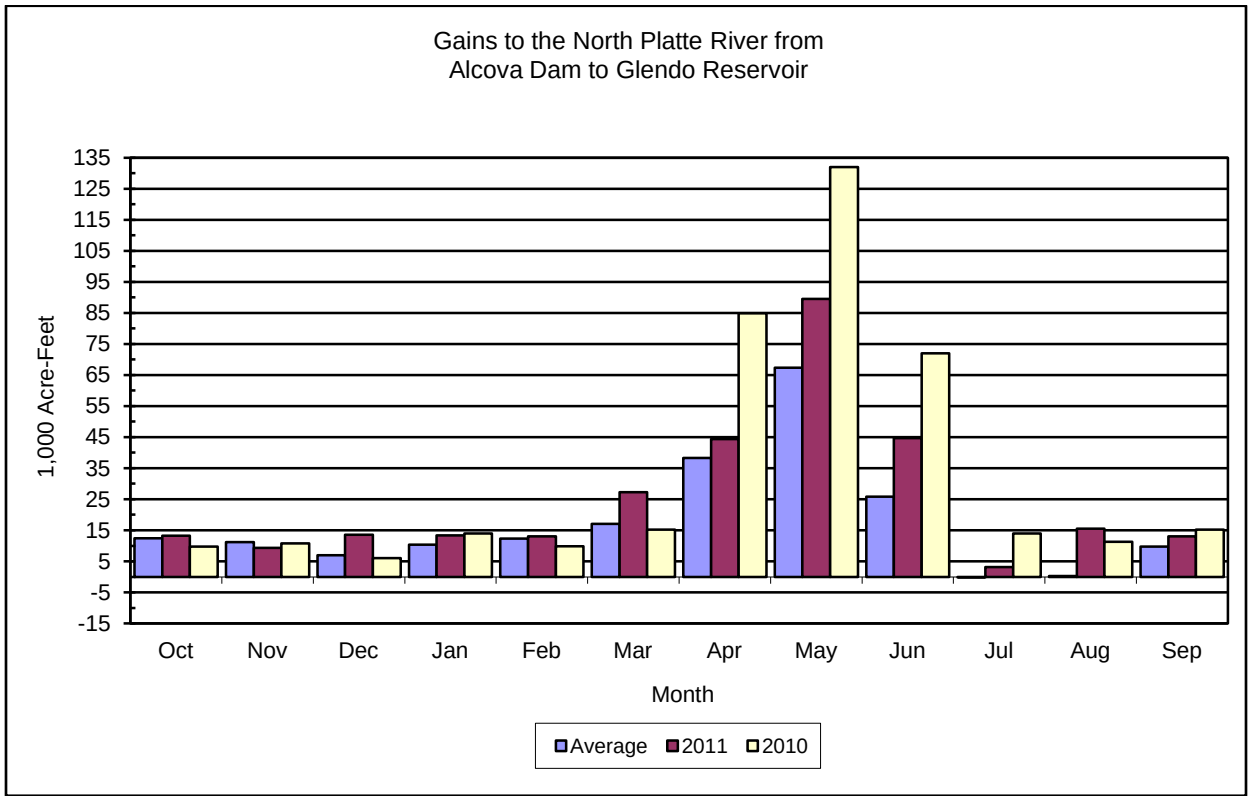


Figure 6 Gains to the North Platte River from Alcova Dam to Glendo Reservoir

Glendo Reservoir Storage and Releases

Glendo Dam and Reservoir is the only storage facility for the Glendo Unit. The reservoir has a storage capacity of 789,402 AF, including 271,917 AF allocated to flood control. Glendo Powerplant consists of 2 electrical generating units, with a total installed capacity of 38 MW. With both generating units operating at capacity and the reservoir water surface at elevation 4635.0 feet, approximately 3,920 cfs can be released through Glendo Powerplant. The reinforced concrete spillway has an ungated ogee crest. The spillway capacity at elevation 4669.0 feet, (6 feet below the crest of the dam), is 10,335 cfs.

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

Glendo Reservoir storage was 240,770 AF at the beginning of water year 2011, which was 205 percent of average but only 47 percent of active conservation of 517,485 AF. Water releases from Glendo Reservoir were initiated on February 22, 2011, in order to evacuate water from the system in preparation for the spring runoff. The reservoir reached a maximum storage for the year of 582,110 AF (elevation 4639.95 feet) on July 4, 2011. At the end of the water year, Glendo Reservoir contained 219,125 AF of water (water surface elevation 4602.52 feet) which was 186 percent of average and only 42 percent of active conservation of 517,485 AF. Figure 7 depicts water year 2011 and water year 2010 end of month reservoir storage compared to average. Table 5 depicts a summary of Glendo Reservoir information for water year 2011.

Glendo Reservoir entered the flood pool on June 1, 2011, and stayed there until August 13, 2011. At peak storage, there was nearly 5 feet of water in the flood pool. When Glendo Reservoir is in the flood pool, releases are directed by the Corps of Engineers, and frequent coordination took place between Wyoming Area Office and the Corps of Engineers regarding Glendo Operations during that time.

Table 5 Glendo Reservoir Hydrologic Data for Water Year 2011

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

Storage-Elevation Data	Elevation (FT)	Storage (AF)	Date
Beginning of water year	4605.60	240.770	Oct 1, 2010 [1]
End of water year	4602.52	219,125	Sep 30, 2011
Annual Low	4602.16	216,673	Sep 28, 2011
Historic Low	4548.10	15,140	Sep 28, 1966
Annual High	4639.95	582,110	Jul 4, 2011
Historic High	4650.94	758,830	May 28, 1973

[1] Represents 0001 hours on October 1.

Inflow-Outflow Data	Inflow	Date	Outflow [2]	Date
Annual Total (AF)	2,482,257	Oct, 2010 – Sep,2011	2,470,558	Oct, 2010 – Sep, 2011
Daily Peak (CFS)	9,107	May 30, 2011	8,104	August 26, 2011
Daily Minimum (CFS)	81	February 3, 2011	23 [3]	October 15, 2010
Peak Bypass Release (CFS)			5,353	August 10, 2011
Total Bypass Release (AF)			913,244[3]	Oct, 2010 – Sep, 2011

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

Month	Gain from Alcova		Inflow [7]		Outflow		Content [9]	
	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]	KAF	% of Avg. [5]
October	13.2	106	44.0	69	1.7	74 [6]	281.6	165
November	9.3	83	38.9	73	1.5	94 [6]	318.3	144
December	13.6	194	43.6	94	1.6	84 [6]	360.0	136
January	13.3	128	43.3	89	1.6	84 [6]	401.3	128
February	13.0	106	40.1	86	6.7	319 [6]	434.3	123
March	27.3	160	147.4	215	186.8	1405 [6]	393.2	98
April	44.4	116	296.3	284	253.9	449 [8]	433.8	97
May	89.5	133	435.4	267	349.4	296 [8]	516.4	106
June	44.7	173	489.4	306	418.5	258 [8]	580.9	122
July	3.1	NA [4]	450.3	284	459.7	144 [8]	563.7	181
August	15.5	5167	300.9	225	458.6	155 [8]	399.6	273
September	13.0	134	152.7	184	330.4	300 [8]	219.1	186
Annual	299.9	142	2482.3	220	2470.4	228		

[4] Represents a negative number that makes the percentage meaningless.
[5] 30 year average is the period (1981-2010)
[6] 17 year average is the period (1994-2010) In 1993 a low flow valve was installed at Glendo Dam which allowed the release of 25 cfs during the non irrigation season. Therefore, a 17 year average is used for the months of October through March. The March average is skewed high due to evacuation of space in the upper system to allow for snow melt run off. The higher March average caused the percent of average to be lower than normal.
[7] Inflow include the gain from Alcova Dam to Glendo Dam.
[8] Release of excess water due to high inflows.
[9] End of month

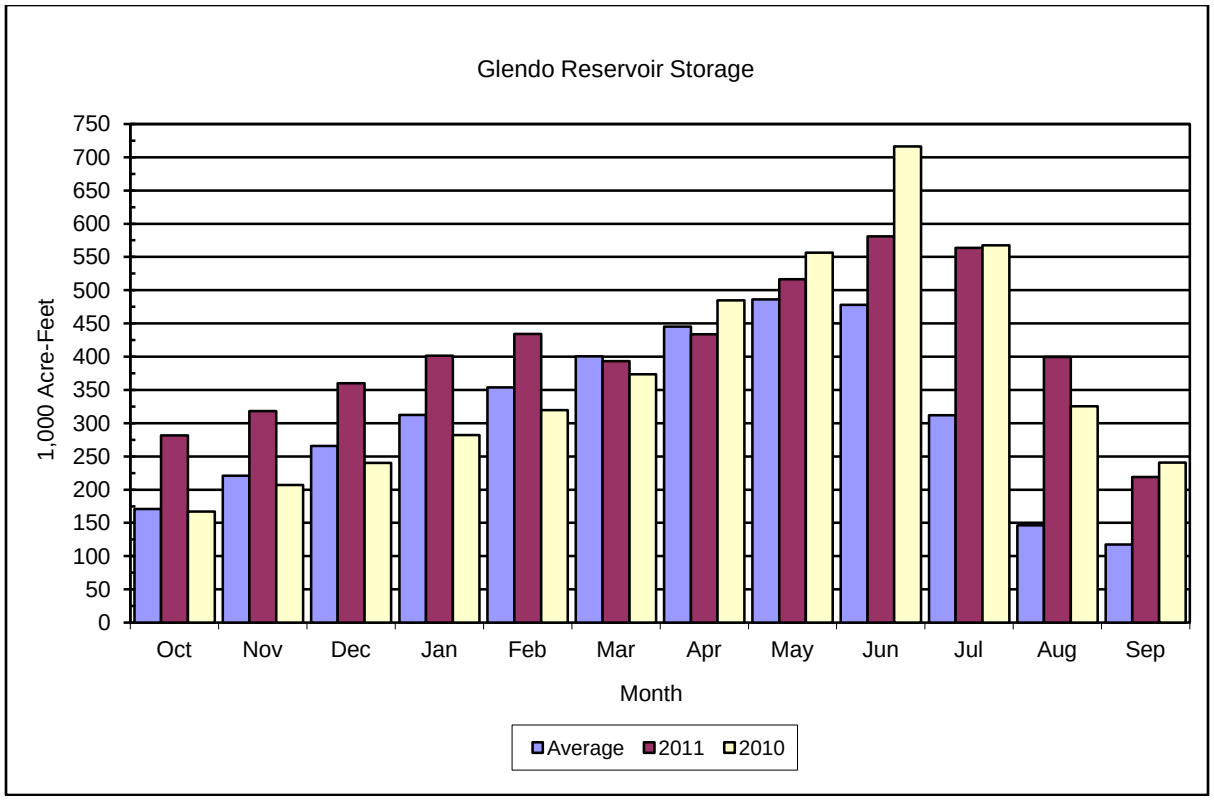


Figure 7 Glendo Reservoir Storage

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

The river gains between Glendo Dam and Guernsey Dam during water year 2011 were below average for March, June, and August 2011. The Glendo Dam to Guernsey Reservoir river gains ranged from 47 percent of average in June 2011 to a high of 1400 percent in July 2011, with the months of March and August having negative values making a percentage value meaningless. On August 24, 2011, daily computed inflow to Guernsey Reservoir peaked at 8,124 cfs. Figure 8 depicts a comparison of average, water year 2011 and water year 2010 monthly river gains.

