INTRODUCTION

Annual reports on actual operations and operating plans for reservoir regulation activities were initiated in 1953. The Montana Area Office, Wyoming Area Office, Dakota Area Office and the Regional Office are all responsible for preparing reports on actual operations and operating plans for reservoir within the Upper Missouri River Basin above Sioux City, Iowa. This report briefly summarizes weather and streamflow conditions in the Upper Missouri River Basin during water year 2005, which are principal factors governing the pattern of reservoir operations. This report also describes operations during water year 2005 for reservoirs constructed by the Bureau of Reclamation (Reclamation) for providing flood control and water supplies for power generation, irrigation, municipal and industrial uses, and to enhance recreation, fish, and wildlife benefits.

This report includes operating plans to show estimated ranges of operation for water year 2006, with a graphical presentation on a monthly basis. The operating plans for the reservoirs are presented only to show possible operations under a wide range of inflows, most of which cannot be reliably forecasted at the time operating plans are prepared; therefore, plans are at best only probabilities. The plans are updated monthly, as the season progresses, to better coordinate the actual water and power requirements with more reliable estimates of inflow.

A report devoted to “Energy Generation” is included at the end of this report. The energy generation and water used for power at Reclamation and Corps of Engineers’ (Corps) plants are discussed, and the energy generated in 2005 is compared graphically with that of previous years. Energy produced at the Reclamation and Corps mainstem plants is marketed by the Department of Energy. Table CET6, entitled “Total Reservoir Storage Contents at the End of Water Years 2004 and 2005,” compares the water storage available at the beginning of water year 2006 to that available at the beginning of water year 2005. Table CET7 is a summary of the end of month storage contents for each reservoir during water year 2005. The Montana Area Office also assists in the preparation of plans for operation of the Corps reservoir on the main stem of the Missouri river by furnishing depletion estimates based upon the operating plans presented in this report.

All references to a year in this report will mean the water year extending from October 1 through September 30, unless specifically stated otherwise.

SUMMARY OF HYDROLOGIC CONDITIONS AND FLOOD CONTROL DURING 2005

Antecedent Conditions:

There were extremely diverse conditions that existed following the 2004 water year. The temperatures and precipitation for water year 2004 varied significantly between basins. Precipitation for most basins was near to much below normal for the entire water year. The exception was the Milk and Madison River basins which finished the water year with above average valley precipitation. The Milk River downstream of Fresno Reservoir had near record snowpack due to the much above average December and January precipitation. In most basins, east of Continental Divide the precipitation conditions in the mountains ended the water year near to slightly below normal, mainly due to the above normal precipitation in August and September.

The 2004 snowpack as of April 1 was below normal in the river basins in Montana and Wyoming. It ranged from 62 percent of normal in the Shoshone basin to 86 percent of normal in the Madison River basin. The below normal snowpack in Montana was offset with the near to above average precipitation during May. The Bighorn basin in Wyoming however received much below average spring precipitation thus producing near record low runoff. The overall below normal snowpack conditions were reflected in the inflows for the year.

Inflows for water year 2004 were generally much below average and several low inflow records were set. Annual inflow was the lowest on record for Clark Canyon and Canyon Ferry Reservoirs, and the second lowest on record for Bighorn Lake.

The end of September storage for Reclamation reservoirs ranged from much below average to above average. Releases during 2004 were very conservative at Reclamation projects. At three major Reclamation projects, Yellowtail, Clark Canyon, and Canyon Ferry Dams releases were below the minimum desired for the fishery as recommended by the Montana Fish, Wildlife, and Parks (MFWP).

October through December:

Precipitation for the 2005 water year began slightly better than the previous year after a mid-month series of Northern Pacific and Canadian systems brought moist and cooler weather to the area. Conditions by the end of the October were again dry but remained cool. The dry continued for the next couple of months and for most Montana reporting stations located east of the Continental Divide, precipitation during October through December ranged from near normal to much below normal. For the basins along the Rocky Mountain Front, the drought kept its grip for the fifth consecutive year. Other areas such as the upper Missouri and upper Bighorn basins would begin to improve as the winter progressed, Table MTT3.

October through December inflows were below normal at all Reclamation reservoirs in Montana east of the Continental divide with the exception of Sherburne Reservoir. During the fall inflows remained near or at record lows. A new record low inflow was recorded at Clark Canyon for

October and December, while Canyon Ferry was 5th lowest of record for November through December. A new record low inflow was recorded for Bighorn Lake during December.

January through March:

On January 1, the Natural Resources Conservation Service reported mountain snowpack in Montana east of the Continental Divide where Reclamation facilities are located ranged from 34 percent of normal in the Milk River Basin to 91 percent of normal in the Beaverhead River Basin. The mountain snowpack was 86 percent of normal in the Bighorn River Basin in Wyoming. Mountain snow water content statewide was 71 percent of average and 69 percent of last year. West of the Continental Divide, mountain snow water content was 66 percent of average and 65 percent of last year. East of the Continental Divide, mountain snow water content was 77 percent of average and 76 percent of last year. January was a record breaking month for both low snowpack and temperatures. A Chinook event during January 18-21 caused several low elevation snow sites to melt out and numerous mountain sites to be reduced by more than an inch of snow water equivalent. Valley temperatures across central and southeast Montana were 22 to 27 degrees above average during the Chinook event thus causing many locations to receive precipitation in the form of rain instead of snow.

In February, precipitation around the state was much below normal thus causing the percent of average snow water content to drastically decline. By March 1, mountain snow water content for the state was 53 percent of average and 57 percent of last year, while east of the Continental Divide snow water content was 61 percent of average and 65 percent of last year. Precipitation during March for mountain and valley areas east of the Continental Divide, was 108 percent of average and 194 percent of last year. This helped some of the snowpack deficits; however, 8 of 15 major river basins or 53 percent still tied or set new record low snow water equivalent for the end of March.

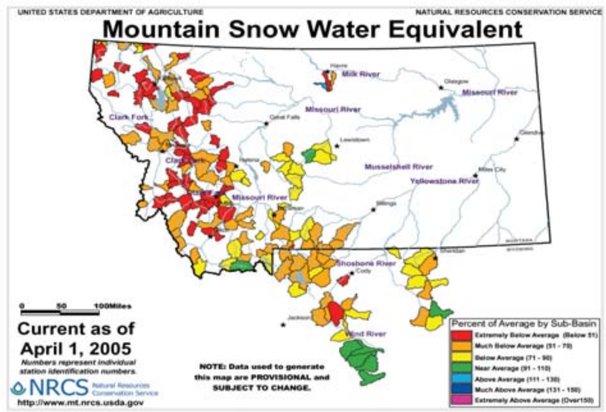
January through March inflows were below normal to much below normal. The exception was Lake Sherburne which was 187 percent of average. Inflows for March were lowest on record for Clark Canyon and Canyon Ferry Reservoirs and second lowest for Bighorn Lake.

April through June:

As of April 1, mountain snow water contents statewide were 60 percent of average and 76 percent of last year. West of the Continental Divide snowpack was 53 percent of average and 66 percent of last year. East of the Continental Divide snowpack was 67 percent of average and 90 percent of last year. During April, precipitation was near average for most of Montana. Overall, April mountain and valley precipitation across the state was 102 percent of average and 138 percent of last year. April temperatures were generally near to below average across Montana thus keeping snowmelt rates near normal.

Precipitation during May continued to be near normal across Montana. Mountain and valley precipitation across the state was 105 percent of average and 87 percent of last year, while east of the Continental Divide mountain and valley precipitation was 105 percent of average and 91 percent of last year. The areas that did not receive near normal precipitation during May were located along the Rocky Mountain Front. The Sun, Marias, Milk and St. Mary basins all received much below average precipitation during May, which combined with near record low snowpack did not provide good prospects for improved snowmelt runoff.

As of June 1, remaining mountain snow water contents were generally much below average. Precipitation conditions improved significantly during June and several rainfall records were equaled or surpassed for cities in Montana. The Sun, Marias and St. Mary basins received approximately twice the normal precipitation during June providing some relief to the drought conditions. Even with the improved spring precipitation the peak mountain snowpack was still below normal for basins in Montana where Reclamation facilities are located. Although snowpack for the Wind River in Wyoming above Bighorn Lake was near normal, the overall peak snowpack for the Bighorn River Basin in Wyoming was below normal; albeit improved from the previous year. The peak snowpack for Reclamation reservoirs occurred between April 4 and May 13. The peak generally occurs around April 15 for mountain locations. In the Bighorn basin in Wyoming, however, cool temperatures and near normal precipitation in April and May resulted in a peak snowpack slightly later than usual, Figure MTG1.

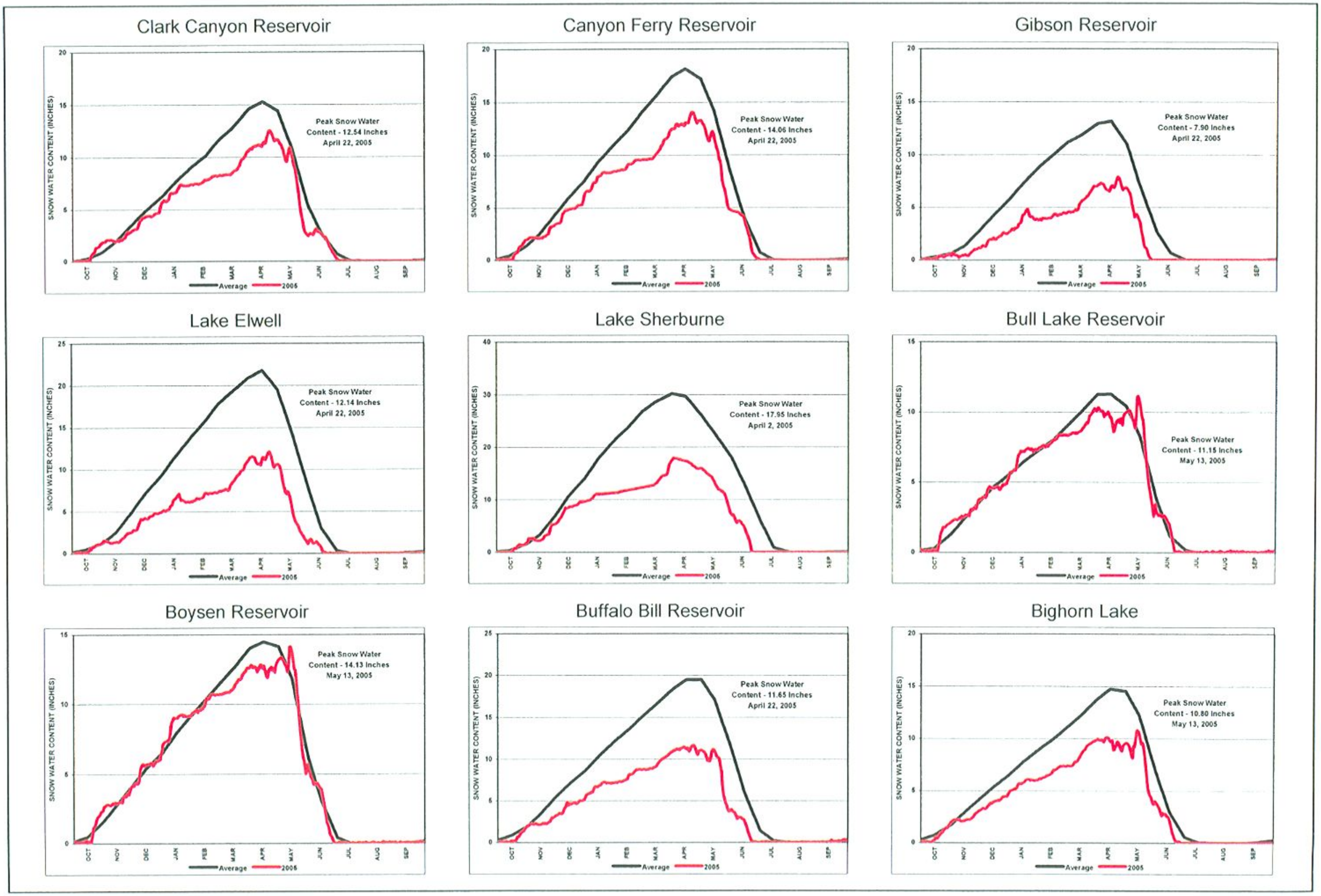


July through September:

During July, temperatures were above average, while precipitation was much below average across Montana and the Bighorn basin in Wyoming. There was some relief by the end of July due to a Canadian cold front. August temperatures were near average with above average daytime highs and slightly below average nighttime lows. The latter part of the month did produce some record high temperatures in Montana. The precipitation during August was varied across Montana with some basins receiving much below normal and others receiving much above normal. September temperatures and precipitation were again varied; the basins along the Rocky Mountain Front received much above average precipitation while the Milk River and Bighorn River basins were much below average.

The inflow conditions for August through September ranged from near average to much below average. The total inflows for the water year ranged from 40 percent of normal at Clark Canyon Reservoir to 84 percent of normal at Lake Sherburne. Leading into water year 2006 the drought remained prominent in several Montana basins east of the Continental Divide, where Reclamation facilities are located. At the start of water year 2006, the early indications are there is moderate improvement in drought conditions for the Bighorn basin in Wyoming.

Figure MTG1
WATER YEAR 2005
SNOW WATER CONTENT



<u>Reservoir Storage, Releases and Inflows:</u>

The 2005 water year storage began with Reclamation reservoirs ranging from much above to much below average storage. October 1 storage in the Upper Missouri Basin was 2,297,200 acre-feet, 84 percent of average. Storage for the Milk River Project was 119,600 acre-feet, 112 percent of normal. Storage in Bighorn Lake in the Bighorn River Basin was 710,300 acre-feet, 70 percent of normal. These percent of normal storage levels remained similar through the end of December.

The January through March storage in Reclamation reservoirs east of the Continental Divide ranged from much below average to much above average. For example, the end of March storage ranged from 40 percent of normal at Clark Canyon Reservoir to 200 percent of normal at Lake Sherburne. The January through end of March storage levels in Clark Canyon Reservoir and Bighorn Lake were second and third lowest of record, respectively.

Due to the much below average inflows, the storage conditions during April and May did not improve in most basins. Bighorn Lake was the exception; the above average precipitation in the basin allowed reservoir storage to increase substantially during May. At the end of May, storage in Bighorn Lake had increased to 104 percent of average. Conversely dry conditions dominated in the Sun and Marias River basins and thus put significant demands on reservoir storage.

The only Reclamation reservoirs in Montana that did not fill to normal full capacity were Sherburne, Nelson, Clark Canyon, and Tiber Reservoirs.

There was approximately $23,613,100 in flood damages prevented during water year 2005 by Reclamation facilities in Montana east of the Continental Divide. The total flood damages prevented by these facilities since 1950 is approximately $350,079,700.

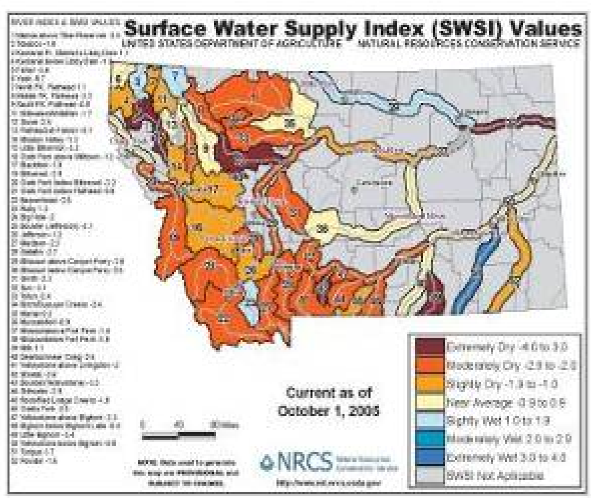
June through August storage ranged from much below average to above average. Storage in Clark Canyon Reservoir remained much below normal throughout this period. End of June storage in Clark Canyon Reservoir was the third lowest on record. During this time the improved precipitation and subsequent runoff allowed storage to peak approximately 11,000 acre-feet more than the pervious year. However the extended drought conditions still only allowed minimal improvement in the overall storage conditions. Most areas in Montana received above normal precipitation in June therefore storage conditions did not decline as rapidly as expected. Moreover, most reservoirs by the end of August were still at near normal levels; the exceptions were Sherburne, Gibson and Clark Canyon Reservoirs. The end of August content was 66, 17 and 29 percent of normal, respectively.

Water year 2005 ended with storage ranging from above average to much below average. Some Reclamation reservoirs in northcentral and central Montana entered water year 2006 with near or above normal storage. The Reclamation reservoirs with the least amount of normal carryover storage were Clark Canyon and Gibson Reservoirs. Both Clark Canyon and Gibson Reservoirs began the 2006 water year at the seventh lowest level since construction of the dam.