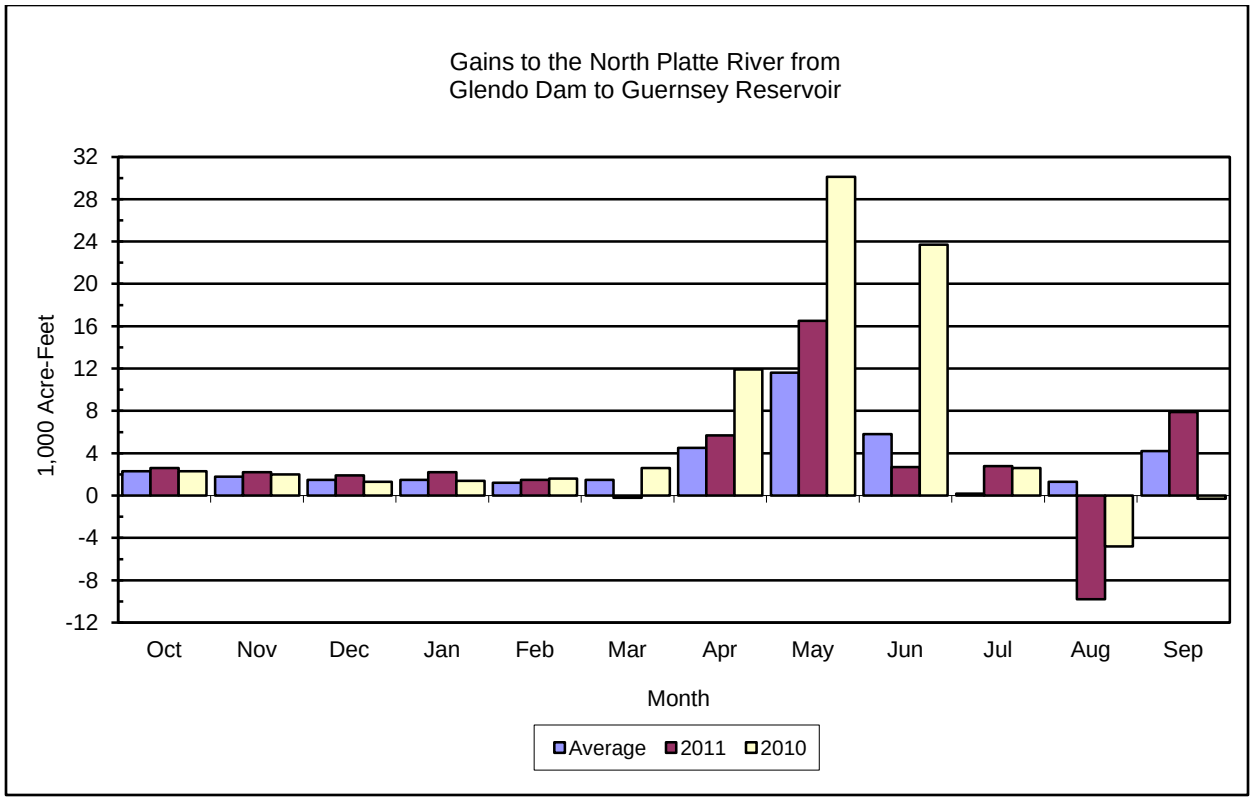


Figure 8 Gains to the North Platte River from Glendo Dam to Guernsey Reservoir

Guernsey Reservoir Storage and Releases

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

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

At the beginning of water year 2011, storage in Guernsey Reservoir was at 1,980 AF. Releases from Guernsey Reservoir were started on February 28, 2011, in order to evacuate water from the system in preparation for the spring runoff. The irrigation districts notified us of the need for silt to seal their canals in order to continue making deliveries after the cancelation of the 2010 "silt run". The annual "silt run" from the reservoir was late due to the need to continue the evacuation of water from the Glendo flood pool; in coordination with the Corps of Engineers the "silt run" was initiated on August 10 as Glendo Reservoir storage was decreasing out of the

flood pool. Reservoir storage was reduced to initiate the "silt run" and was maintained at a low level throughout the period. The minimum reservoir content during the "silt run" of 1,399 AF occurred on August 19, 2011. Following the "silt run", the reservoir was refilled to 27,204 AF by August 29, 2011, again making the reservoir suitable for recreation. At the end of the irrigation season, September 30, 2011, Guernsey Reservoir contained 452 AF. See Figure 9 for water year 2011 and water year 2010 storage compared to average.

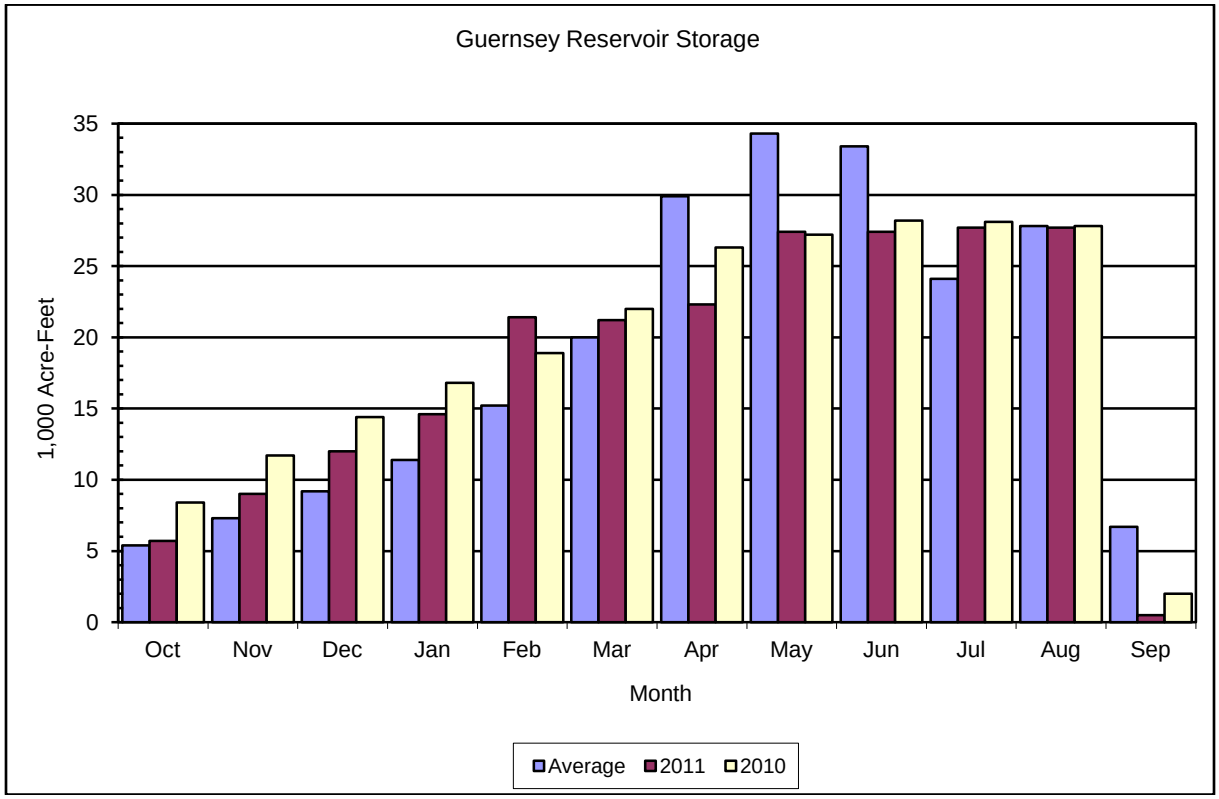


Figure 9 Guernsey Reservoir Storage

Precipitation Summary for Water Year 2011

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

In the Seminoe watershed, the Walden weather station recorded the 2nd highest October precipitation since 1938, the lowest June precipitation in the last 30 years, and the highest July precipitation since 1938. The Seminoe watershed precipitation was over 195 percent of normal in April 2011. The Seminoe watershed had an annual total of 111 percent of average precipitation for water year 2011.

In the Pathfinder watershed, the Lander, Wyoming weather station recorded the highest May precipitation since 1901 and the lowest July precipitation in the last 30 years. In the Pathfinder watershed, precipitation at the Pathfinder, Wyoming weather station recorded the 2nd highest December precipitation since 1901. The Pathfinder watershed precipitation was over 225 percent of normal in December 2010 and May 2011. The Pathfinder watershed had an annual total of 106 percent of average precipitation for water year 2011.

In the Glendo watershed, precipitation at the Casper, Wyoming weather station recorded the 2nd highest December precipitation in the last 30 years, and the 2nd lowest September precipitation since 1915. The Glenrock weather station recorded the 4th highest December precipitation since 1942. The Glendo watershed precipitation was over 270 percent of normal in December 2010. The Glendo watershed had an annual total of 106 percent of average precipitation for water year 2011. The Pathfinder Dam weather station is used as an indicator in both the Pathfinder and Glendo watersheds.

In the Guernsey watershed, the Glendo Dam, Wyoming, weather station recorded the 4th highest May precipitation since 1958. The Guernsey watershed precipitation was over 175 percent of normal in January 2011 and over 185 percent of normal in May 2011. The Guernsey watershed had an annual total of 119 percent of average precipitation for water year 2011.

See Figure 10 for a comparison of average, water year 2011 and water year 2010 total precipitation.

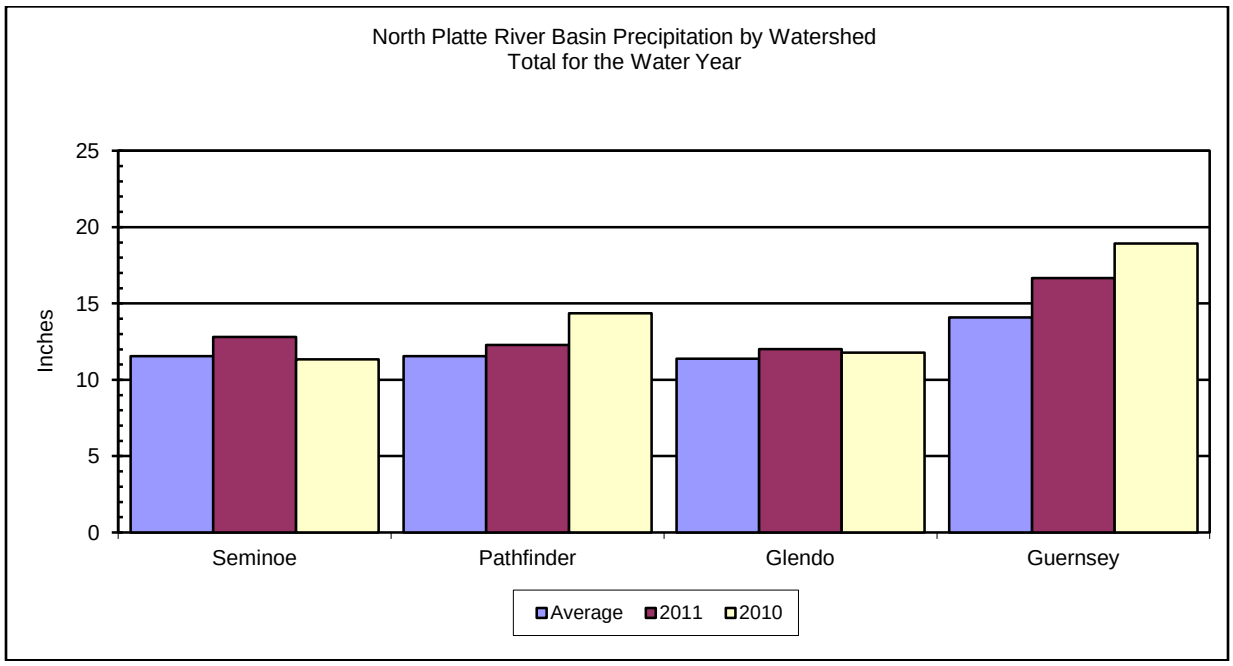


Figure 10 North Platte River Basin Precipitation by Watershed Total for Water Year 2011

Snow pack Summary for Water Year 2011

Reclamation relies on the Natural Resources Conservation Service (NRCS) to provide snow water equivalent (SWE) information for the three drainage areas in which Reclamation forecasts snowmelt runoff. The watershed area above Seminoe Reservoir was well above average for February, March, April, and May. The Sweetwater River watershed above Pathfinder Reservoir was just below average for February and March before increasing above average for April and May. The watershed between Alcova Dam and Glendo Reservoir was above average in February, March, April, and May. Table 6 shows a summary of snowpack for water year 2011.

Snow pack SWE for February 1, 2011, was above average at 143 percent for the watershed above Seminoe Reservoir; below average at 98 percent for the Sweetwater River watershed which flows into Pathfinder Reservoir; and above average at 107 percent for the Alcova to Glendo watershed.

Snow pack on March 1, 2011, decreased slightly with SWE at 137 percent of average for the watershed above Seminoe Reservoir; decreased to 96 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir; and increased to 111 percent of average for the Alcova to Glendo watershed.

Snow pack for April 1, 2011, increased slightly with SWE at 140 percent of average for the watershed above Seminoe Reservoir; increased to 105 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir; and decreased to 103 percent of average for the Alcova to Glendo watershed

Snow pack for May 1, 2011, increased greatly with SWE at 175 percent of average for the watershed above Seminoe Reservoir; 115 percent of average for the Sweetwater River watershed which flows into Pathfinder Reservoir; and 131 percent of average for the Alcova to Glendo watershed.

Table 6 North Platte Snowpack Water Content for 2011

	Feb 1		Mar 1		Apr 1		May 1	
Watershed	SWE[1]	% of Avg.[2]	SWE[1]	% of Avg.[2]	SWE[1]	% of Avg.[2]	SWE[1]	% of Avg.[2]
Seminoe Reservoir	19.0	143	23.5	137	29.6	140	37.7	175
Pathfinder Reservoir	9.5	98	11.7	96	15.3	105	16.7	115
Glendo Reservoir	7.8	107	10.2	111	12.2	103	14.3	131

[1] SWE (Snow Water Equivlent is the amount of water in the snowpack expressed in inches).
[2] Average is based on the 1971-2000 period.

Allocation for Water Year 2011

No allocation of storage water was required in water year 2011. The most consecutive allocation years historically are now 2002, 03, 04, 05, 06, and 2007 with 1953, 54, 55, 56, and 1957 being the second longest series of consecutive allocation years.

Ownerships for Water Year 2011

Stored water which is held in accounts for various entities is referred to as their ownership. At the beginning of water year 2011, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 695,254 AF of water, which is 170 percent of average. The Kendrick ownership contained 1,112,973 AF of water, which is 127 percent of average; and the Glendo ownership contained 175,936 AF of water, which is 141 percent of average. Kendrick, Pathfinder, Glendo, Inland Lakes, and Guernsey ownerships filled to their permitted amount during water year 2011.

The Operational Ownership filled in March 2011. This allowed for re-regulation water to be used in evaporation payback. Over 93,000 AF of re-regulation water was used to pay back evaporations to other ownership accounts (see Table 8). The evaporation was able to be paid back because no storage was ordered above Tri-State Dam.

Due to the combined high reservoir storage in the North Platte System, it was decided to transfer 435,000 AF of North Platte and Kendrick Ownership water to the re-regulation account (see Table 8). This amount was determined to be released at Guernsey Dam to satisfy the expected demand for the irrigation season while attaining an end of September system storage target of 2,000,000 AF. As a result of the release from re-regulation, the only storage charged during the year were to temporary Glendo contractors and irrigation districts below Tri-State Dam that wanted to divert more water than their natural flow right.

The total amount of water stored at the end of water year 2011 in the mainstem reservoirs for use in water year 2012 was 2,003,172 AF which was 141 percent of average. This total does not include 34,700 AF of water remaining in the four Inland Lakes in Nebraska.

At the end of water year 2011, the North Platte Project ownership (includes North Platte Pathfinder and North Platte Guernsey), contained 694,959 AF of water which is 170 percent of average. The Glendo ownership contained 176,685 AF of water which is 142 percent of average. The Kendrick ownership contained 1,109,121 AF, which is 127 percent of average and the operational/re-regulation water account contained 14,770 AF. Also stored in the North Platte storage system was 2,561 AF for the city of Cheyenne, 3,076 AF for the Wyoming Water Development Commission, and 2,000 AF for Pacific Power. See Figure 11 for the last two water years ownership carryover compared with average. Table 8 shows a summary of ownership for water year 2011.

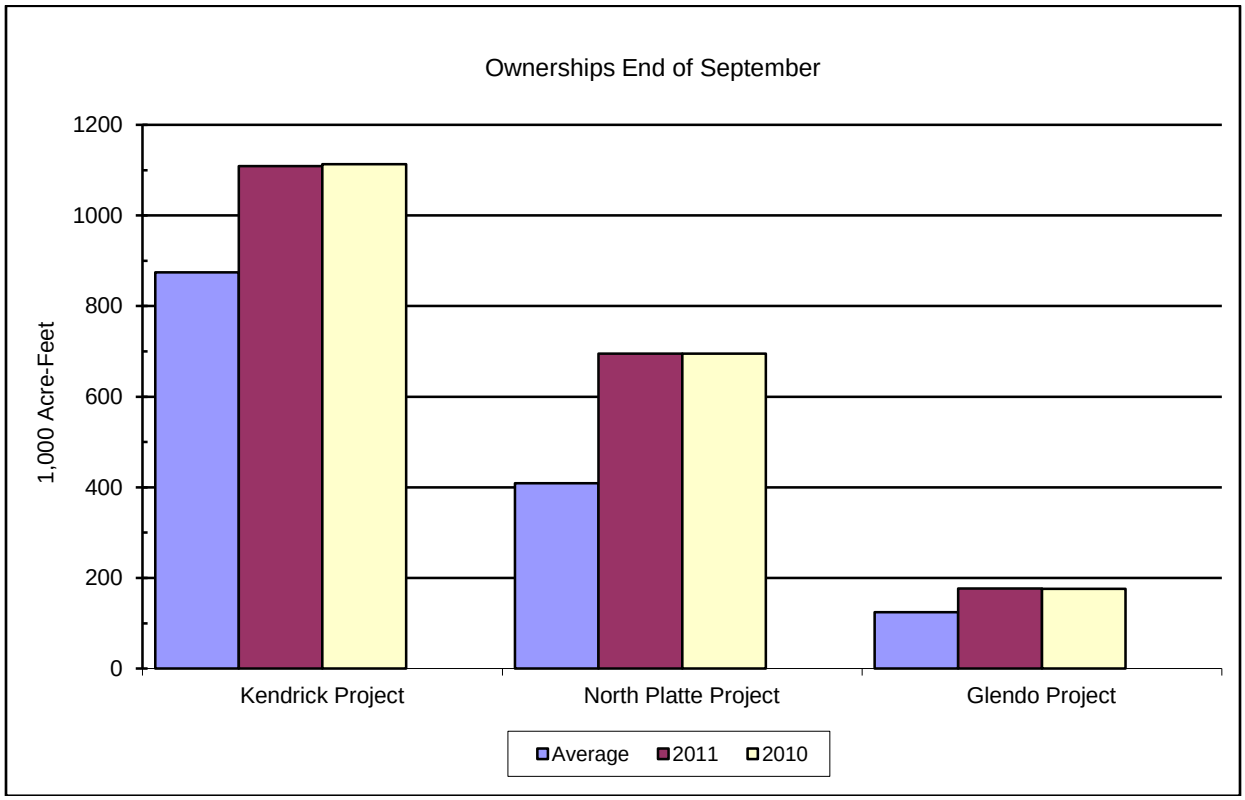


Figure 11 Ownership End of September

North Platte River Forecast 2011

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

Runoff forecasts for the Seminoe Reservoir watershed, the Sweetwater River above Pathfinder Reservoir, and the North Platte River from Alcova Dam to Glendo Reservoir are based on snow telemetry (SNOTEL) and/or snow course sites, precipitation sites, and calculated November inflow. Reclamation maintains a database consisting of historic monthly data for reservoir inflows, snow and precipitation stations. WYAO staff coordinates with NRCS Portland Office staff to exchange forecasted numbers. Reclamation forecasts and NRCS forecasts are then reviewed by WYAO management. All the information available is considered and judgement is applied to result in a final forecast of reservoir inflow. The forecasted information is then made available to the public through a news release and is used in updating monthly reservoir operating plans. Table 7 depicts a summary of the monthly forecasts for water year 2011.

Table 7 Summary of Forecasts of April-July Runoff for Water Year 2011

Forecast Points	Feb 1 KAF	Feb 1 % of Avg.	Mar 1 KAF	Mar 1 % of Avg.	Apr 1 KAF	Apr 1 % of Avg.	May 1 KAF	May 1 % of Avg.	Actual April-July KAF	% of Apr-Jul Avg.[1]
Seminoe Reservoir	1200	168	1230	172	1450	203	1750 [2]	245	1969.4	276
Sweetwater River	60	102	65	110	65	110	80 [3]	136	100.0	169
Alcova to Glendo	170	129	180	137	180	137	220 [4]	168	181.7	138

[1] Average is based on the 1981-2010 period.
[2] The May 1 forecast includes an actual April inflow of 171,700 AF.
[3] The May 1 forecast includes an actual April inflow of 7,500 AF.
[4] The May 1 forecast includes an actual April inflow of 44,400 AF.

Table 8 Summary of North Platte River System Ownership for Water Year 2011

Summary of North Platte River Systems Ownerships for Water Year 2011 (Acre-Feet)

	Months	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
	Pathfinder Ownership														
	Evaporation		-4,138	-678	-2,522	-685	-735	-1,386	-7,714	-6,562	-10,402	-12,399	-11,656	-7,561	**-66,438**
	Accural		28,449	33,366	51,226	38,172	34,438	43,180	107,540	0	0	0	0	0	**336,371**
B/	Delivery			0	0	0	0	0	0	0	0	0	0	0	**0**
A/	PP&L payback		0	0	0	0	0	0	0	806	175	0	0	0	**981**
E/	Evaporation payback											31,122	7,105	0	**38,227**
F/	Re-Regulation transfer												-309,436	0	**-309,436**
	Ownership total	695,254	719,565	752,253	800,957	838,444	872,147	913,941	1,013,767	1,008,011	997,784	1,016,507	702,520	694,959	
	Kendrick Ownership														
	Evaporation		-3,841	-865	-3,041	-780	-816	-1,314	-5,350	-3,433	-6,480	-7,256	-11,235	-7,369	**-51,780**
	Accural		0	0	0	0	0	0	57,418	33,105	0	0	0	0	**90,523**
B/	Delivery		0	0	0	0	0	0	0	0	0	0	0	0	**0**
E/	Evaporation payback											31,358	6,765	0	**38,123**
F/	Re-Regulation transfer							-310,000	-70,000	-70,000	0	450,000	-80,000	-718	**-80,718**
	Ownership total	1,112,973	1,109,132	1,108,267	1,105,226	1,104,446	1,103,630	792,316	774,384	734,056	727,576	1,201,678	1,117,208	1,109,121	
	Glendo Ownership														
	Evaporation		-1,314	-443	-127	-193	-174	-45	-440	-1,780	-2,166	-2,658	-2,641	-1,864	**-13,845**
	Accural		0	0	0	0	0	7,302	0	0	0	0	-15	0	**7,287**
B/	Delivery		0	0	0	0	0	0	0	0	-51	-36	-42	-3,593	**-3,722**
E/	Evaporation payback											10,223	1,689	0	**11,912**
	Ownership total	175,941	174,627	174,179	174,052	173,859	173,685	180,942	179,619	177,839	175,622	183,151	182,142	176,685	
	Guernsey Ownership														
	Evaporation		0	0	-31	-60	-70	-413	-417	-649	-1,101	-1,210	-774	0	**-4,725**
	Accural		0	0	14,963	14,346	13,395	3,109	0	0	0	0	0	0	**45,813**
B/	Delivery		0	0	0	0	0	0	0	0	0	0	0	0	**0**
E/	Evaporation payback											3,750	726	0	**4,476**
F/	Re-Regulation transfer												-45,564	0	**-45,564**
	Ownership total	0	0	0	14,932	29,218	42,543	45,239	44,822	44,173	43,072	45,612	0	0	
	Inland Lakes														
	Evaporation		-72	-80	-72	-60	-56	-202	-198	-28	0	0	0	0	**-768**
	Accural		15,319	11,095	0	0	0	0	19,807	0	0	0	0	0	**46,221**
C/	Delivery		0	0	0	0	0	0	-28,038	-17,415	0	0	0	0	**-45,453**
	Ownership total	0	15,247	26,262	26,190	26,130	26,074	25,872	17,443	0	0	0	0	0	

Summary of North Platte River Systems Ownerships for Water Year 2011 (Acre-Feet)

	Months	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
	City of Cheyenne														
	Evaporation		-22	-1	-14	0	-1	-5	-58	-31	-23	-3	-19	-20	**-197**
	Stored		939	552	392	377	744	571	254	406	536	1,050	773	838	**7,432**
	Used		-287	-326	-500	-179	-318	-400	-861	-1,187	-5,108	-501	-153	-342	**-10,162**
	Ownership total	5,488	6,118	6,343	6,221	6,419	6,844	7,010	6,345	5,533	938	1,484	2,085	2,561	
	Pacific Corp (PP&L)														
	Evaporation		-11	0	-1	0	0	-7	-3	-15	-26	-28	-30	-24	**-145**
	Accrual		0	0	0	0	0	0	0	82	26	28	30	24	**190**
B/	Delivery		0	0	0	0	0	0	0	0	0	0	0	0	**0**
	Ownership total	2,000	1,989	1,989	1,988	1,988	1,988	1,981	1,978	2,000	2,000	2,000	2,000	2,000	
	WWDC Ownership														
	Evaporation		-15	-2	-1	0	0	-11	-6	-23	-33	-43	-39	-28	**-201**
	Accural		0	0	0	0	0	0	0	0	0	0	0	0	**0**
D/	Delivery		0	0	0	0	0	0	0	0	0	0	0	0	**0**
	Ownership total	3,277	3,262	3,260	3,259	3,259	3,259	3,248	3,242	3,219	3,186	3,143	3,104	3,076	
	Operational Ownership														
	Evaporation		-86	-17	-4	0	0	-51	-54	-107	-167	-194	-196	-145	**-1,021**
	Accural		0	0	0	0	0	537	0	0	0	0	0	0	**537**
	Delivery		0	0	0	0	0	0	0	0	0	0	0	0	**0**
E/	Evaporation payback											569	111	0	**680**
	Ownership total	14,574	14,488	14,471	14,467	14,467	14,467	14,953	14,899	14,792	14,625	15,000	14,915	14,770	
	Re-Regulation Water														
	Evaporation		-132	-25	-6	0	0	-361	-803	-658	-4,590	-8,050	-2,962	-1,243	**-18,830**
	Accural		0	0	0	0	0	16,159	30,213	464,636	899,456	406,744	0	-292,012	**1,525,196**
	Delivery		0	0	0	0	-314	-186,562	-230,081	-342,892	-420,242	-312,556	-370,660	0	**-1,863,307**
E/	Evaporation Payback											-77,022	-16,396	0	**-93,418**
F/	Re-Regulation Transfer							310,000	70,000	70,000		-450,000	435,000	718	**435,718**
	Ownership total	14,636	14,504	14,484	14,478	14,478	14,164	153,400	22,729	213,815	688,439	247,555	292,537	0	

A/ In 1992, the Wyoming State Engineer granted an exchange which allows Pacific Power to exchange direct flows in the winter months (Oct-Apr) for direct flow in the summer months. During the winter months some direct flows which are available for storage under Pathfinder's storage right are not stored but instead are allowed to pass downstream for use by Pacific Power. In exchange, starting on May 1 Pacific Power allows some of its available direct flow to pass downstream to Glendo Reservoir to be stored as Pathfinder ownership. The exchange water was returned to Pathfinder at a rate of 26 AF daily starting on May 1, 2011, until June 7, 2011, when the last 19 AF of the exchange was returned.

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

C/ Transfer refers to Inland Lakes ownership water which was delivered from storage in Glendo or Guernsey Reseroirs. In April and May, 45,453 AF was transferred to the Inland Lakes.

D/ Wyoming Water Development Commission (WWDC) contracted with the Bureau of Reclamation for storage space of 3,300 AF in Glendo Reservoir for a one year period to store non-project water for irrigation purposes.

E/ Evaporations in the Kendrick, Pathfinder, Glendo, and Guernsey Ownerships were paid back using re-regulation water.