Releases from nearly all Reclamation reservoirs were very conservative for most of the water year because of the severe drought conditions. Releases were only increased when absolutely necessary to control the spring runoff or irrigation demands. In the Missouri and Bighorn Rivers, flows were maintained at rates below the desired minimum fishery flows for the early part of water year 2005. However after the above normal precipitation during April through June and consequently the improved storage, releases to these rivers were increased to the desired minimum for river fisheries. Even with slightly improved inflows, releases from Clark Canyon Dam were once again set for the winter at approximately 25 cfs, well below the desired minimum for river fisheries, beginning in late September.

<u>Water Supply and Runoff:</u>

The January 1 forecasted April-July runoff volumes ranged from 32 to 85 percent of average among Reclamation reservoirs east of the Continental Divide. This indicated that the drought may be continuing for most of Montana and Northwest Wyoming. Snowpack conditions declined through the end of March and on April 1 it appeared that almost all reservoirs in Montana and the Bighorn basin in Wyoming would be water short. The April 1 forecasted April-July runoff volumes ranged from 23 to 73 percent of average. However due to above average spring precipitation the actual runoff for water year 2005 ranged from 34 to 89 percent of average, MTT2. In areas some areas of Montana water shortages were experienced during the irrigation season, but substantially less than expected.



During water year 2005 the peak release at Clark Canyon was approximately 476 cfs greater than peak inflow. Peak release was 813 cfs on July 23, while the inflow peaked at 337 cfs on June 30, which was much below normal. Canyon Ferry peak inflow was 12,733 cfs on June 19, while the peak release was 6,497 cfs on July 10. In the Sun River Basin, Gibson Reservoir inflow peaked at 3,947 cfs, while the release peaked at 4,045 cfs both occurring on May 17. The peak inflow for Pishkun and Willow Creek Reservoirs were 1,426 cfs on August 1; and 95 cfs on May 9, respectively. Inflow to Lake Elwell peaked at 3,901 cfs on June 07 and releases peaked at 515 cfs on October 15, 2004. In the Milk River Basin, Lake Sherburne peak inflow was 1,164 on June 3 and releases peaked at 687 cfs on August 31. The peak inflow for Fresno Reservoir was 2,234 cfs on June 10 while the release peaked at 1,138 cfs on August 4. Peak inflow at Nelson Reservoir was 475 cfs on June 28 while the release peaked at 310 on August 1. In the Bighorn River Basin, Bighorn Lake peak inflow was 13,371 cfs on May 12 and the peak release was 6,739 cfs on July 7, which were both near normal. Inflows to Reclamation facilities in Montana east of the Continental Divide were all much below average.

TABLE MTT I
2005 MOUNTAIN SNOW WATER CONTENT
AS A PERCENT OF NORMAL

DRAINAGE BASIN	JAN I	FEB 1	MAR 1	APR 1	MAY I	
Beaverhead	91	81	69	68	74	
Jefferson	75	68	59	61	71	
Madison	85	78	67	72	70	
Gallatin	89	77	66	75	75	
Missouri Headwaters above Toston	81	74	63	66	72	
Sun	56	55	40	48	51	
Marias	51	39	34	48	43	
Milk River	34	3	0	62	9	
St. Mary	68	53	43	47	45	
Wind	100	88	85	82	85	
Shoshone	66	58	57	59	54	
Bighorn (Boysen-Bighorn)	86	74	73	75	74	

TABLE MTT2
2005 WATER SUPPLY FORECASTS

RESERVOIR	JAN 1		FEB 1		MAR 1		APR 1		MAY 1		JUN 1		ACTUAL April -July		% 01" APRII FORE-CAST RI X7D
	1.000 AC-FT	% OF AVG	1,000 AC-FT	% OF AVG	1,000 AC-FT	`)/. OF AVG	1.000 AC-FT	% OF AVG	1.000 AC-FT	% OF AVG	1.000 AC-FT	cYo OF AVG	1,000 AC-FT	% OF AVG	
Clark Canyon	36.4	32	24.5	22	22.8	20	25.5	23	27.4	30	19.6	31	37.9	34	149
Canyon Ferry	1,352.0	67	1,474.0	73	1.032.0	51	1,093.0	54	816.0	49	656.1	59	1.364.2	67	125
Gibson	323,0	68	293.0	61	241.0	50	260.0	54	-,1").0	48	132.0	49	283.8	59	109
Tiber	259.0	53	232.0	48	192,0	40	214.0	44	167.0	40	72,0	28	223.9	46	105
Sherburne	89.0	85	78.6	76	72.0	69	**75.8**	73	66.8	70	40.7	65	75.2	72	99
Fresno	71.0	85	43.0	52	37.0	44	24.0	40	12.0	29	0.0	0	30.2	36	126
Yellowtail	910.2	76	875.3	73	753.0	63	730.5	61	625.9	61	666.4	88	1.065.0	89	146

I/ Runoff Forecast for April-July; Fresno Reservoir is March-July.
2/ Runoff Forecast for April-July.
3/ Runoff Forecast for May-July.
4/ Runoff Forecast for June-July.
5/ Actual Runoff for April-July; Fresno Reservoir is March-July.

TABLE MTT3

PERCENT OF AVERAGE PRECIPITATION

2005 VALLEY PRECIPITATION

BASIN	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Beaverhead												
Monthly % of Average	138	40	59	12	57	78	169	95	168	44	87	94
Year-to-Date % of Average	138	106	96	80	77	77	103	100	116	106	104	103
Jefferson												
Monthly % of Average	132	25	54	41	31	66	134	108	173	42	83	88
Year-to-Date % of Average	132	87	79	71	66	66	83	91	111	101	99	98
Madison												
Monthly % of Average	155	25	79	119	31	93	90	88	192	54	123	67
Year-to-Date % of Average	155	84	82	92	81	83	84	85	101	97	99	96
Gallatin												
Monthly % of Average	109	55	65	100	84	101	118	53	155	96	133	72
Year-to-Date % of Average	109	87	82	86	86	89	96	84	98	98	101	98
Missouri Above Toston												
Monthly % of Average	137	28	73	100	35	87	110	96	184	55	109	78
Year-to-Date % of Average	137	84	80	85	77	79	85	87	106	100	101	99
Sun-Teton												
Monthly % of Average	107	50	101	63	25	172	115	67	179	9	68	120
Year-to-Date % of Average	107	77	85	79	70	86	9	85	103	93	91	93
Marias												
Monthly % of Average	180	15	85	51	1	135	75	32	235	12	97	133
Year-to-Date % of Average	180	110	103	92	79	91	87	67	117	102	101	104
Miilk												
Monthly % of Average	106		43	46		161	93	59	213	17		57
Year-to-Date % of Average	106		70	64		76	80	73	113	97	70	90
St. Mary												
Monthly % of Average		52	54	61	55	147	99	46	246	20	164	163
Year-to-Date % of Average	149	93	79	74	71	79	282	75	105	96	103	107
Bighorn Above Yellowtail												
Monthly % of Average	83	51	47	81	54	85	161	177	68	38	107	70
Year-to-Date % of Average	83	71	66	69	67	71	97	123	113	104	104	40

2005 MOUNTAIN PRECIPITATION

BASIN	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Lima Resevoir												
Monthly % of Average	209	31	133	83	22	100	93	123	170	40	119	84
Year to-Date % of Average	209	104	115	106	89	91	9 1		105	100	101	100
Clark Canyon Reservoir												
Monthly % of Average	139	43	91	61	3	80	99	125	155	40	91	99
Year-to-Date % of Average	139	81	85	79	70	72	76	84	93	89	89	90
Jefferson Dranage												
Monthly % of Average	104	47	84	58	34	86	95	128	169	38	86	94
Year-to-bate % of Average	104		76		64	68	73		91	88	88	88
Madison Drainage												
Monthly % of Average	151	47	95	70	42	81	82	115	185	52	125	71
Year-to•Date % of Average	151	88	91	85	76	77	7	83	92	90	92	91
Gallatin Drainage												
Monthly % of Average	117	63	84	50	46	93	85	75	129	61	124	59
Year-to-Date % of Average	117	87	86	77	71	76	77	77	83	82	84	83
Canyon Ferry Reservoir												
Monthly % of Average	121	49	88	62	39	85	88	117	170	44	102	84
Year-to-Date % of Average	121	78	82	76	69	72	75	81	90	87	88	88
Gibson Reservoir												
Monthly % of Average	89	29	79	69	34	104	110	89	168	27	99	107
.Year4o-Date % of Average	89	54	63	65	59	66	72	74	87	83	84	86
Lake Elwell Reservoir												
Monthly % of Average	118	36	72	52	34	104	94	66	174	24	86	116
Year-to-Date % of Average	118	69	70	.65	59	66	69	69	80	77	78	80
Sherburne Reservoir												
Monthly % of Averag	102	68	87	64	45	91	65	54	175	32	102	178
Year-to-Date % of Average	102	81	83	78	72	75	74	72	81	79	80	85
Bighorn Lake												
Monthly % of Averag	125	48	79	55	63	93	86	159	100	58	151	79
Year-to-Date % of Average	125	83	82	76	74	77	79	93	94	91	94	93

FLOOD BENEFITS

The Corps of Engineers evaluated the reservoir regulation data pertaining to Reclamation reservoirs within the jurisdiction of the Montana Area Office and indicated that six reservoirs provided flood relief during water year 2005. They were: Clark Canyon on the Beaverhead River near Dillon; Canyon Ferry on the Missouri River near Helena; Lake Elwell on the Marias River near Chester; Bighorn Lake on the Bighorn River near Fort Smith; Fresno Reservoir on the Milk River near Havre; and Lake Sherburne on Swiftcurrent Creek near Babb. Canyon Ferry Reservoir and Bighorn Lake played the most important roles in preventing flood damages during the 2005 runoff season. The most notable examples of peak flows regulated by Bureau reservoirs during the spring runoff are as follows:

Reservoir	Peak Inflow (cfs)	River Discharge (cfs)	Date
Canyon Ferry	12,733	5,751	06/19/05
Lake Elwell	3,901	411	06/07/05
Lake Sherburne	2,234	281	06/10/05
Fresno Reservoir	1,164	110	06/03/05
Bighorn Lake	13,371	1,504	05/12/05

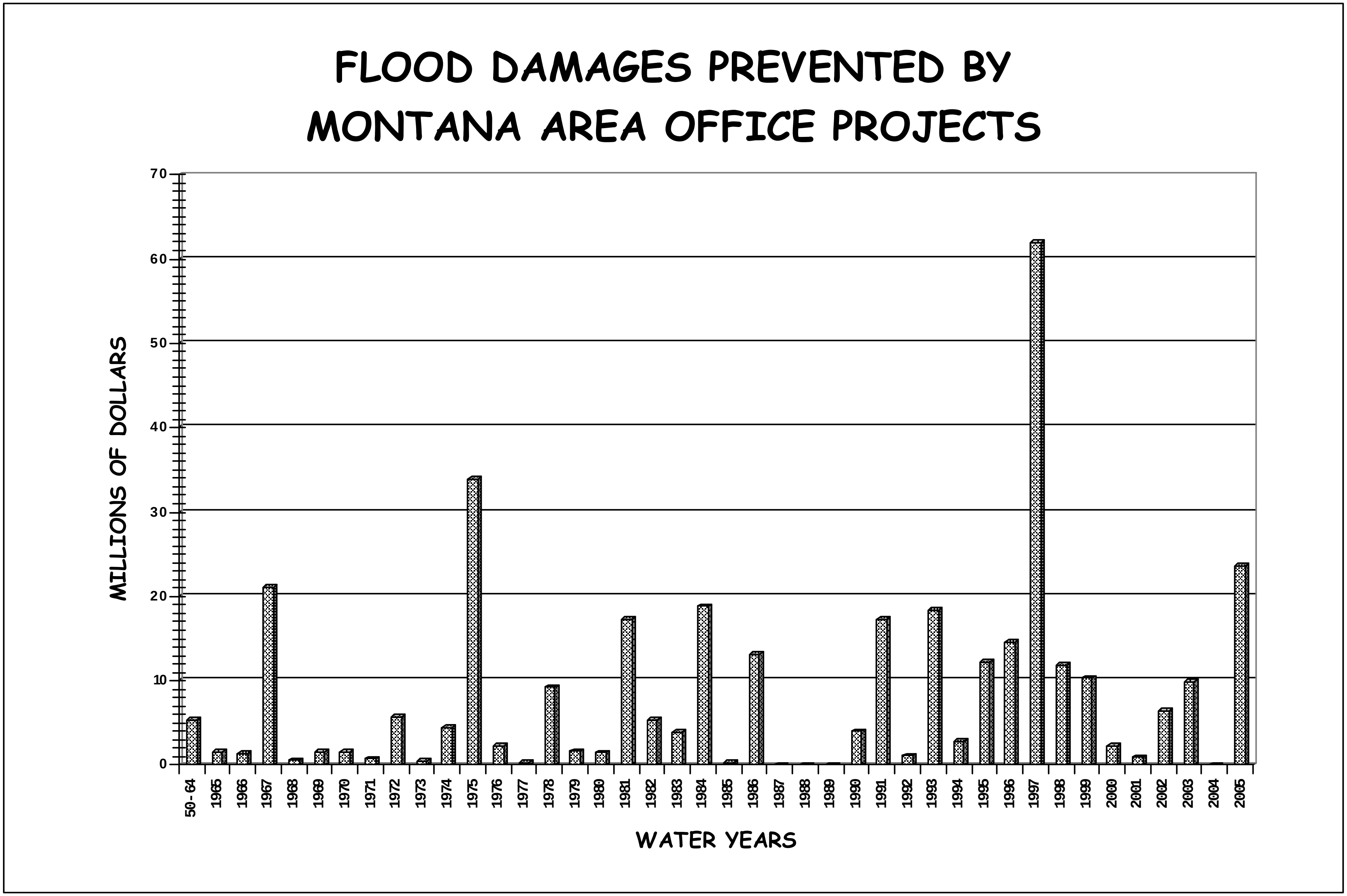
The Corps estimated these six Bureau reservoirs in Montana reduced flood damages by $23,613,100 in 2005. Some of these benefits were derived by reducing local damages and other benefits were derived by storing water which would have contributed to flooding downstream on the main stem of the Missouri River below Fort Peck Reservoir. The distribution of flood damages prevented is as listed in Table MTT4. For additional information on the operations of the reservoirs within the jurisdiction of the Montana Area Office, refer to the individual "Summary of Operations for 2005" for each reservoir in this report. Figure MTG2 shows the annual flood damages prevented by Montana Area Office reservoirs since 1950.

TABLE MTT4
FLOOD DAMAGES PREVENTED
(THOUSANDS OF DOLLARS)

Reservoir	Local	Main Stem	2005 Total	Prev. Accum.	1950-2005 Accum. Total
Clark Canyon	$ 0.0	$ 193.1	$ 193.1	$ 12,310.3	$ 12,503.4
Canyon Ferry	79.0	10,606.9	10,685.9	138,132.5	148,818.4
Gibson[1]	0.0	0.0	0.0	3,044.5	3,044.5
Lake Elwell	0.0	2,220.9	2,220.9	58,667.7	60,888.6
Lake Sherburne	6.4	0.0	6.4	0.0	6.4
Fresno	25.9	0.0	25.9	13,059.3	13,085.2
Yellowtail	0.0	10,480.9	10,480.9	101,252.3	111,733.2
Total	$ 111.3	$ 23,501.8	$ 23,613.1	$326,466.6	$350,079.7

[1] No space allocated to flood control, but some flood protection provided by operation for other purposes.

FIGURE MTG2



FLOOD DAMAGES PREVENTED BY
MONTANA AREA OFFICE PROJECTS
MILLIONS OF DOLLARS
0
10
20
30
40
50
60
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50-64
1965
1966
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WATER YEARS

UNIT OPERATIONAL SUMMARIES FOR WATER YEAR 2005

Clark Canyon Reservoir

Clark Canyon Reservoir, a Pick-Sloan Missouri basin Program (P-S MBP) project, is located on the Beaverhead River approximately 20 miles upstream from Dillon, Montana. It has a total capacity of 257,152 acre-feet (255,643 acre-feet active). The reservoir is the storage facility for the East Bench Unit providing a full water supply for irrigation of 21,800 acres and a supplemental supply for about 28,000 acres. Flood control, recreation, and fish and wildlife are among the other functions served by the reservoir.