F/ 435,718 AF of North Platte and Kendrick Ownership water was transferred to the re-regulation account to meet anticipated irrigaton demands and to help meet an end of year storage target of 2,000,000 AF.

Table 9 Actual Reservoir Operations for Water Year 2011

NORTH PLATTE RIVER OPERATING PLAN
Year Beginning Oct 2010

HYDROLOGY OPERATIONS

Seminoe Reservoir Operations — **Initial Content 850.9 Kaf** — **Operating Limits: Max 1017.3 Kaf, 6357.00 Ft.** / **Min 31.7 Kaf, 6239.02 Ft.**

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	28.3	34.5	41.3	35.5	35.7	68.5	171.7	391.1	850.4	556.2	84.5	41.0
Total Inflow	cfs	460.	579.	672.	577.	642.	1114.	2886.	6360.	14291.	9046.	1374.	689.
Turbine Release	kaf	33.4	32.5	34.0	34.2	82.5	145.4	220.3	217.6	172.4	153.8	91.4	73.8
Jetflow Release	kaf	0.0	0.6	0.0	0.1	7.1	3.1	5.9	41.7	34.1	0.7	0.6	0.0
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	134.0	215.3	272.9	269.8	0.0	0.0
Total Release	kaf	33.4	33.1	34.0	34.3	89.6	148.5	360.2	474.6	479.4	424.3	92.0	73.8
Total Release	cfs	543.	556.	553.	557.	1613.	2415.	6054.	7719.	8057.	6900.	1496.	1240.
Evaporation	kaf	2.9	2.4	0.7	0.7	1.1	2.2	3.2	2.3	5.7	8.8	9.3	5.8
End-month content	kaf	842.8	841.7	848.4	848.9	793.9	711.7	520.0	434.1	799.4	922.6	905.8	867.2
End-month elevation	ft	6347.8	6347.7	6348.1	6348.1	6344.9	6339.7	6325.5	6317.8	6345.2	6352.2	6351.3	6349.1

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

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	33.4	33.1	34.0	34.3	89.6	148.5	360.2	474.6	479.4	424.3	92.0	73.8
Total Inflow	cfs	543.	556.	553.	557.	1613.	2415.	6054.	7719.	8057.	6900.	1496.	1240.
Turbine Release	kaf	14.4	0.0	3.8	7.3	31.9	37.3	62.9	137.4	142.8	175.0	90.4	72.0
Spillway Release	kaf	18.9	33.0	30.3	26.9	57.6	111.0	297.0	337.2	336.7	249.7	1.5	1.7
Total Release	kaf	33.4	33.0	34.1	34.2	89.5	148.3	359.9	474.6	479.5	424.7	91.9	73.7
Total Release	cfs	541.	555.	555.	556.	1612.	2413.	6049.	7719.	8058.	6907.	1495.	1239.

Pathfinder Reservoir Operations — **Initial Content 743.6 Kaf** — **Operating Limits: Max 1016.5 Kaf, 5850.10 Ft.** / **Min 31.4 Kaf, 5746.00 Ft.**

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Sweetwater Inflow	kaf	2.2	3.2	3.3	3.6	3.5	4.5	7.5	22.6	45.9	24.0	5.4	2.2
Kortes-Path Gain	kaf	-1.6	0.1	3.2	0.2	-2.4	-6.7	-3.8	-15.9	-17.5	-21.7	1.4	-0.1
Inflow from Kortes	kaf	33.3	33.0	34.1	34.2	89.5	148.3	359.9	474.6	479.5	424.7	91.9	73.7
Total Inflow	kaf	33.8	36.3	40.6	38.0	90.6	146.1	363.7	481.3	507.8	427.0	98.6	75.8
Total Inflow	cfs	550.	610.	661.	617.	1632.	2377.	6112.	7828.	8535.	6944.	1604.	1275.
Turbine Release	kaf	2.7	26.2	26.0	26.5	23.8	105.4	127.8	149.7	128.4	121.3	137.4	95.4
Jetflow Release	kaf	4.4	4.3	4.7	4.7	4.3	36.2	162.9	185.4	133.9	144.9	168.1	40.1
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5	214.8	190.6	0.0	0.0
Total Release	kaf	7.1	30.5	30.7	31.2	28.1	141.6	290.7	352.5	477.1	456.8	305.5	135.5
Total Release	cfs	115.	513.	499.	507.	506.	2302.	4885.	5733.	8018.	7429.	4968.	2277.
Evaporation	kaf	4.3	2.5	0.7	0.7	1.3	2.8	5.2	6.5	10.9	13.1	11.8	7.3
End-month content	kaf	766.1	769.3	778.6	784.6	845.9	847.7	915.5	1037.8	1057.6	1014.7	796.1	729.1
End-month elevation	ft	5837.6	5837.8	5838.3	5838.6	5841.9	5842.0	5845.4	5851.1	5851.9	5850.0	5839.3	5835.5

Alcova Reservoir Operations — **Initial Content 180.5 Kaf** — **Operating Limits: Max 184.4 Kaf, 5500.00 Ft.** / **Min 145.3 Kaf, 5483.12 Ft.**

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	7.1	30.5	30.7	31.2	28.1	141.6	290.7	352.5	477.1	456.8	305.5	135.5
Total Inflow	cfs	115	513	499	507	506	2302	4885	5733	8018	7429	4968	2277
Turbine Release	kaf	30.8	29.6	30.6	31.2	27.9	68.8	173.9	218.6	218.3	197.0	159.0	106.9
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	71.8	92.7	127.4	244.2	242.4	128.0	16.1
Casper Canal Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.4	5.7	13.2	16.1	17.1	11.5
Total Release	kaf	30.8	29.6	30.6	31.2	27.9	140.6	266.9	351.7	475.7	455.5	304.1	134.5
Total Release	cfs	501.	497.	497.	507.	502.	2286.	4486.	5720.	7994.	7408.	4946.	2260.
Evaporation	kaf	0.6	0.3	0.1	0.1	0.2	0.3	0.6	0.7	1.2	1.4	1.4	1.0
End-month content	kaf	156.2	156.8	155.8	156.7	156.8	157.5	180.6	180.7	180.9	180.8	180.8	180.7
End-month elevation	ft	5488.1	5488.3	5488.3	5488.3	5488.3	5488.6	5498.5	5498.5	5498.6	5498.5	5498.5	5498.5

Table 9 (Continued) Actual Reservoir Operations for Water Year 2011

NORTH PLATTE RIVER OPERATING PLAN
Year Beginning Oct 2010

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

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Inflow	kaf	30.8	29.6	30.6	31.2	27.9	140.6	266.6	346.0	462.5	439.4	287.0	123.0
Total Inflow	cfs	501.	497.	497.	507.	502.	2286.	4480.	5627.	7772.	7146.	4668.	2067.
Total Release	kaf	30.8	29.8	30.8	30.8	27.8	140.6	266.5	345.9	462.4	439.3	286.9	122.9
Total Release	cfs	500.	501.	501.	501.	501.	2284.	4479.	5625.	7770.	7144.	4666.	2066.

Glendo Reservoir Operations — Initial Content 240.8 Kaf — Operating Limits: Max 789.4 Kaf, 4653.00 Ft. / Min 63.2 Kaf, 4570.02 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Alcova-Glendo Gain	kaf	13.2	9.3	13.6	13.3	13.0	27.3	44.4	89.5	44.7	3.1	15.5	13.0
Infl from Gray Reef	kaf	30.8	29.6	30.0	30.0	27.1	120.1	252.0	345.9	444.8	447.2	285.3	139.7
Total Inflow	kaf	44.0	38.9	43.6	43.3	40.1	147.4	296.4	435.4	489.4	450.3	300.9	152.7
Total Inflow	cfs	715.	654.	709.	704.	722.	2396.	4980.	7081.	8225.	7323.	4894.	2566.
Turbine Release	kaf	0.0	0.0	0.0	0.0	5.3	185.2	243.8	248.4	234.0	236.8	212.8	191.1
Low Flow Release	kaf	1.7	1.5	1.6	1.6	1.4	1.6	1.4	1.5	1.5	1.5	1.5	1.5
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Irrigation Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	8.6	99.5	183.0	221.4	244.3	137.8
Total Release	kaf	1.7	1.5	1.6	1.6	6.7	186.5	253.9	349.4	418.5	459.7	458.6	330.4
Total Release	cfs	27.	26.	26.	26.	121.	3038.	4267.	5683.	7033.	7477.	7459.	5553.
Evaporation	kaf	1.5	0.6	0.3	0.3	0.5	1.6	1.9	3.4	6.4	7.8	6.3	2.8
End-month content	kaf	281.6	318.3	360.0	401.3	434.3	393.2	433.8	516.4	580.9	563.7	399.6	219.1
End-month elevation	ft	4611.0	4615.5	4620.2	4624.5	4627.7	4623.7	4627.6	4634.9	4639.9	4638.6	4624.3	4602.5

Guernsey Reservoir Operations — Initial Content 2.0 Kaf — Operating Limits: Max 45.6 Kaf, 4419.99 Ft. / Min 0.0 Kaf, 4370.00 Ft.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Glendo-Guerns Gain	kaf	2.6	2.2	1.9	2.2	1.5	-0.2	5.7	16.5	2.7	2.8	-9.8	7.9
Inflow from Glendo	kaf	1.9	1.5	1.6	1.6	1.4	186.8	253.9	349.4	418.5	459.7	458.6	330.4
Total Inflow	kaf	4.3	3.7	3.5	3.8	8.1	186.6	259.6	365.9	421.2	462.5	448.9	338.3
Total Inflow	cfs	70.	62.	56.	62.	147.	3036.	4362.	5950.	7079.	7522.	7300.	5686.
Turbine Release	kaf	0.0	0.0	0.0	0.0	0.3	58.3	60.9	64.6	62.5	61.9	29.9	53.6
Seepage	kaf	0.5	0.4	0.5	1.1	1.0	0.9	0.7	0.7	0.7	0.7	0.5	0.1
Spillway Release	kaf	0.0	0.0	0.0	0.0	0.0	127.4	196.5	295.0	357.0	398.5	418.0	311.3
Total Release	kaf	0.5	0.4	0.5	1.1	1.3	186.6	258.1	360.3	420.2	461.1	448.4	365.0
Total Release	cfs	7.	6.	8.	18.	24.	3034.	4338.	5860.	7062.	7499.	7293.	6134.
Evaporation	kaf	0.1	0.1	0.0	0.1	0.1	0.3	0.2	0.5	0.9	1.0	0.5	0.6
End-month content	kaf	5.7	9.0	12.0	14.6	21.4	21.2	22.3	27.4	27.4	27.7	27.7	0.5
End-month elevation	ft	4395.5	4399.4	4402.0	4404.0	4408.4	4408.3	4408.9	4411.6	4411.6	4411.8	4411.8	4380.7

Flood Benefits for Water Year 2011

Because of the existence of dams on the North Platte River, The Corps of Engineers, Omaha District, estimates that in water year 2011 flood damages of $14,579,500 were prevented. Table 10 is a breakdown of flood damage prevented by Dams.

Table 10 Flood Damage Prevented by Dams for Water Year 2011 (on the North Platte River Basin System)

DAMS	WATER YEAR 2011	PRIOR TO 2011 [2]	ACCUMULATED TOTAL [1]
SEMINOE	$8,751,500	$33,713,800	$42,465,300
PATHFINDER	$958,100	$13,172,000	$14,130,100
ALCOVA	$296,300	$763,200	$1,059,500
GLENDO	$4,573,600	$85,893,000	$90,466,600
GUERNSEY	$0	$434,000	$434,000
TOTAL	$14,579,500	$133,976,000	$148,555,500

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

[2] The period of assessment is 1970 through 2011 except for Glendo Dam, which is 1965 through 2011.

Generation for Water Year 2011

Power generation was above average for all powerplants on the North Platte River Basin in water year 2011 except for Kortes. See Table 11 for a breakdown of generation by powerplant.