In 2000, Reclamation surveyed Clark Canyon Reservoir to develop a topographic map and compute a present storage-elevation relationship (area-capacity tables). The data were used to calculate reservoir capacity lost due to sediment accumulation since dam closure in August of 1964. The 2000 survey determined that Clark Canyon Reservoir has a storage capacity of 174,367 acre-feet and a surface area of 5,151 acres at a reservoir elevation of 5546.10. Since closure in 1964, the reservoir has accumulated a sediment volume of 4,106 acre-feet below elevation 5546.10. This volume represents a 2.3 percent loss in capacity and an average annual loss of 114.7 acre-feet. The revised area-capacity table was put into effect on October 1, 2001, reflecting the new storage levels.

The severe drought conditions in the Beaverhead basin continued during water year 2004. Valley precipitation, during July, August and September, was well below normal; conversely though mountain precipitation was near to above average during this same time. The improved mountain precipitation did not however change streamflows significantly. Inflow to Clark Canyon during July, August and September was 22, 32 and 28 percent of average respectively. Large irrigation demands during water year 2004 had placed a heavy demand on storage in Clark Canyon Reservoir. Following the conclusion of the irrigation season and after the Labor Day weekend, releases from Clark Canyon were reduced to the fall and winter flow rate of between 25-30 cfs on September 8, which is much below the minimum recommended fishery flow between 100-200 cfs. Beginning in mid-August, storage in Clark Canyon began to steadily increase and entered water year 2005 with a content of 24,729 acre-feet at elevation 5501.23. At 20 percent of average, this was third lowest level of record for this time of year and 8,892 acre-feet or 6.41 feet higher than at the beginning of water year 2004.

The 2005 water year began with significant storm activity thus resulting in valley and mountain precipitation being much above average. This pattern reversed in November and December resulting in below average precipitation for both areas. On January 1, the Natural Resources and Conservation Service measured snowpack in the Beaverhead River basin at 91 percent of average. However this would soon change due to below average, mountain and valley precipitation during January and February. On March 1, the measured snowpack in the Beaverhead basin was 69 percent of average. The dry conditions would remain unchanged through March, indicating that another year of drought was likely. The combination of previous drought years and much below average precipitation resulted in record low inflows for October through March. Inflow for October through

March was 44,574 acre-feet, or 40 percent of normal. This was 4,598 acre-feet or 10 percent lower than record low inflows experienced in 2004.

The mountain snowmelt in the Beaverhead River basin normally begins in late April or early May. In 2005, the mountain snowpack peaked on April 22, near the normal time; however much below the average peak content. Several years of consecutive drought have had a significant affect in southwestern Montana. While there was improved moisture in 2004 the soil moisture deficits were still very severe in several locations in the basin during the winter and spring of 2005. By May 1, the snowpack was measured at 74 percent of average, a decrease of 17 percent from that recorded on January 1. This was a 17 percent increase from water year 2004 principally because the mountain and valley precipitation during April was 99 and 169 percent of average, respectively. In May the mountain precipitation improved to 125 percent of average, while valley precipitation remained near normal. However the inflows were still much below average, primarily due to the dry soil conditions and upstream irrigation demand earlier in the season. Consequently, streamflows into Clark Canyon Reservoir continued to be near record low.

Based on the mountain snowpack, the water supply forecast prepared on April 1, indicated the April-July runoff into Clark Canyon would be 23 percent of normal, totaling approximately 25,500 acre-feet. This was a slight improvement from the March 1 forecast of 22,800 acre-feet. The April forecast of inflow in conjunction with the much below average storage at the beginning of the month was not favorable for the East Bench Irrigation District's (EBID) water supply. Principally because with the existing contracts and water rights below Clark Canyon Dam, East Bench would not be able to receive a full irrigation water without impacting the Clark Canyon Water Supply Company (CCWSC). Several meetings and conference calls were held with the Clark Canyon Joint Board prior to the irrigation season to discuss options for EBID to receive at least some water during the irrigation season. The Joint Board consisted of three representatives from each water user entity. They agreed that East Bench could not repeat 2004 when they did not receive any water deliveries. Based on forecasted snowmelt runoff CCWSC elected to reduce their seasonal allotment to 3 acre-feet per acre. Consequently this would allow EBID was to divert 15,000 acre-feet of water through their main canal during 2005 to begin the irrigation season.

Snowmelt runoff during April through July was well below normal. Inflows into Clark Canyon Reservoir averaged 86 cfs during April, 91 cfs during May, 218 cfs during June and 231 cfs during July. These resulted in respective monthly total inflows of 5,061 acre-feet, 5,624 acre-feet, 12,998 acre-feet and 14,201 acre-feet. Releases during this time averaged 25 cfs during April, 72 cfs during May, 227 cfs during June and 537 cfs during July. Storage was allowed to slowly increase to a peak for the year of 66,367 acre-feet at elevation 5519.98 on May 24, 2005 before irrigation demands required storage to be drafted. This was 40 percent of normal and 38 percent of full capacity. This was also 9,071 acre-feet or 3.22 feet higher than the 2004 peak storage. The peak inflow for the year was recorded on June 30 at 337 cfs. This was also the sixth lowest peak daily inflow since the construction of the dam. The total April-July inflow to Clark Canyon was 34 percent of average totaling 37,883 acre-feet and was the sixth lowest April-July inflow of record since construction of Clark Canyon Dam. The 2005 April through July runoff was a moderate improvement from 2004 and was greater than any of the previous three years runoff.

Spring and early summer storms moved across southwestern Montana, bringing some relief in the valleys and mountains. In mid-June the Joint Board met again and increased EBID's allotment due to the significant transportation losses that occurred early in the irrigation season. Precipitation conditions appeared to be improving and members of the Joint Board felt that additional water was available to EBID without further jeopardizing CCWSC's allotment. By the end of June this assumption held true, valley precipitation for the water year had improved to 116 percent of average while mountain precipitation climbed to 93 percent of average.

Beginning in July precipitation patterns would reverse dramatically, valley precipitation was only 44 percent of normal, once again reflecting the significant drought conditions. The below average valley precipitation continued through the end of the water year counteracting the above average spring precipitation. By the end of September the cumulative valley precipitation was 103 percent of average. Mountain precipitation for the Beaverhead basin decreased significantly in July, but rebounded in August and September. The cumulative mountain precipitation for the water year was 90 percent of normal. Unfortunately, the lack of valley precipitation in July produced heavy demands on storage out of Clark Canyon to meet the downstream irrigation demands. Storage in Clark Canyon was quickly depleted. By the end of July, only 44,896 acre-feet of storage remained in Clark Canyon Reservoir and continued to drop until August 25 when it reached 37,303 acre-feet. Releases were then reduced out of Clark Canyon to about 130 cfs on August 26.

The majority of the storage water released from Clark Canyon Reservoir during water year 2005 to meet the downstream irrigation demands was released during May 23 through September 26. During this time, releases averaged 297 cfs and, at one point, reached a peak for the year of 813 cfs on July 23 to satisfy the downstream water needs. The average release of 297 cfs was about 97 cfs higher than the average release experienced a year ago during this similar time period. Beginning in late May, storage in Clark Canyon declined from a peak of 66,367 acre-feet at elevation 5519.98 on May 24 to 37,303 acre-feet at elevation 5508.19 on August 25 at which time inflows exceeded releases and storage began to increase. Storage in Clark Canyon Reservoir increased through September and ended the water year at 43,991 acre-feet, 35 percent of average. This was the sixth lowest end of water year storage level ever recorded at Clark Canyon. This storage level was approximately 16,000 acre-feet below the target level of 60,000 acre-feet recommended by the Montana Fish, Wildlife and Parks as the minimum required to sustain an adequate and healthy lake fishery. On September 26 the releases were reduced to a fall and winter flow of between 25-30 cfs, again much below the minimum recommended fishery flow of 100-200 cfs.

EBID water users received approximately 34,700 acre-feet or 49 percent of the full contract allotment and Clark Canyon Water Supply Company received about 81 percent of their full contract supply during water year 2005. The total annual inflow to Clark Canyon Reservoir during 2005 was 40 percent of normal, totaling 106,841 acre-feet, the third lowest annual inflow of record. By comparison this total inflow fell between other recent drought years; the inflow for water year 2005 was 26,294 acre-feet, and 1,651 acre-feet more than experienced during the drought years of 2004 and 2003, respectively. Conversely, 2005 inflow was 3,994 acre-feet and 29,279 acre-feet less than experienced during the drought years of 2002 and 2001, respectively. The total annual release to the Beaverhead River from Clark Canyon was 87,579 acre-feet or 33 percent of normal and was also the second lowest annual release of record since construction of the dam. This was however 15,923 acre-feet more than what was released during the drought of 2004.

Lima Reservoir is a private irrigation facility located upstream of Clark Canyon Reservoir on the Red Rock River, a tributary of the Beaverhead River. Lima Reservoir essentially filled in water year 2005 and peaked at 74,545 acre-feet, which is 87 percent of full capacity on May 20. The drainage area above Lima Reservoir accounts for about 25 percent of the total drainage area above Clark Canyon Reservoir.

Streamflow of the Beaverhead River at Barretts peaked at 884 cfs on July 23 due to irrigation releases from storage, but the streamflow would have peaked at 509 cfs on June 27 if Clark Canyon Reservoir would not have been controlling the releases.

The Corps of Engineers determined that during 2005, Clark Canyon did not prevent any local damages, but it did provide main stem flood damages in the amount of $193,100. Since construction of the Clark Canyon Dam in 1965, Clark Canyon Reservoir has reduced flood damages by a total of $12,503,400.

Important Events - 2005

September 8, 2004: Following the 2004 irrigation season, releases from Clark Canyon to the Beaverhead River were reduced to approximately 30 cfs to conserve storage and allow Clark Canyon Reservoir to gradually increase throughout the fall and winter.

April 7: Clark Canyon Water Supply Company agrees to reduce their allotment to 3 acre-feet per acre and therefore allowing East Bench to receive approximately 15,000 acre-feet.

May 24: This marked the beginning of when releases from Clark Canyon were increased to meet downstream irrigation demands. Clark Canyon Reservoir reached a peak storage content of 66,367 acre-feet at elevation 5519.98, which is 108,000 acre-feet or 26.12 feet below normal full pool level.

June 23: The Joint Board elects to increase allotments for East Bench due to the low canal efficiencies; a very minimal amount of the initial allotment made it to individual users for irrigation.

June 30: Inflow to Clark Canyon reached a peak for the year at 337 cfs.

July 7: The Joint Board elects to allow East Bench to receive another 0.15 acre-feet per acre of water and capping their total water diverted to 37,000 acre-feet.

July 23: Releases from Clark Canyon Reservoir reached a peak of 813 cfs to meet downstream water demands from the Beaverhead River.

August 4: The Joint Board elects that due to slightly improved streamflows that the Clark Canyon Water Supply Company can increase their allotment to 3.25 acre-feet per acre.

August 25: Storage in Clark Canyon Reservoir was drafted to a content of 37,303 acre-feet at elevation 5508.19. This was 21 percent of full capacity and 137,064 acre-feet or 37.91 feet below normal full pool level. After this time the reservoir begins to refill due to the decrease in irrigation demands downstream.

September 26: Release from Clark Canyon Dam to the Beaverhead River reduced to the winter release of approximately 30 cfs.

September 30: Clark Canyon Reservoir ends the water year with the sixth lowest storage on record.

Additional hydrologic and statistical information pertaining to the operation of Clark Canyon Reservoir during 2005 can be found in Table MTT5 and Figure MTG3.

TABLE MTT5
HYDROLOGIC DATA FOR 2005
CLARK CANYON - EAST BENCH UNIT
NEW SEDIMENT SURVEY DATA EFFECTIVE 10/1/2001

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	5470.60	1,061	1,061
TOP OF ACTIVE CONSERVATION	5535.70	124,160	123,099
TOP OF JOINT USE	5546.10	174,367	50,207
TOP OF EXCLUSIVE FLOOD CONTROL	5560.40	253,442	79,075

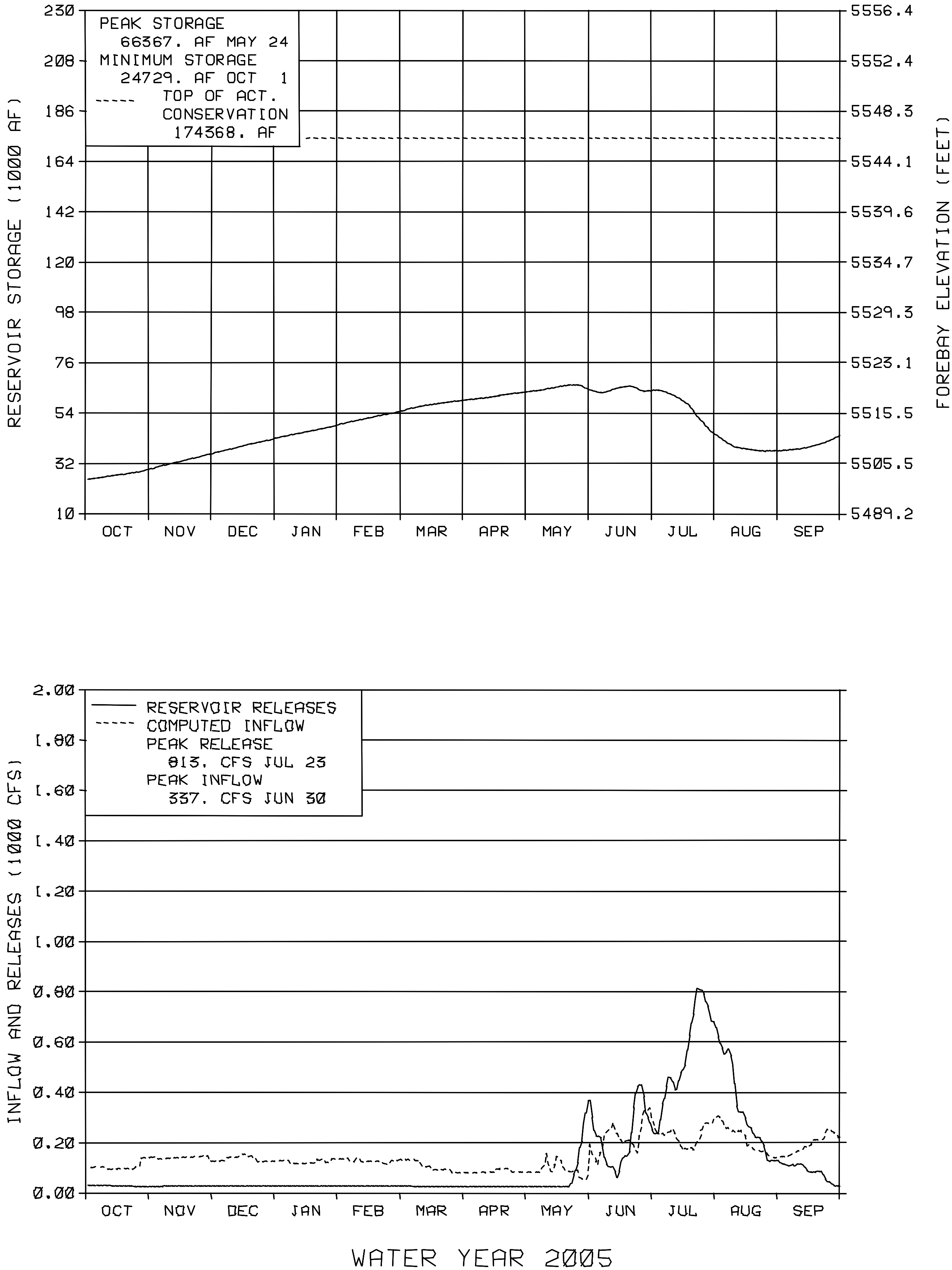
STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	5501.23	24,729	OCT 01, 2004
END OF YEAR	5511.32	43,991	SEP 30, 2004
ANNUAL LOW	5501.23	24,729	OCT 01, 2004
ANNUAL HIGH	5519.98	66,367	MAY 24, 2005
HISTORIC HIGH	5564.70	283,073	JUN 25, 1984

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	106,841	OCT 04-SEP 05	87,579	OCT 04-SEP 05
DAILY PEAK (CFS)	337	JUNE 30, 2005	813	JUL 23, 2005
DAILY MINIMUM (CFS)	53	MAY 30, 2005	25	MAR 08, 2005
DAILY FLOW AT BARRETTS (CFS)			884	JUL 23, 2005
DAILY FLOW AT BARRETTS W/O CLARK CANYON RESERVOIR (CFS)			509	JUN 27, 2005
PEAK SPILL (CFS)			0	NONE
TOTAL SPILL (AF)			0	NONE

MONTH	INFLOW		OUTFLOW*		CONTENT	
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG
OCTOBER	6.5	28	1.7	11	29.5	23
NOVEMBER	8.3	37	1.6	11	36.2	27
DECEMBER	8.4	44	1.7	13	42.9	31
JANUARY	7.7	48	1.7	15	48.9	35
FEBRUARY	7.1	49	1.5	15	54.5	39
MARCH	6.5	35	1.6	15	59.5	40
APRIL	5.1	23	1.5	11	63.0	40
MAY	5.6	21	4.4	15	64.2	39
JUNE	13.0	36	13.5	33	63.7	38
JULY	14.2	51	33.0	71	44.9	30
AUGUST	12.9	67	20.3	52	37.5	29
SEPTEMBER	11.5	57	5.0	24	44.0	35
ANNUAL	106.8	40	87.5	33		
APRIL-JULY	37.9	34				

* Average for the 1965-2005 period.

FIGURE MTG3
CLARK CANYON RESERVOIR



Canyon Ferry Lake and Powerplant

Canyon Ferry Lake (P-S MBP), formed by Canyon Ferry Dam, is located on the Missouri River near Helena, Montana. It has a total capacity of 1,992,977 acre-feet. The top 3 feet were allocated to exclusive flood control in February 1966. The next 27 feet are allocated to joint conservation and flood control purposes. The joint-use space will be evacuated for flood control purposes only to the extent that refill during the spring runoff is reasonably assured. The conservation space was constructed mainly for power generation and to provide replacement storage for several new irrigation developments located on the Missouri River and its tributaries above Great Falls, Montana. To date, however, the conservation storage has been used primarily for power production. The only new areas under irrigation are 5,000 acres being irrigated on the Crow Creek Unit (P-S MBP), 13,900 acres on the Helena Valley Unit (P-S MBP), and 20,300 acres on the East Bench Unit (P-S MBP). In addition, about 5,200 acres in the Helena Valley Unit that were once irrigated by pumping from Lake Helena and from other streams, are now irrigated by pumping from Canyon Ferry Reservoir. About 28,000 acres on the East Bench Unit also receives a supplemental water supply. A small amount of municipal water is also furnished to the city of Helena, Montana, through facilities for the Helena Valley Unit.

In 1997, a hydrographic and a topographic survey was conducted and a new elevation-area-capacity table and curve was developed. The 1997 survey determined that Canyon Ferry Lake has a storage capacity of 1,992,977 acre-feet and a surface area of 34,048 acres at reservoir elevation 3800. Since closure in 1953, the reservoir has accumulated a sediment volume of 59,746 acre-feet below reservoir elevation 3800. This volume represents a 2.91 percent loss in capacity and an average annual loss of 1,345.6 acre-feet. The revised area-capacity table was put into effect on October 1, 1998, reflecting the new storage levels.

The extended droughts of 2001, 2002, 2003, and 2004 continued to impact Montana and affect the inflow to Canyon Ferry Lake. The National Weather Service reported the valley precipitation during August and September of 2004 was 112 and 119 percent of average, respectively while the mountain precipitation was 138 and 130 percent of average, respectively. This was a huge improvement from the amount of precipitation received during August and September of 2003. Even though the precipitation was well above normal, inflow to Canyon Ferry during August and September still only totaled 103,519 acre-feet and 136,915 acre-feet respectively and was 61 and 64 percent of normal, respectively. After experiencing the unusually low runoff, releases from Canyon Ferry Lake continued to be maintained at rates that would sustain flows in the Missouri River below Holter Dam between 2,800-3,000 cfs during August and September in an effort to conserve storage in Canyon Ferry Reservoir. As a result, storage in Canyon Ferry Lake increased moderately during September and entered water year 2005 with a storage content of 1,398,950 acre-feet at elevation 3781.39. This was 148,232 acre-feet or 4.92 feet lower than at the beginning of water year 2004.

Precipitation in the Missouri River Basin above Canyon Ferry Lake started out well above average. Valley precipitation during October was 137 percent of average while the mountain precipitation was 121 percent of average. But by November, it appeared the drought was once again returning. Precipitation dropped well below normal with the valley precipitation declining to 28 percent of average and the mountain precipitation declining to 49 percent of average in November. To conserve storage in Canyon Ferry, releases from Canyon Ferry to the Missouri River were maintained at 3,000 cfs below Holter Dam through December. With this release rate, storage in Canyon Ferry Lake continued to slowly increase to 1,416,473 acre-feet at elevation 3781.99 by December 21.

After that time, colder temperatures moved into Montana. The National Weather Service forecasted extremely cold temperatures in late December and into early January. In response releases from Canyon Ferry to the Missouri River were increased by about 500 cfs during December 31 through January 25. This would allow the Missouri River to freeze over at a higher level, thereby reducing the potential for ice-jam flooding from occurring once the releases were reduced to 3,000 cfs later.

By January 1, the Natural Resources and Conservation Service (NRCS) measured the mountain snowpack in the Missouri River Basin above Canyon Ferry to be 81 percent of average, about 26 percent lower than a year ago. Snowpack in the Jefferson, Madison, and Gallatin River Basins, major tributaries of the Missouri River Basin was 75, 85 and 89 percent of normal, respectively. As the winter proceeded, mountain snowfall accumulated at well below normal rates. By April 1, mountain snowpack in the Missouri River Basin had declined to 66 percent of average. This was 13 percent less than that experienced a year ago. Snowpack in the tributaries of the Jefferson, Madison, and Gallatin River Basins reported 61, 72 and 75 percent of normal respectively, as compared to 77, 86 and 79 percent of normal a year ago.

The water supply forecast prepared on April 1, indicated the April-July runoff into Canyon Ferry Lake was expected to be 54 percent of average, totaling 1,093,000 acre-feet. With storage at 95 percent of average, projected operations indicated the release out of Canyon Ferry to the Missouri River should be maintained at rates that would provide 2,800-3,000 cfs in the Missouri River downstream of Holter Dam during April through June. This would provide better assurance for storage in Canyon Ferry Lake to fill to the top of the joint-use pool at elevation 3797 by the end of June.

Precipitation in Montana greatly improved during April through June. Valley precipitation above Canyon Ferry Lake during April, May, and June was respectively 110, 96, and 184 percent of average while the mountain precipitation was 88, 117, and 170 percent of average, respectively. The National Weather Service reported that the precipitation received during June, made June one of the wettest June's on record.

Temperatures were cooler than normal during April through June. The cooler temperatures delayed the beginning of the high elevation snowmelt and it was not until late May, that the snowmelt runoff actually began to flow into Canyon Ferry Lake. Inflows to Canyon Ferry gradually increased from near 3,000 cfs in early May to nearly 11,700 cfs by May 24. With releases continuing to be maintained at rates that would maintain river flows downstream of Holter Dam near 3,000 cfs, Canyon Ferry Lake rose 6.5 feet and gained 196,704 acre-feet of storage. Canyon Ferry Lake steadily increased from a storage content of 1,387,650 acre-feet at elevation 3781.00 on May 6 to a content of 1,584,354 acre-feet at elevation 3787.50 on May 31, 97 percent of average. This storage level was still 9.5 feet below the top of the joint-use pool.

Inflow to Canyon Ferry Lake during May was 66 percent of average, leaving lots of room for improvement. Then came the generous but moderate precipitation that fell during June. Inflow to Canyon Ferry steadily increased, reaching a peak for the year of 12,733 cfs on June 19. The June inflow to Canyon Ferry continued to remain well below normal at only 79 percent of average. With conservative releases continuing from Canyon Ferry Lake, storage in Canyon Ferry finally reached the top of the joint-use pool at elevation 3797 on June 23 and entered the exclusive flood pool. Storage continued to slowly increase until reaching a peak content for the year of 1,942,506 acre-feet at elevation 3798.51 on July 2. To control the runoff into Canyon Ferry and slow the rate of fill in storage, releases from Canyon Ferry to the Missouri River were gradually increased and maintained at rates that provided flows in the Missouri River downstream of Holter Dam near 7,000 cfs for a brief period in late June and early July. The peak discharge from Canyon Ferry Lake to the Missouri River was recorded on July 10 at 6,497 cfs.

As the rains finally ended in June, the irrigation demands began to increase during July and remained high through September. The irrigation demands continued to deplete the streamflows upstream of Canyon Ferry Lake, contributing to the inflow to Canyon Ferry Lake during July through September to decline to 60 percent of average. Since March 2000, the inflow to Canyon Ferry has been below average for 67 consecutive months. This marks the longest period of record that the monthly inflows to Canyon Ferry Lake have been below average. The April-July runoff into Canyon Ferry totaled 1,364,173 acre-feet. This was 67 percent of average and 518,192 acre-feet higher than the inflow experienced in 2004.

In late July after all flood storage was successfully drafted from Canyon Ferry Lake, the releases were gradually reduced to the minimum rates that would maintain river flows downstream of Holter Dam at or above the desired minimum fishery flow rate of 4,100 cfs. These flow rates continued for the remainder of the year.

Valley precipitation in the Missouri River Basin during August increased to 109 percent of average while the mountain precipitation increased to 102 percent of average. The valley precipitation during September declined to 78 percent of average while the mountain precipitation declined to 84 percent of average. With inflows to Canyon Ferry Lake at only 60 percent of average during August through September and releases maintained at rates that provided river flows downstream of Holter Dam at 4,100 cfs, storage in Canyon Ferry Lake steadily and slowly declined to 1,550,596 acre-feet at elevation 3786.42 by the end of water-year 2005. This was 91 percent of average and 151,646 acre-feet and 5.03 feet higher than at the end of water-year 2004. The annual inflow to Canyon Ferry Lake was 68 percent of average, totaling 2,701,404 acre-feet. This was 569,855 acre-feet greater that the total annual inflow experienced in water-year 2004.

During 2005, Canyon Ferry powerplant generated 279,478,000 kilowatt-hours, the sixth lowest of record since construction of the powerplant. This was 69 percent of the long-term average and 40,393,000 kilowatt-hours more than generated in 2004. The plant used 90 percent of the water released from the dam in 2005 (2,301,609 acre-feet). The remainder of the water was released to meet the irrigation needs of the Helena Valley Irrigation District (205,357 acre-feet) and spilled through the river outlet gates (42,802 acre-feet) to allow for scheduled maintenance outages at Canyon Ferry Dam and Powerplant and release water in excess of full powerplant capacity at Canyon Ferry Dam and Powerplant.

The Corps of Engineers estimated that during 2005, Canyon Ferry prevented $79,000 in local flood damages and also prevented $10,606,900 in flood damages downstream on the Missouri River below Fort Peck Reservoir. Since construction of the Canyon Ferry Dam in 1954, Canyon Ferry Reservoir has reduced flood damages by a total of $148,818,400.

Important Events - Water Year 2005

October 4: All irrigation deliveries to the Helena Valley Unit were discontinued for the 2004 irrigation season. To continue conserving storage in Canyon Ferry, turbine releases were maintained at rates that maintained river flows downstream of Holter Dam near 2,800 cfs.

October 6: Maintenance problems were encountered on powerplant Unit No. #2 and with Unit No. 3 unavailable to allow for ongoing work in the stilling basin, turbine releases were restricted to single-unit load for approximately 3.5 hours from 8:30am to 12:00 noon.

October 14-15: PPL-MT reported maintenance work at Hauser Dam has been completed and requested assistance in refilling Hauser and Holter Reservoirs. In response, turbine releases to the Missouri River were increased to about 3,640 cfs.

October 19: Based on the 2005 Annual Operating Plan, turbine releases to the Missouri River were gradually increased to about 3,350 cfs to provide a winter flow rate of 3,400 cfs downstream of Holter Dam.

October 19-28: A 10-day maintenance outage was scheduled on Unit No. 2 to replace protective relays. In conjunction with this maintenance work, Unit No. 3 was scheduled for a 4-5 hour outage to allow for concrete repairs in the spillway stilling basin. In response, the turbine releases were adjusted and restricted to single unit load and 2-unit load during this period.

October 22: PPL-MT reported maintenance work is completed and reservoir levels in Hauser and Holter Reservoirs are at near normal full pool levels. To assist them in improving efficiency at their hydro-plants and minimize spills past their powerplants, turbine releases from Canyon Ferry to the Missouri River were decreased by 150 cfs to 3,200 cfs.

November 3: PPL-MT called and requested assistance in improving operations at their downstream hydro-plants. To assist them in improving efficiency and minimize spills past their powerplants, releases from Canyon Ferry to the Missouri River were decreased by 250 cfs to 3,200 cfs.

November 15-December 16: Outage was scheduled on Unit No. 3 to allow for modification to the turbine runner in hopes of improving the oxygenation levels below Canyon Ferry Dam. Power generation was restricted to 2-unit load during this period.

November 18: Tributary flows between Canyon Ferry and Holter Dams have increased. At the request of PPL-MT, turbine releases from Canyon Ferry to the Missouri River were reduced to 3,100 cfs to avoid spilling water past PPL-MT downstream powerplants.

December 30: The National Weather Service predicted a cold front to move into Montana. In response and at the request of PPL-MT turbine releases from Canyon Ferry to the Missouri River were increased to 3,500 cfs to allow the river to freeze over at a higher flow rate to prevent ice-jam flooding from occurring.

January 5: Hauser and Holter Reservoirs were at near full pool levels. At the request of PPL-MT, turbine releases from Canyon Ferry to the Missouri River were reduced by 100 cfs to avoid spilling water past PPL-MT downstream powerplants.

January 18-February 17: To allow for scheduled triennial maintenance on Unit No. 1, turbine releases from Canyon Ferry were maintained at 3,520 cfs and restricted to 2-unit capacity.

January 26: Snowpack accumulations above Canyon Ferry have declined considerably since January 1. To conserve storage in Canyon Ferry River turbine releases from Canyon Ferry to the Missouri River were reduced to 3,000 cfs.

February 8-9: Electrical contractor inspected air circuit breakers on Unit Nos. 2&3. With triennial maintenance continuing on Unit No. 1, turbine releases from Canyon Ferry were restricted and limited to single-unit capacity of about 1,840 cfs during the inspections.

February 22-24: Outage was scheduled on Unit No. 2 to replace the governor actuator tank hatch cover and hydrostat test the tank. Turbine releases from Canyon Ferry to the Missouri River were maintained at 3,000 cfs.

March 8: Based on the March 1 water supply forecast, the expected runoff into Canyon Ferry was forecast to be 51 percent of average and has declined nearly 20 percent from that forecast on February 1. To conserve storage in Canyon Ferry, turbine releases from Canyon Ferry to the Missouri River were reduced to the minimum flow rate of 2,800 cfs.

March 15: Irrigation deliveries to Helena Valley Unit were initiated on March 15 and adjusted periodically throughout the irrigation season to meet the irrigation demands. Because of the low snowpack and persistent dry weather conditions, as irrigation deliveries to the Helena Valley Project were adjusted, turbine releases from Canyon Ferry powerplant were also adjusted proportionately to maintain minimum river flows below Holter Dam between 2,800-3,000 cfs.

March 27: As a water conservation measure, total release from Canyon Ferry was gradually decreased to 2,825 cfs (≈ 2,500 cfs through the powerplant and 325 cfs for the Helena Valley Project).

March 31: With Helena Valley Reservoir nearly full, diversions from Canyon Ferry Lake to Helena Valley Reservoir were discontinued. Total release from Canyon Ferry was decreased and maintained at 2,515 cfs (≈ 2,515 cfs through the powerplant and 0 cfs for the Helena Valley Project).

April 3: PPL-MT reported difficulty in maintaining stable levels in Hauser and Holter Reservoirs while maintaining river flows below Holter Dam no lower than 2,800 cfs. At the request of PPL-MT, the total release out of Canyon Ferry was increased to 2,825 cfs (≈ 2,825 cfs through the powerplant and 0 cfs for the Helena Valley Project).

April 7: Reclamation attended and participated in the Upper Missouri River Advisory Group meeting held in the MFWP Conference Room in Helena, Montana. Tim Felchle, Chief of Reservoir and River Operations, presented the water supply outlook for the upper Missouri River Basin and the proposed operations for Canyon Ferry for 2005.

April 18: Helena Valley Irrigation District requested an increase in diversions from Canyon Ferry Lake to Helena Valley Reservoir to meet irrigation demands. Total release from Canyon Ferry was increased to 2,975 cfs (≈ 2,665 cfs through the powerplant and 310 cfs for the Helena Valley Project) to maintain river flows downstream of Holter Dam above 2,800 cfs..