Table 11 Power Generation Water Year 2011

Powerplant	Gross generation [1](GWh)	Percent of Average [2]
Seminoe	191.7	146
Kortes	118.4	85
Fremont Canyon	291.6	129
Alcova	166.2	147
Glendo	162.6	206
Guernsey	26.2	142
Total Basin	956.7	135

[1] Generation is reported in giga-watt hours (GWh).
[2] 30 year average (1981-2010)

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

Table 12 North Platte River Powerplant Data

Powerplant	Number of Units	Capacity Each Unit (kw)	Total [2] Installed Capacity (kw)	Normal Operating Head (feet)	Output At rated Head (cfs)	30 year Average [1] (GWh)
Seminoe	3	17,000	51,000	97-227	4,050	131.2
Kortes	3	12,000	36,000	192-204	2,910	139.4
Fremont Canyon	2	33,400	66,800	247-363	3,080	226.4
Alcova	2	19,500	39,000	153-165	4,100	113.4
Glendo	2	19,000	38,000	73-156	3,400	79.1
Guernsey	2	3,200	6,400	89-91	1,340	18.4
Total	14	---	237,200	---	---	707.9

[1] 1981-2010
[2] Installed capacity from Monthly Report of Power Operations-Powerplant (Form PO&M 59)

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

Glossary (continued)

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

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

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

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

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

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

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

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

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

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

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

Water Year - October 1 through September 30

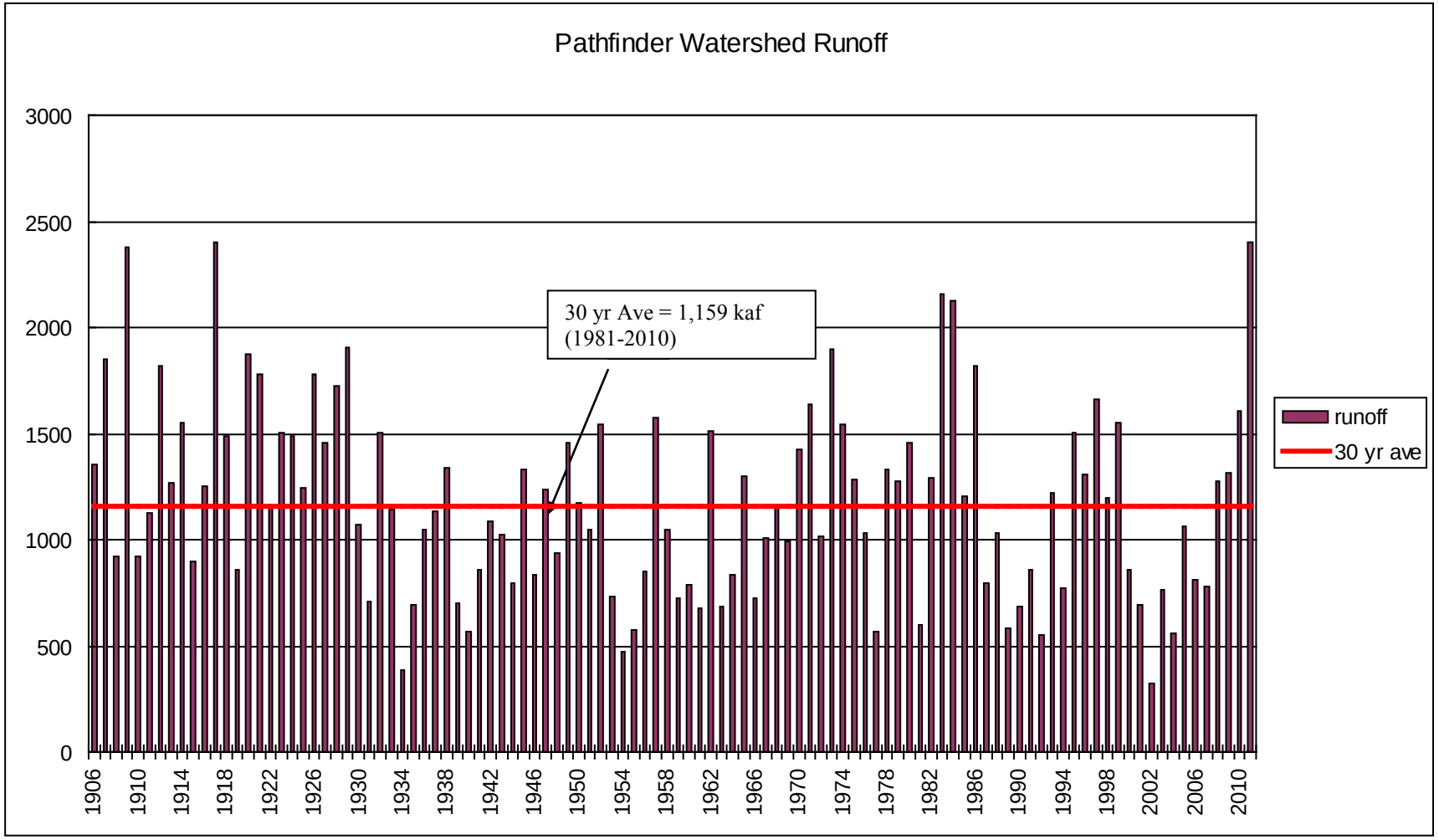


Figure 20 Pathfinder Watershed Runoff 1906-2011

Reservoir Data Definitions Sheets

A. **General:**

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

B. **Water Surface Elevation Definitions:**

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

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

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

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

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

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

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

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

C. **Capacity Definitions:**

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

a) Top of exclusive flood control capacity

b) Top of joint use capacity

c) Top of active conservation capacity

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

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

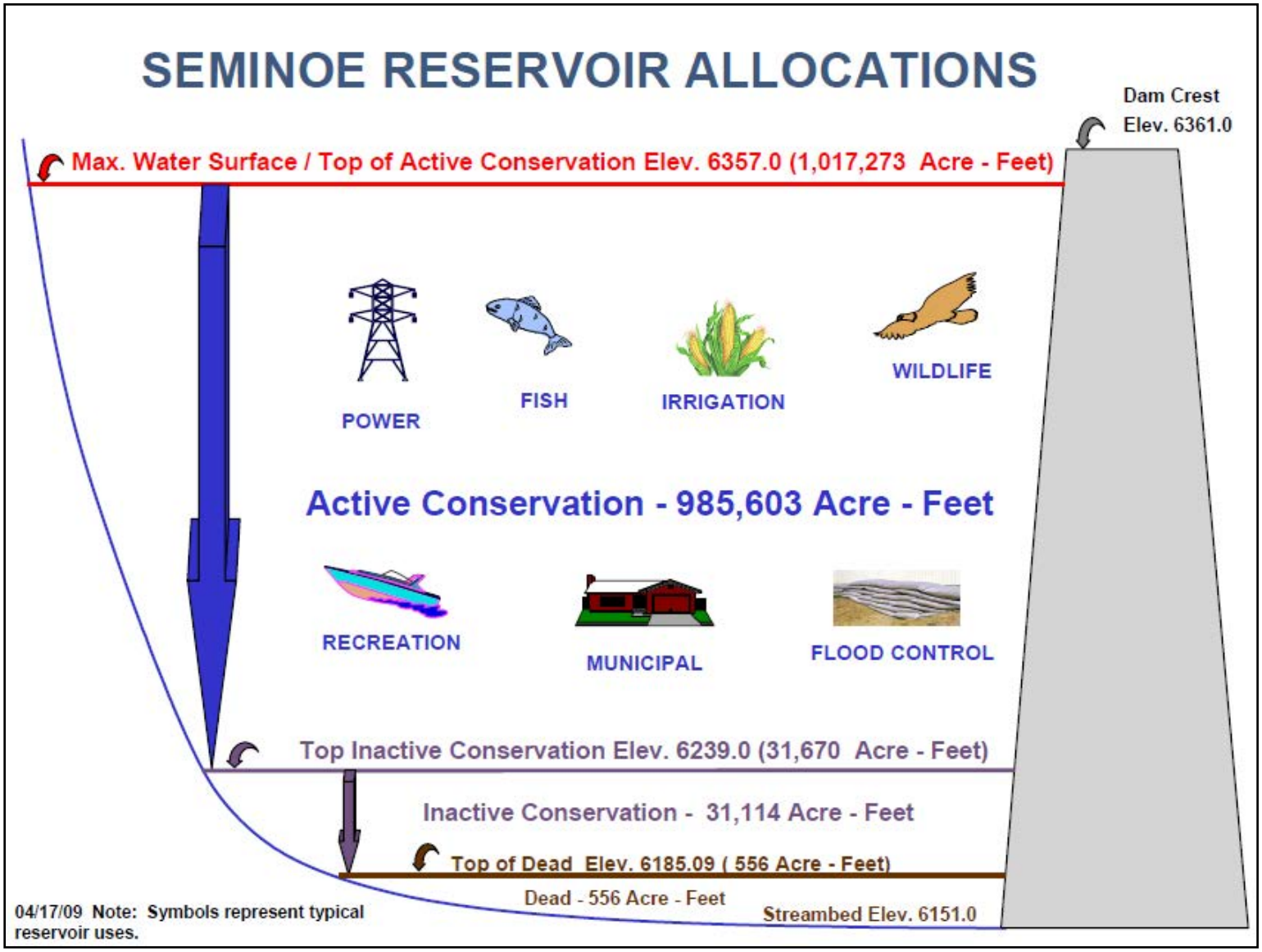
Active Capacity - the reservoir capacity normally usable for storage and regulation of reservoir inflows to meet established reservoir operating requirements. Active capacity extends from the highest of the top of exclusive flood control capacity, the top of joint use capacity, or the top of active conservation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

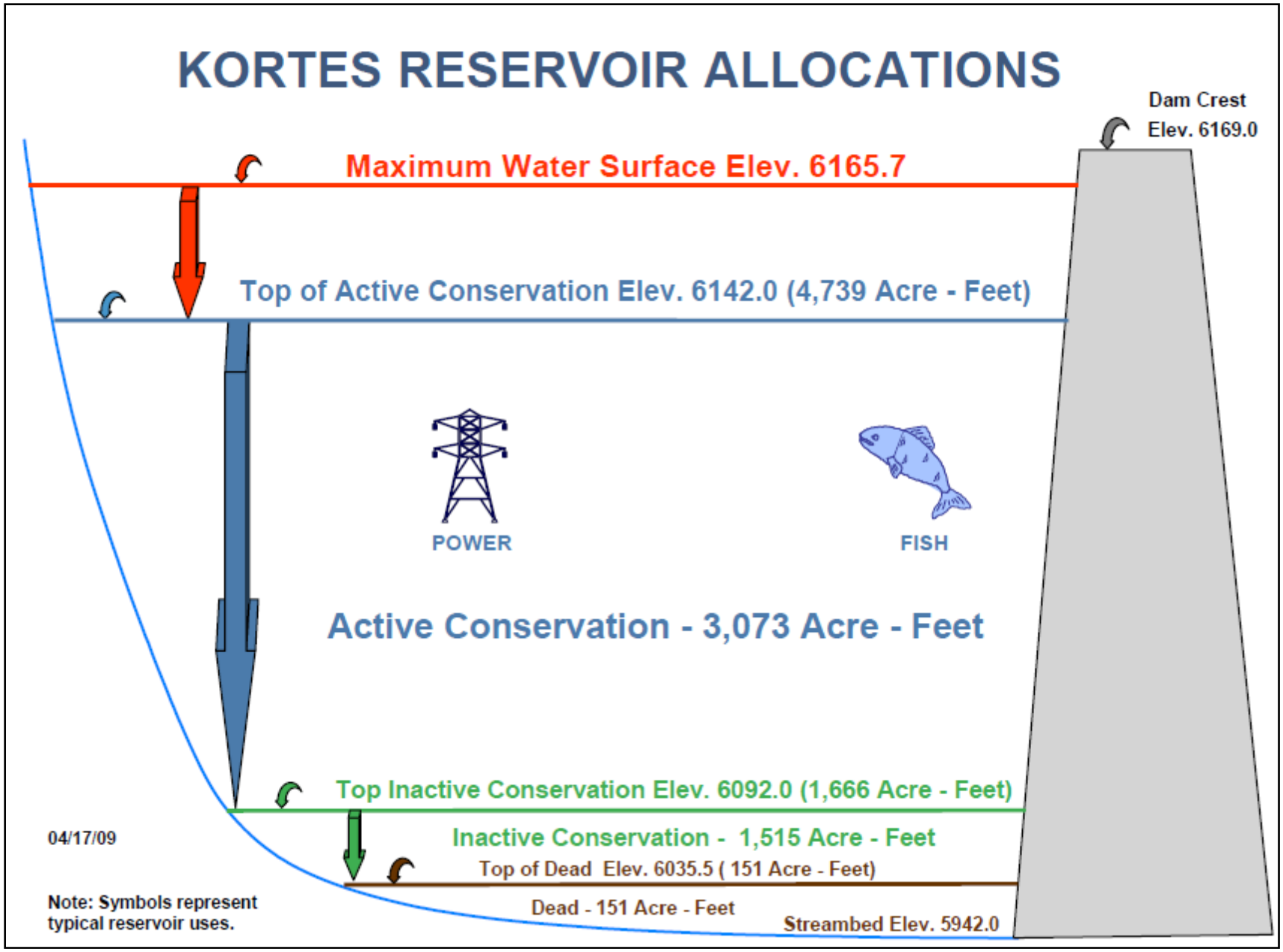
Exclusive Flood Control Capacity - the reservoir capacity assigned to the sole purpose of regulating flood inflows to reduce flood damage downstream.