May 1: Irrigation demands increased for Helena Valley Irrigation District. In response the diversions from Canyon Ferry Lake to Helena Valley Reservoir were increased to meet the demands and maintain river flows downstream of Holter Dam above 2,800 cfs. Total release from Canyon Ferry was increased to 3,025 cfs (≈ 2,595 cfs through the powerplant and 430 cfs for the Helena Valley Project).

May 11: Irrigation demands increased for Helena Valley Irrigation District. In response the diversions from Canyon Ferry Lake to Helena Valley Reservoir were increased to meet the demands and maintain river flows downstream of Holter Dam above 2,800 cfs. Total release from Canyon Ferry was increased to 3,075 cfs (≈ 2,490 cfs through the powerplant and 585 cfs for the Helena Valley Project).

May 19: Rains have caused tributary flows between Canyon Ferry and Holter Dams to increase. To continue conserving storage in Canyon Ferry while maintaining river flows downstream of Holter Dam above 2,800 cfs. Total release from Canyon Ferry was decreased to 2,750 cfs (≈ 2,185 cfs through the powerplant and 565 cfs for the Helena Valley Project).

June 1: Irrigation demands increased for Helena Valley Irrigation District. In response the diversions from Canyon Ferry Lake to Helena Valley Reservoir were increased to meet the demands and maintain river flows downstream of Holter Dam above 2,800 cfs. Total release from Canyon Ferry was increased to 2,790 cfs (≈ 2,060 cfs through the powerplant and 730 cfs for the Helena Valley Project).

June 8: Spring rains frequented the area. As irrigation demands decreased for Helena Valley Irrigation District, diversions from Canyon Ferry Lake to Helena Valley Reservoir were decreased to meet the demands and maintain river flows downstream of Holter Dam above 2,800 cfs. Total release from Canyon Ferry was increased to 2,570 cfs (≈ 2,060 cfs through the powerplant and 510 cfs for the Helena Valley Project).

June 17-19: Snowmelt accompanied by generous rainfall, produced inflows to Canyon Ferry of over 10,000 cfs. To slow the rate of rise in storage, total release from Canyon Ferry was gradually increased to 6,300 cfs (≈ 5,810 cfs through the powerplant and 490 cfs for the Helena Valley Project).

June 23: Inflow to Canyon Ferry Lake continued to remain over 10,500 cfs and holding steady. With storage in Canyon Ferry Lake only 0.30 feet below the top of the joint-use pool, spills in excess of full powerplant capacity was initiated, increasing the total release from Canyon Ferry to 6,675 cfs (≈ 5,160 cfs through the powerplant, 1,000 cfs through the river outlet gates, and 515 cfs for the Helena Valley Project).

July 12-16: Inflow to Canyon Ferry continued to decline. To slow the evacuation rate of storage in Canyon Ferry Lake and return river flows to near normal rates as the irrigation demands varied, all spills were discontinued on July 13 and the total release from Canyon Ferry Lake was gradually reduced to 4,285 cfs (≈ 3,640 cfs through the powerplant, 0 cfs through the river outlet gates, and 645 cfs for the Helena Valley Project).

July 20: PPL-MT reported difficulty in maintaining stable levels in Hauser and Holter Reservoirs while maintaining minimum flows of 4,100 cfs downstream of Holter Dam. In response, the total release out of Canyon Ferry was increased to 4,350 cfs (≈ 3,595 cfs through the powerplant and 755 cfs for the Helena Valley Project).

August 1-3: To assist electrical contractor with removal of old circuit breakers and installation of new breakers, 10 hour outages were required each day for each Unit, restricting and limiting turbine generation to 2-unit load during each of the outages.

August 12: Flow measurements indicated actual river flows were less than anticipated. Turbine releases from Canyon Ferry were adjusted to maintain river flows downstream of Holter Dam at or near 4,100 cfs.

August 18: To assist PPL-MT with maintenance at their downstream powerplants, total release from Canyon Ferry was reduced to 3,800 cfs (≈ 3,070 cfs through the powerplant and 730 cfs for the Helena Valley Project).

August 19: To assist PPL-MT with maintenance at their downstream powerplants, total release from Canyon Ferry was reduced to 3,965 cfs (≈ 3,235 cfs through the powerplant and 730 cfs for the Helena Valley Project).

August 24-25: PPL-MT completed maintenance at their downstream powerplants. To assist them in refilling Hauser and Holter Reservoirs, total release from Canyon Ferry was increased to 4,465 cfs (≈ 3,735 cfs through the powerplant and 730 cfs for the Helena Valley Project).

August 31: With Hauser and Holter Reservoirs at near full capacity, PPL-MT requested a reduction in releases from Canyon Ferry. In response, the total release from Canyon Ferry was reduced to 4,100 cfs (≈ 3,385 cfs through the powerplant and 715 cfs for the Helena Valley Project).

September 5-8: To assist PPL-MT and the Bureau of Land Management with work at White Sandy Recreation Area at Hauser Lake, total release from Canyon Ferry was adjusted periodically to allow for the work. On September 5, total release from Canyon Ferry was reduced to 2,350 cfs (≈ 1,635 cfs through the powerplant and 715 cfs for the Helena Valley Project). During September 7-8, total release from Canyon Ferry was gradually increased to 4,350 cfs (≈ 3,635 cfs through the powerplant and 715 cfs for the Helena Valley Project).

September 9: Helena Valley Reservoir was near full capacity. To prevent the reservoir from overfilling, the total release from Canyon Ferry was reduced to 4,035 cfs (≈ 3,435 cfs through the powerplant and 600 cfs for the Helena Valley Project).

September 16-19: PPL-MT planned to draft Holter Lake 1 foot. To assist them in drafting and refilling the lake, total release from Canyon Ferry was reduced to 3,425 cfs (≈ 2,825 cfs through the powerplant and 600 cfs for the Helena Valley Project) on September 16. On September 19, total release from Canyon Ferry was increase to 4,100 cfs (≈ 3,500 cfs through the powerplant and 600 cfs for the Helena Valley Project).

September 30-October 6: PPL-MT completed maintenance work around Hauser and Holter Reservoirs. To assist them in refilling the reservoirs, total release from Canyon Ferry was increased to 5,115 cfs (≈ 4,530 cfs through the powerplant and 585 cfs for the Helena Valley Project) on September 30. On October 6, normal operations resumed with the total release from Canyon Ferry being reduced to 4,115 cfs (≈ 3,530 cfs through the powerplant and 585 cfs for the Helena Valley Project).

October 3: All irrigation deliveries to the Helena Valley Unit were discontinued for the 2005 irrigation season. To continue conserving storage in Canyon Ferry, turbine releases were maintained at rates that maintained river flows downstream of Holter Dam no lower than 4,100 cfs.

Additional statistical information of Canyon Ferry Reservoir and its operations during 2005 can be found on Table MTT6 and Figure MTG4.

TABLE MTT6
HYDROLOGIC DATA FOR 2005
CANYON FERRY RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	3728.00	396,031	396,031
TOP OF ACTIVE CONSERVATION	3770.00	1,097,599	701,568
TOP OF JOINT USE	3797.00	1,891,888	794,289
TOP OF EXCLUSIVE FLOOD CONTROL	3800.00	1,992,977	101,089

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	3781.39	1,398,950	OCT 01, 2004
END OF YEAR	3786.42	1,550,596	SEP 30, 2005
ANNUAL LOW	3779.85	1,354,712	JAN 18, 2005
ANNUAL HIGH	3798.51	1,942,506	JUL 02, 2005
HISTORIC HIGH	3800.00	2,050,900	JUN 23, 1964

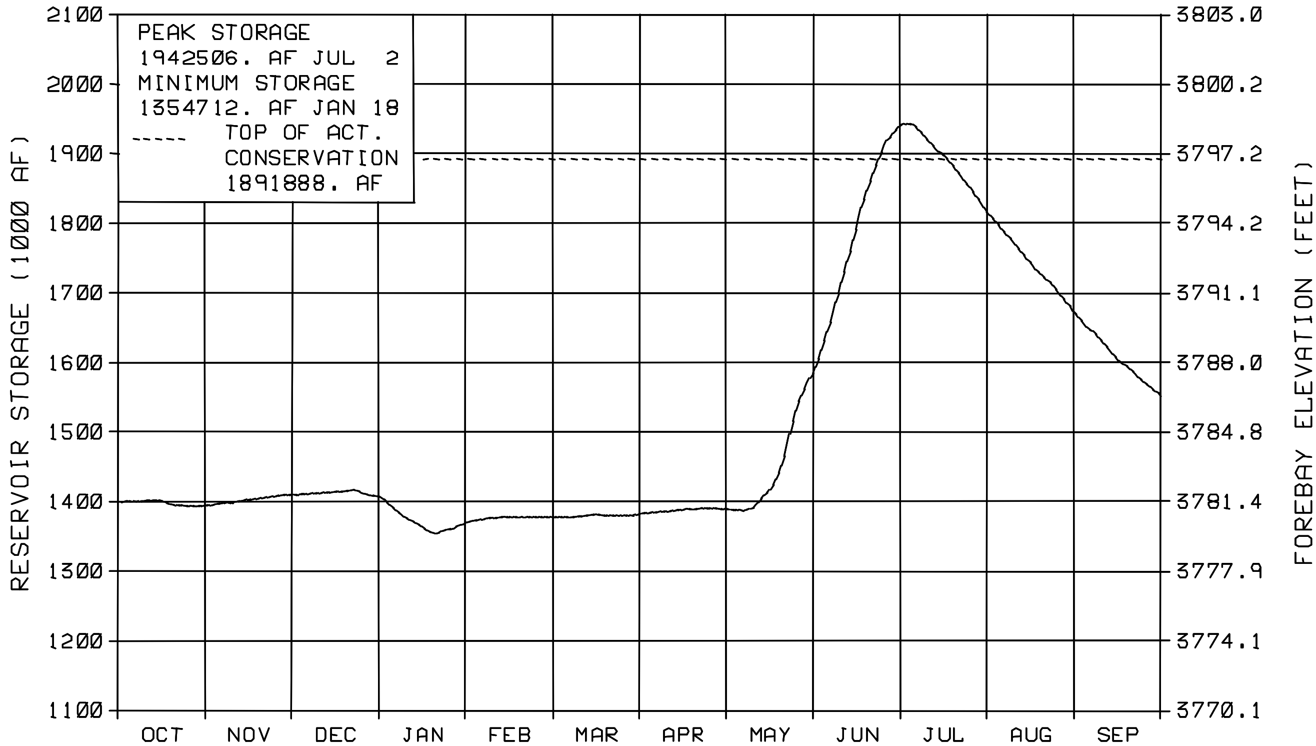
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	2,701,402	OCT 04-SEP 05	2,450,308	OCT 04-SEP 05
DAILY PEAK (CFS)	12,733	JUN 19, 2005	6,497	JUL 10, 2005
DAILY MINIMUM (CFS)	1,463	JAN 18, 2005	1,995	SEP 6, 2005
PEAK SPILL (CFS)			1,169	JUL 3, 2005
TOTAL SPILL (AF)			42,802	6/23-7/13/2005

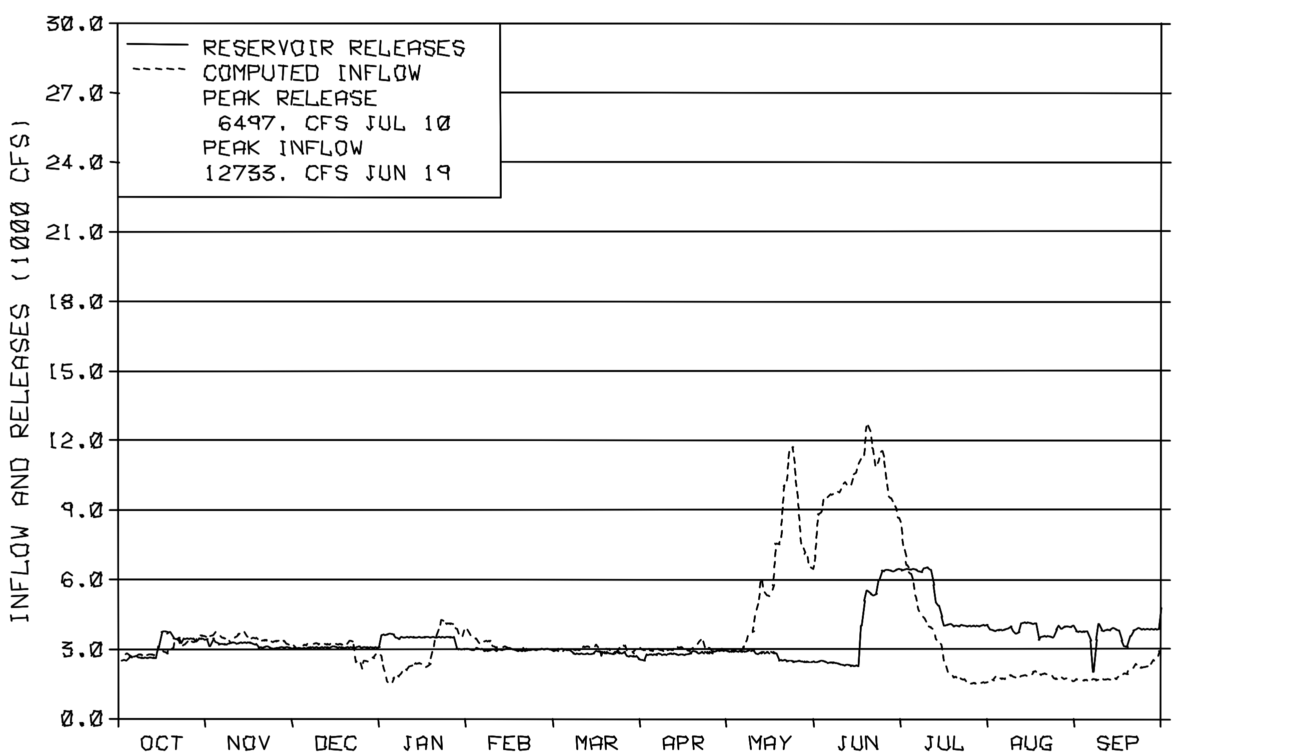
MONTH	INFLOW		OUTFLOW*				CONTENT	
	KAF	% OF AVG	PUMPED TO HELENA VALLEY (KAF)	% OF AVG	RIVER KAF	% OF AVG	KAF	% OF AVG
OCTOBER	187.4	65	0.1	112	191.6	73	1,393.7	81
NOVEMBER	204.8	69	0	---	188.2	69	1,410.3	81
DECEMBER	184.5	76	0	---	189.5	63	1,405.4	84
JANUARY	176.1	80	0	---	211.1	71	1,370.4	87
FEBRUARY	171.8	77	0	---	164.0	61	1,378.1	91
MARCH	182.6	68	4.7	2,243	174.4	58	1,381.6	95
APRIL	179.0	51	4.2	75	167.0	55	1,389.4	95
MAY	376.5	66	15.4	122	166.2	46	1,584.4	97
JUNE	606.0	79	16.1	106	236.5	49	1,937.8	103
JULY	202.7	60	17.9	108	306.4	85	1,816.1	99
AUGUST	111.3	65	22.3	144	235.8	93	1,669.4	97
SEPTEMBER	118.8	56	18.0	236	219.6	94	1,550.6	91
ANNUAL	2,701.4	68	99.4	133	2,450.3	66		
APRIL-JULY	1,364.2	67						

* Average for the 1955-2005 period.

FIGURE MTG4

CANYON FERRY LAKE





WATER YEAR 2005

Helena Valley Reservoir

Helena Valley Reservoir is a regulating offstream reservoir for Helena Valley Unit (P-S MBP), located west of Canyon Ferry. It has a total capacity of 10,451 acre-feet, which is used for irrigation and for furnishing a supplemental municipal supply to the city of Helena, Montana. Helena Valley Reservoir receives its entire water supply by pumping from Canyon Ferry Reservoir. When fully developed, Helena Valley Unit will irrigate about 14,100 acres of full-service land plus 3,500 acres of supplemental-service lands. Present development is about 13,867 full-service acres, including 5,200 acres previously irrigated by pumping from Lake Helena or from other streams.

At the beginning of the year, storage in Helena Valley Reservoir was 8,118 acre-feet at an elevation of 3815.17 feet. Helena Valley Reservoir reached a low for the year of 6,291 acre-feet at an elevation of 3810.51 feet on March 14, 2005. With new operating criteria in place, goals were to fill Helena Valley Reservoir by April 1 and maintain it nearly full through June. In response, diversions to the Helena Valley Unit from Canyon Ferry Reservoir were started on March 15. Storage in Helena Valley Reservoir then steadily increased to a peak for the year of 10,425 acre-feet at an elevation of 3820.02 feet on June 7, 2005. Later in the year, goals were to draft the reservoir to minimum elevations of 3815 and 3812 by the end of July and August respectively. On July 31, storage in Helena Valley Reservoir was drafted to 3812.72 and slowly refilled to elevation 3816.53 by August 31. By the end of water year 2005, Helena Valley reservoir ended with a storage content of 10,270 acre-feet at elevation 3819.72. During 2005, 99,448 acre-feet of water was pumped to Helena Valley from Canyon Ferry Reservoir. Helena Valley Irrigation District released 81,557 acre-feet for irrigation. All irrigation deliveries were discontinued for the 2005 season on October 3.