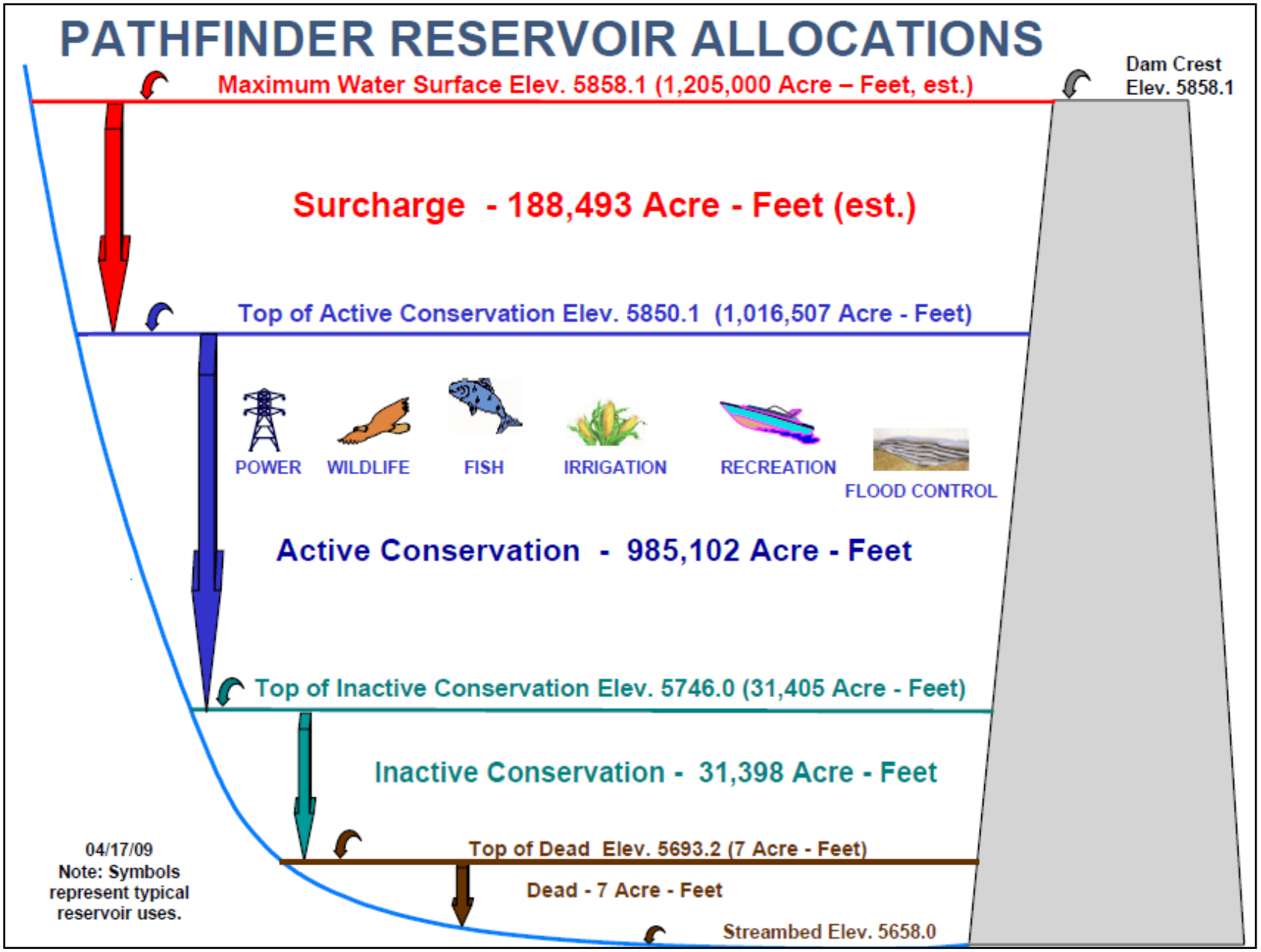
Joint Use Capacity - the reservoir capacity assigned to flood control purposes during certain periods of the year and to conservation purposes during other periods of the year.

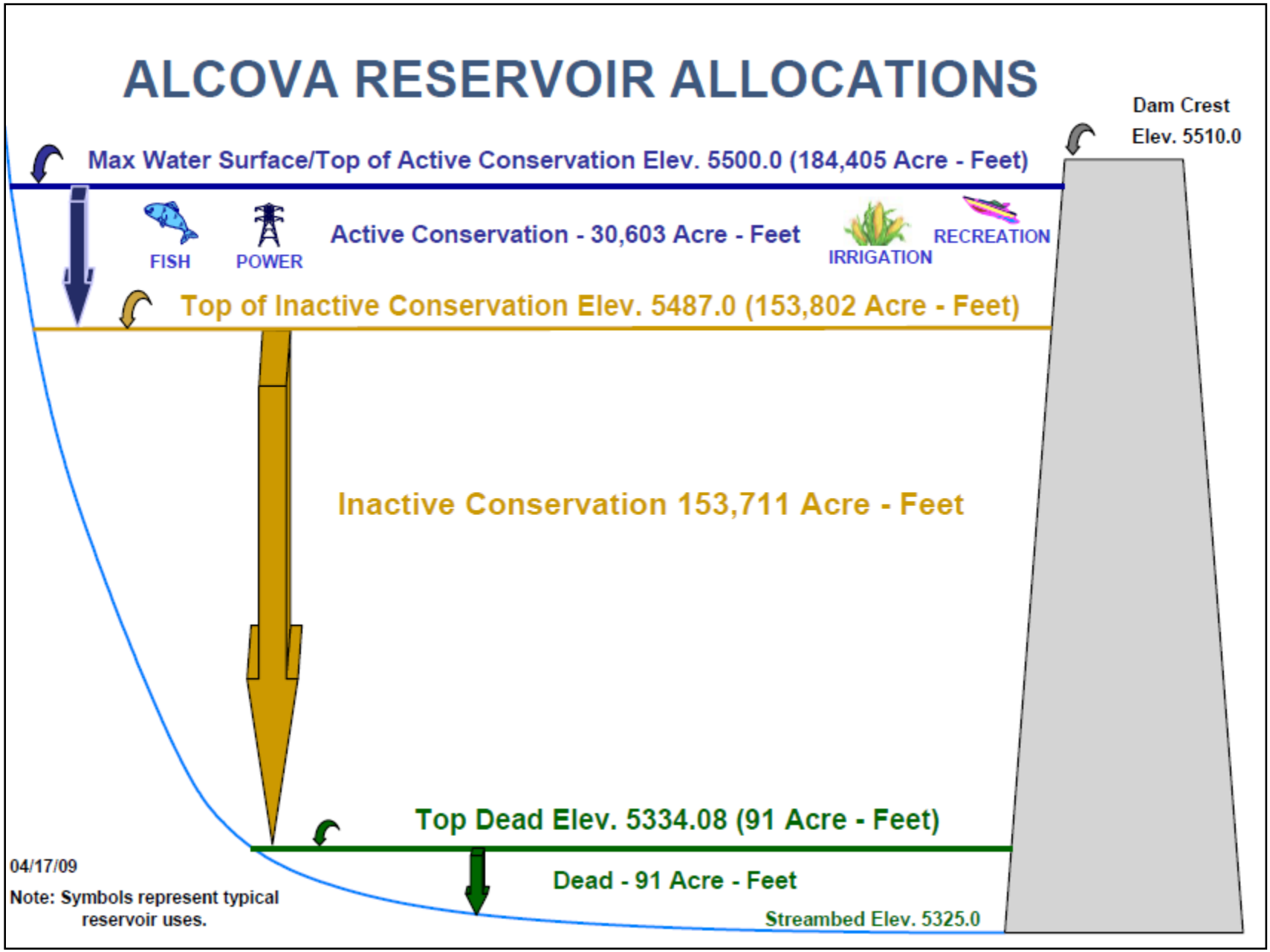
Active Conservation Capacity - the reservoir capacity assigned to regulate reservoir inflow for irrigation, power, municipal, and industrial, fish and wildlife, navigation, recreation, water quality, and other purposes. It does not include exclusive flood control or joint use capacity. The active conservation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

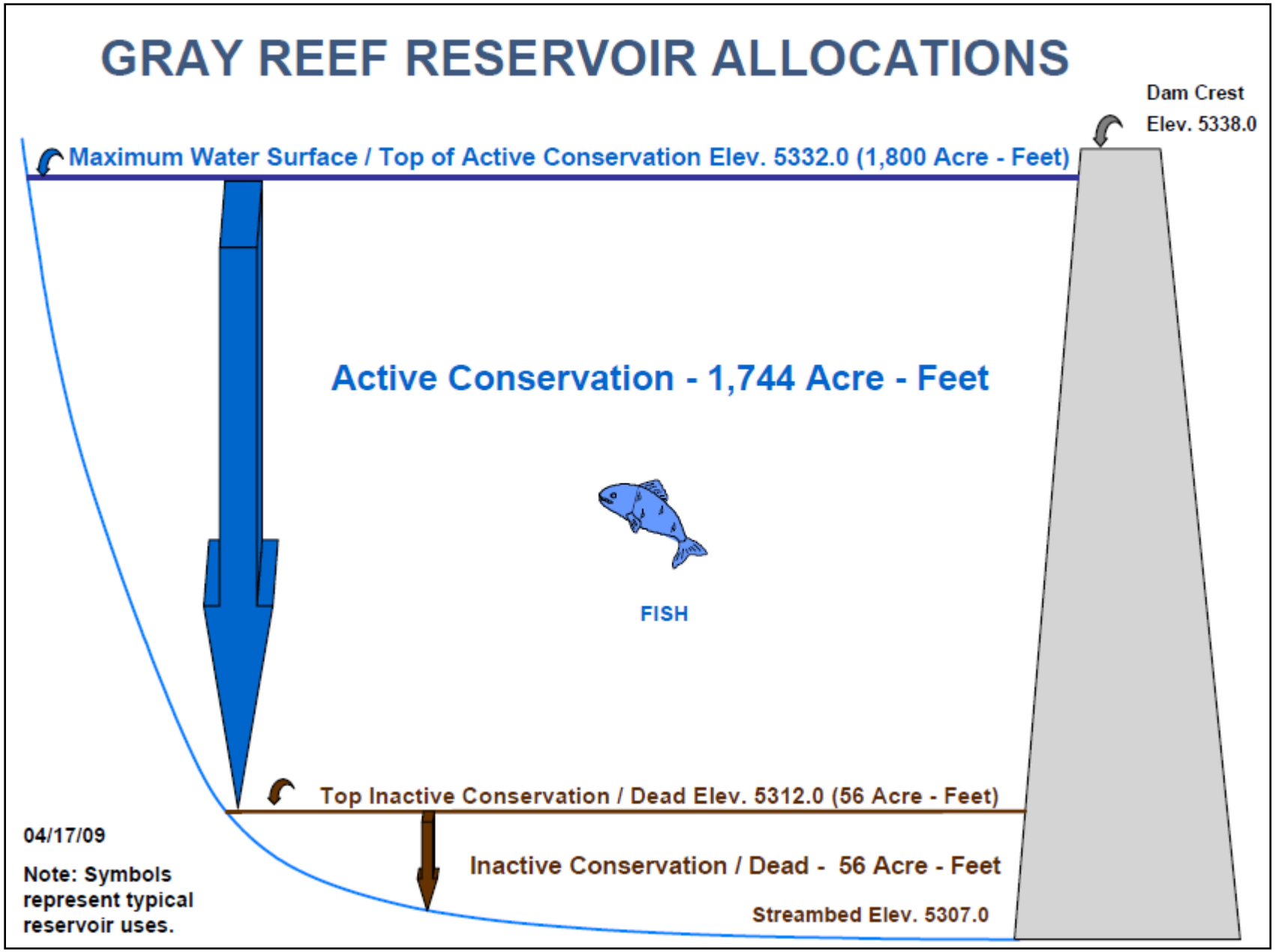
Reservoir Allocation Sheets

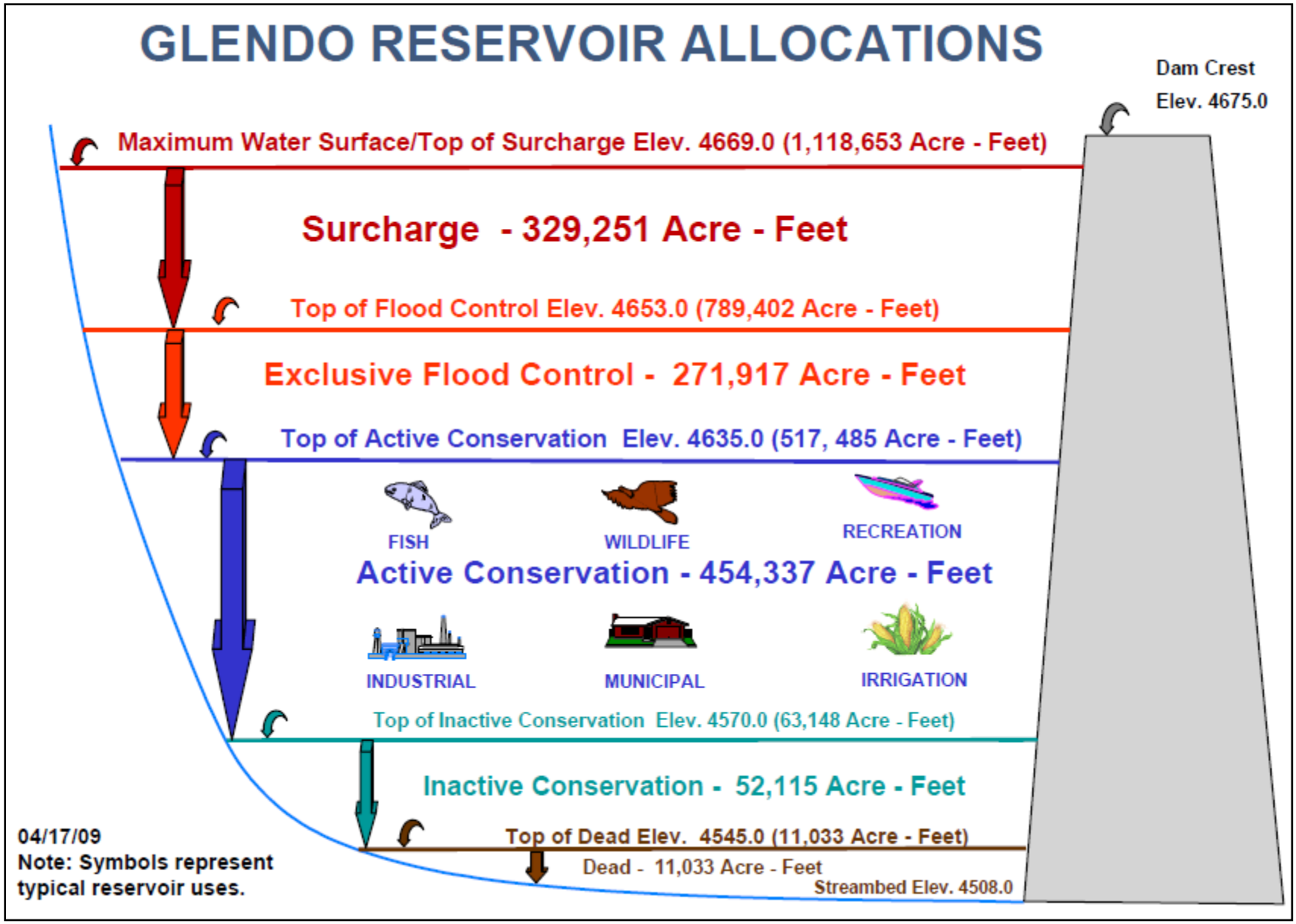


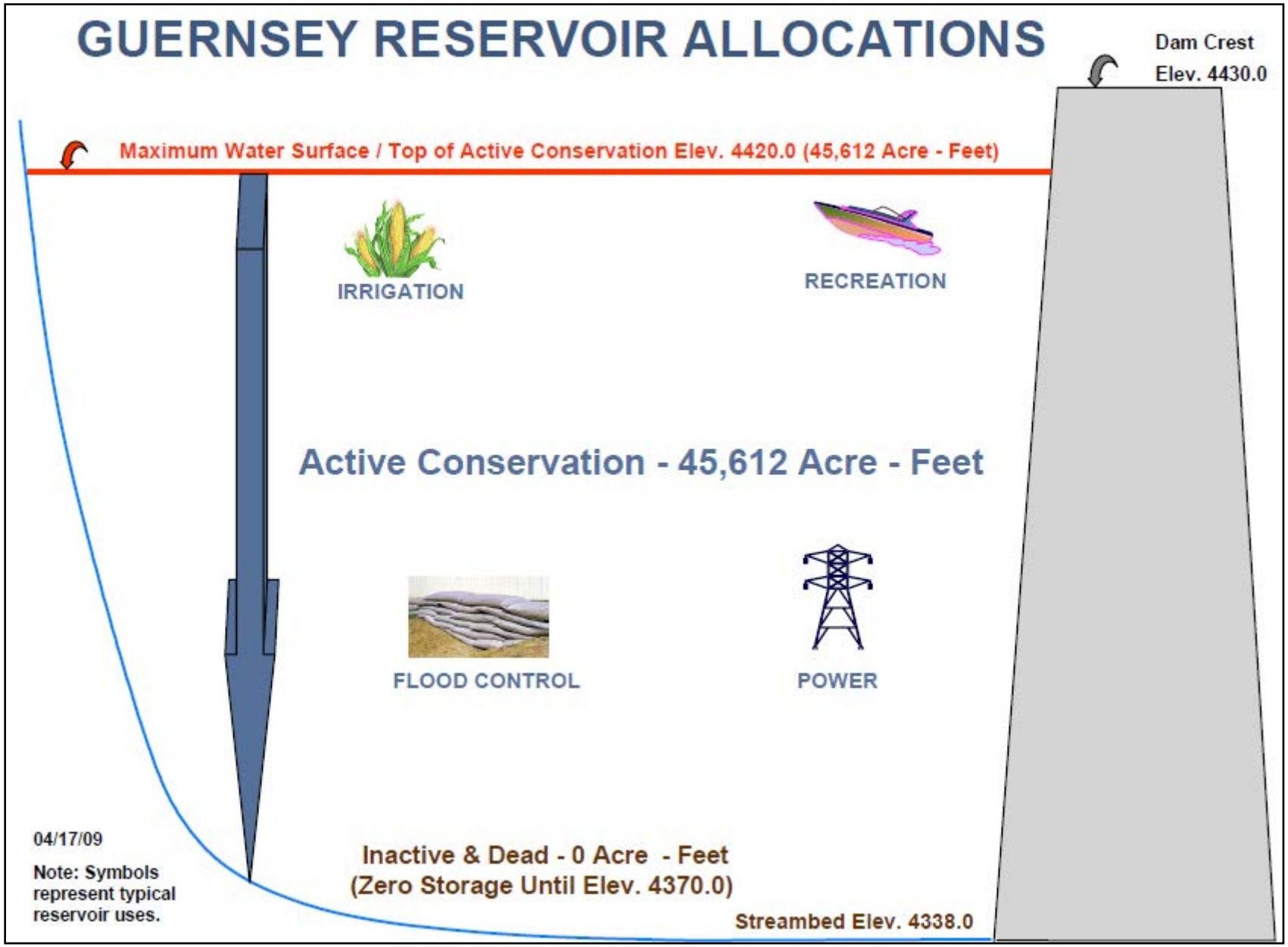

KORTES RESERVOIR ALLOCATIONS
Dam Crest
Elev. 6169.0
Maximum Water Surface Elev. 6165.7
Top of Active Conservation Elev. 6142.0 (4,739 Acre - Feet)
POWER
FISH
Active Conservation - 3,073 Acre - Feet
Top Inactive Conservation Elev. 6092.0 (1,666 Acre - Feet)
Inactive Conservation - 1,515 Acre - Feet
Top of Dead Elev. 6035.5 (151 Acre - Feet)
Dead - 151 Acre - Feet
Streambed Elev. 5942.0
04/17/09
Note: Symbols represent typical reservoir uses.

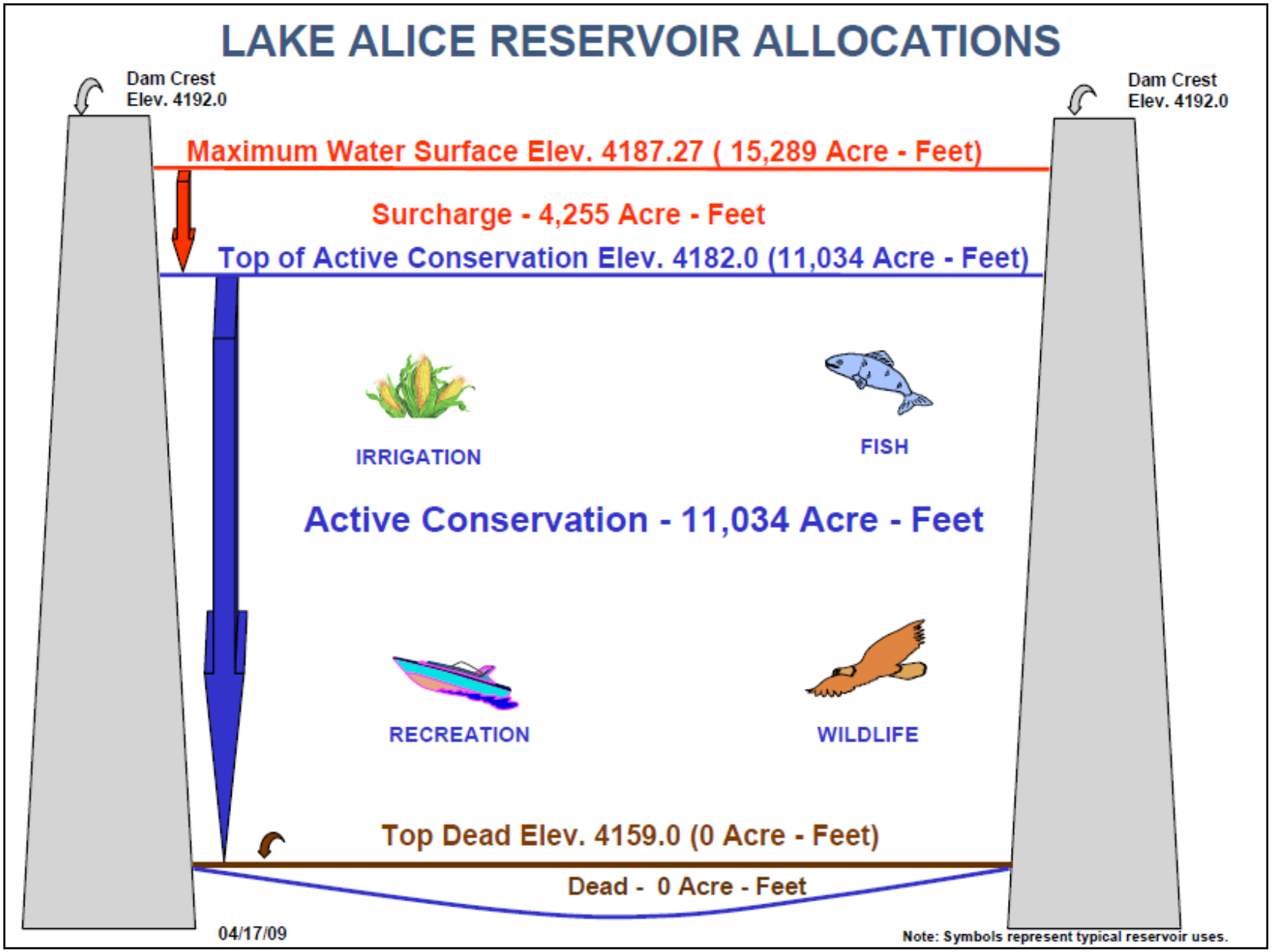

PATHFINDER RESERVOIR ALLOCATIONS
Maximum Water Surface Elev. 5858.1 (1,205,000 Acre – Feet, est.)
Dam Crest
Elev. 5858.1
Surcharge - 188,493 Acre - Feet (est.)
Top of Active Conservation Elev. 5850.1 (1,016,507 Acre - Feet)
POWER
WILDLIFE
FISH
IRRIGATION
RECREATION
FLOOD CONTROL
Active Conservation - 985,102 Acre - Feet
Top of Inactive Conservation Elev. 5746.0 (31,405 Acre - Feet)
Inactive Conservation - 31,398 Acre - Feet
Top of Dead Elev. 5693.2 (7 Acre - Feet)
Dead - 7 Acre - Feet
Streambed Elev. 5658.0
04/17/09
Note: Symbols represent typical reservoir uses.

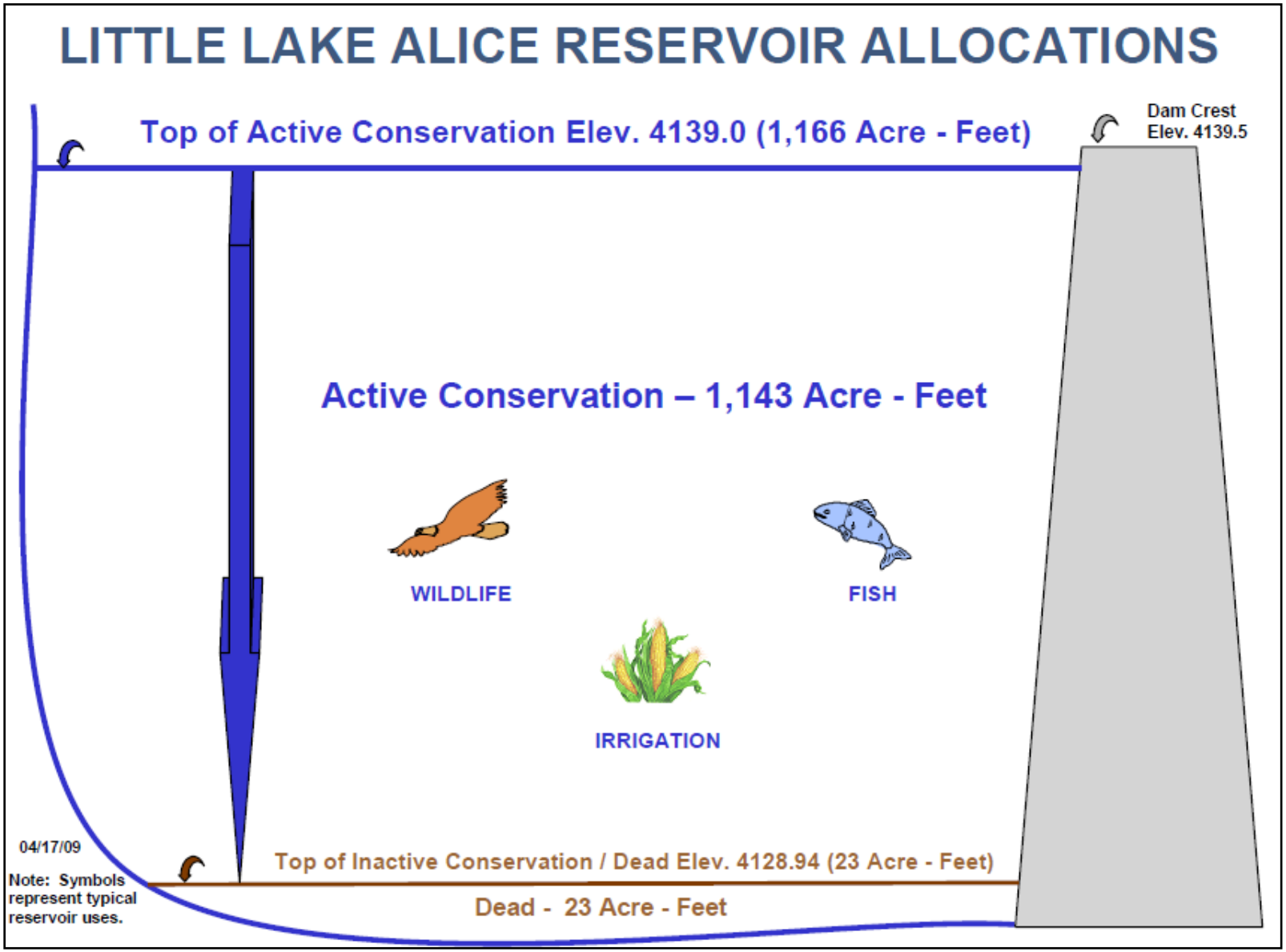

ALCOVA RESERVOIR ALLOCATIONS
Dam Crest
Elev. 5510.0
Max Water Surface/Top of Active Conservation Elev. 5500.0 (184,405 Acre - Feet)
FISH
POWER
Active Conservation - 30,603 Acre - Feet
IRRIGATION
RECREATION
Top of Inactive Conservation Elev. 5487.0 (153,802 Acre - Feet)
Inactive Conservation 153,711 Acre - Feet
Top Dead Elev. 5334.08 (91 Acre - Feet)
Dead - 91 Acre - Feet
Streambed Elev. 5325.0
04/17/09
Note: Symbols represent typical reservoir uses.