The reservoir provided an adequate water supply to satisfy all irrigation requirements for the Helena Valley Unit in 2005 and supplement the City of Helena's municipal water supply.

Statistical information pertaining to Helena Valley Reservoir is shown on Table MTT7 below.

TABLE MTT7
HYDROLOGIC DATA FOR 2005

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
Top of Inactive Storage	3805.00	4,554	4,554
Top of Active Conservation Storage	3820.07	10,451	5,897
STORAGE ELEVATION DATA	ELEVATION (FEET)	STORAGE (AF)	DATE
Beginning of Year	3815.17	8,118	10/1/04
End of Year	3819.72	10,270	9/30/05
Annual Low	3810.51	6,291	03/14/05
Annual High	3820.02	10,425	06/07/05
Historic High	3820.60	10,738	6/02/75
INFLOW-OUTFLOW DATA			ANNUAL
Pumped from Canyon Ferry to Helena Valley Unit			99,448 AC-FT
Inflow to Helena Valley Reservoir			85,114 AC-FT
Released from reservoir for irrigation			81,557 AC-FT
Delivered to the City of Helena for municipal use			1,413 AC-FT

MONTH	RESERVOIR		
	FOREBAY ELEVATION (FEET)	STORAGE CONTENT (KAF)	PUMPED TO HELENA VALLEY (KAF)
OCTOBER	3813.86	7.6	0.1
NOVEMBER	3813.07	7.2	0
DECEMBER	3812.20	6.9	0
JANUARY	3811.50	6.6	0
FEBRUARY	3810.81	6.4	0
MARCH	3819.96	10.4	4.7
APRIL	3819.60	10.2	4.2
MAY	3818.56	9.7	15.4
JUNE	3819.81	10.3	16.1
JULY	3812.72	7.1	17.9
AUGUST	3816.53	8.7	22.3
SEPTEMBER	3819.72	10.3	18.0
ANNUAL			99.4

Sun River Project

Storage for the Sun River Project is provided by Gibson, Willow Creek, and Pishkun Reservoirs, which are all single-purpose irrigation structures. The project serves 95,000 acres on the Greenfields and Fort Shaw Irrigation Districts. A diversion dam is located on the Sun River about 3 miles below Gibson Reservoir to allow flows to be diverted down the Pishkun Supply Canal to Pishkun Reservoir, or down the Willow Creek Feeder Canal to Willow Creek Reservoir. Releases are made from Pishkun Reservoir to supply the canals of the Greenfields Irrigation District. Releases from Willow Creek Reservoir re-enter the Sun River where they can be diverted at the Fort Shaw Diversion Dam to supply the canals of the Fort Shaw Irrigation District.

Gibson Reservoir is located on the Sun River above Augusta, Montana, and has a total capacity of 96,477 acre-feet. In 1996, a hydrographic and topographic survey was conducted to measure the reservoir volume lost due to sediment accumulations that occurred in the drainage basin since the major forest fires that occurred in 1988. As a result of the survey, a new elevation-area-capacity table and curve was developed.

The 1996 survey determined that Gibson Reservoir has a storage capacity of 96,477 acre-feet and a surface area of 1,296 acres at reservoir elevation 4724. Since closure in 1929, the reservoir has accumulated a sediment volume of 8,383 acre-feet below reservoir elevation 4724. This volume represents a 7.99 percent loss in capacity and an average annual loss of 125.7 acre-feet. The 1996 survey also showed the average annual rate of sediment deposition since 1973 was 113.1 acre-feet per year and that most of the sediment contribution came after the 1988 fires. The revised area-capacity table was developed and put into effect on October 1, 1997, reflecting the new storage levels.

The spillway crest is at elevation 4712.0 (81,255 acre-feet). Depending on the runoff conditions and reservoir levels, the spillway gates remain open during the spring until the inflows and remaining snow cover indicate that the runoff is receding. Once it is apparent that the runoff has peaked and begun to recede, the spillway gates are progressively closed to allow the reservoir to fill to the top of the conservation pool at elevation 4724.0 (96,477 acre-feet).

The dry conditions in 2004 provided below average water supply storage in the Sun River basin, heading into water year 2005. During August and September of 2004, precipitation in the Sun River watershed varied between above average and below average. The valley precipitation during those months was 163 and 68 percent of average respectively, while precipitation in the mountains was 119 and 75 percent of average respectively. The August through September inflow to Gibson Reservoir was 76 percent of average, totaling 34,513 acre-feet. With the inflows averaging 245 cfs and releases averaging 193 cfs during September, storage in Gibson Reservoir slowly filled and entered water year 2005 with a storage content of 22,496 acre-feet at elevation 4646.44. This was 80 percent of average and 23 percent of full capacity and 73,981 acre-feet or 77.56 feet below the top of the conservation pool. Storage at the beginning of water year 2005 was 16,250 acre-feet or 33.63 feet greater than at the beginning of water year 2004.

Fall and winter releases from Gibson Reservoir to the Sun River were maintained near minimum flow rate of approximately 50-60 cfs through December 2 with the expectation that with normal snowpack they could be increased to approximately 100 cfs. As precipitation conditions appeared to be improving in December, releases to the Sun River were slightly increased in early December to between 70-85 cfs and were maintained at this rate through January; however by mid-February it was apparent that conditions were not improving and the snowpack was much below average. Releases were then reduced to approximately 60 cfs in an effort to conserve storage. Storage in Gibson Reservoir had slowly but steadily increased to 32,640 acre-feet at elevation 4662.14 by the end of December.

Precipitation in the Sun River basin varied from much above average to much below average during water year 2005. Cumulative precipitation for October through December was below average for both valley and mountain areas in the Sun River basin. By January 1, the Natural Resources and Conservation Service (NRCS) measured snowpack in the Sun-Teton River Basins at 56 percent of average, which was a 41 percent decrease from a year ago. In January and February precipitation conditions continued to be below average in both the valley and mountain areas. In addition, a rapid warming trend during January caused some low level snowpack to begin melting. Consequently, the beginning of March snowpack was only 40 percent of average. Following the extremely dry February, March precipitation was much above average in valley areas, while near average in the mountains. This increased the cumulative precipitation through the end of March to 86 and 66 percent of average for the valley and mountain areas respectively.

By April 1 the snowpack measured 48 percent of average. In 2005 the snowpack in the Sun River basin reached its peak accumulation about mid-April, was only 65 percent of average. Snowmelt runoff began entering Gibson Reservoir near the end of April when streamflows gradually increased from about 210 cfs in early April to near 1000 cfs by the end of the month. Streamflows decreased briefly in late April due to cooler temperatures; however as the temperatures once again increased in early May, streamflows increased to the peak inflow for the year of 3,947 cfs by May 17. During April, precipitation in both the valley and mountain areas was near to above average; however, precipitation in May once again reflected the drought conditions and was below average. The Sun River basin, like many other basins in Montana, experienced an extremely wet June. Precipitation in June for valley and mountain areas was 179 and 168 percent of average. Even with the above average precipitation during June, the low snowpack conditions produced a spring runoff volume significantly below average.

As the inflows increased, the releases from Gibson Reservoir to the Sun River were increased to control the rate of fill of storage. On June 15, Gibson Reservoir reached a peak storage content for the year of 96,477 acre-feet at elevation 4724.00, the top of the active conservation pool. The peak discharge to the Sun River over the Sun River Diversion Dam was recorded on May 17 at 3,640 cfs, while the peak discharge from Gibson Reservoir was recorded on May 17 at 4,045 cfs. The peak inflow was much below average principally due to snowpack conditions. The snowmelt runoff peaked quickly and began to recede by the end of May. However above average precipitation in June provided rainfall runoff as well as some additional snow at higher elevations. This prolonged the runoff and reduced irrigation demands. Unfortunately improved precipitation would only provide temporary relief and the drought conditions were still prevalent; inflows to Gibson Reservoir were only 54 and 51 percent of average for June and July, respectively. The actual April-July inflow totaled 283,770 acre-feet, which is approximately 194,000 acre-feet or 41 percent below average.

August valley precipitation remained below average, while mountain precipitation was near average. The cumulative water year precipitation through August for valley and mountain areas was 91 and 84 percent of average, respectively. Concluding the water year, September valley and mountain precipitation were both near average at 120 and 107 percent of average respectively. The August-September inflow to Gibson Reservoir was 65 percent of average totaling 28,178 acre-feet. Beginning in August, releases from Gibson Dam were gradually reduced from approximately 1,480 cfs to about 260 cfs by the end of the month. Releases were again reduced in mid-September to approximately 160 cfs. During September the average inflow was approximately 175 cfs and thus resulting in storage of Gibson Reservoir gradually declining to a content of 5,080 acre-feet at elevation 4609.22, on September 30. In the latter part of September releases were reduced to rates adequate to allow diversion to the Pishkun Supply Canal and provide minimum fishery flow below the Sun River Diversion Dam. Gibson Reservoir ended the water year with a content of 5,080 acre-feet of storage at elevation 4609.22. This was 18 percent of average and 5 percent of normal full capacity or 91,397 acre-feet or 114.78 feet below the top of the conservation pool. Storage at the end of water year 2005 was 17,416 acre-feet or 37.22 feet less than at the end of water year 2004.

Total annual inflow for water year 2005 was 62 percent of average, totaling 380,617 acre-feet. This was 18,167 acre-feet or 5 percent less than the inflow experienced during water year 2004.

Diversions to the Pishkun Supply Canal were started on April 5 and April 29 for Willow Creek and Pishkun Reservoirs, respectively. They were adjusted periodically throughout the year to meet the downstream irrigation demands on the Sun River Project. Diversions to Pishkun Reservoir were discontinued September 27 due to adequate storage to meet the operational objectives for winter carry-over storage in Pishkun Reservoir. The total net inflow to Pishkun Reservoir during water year 2005 was 202,690 acre-feet, 89 percent of average. Diversions to Willow Creek Reservoir were discontinued on May 9. Diversions to Willow Creek Reservoir were reinitiated on September 27 and continued through early December totaling approximately 13,800 acre-feet. The net inflow for the water year to Willow Creek Reservoir was 13,688 acre-feet. All diversions for the season were discontinued on December 3, 2005.

Greenfields Irrigation District discontinued water delivery on August 19. Supplemental water contracts served by Greenfields were satisfied May 23 through July 6 while Gibson Reservoir releases were in excess of senior irrigation demands. Based on average diversions to Pishkun Reservoir and supplemental water delivered, Greenfields delivered approximately 75 percent of normal allotment to their water users. The total diversion for Fort Shaw Irrigation District was above average during 2005. The total water diverted was approximately 55,000 acre-feet, which is 130 percent of average.

Even though there is no space allocated to flood control, the Corps of Engineers still estimates flood damages that may be prevented by Gibson Reservoir. During 2005 Gibson Reservoir did not contribute to the reduction of flood damages locally or downstream on the Missouri River below Fort Peck Reservoir.

Additional hydrologic and statistical data pertaining to the operation of Gibson Reservoir can be found in Table MTT8-A and Figure MTG5.

Pishkun Reservoir, near Augusta, Montana, is an off-stream reservoir supplied by a feeder canal which diverts water from the Sun River below Gibson Reservoir. The reservoir serves the 81,000-acre Greenfields Division. The total capacity of the reservoir is 46,670 acre-feet at elevation 4370.0.

All canal diversions from the Sun River to Pishkun during the 2004 irrigation season were discontinued on September 15, 2004. Reservoir content in Pishkun at the beginning of water year 2005 was 37,391 acre-feet at elevation 4363.53. This was 113 percent of average and 80 percent of normal full capacity and 3,912 acre-feet or 3.03 feet greater than at the beginning of water year 2004.

Storage began to decrease because of normal reservoir losses throughout the winter and early spring of 2005. Storage declined to 34,628 acre-feet at elevation 4361.39 on April 29 when diversion from the Sun River reached Pishkun Reservoir. After Diversions began storage increased prior to irrigation season to 45,666 acre-feet at elevation 4369.32 on May 13. Once irrigation releases began, storage fluctuated based on demands, and due to the above average precipitation in June demands decreased significantly allowing storage to increase to a peak content for the year of 47,909 acre-feet at elevation 4370.76 on June 6. Irrigation releases from Pishkun Reservoir were started on May 13 with a maximum release of 1,718 cfs recorded on July 7. The maximum inflow was 1,426 cfs on August 1, 2005. All irrigation releases from Pishkun Reservoir were discontinued on August 19. All diversions from the Sun River to Pishkun Reservoir were discontinued on September 27. Approximately 204,408 acre-feet of water, 90 percent of average, was released from Pishkun Reservoir during May 13 through August 19 to help meet the irrigation demands on the Sun River Project. Irrigation demands were reduced in August and Pishkun Reservoir was allowed to refill; by the end of the water year, the reservoir storage was 35,674 acre-feet at elevation 4362.20. This was 108 percent of average and 76 percent of full capacity. This was also 1,718 acre-feet or 1.33 feet less than at the end of water year 2004.

Additional hydrologic and statistical data pertaining to Pishkun Reservoir can be found in Table MTT8-B and Figure MTG6.

<u>Willow Creek Reservoir</u> obtains its water supply from Willow Creek and the Sun River via the Willow Creek Feeder Canal. The total reservoir capacity is 32,300 acre-feet at elevation 4142.0 feet. Releases from Willow Creek Reservoir enter the Sun River and can be diverted for irrigation at the Fort Shaw Diversion Dam, the Floweree Canal of the Broken O Ranch, and other downstream senior water users.

All diversions from the Sun River to Willow Creek during the 2004 irrigation season were discontinued on November 30, 2004. Reservoir content in Willow Creek at the beginning of water year 2005 was 19,154 acre-feet at elevation 4132.08. This was 106 percent of average and 59 percent of full capacity and 495 acre-feet or 0.42 feet less than at the beginning of water year 2004.

Storage in Willow Creek Reservoir remained fairly stable throughout the winter. Diversions from the Sun River to Willow Creek Reservoir during 2005 were initiated on April 5 at a rate of approximately 25 cfs and were eventually increased to 100 cfs on April 14. The diversions began to reach Willow Creek Reservoir on April 7 and storage increased to a peak storage content for the year of 32,900 acre-feet at elevation 4142.40 on June 29. This storage level was 106 percent of average and was at 102 percent of full capacity. Due to the reservoir approaching normal full pool diversions from the Sun River to Willow Creek were discontinued on May 9 with the total inflow during this period approximately equal to 5,400 acre-feet. To help meet irrigation demands within the Sun River Irrigation Projects a release of 80 cfs was initiated from Willow Creek Reservoir on July 5 and steadily increased to 216 cfs by the end of the month. Releases were adjusted through July and August according to downstream water user needs, until they were discontinued on August 15. Approximately 14,700 acre-feet of storage was released from Willow Creek Reservoir during July 5 through August 15 to help meet the irrigation demands in 2005. As a result, storage was drafted to the minimum content for the water year of 18,057 acre-feet at elevation 4131.15 on September 13. Diversions were reinitiated to Willow Creek Reservoir on September 27 which allowed storage to slowly increase through the remainder of the year. Willow Creek Reservoir ended the water year with a storage content of 18,104 acre-feet at elevation 4131.19. This was 101 percent of average and 56 percent of normal full capacity. This was also 1,051 acre-feet or 0.89 feet lower than at the end of water year 2004. Diversions to Willow Creek Reservoir continued through December 3 with an average diversion of 102 cfs per day. Approximately 13,800 acre-feet of water was diverted at the end of water year 2005 and beginning of water year 2006.

Additional hydrologic and statistical data pertaining to Willow Creek Reservoir can be found in Table MTT8-C and Figure MTG7.

<u>Important Events – 2005</u>

<u>November 30:</u> Diversions to Willow Creek Feeder Canal were discontinued for the winter.

April 5: Diversions to the Willow Creek Feeder Canal were initiated.

April 29: Diversions to the Pishkun Supply Canal were initiated.

May 9: Diversions to Willow Creek Reservoir discontinued.

May 17: Inflows into Gibson Reservoir peak at approximately 3,947 cfs.

June 6: Pishkun Reservoir reaches peak for year at elevation 4370.76.