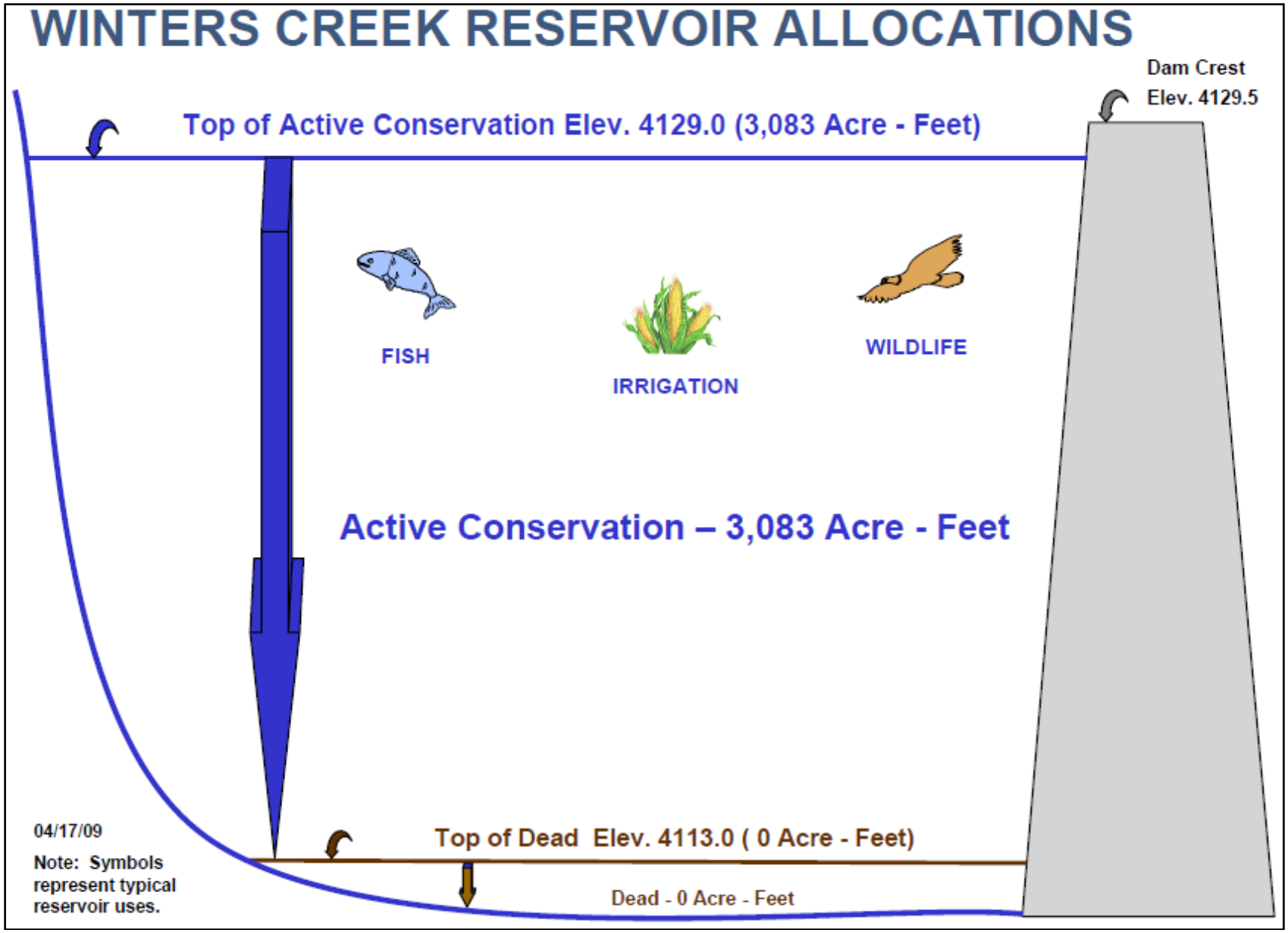

GRAY REEF RESERVOIR ALLOCATIONS
Dam Crest
Elev. 5338.0
Maximum Water Surface / Top of Active Conservation Elev. 5332.0 (1,800 Acre - Feet)
Active Conservation - 1,744 Acre - Feet
FISH
Top Inactive Conservation / Dead Elev. 5312.0 (56 Acre - Feet)
Inactive Conservation / Dead - 56 Acre - Feet
Streambed Elev. 5307.0
04/17/09
Note: Symbols represent typical reservoir uses.


GLENDO RESERVOIR ALLOCATIONS
Dam Crest
Elev. 4675.0
Maximum Water Surface/Top of Surcharge Elev. 4669.0 (1,118,653 Acre - Feet)
Surcharge - 329,251 Acre - Feet
Top of Flood Control Elev. 4653.0 (789,402 Acre - Feet)
Exclusive Flood Control - 271,917 Acre - Feet
Top of Active Conservation Elev. 4635.0 (517, 485 Acre - Feet)
FISH
WILDLIFE
RECREATION
Active Conservation - 454,337 Acre - Feet
INDUSTRIAL
MUNICIPAL
IRRIGATION
Top of Inactive Conservation Elev. 4570.0 (63,148 Acre - Feet)
Inactive Conservation - 52,115 Acre - Feet
Top of Dead Elev. 4545.0 (11,033 Acre - Feet)
Dead - 11,033 Acre - Feet
Streambed Elev. 4508.0
04/17/09
Note: Symbols represent typical reservoir uses.


GUERNSEY RESERVOIR ALLOCATIONS
Dam Crest
Elev. 4430.0
Maximum Water Surface / Top of Active Conservation Elev. 4420.0 (45,612 Acre - Feet)
IRRIGATION
RECREATION
Active Conservation - 45,612 Acre - Feet
FLOOD CONTROL
POWER
04/17/09
Note: Symbols represent typical reservoir uses.
Inactive & Dead - 0 Acre - Feet
(Zero Storage Until Elev. 4370.0)
Streambed Elev. 4338.0


LAKE ALICE RESERVOIR ALLOCATIONS
Dam Crest
Elev. 4192.0
Dam Crest
Elev. 4192.0
Maximum Water Surface Elev. 4187.27 (15,289 Acre - Feet)
Surcharge - 4,255 Acre - Feet
Top of Active Conservation Elev. 4182.0 (11,034 Acre - Feet)
IRRIGATION
FISH
Active Conservation - 11,034 Acre - Feet
RECREATION
WILDLIFE
Top Dead Elev. 4159.0 (0 Acre - Feet)
Dead - 0 Acre - Feet
04/17/09
Note: Symbols represent typical reservoir uses.


LITTLE LAKE ALICE RESERVOIR ALLOCATIONS
Top of Active Conservation Elev. 4139.0 (1,166 Acre - Feet)
Dam Crest
Elev. 4139.5
Active Conservation – 1,143 Acre - Feet
WILDLIFE
FISH
IRRIGATION
04/17/09
Note: Symbols represent typical reservoir uses.
Top of Inactive Conservation / Dead Elev. 4128.94 (23 Acre - Feet)
Dead - 23 Acre - Feet


WINTERS CREEK RESERVOIR ALLOCATIONS
Dam Crest
Elev. 4129.5
Top of Active Conservation Elev. 4129.0 (3,083 Acre - Feet)
FISH
IRRIGATION
WILDLIFE
Active Conservation – 3,083 Acre - Feet
04/17/09
Note: Symbols represent typical reservoir uses.
Top of Dead Elev. 4113.0 (0 Acre - Feet)
Dead - 0 Acre - Feet

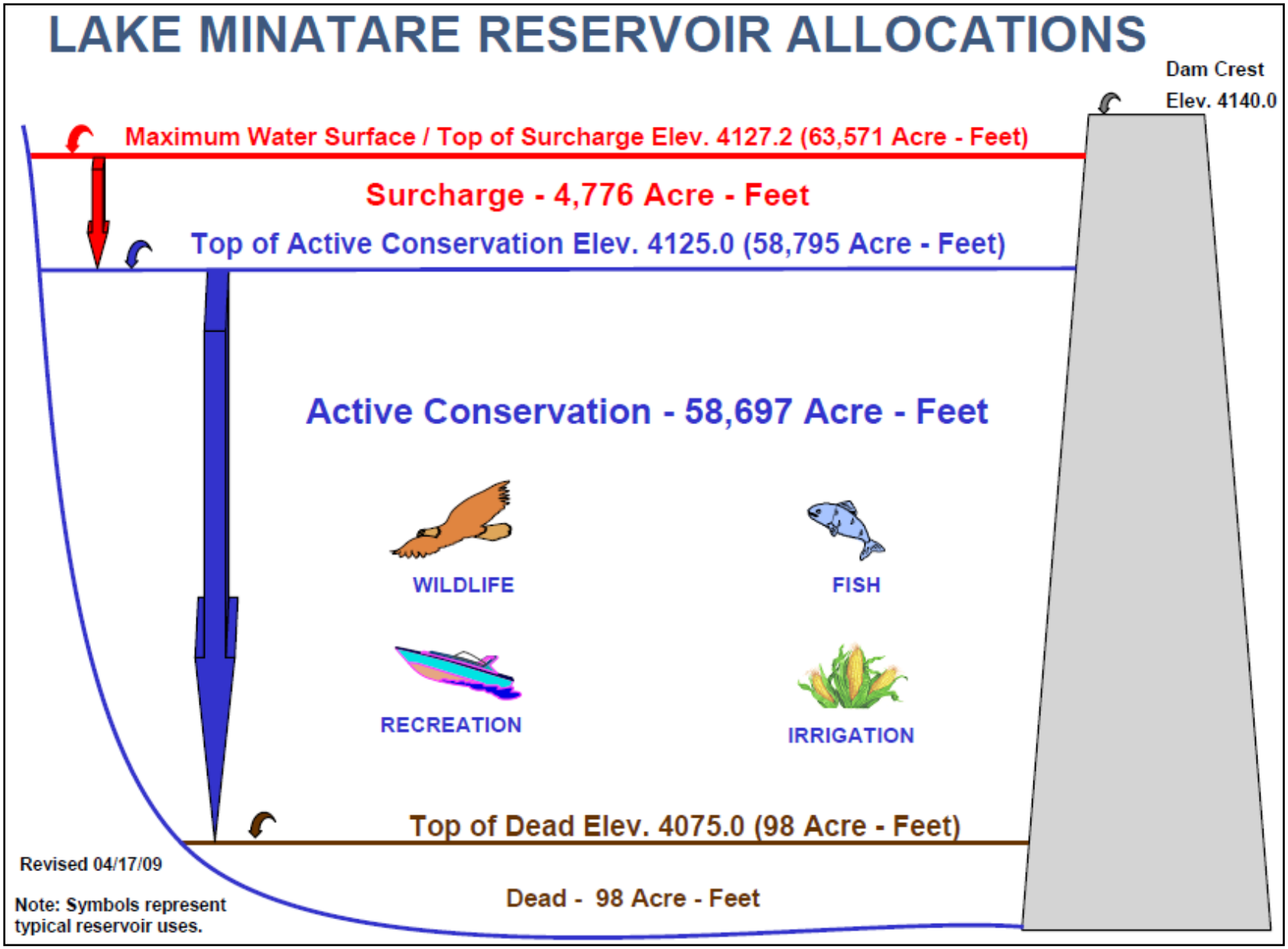

LAKE MINATARE RESERVOIR ALLOCATIONS
Dam Crest
Elev. 4140.0
Maximum Water Surface / Top of Surcharge Elev. 4127.2 (63,571 Acre - Feet)
Surcharge - 4,776 Acre - Feet
Top of Active Conservation Elev. 4125.0 (58,795 Acre - Feet)
Active Conservation - 58,697 Acre - Feet
WILDLIFE
FISH
RECREATION
IRRIGATION
Top of Dead Elev. 4075.0 (98 Acre - Feet)
Revised 04/17/09
Note: Symbols represent typical reservoir uses.
Dead - 98 Acre - Feet

Figure 21 North Platte River Basin Map