June 15: Gibson Reservoir reaches normal full pool at elevation 4724.04.

June 29: Willow Creek Reservoir reaches peak for year at elevation 4142.4.

August 19: Greenfields Irrigation District discontinued water delivery from Pishkun Reservoir.

September 27: Diversions to Pishkun Reservoir discontinued for the year.

September 27: Diversion to Willow Creek Reservoir reinitiated to provide increased winter carry-over storage.

December 3: Diversions discontinued to the Willow Creek Feeder Canal.

TABLE MTT8-A
HYDROLOGIC DATA FOR 2005
GIBSON RESERVOIR (SUN RIVER PROJECT)

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	4557.50	0	0
TOP OF ACTIVE CONSERVATION	4724.00	96,477	96,477

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	4646.44	22,496	OCT 01, 2004
END OF YEAR	4609.22	5,080	SEP 30, 2005
ANNUAL LOW	4609.22	5,080	SEP 30, 2005
ANNUAL HIGH	4724.00	96,477	JUN 15, 2005
HISTORIC HIGH	4732.23	116,400	JUN 08, 1964

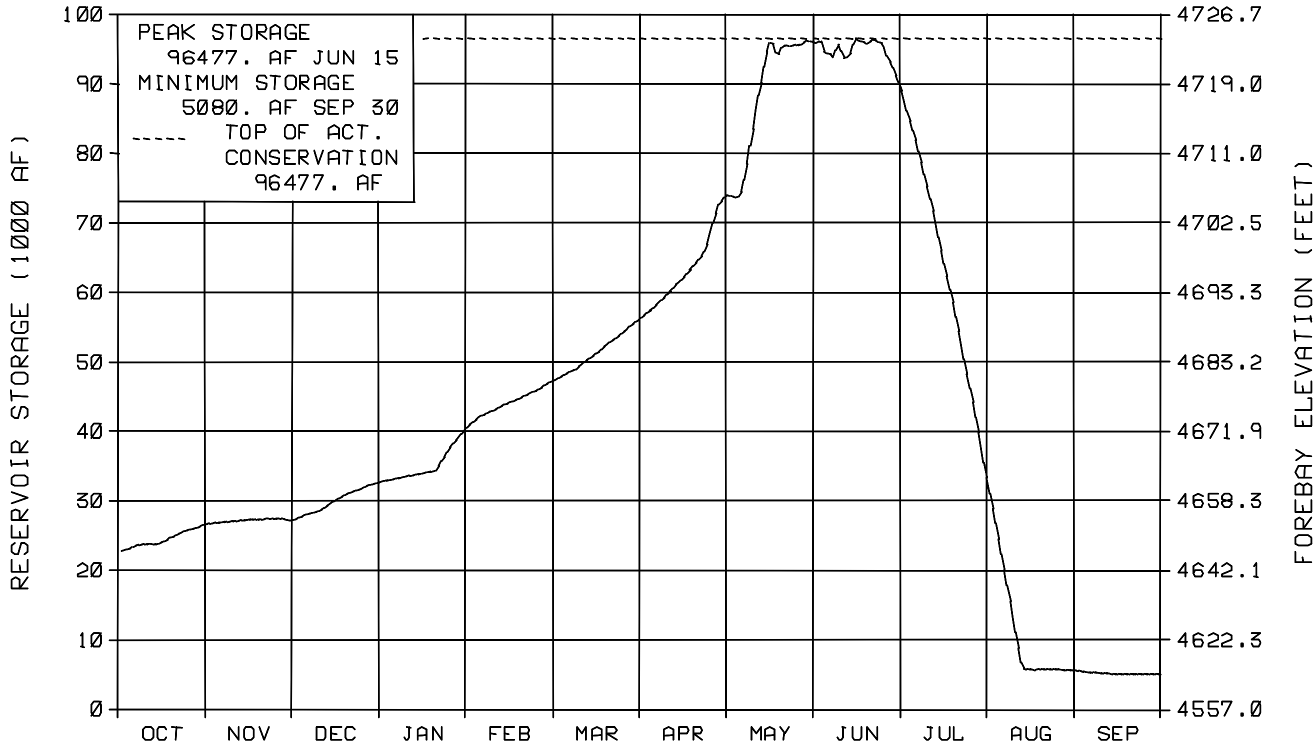
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	380,617	OCT 04-SEP 05	389,909	OCT 04-SEP 05
DAILY PEAK (CFS)	3,947	MAY 17, 2005	4,045	MAY 17, 2005
DAILY MINIMUM (CFS)	101	NOV 28, 2004	44	FEB 24, 2005

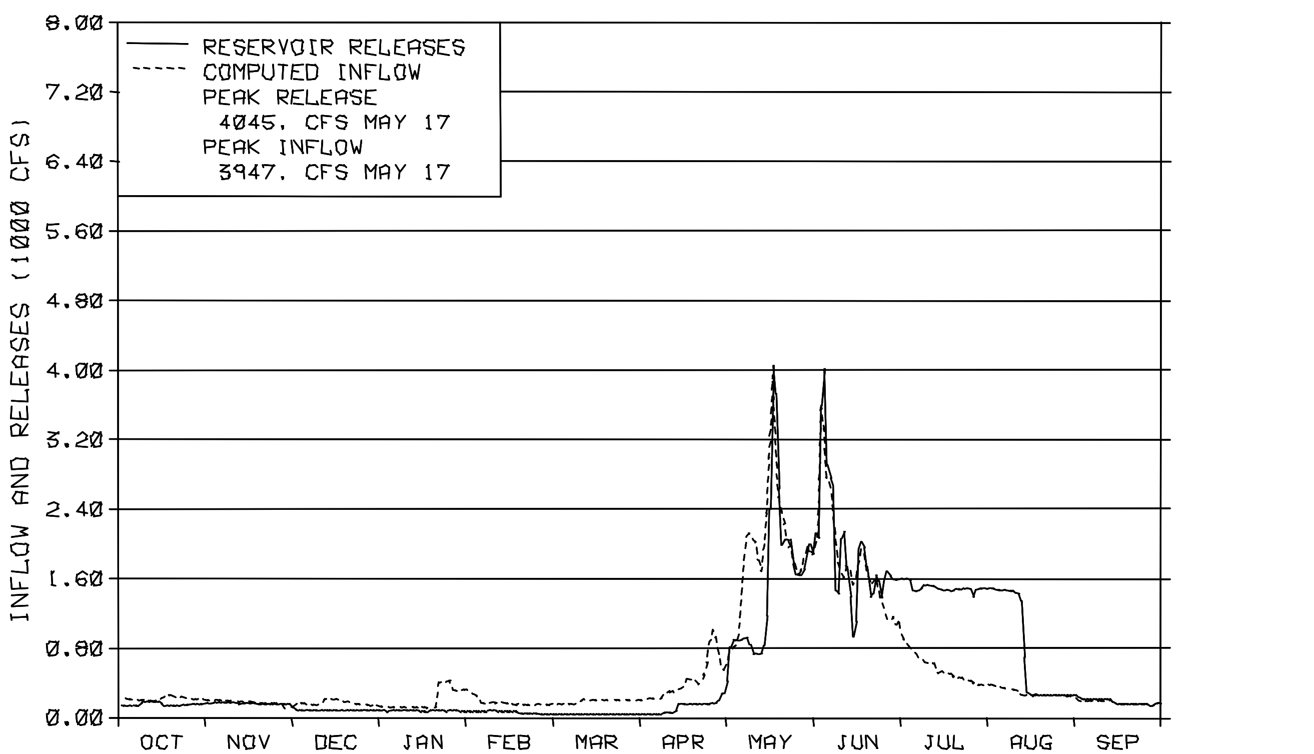
MONTH	INFLOW		OUTFLOW*				CONTENT	
	KAF	% OF AVG	TOTAL CANAL KAF	% OF AVG	RIVER KAF	% OF AVG	KAF	% OF AVG
OCTOBER	13.6	72	5.5	171	4.2	41	26.5	89
NOVEMBER	10.4	60	5.8	536	3.7	33	27.1	79
DECEMBER	10.4	66	0	---	4.8	42	32.6	85
JANUARY	13.0	94	0	---	4.7	47	40.9	98
FEBRUARY	9.6	78	0	---	4.0	48	46.9	104
MARCH	11.7	81	0	---	3.7	38	56.0	117
APRIL	25.0	62	4.6	53	4.4	20	73.6	137
MAY	116.6	68	43.1	111	53.1	54	96.0	113
JUNE	107.4	54	40.6	72	70.9	53	90.2	102
JULY	34.7	51	82.5	115	7.8	29	33.2	57
AUGUST	17.8	67	40.2	100	7.9	59	5.6	17
SEPTEMBER	10.4	54	7.3	63	4.3	43	5.1	18
ANNUAL	380.6	62	229.7	97	173.5	48		
APRIL-JULY	283.7	59						

* Average for the 1931-2005 period.

FIGURE MTG5

GIBSON RESERVOIR





WATER YEAR 2005

TABLE MTT8-B
HYDROLOGIC DATA FOR 2005
PISHKUN RESERVOIR (SUN RIVER PROJECT)

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	4342.00	16,250	16,250
TOP OF ACTIVE CONSERVATION	4370.00	46,670	30,420

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	4363.53	37,391	OCT 01, 2004
END OF YEAR	4362.20	35,674	SEP 30, 2005
ANNUAL LOW	4356.50	28,995	JUL 26, 2005
ANNUAL HIGH	4370.76	47,909	JUN 06, 2005
HISTORIC HIGH	4371.40	48,950	JUL 04, 1953

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	202,691	OCT 04-SEP 05	204,408	OCT 04-SEP 05
DAILY PEAK (CFS)	1,426	AUG 01, 2005	1,718	JUL 07, 2005
DAILY MINIMUM (CFS)	0	*	0	*

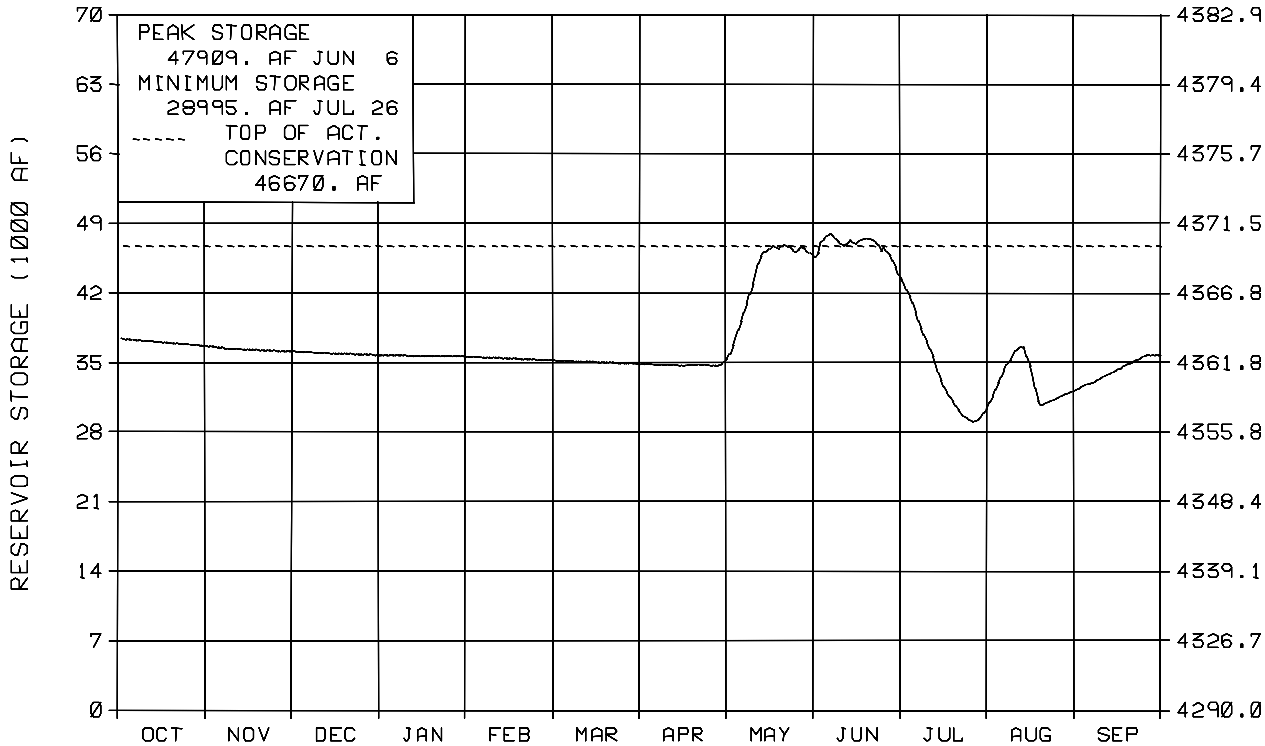
* During nonirrigation season

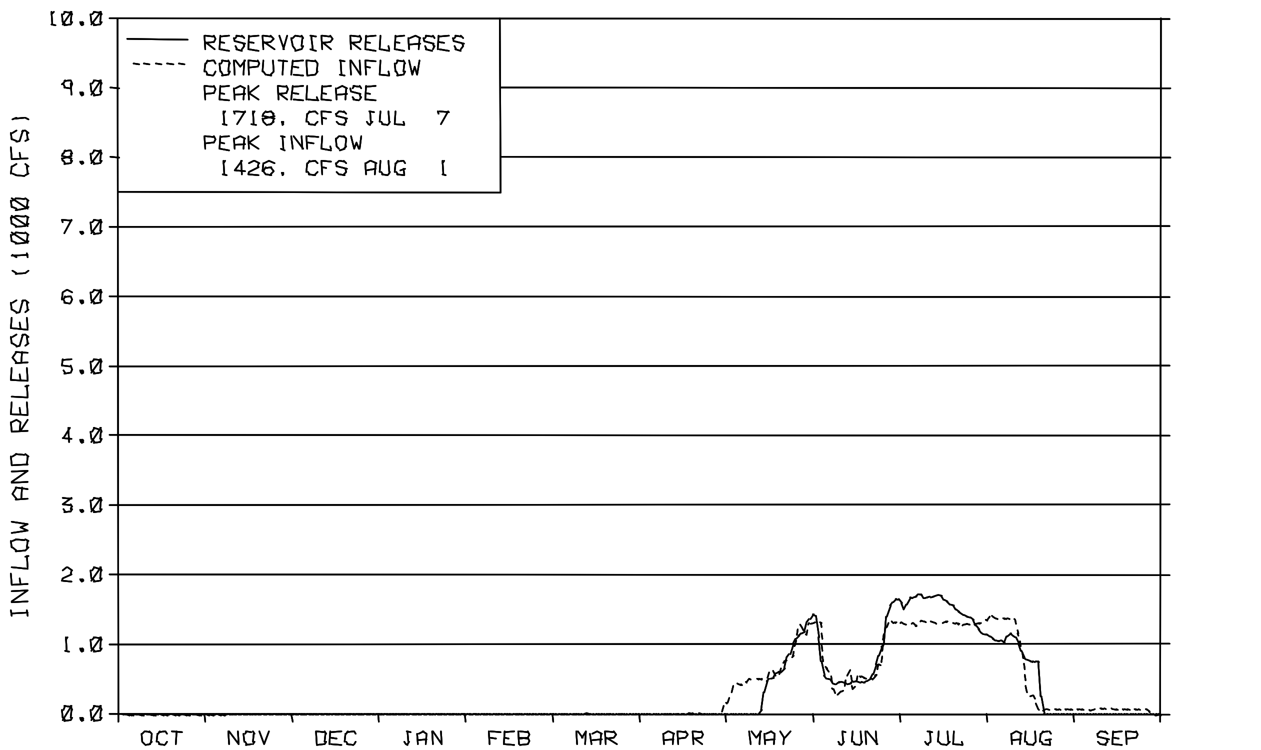
MONTH	INFLOW*		OUTFLOW*		CONTENT	
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG
OCTOBER	-0.8	---	0	---	36.6	107
NOVEMBER	-0.5	---	0	---	36.1	104
DECEMBER	-0.3	---	0	---	35.8	104
JANUARY	-0.2	---	0	---	35.6	104
FEBRUARY	-0.4	---	0	---	35.2	103
MARCH	-0.4	---	0	---	34.8	102
APRIL	0.2	2	0	---	35.0	86
MAY	41.6	116	30.8	102	45.8	100
JUNE	43.6	75	45.5	74	43.9	103
JULY	79.8	116	93.4	127	30.3	81
AUGUST	36.7	87	34.7	81	32.2	91
SEPTEMBER	3.5	27	0	0	35.7	108
ANNUAL	202.7	89	204.4	90		
APRIL-JULY	165.1	97				

* Average for the 1947-2005 period.

FIGURE MTG6

PISHKUN RESERVOIR





WATER YEAR 2005

TABLE MTT8-C
HYDROLOGIC DATA FOR 2005
WILLOW CREEK RESERVOIR (SUN RIVER PROJECT)

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	4085.28	67	67
TOP OF ACTIVE CONSERVATION	4142.00	32,300	32,233

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	4132.08	19,154	OCT 01, 2004
END OF YEAR	4131.19	18,104	SEP 30, 2005
ANNUAL LOW	4131.15	18,057	SEP 13, 2005
ANNUAL HIGH	4142.40	32,900	JUN 29, 2005
HISTORIC HIGH	4144.00	35,300	JUN 22, 1975

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	13,688	OCT 04-SEP 05	14,738	OCT 04-SEP 05
DAILY PEAK (CFS)	95	MAY 09, 2005	218	AUG 02, 2005
DAILY MINIMUM (CFS)	0	*	0	*

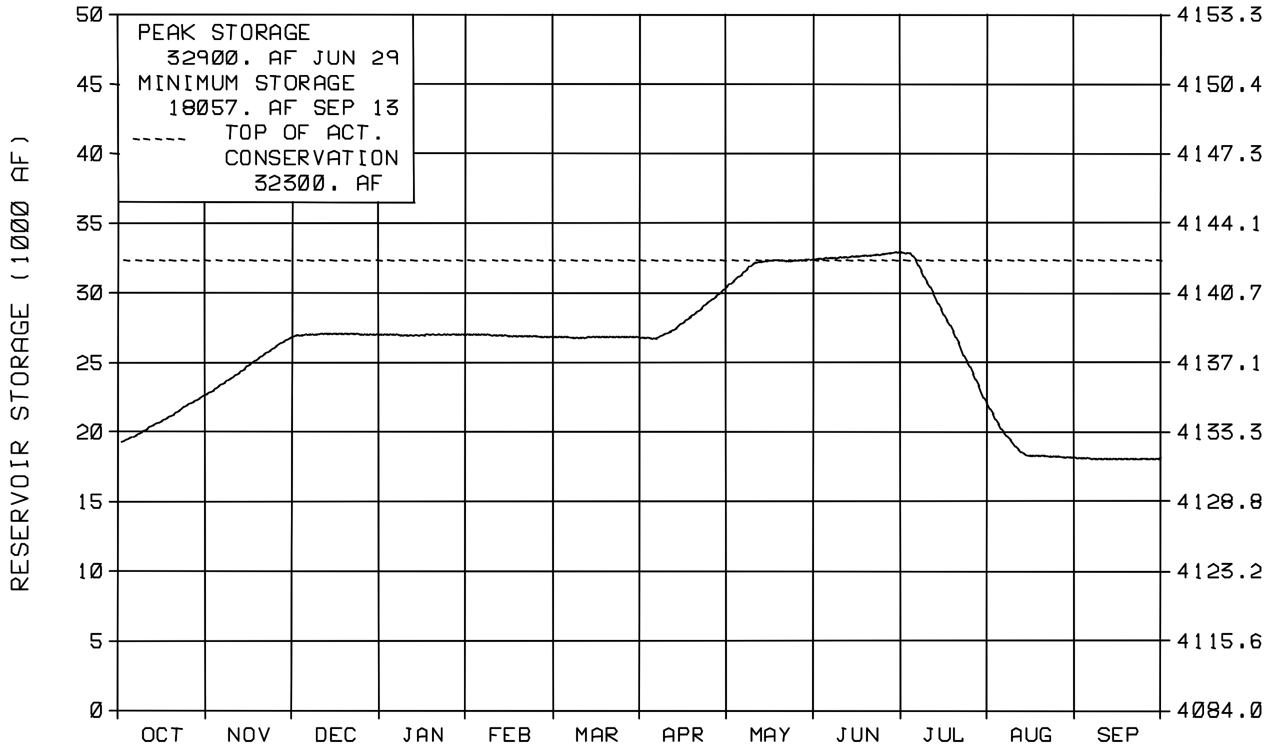
* During nonirrigation season

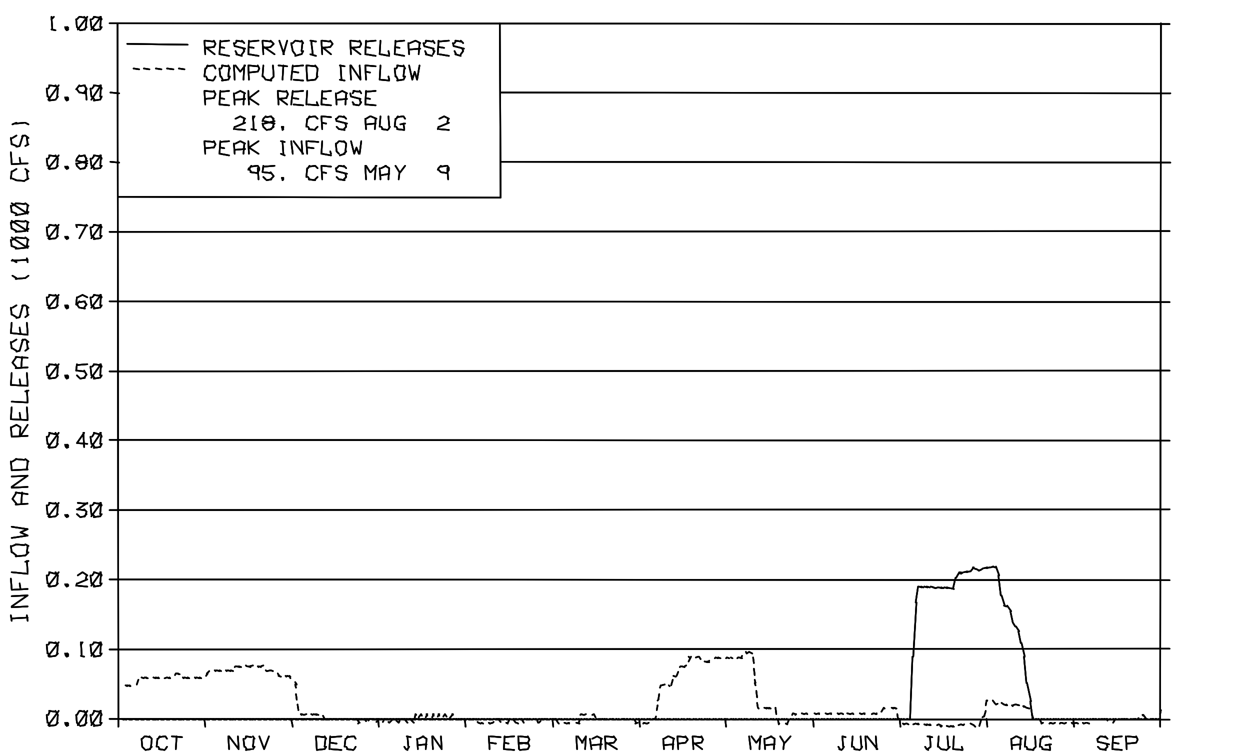
MONTH	INFLOW*		OUTFLOW*		CONTENT	
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG
OCTOBER	3.5	505	0	---	22.7	116
NOVEMBER	4.1	693	0	---	26.8	133
DECEMBER	0.2	40	0	---	27.0	132
JANUARY	0.0	12	0	---	27.0	130
FEBRUARY	-0.2	---	0	---	26.9	127
MARCH	-0.1	---	0	---	26.8	120
APRIL	3.4	170	0	---	30.2	123
MAY	2.2	52	0	---	32.4	115
JUNE	0.5	13	0	---	32.9	113
JULY	-0.5	---	10.4	193	22.0	92
AUGUST	0.4	---	4.3	118	18.1	95
SEPTEMBER	0.0	---	0	---	18.1	101
ANNUAL	13.7	94	14.7	102		
APRIL-JULY	5.7	52				

* Average for the 1952-2005 period.

FIGURE MTG7

WILLOW CREEK RESERVOIR





WATER YEAR 2005

Lake Elwell (Tiber Dam)

Lake Elwell (Tiber Dam) (P-S M.B.P.) is located on the Marias River near Chester, Montana. It was built to provide an adequate water supply for 127,000 acres in the Lower Marias Unit and for flood control. The crest section of Tiber Dam spillway began settling in 1956, following initial filling of the reservoir. Restrictions were placed on reservoir operating levels in the late 1950s to safeguard the structure until repairs could be made. The settling continued despite attempts to halt it. The rate of settlement was alarming following the flood of 1964 and the heavy runoff of 1965. This settlement was attributed to a weakness of the underlying shale formation in which small lenses of gypsum were slowly being dissolved as water passed through the shale. Measures to protect the structure were approved by Congress, and construction was initiated in 1967. This work, completed in 1970, consisted of modifying the canal outlet works for use as an auxiliary outlet works and closing the entrance channel of the spillway by a temporary earthfill cofferdam. To accommodate these changed conditions, the reservoir operating criteria was further revised and the active capacity was eliminated. Work on modification of the spillway to restore active conservation capacity was begun in 1976. This work, completed in October 1981, consisted of replacing the upstream section of the spillway and raising the dam 5 feet. Since that time, all restrictions on operating levels were lifted and normal operations were restored at Lake Elwell.

Because the irrigation distribution works have not yet been constructed, the reservoir is operated primarily for flood control and for increased fishery and recreation benefits. However, the reservoir provides irrigation water to several individual operators by water service contracts and provides about 1,500 acre-feet to the Tiber County Water District for municipal, industrial, rural domestic, and livestock use. The city of Chester, Montana, receives a small amount of water from the reservoir annually for municipal use. Approximately 3,000 acres are irrigated by contract from Lake Elwell storage.

In September of 2003, construction of a Federal Energy Regulatory Commission (FERC) permitted powerplant began. The river outlet works underwent extensive modification to incorporate the addition of a 7.5 MW powerplant, privately owned by Tiber Montana, LLC. A bifurcation pipe was installed in the river outlet works tunnel at the downstream end to divert flow from the existing 72-inch outlet pipe through a bifurcation and 96-inch butterfly valve to the powerplant. Construction of the powerplant was completed and brought on-line in June 2004.

During June and July of 2004, precipitation in the Marias River Basin above Lake Elwell was well below normal. Valley precipitation was recorded at 67 and 49 percent of average, respectively, while mountain precipitation was 58 and 90 percent of average, respectively. Inflow into Lake Elwell during June-September totaled 107,422 acre-feet which was only 37 percent of normal and the eleventh lowest inflow ever recorded during this time. The total annual runoff into Lake Elwell during 2004 was 304,057 acre-feet, 45 percent of normal. This was the seventh lowest annual inflow ever recorded into Lake Elwell.

By the end of water year 2004, normal operations of Lake Elwell drafted storage to 794,525 acre-feet at an elevation of 2982.55 feet. This was 96 percent of normal and 3.97 feet lower than reported on September 30, 2003.

Water year 2005 started off very wet with both valley and mountain precipitation in the Marias River basin upstream of Lake Elwell being above normal during October of 2004. Valley precipitation during October was 180 percent of normal while mountain precipitation was 118 percent of normal. Inflow into Lake Elwell during October through December totaled 36,893 acre-feet and was only 56 percent of normal.

During the winter of 2004-2005, mountain snowpack in the Marias Basin above Lake Elwell began accumulating at near normal rates until early November when the snowpack dropped below normal. By January 1, the Natural Resources and Conservation Service (NRCS) measured snowpack in the Marias River Basin above Lake Elwell to be 51 percent of average. The January 1 water supply forecast, based on mountain snowpack, indicated the April-July runoff into Lake Elwell would be 259,900 acre-feet, only 53 percent of normal.

As the winter progressed, mountain snowfall increased at below normal rates and by April 1, mountain snowpack in the Marias River Basin had deteriorated to 48 percent of normal. Mountain snowpack peaked on April 22 at 58 percent of normal. The April 1 water supply forecast indicated the April-July runoff into Lake Elwell would be 214,000 acre-feet or 44 percent of normal. Storage in Lake Elwell slowly drafted to a low content for the year of 711,555 acre-feet at elevation 2976.88 on April 26.

Precipitation across much of Montana improved during April through June. Valley precipitation above Lake Elwell during April, May and June was 75, 32 and 235 percent of average, respectively, while the mountain precipitation 94, 66, and 174 percent of average, respectively.

The May 1 water supply forecast indicated the May-July runoff into Lake Elwell would be 167,000 acre-feet or 40 percent of normal. Temperatures were cooler than normal during April through June delaying the snowmelt runoff. It was early June before the snowmelt runoff began to flow into Lake Elwell. Inflow into Lake Elwell during April-May totaled 94,521 acre-feet which was only 46 percent of normal and the fourth lowest inflow ever recorded during this time.

Inflow into Lake Elwell during May was 41 percent of average, leaving lots of room for improvement. With near record low inflows into Lake Elwell continuing, releases to the Marias River were reduced to 400 cfs on June 3. Then came the generous but moderate precipitation that fell during June. Inflow into Lake Elwell steadily increased until reaching a peak for the year of 3,901 cfs on June 7, 2005.

The June inflow to Lake Elwell continued to remain well below normal at only 59 percent of average. Storage steadily increased until reaching a peak content for the year of 841,056 acre-feet at elevation 2985.52 on July 9, 2005. Actual April-July runoff into Lake Elwell totaled 223,935 acre-feet which was 46 percent of normal and 7,042 acre-feet more than in 2004.

Precipitation in the Marias River Basin above Lake Elwell was well below normal during July and August. Valley precipitation was recorded at 12 and 97 percent of average, respectively, while mountain precipitation was 24 and 86 percent of average, respectively. Inflow into Lake Elwell during July-September totaled 27,806 acre-feet which was only 34 percent of normal and the eighth lowest inflow ever recorded during this time. The total annual runoff into Lake Elwell during 2005 was 339,111 acre-feet, 50 percent of normal and 35,054 acre-feet more than experienced in 2004. This was the ninth lowest annual inflow ever recorded into Lake Elwell.

By the end of the year, normal operations Lake Elwell drafted storage to 789,477 acre-feet at an elevation of 2982.22 feet. This was 96 percent of normal and 0.33 feet lower than reported on September 30, 2004.

The Corps of Engineers determined that during 2005, Lake Elwell did not prevent any local flood damages but did prevent $2,220,900 in flood damages downstream on the Missouri River below Fort Peck Reservoir. Since closure of Tiber Dam in 1954, Lake Elwell has reduced flood damages by a total of $60,888,600.00.

Important Events – 2005

October 19-21, 2004: To accommodate line work that Western Area Power Administration was performing on the 115kV line and maintenance work on Tiber Montana's turbine unit, the powerplant was shut off and flows were switched to the river outlet works and maintained at the current rate of 510 cfs. After all the work was completed, Tiber Montana conducted efficiency tests of the powerplant by dropping flows to 400 cfs and at 15 minute increments, flows were increased by 50 cfs until reaching a maximum flow of 700 cfs. Flows were then returned to the previous rate of 510 cfs.

December 1, 2004: Natural Resources and Conservation Service measured snowpack conditions in the watershed above Lake Elwell to be about 51 percent of normal.

January 1, 2005: Natural Resources and Conservation Service measured snowpack conditions in the watershed above Lake Elwell to be about 51 percent of normal.

April 1, 2005: Natural Resources and Conservation Service measured snowpack conditions in the watershed above Lake Elwell to have decreased to 48 percent of normal. Water supply forecast indicated the April-July runoff into Lake Elwell would be 214,000 acre-feet or 44 percent of normal.

April 8, 2005: Personnel from the Reservoir and River Operations Branch met with the Marias Management Committee to discuss the projected water supply for the Marias River Basin and proposed operations of Lake Elwell.

June 3, 2005: Streamflows continue to remain at near record low levels. To conserve storage, releases to the Marias River were decreased by 100 cfs to 400 cfs.

July 9, 2005: Lake Elwell reaches a peak elevation for the year of 2985.52 feet, 7.48 feet below the top of the joint use pool.

September 21, 2005: To accommodate an inspection of the river outlet works, flows were gradually discontinued from the river outlet works through the powerplant and initiated through the auxiliary outlets works.

Additional hydrologic and statistical information pertaining to the operation of Lake Elwell during 2005 can be found in Table MTT9 and Figure MTG8.

TABLE MTT9
HYDROLOGIC DATA FOR 2005
LAKE ELWELL (TIBER DAM)

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	2966.40	577,625	577,625
TOP OF ACTIVE CONSERVATION	2976.00	699,325	121,700
TOP OF JOINT USE	2993.00	967,319	267,994
TOP OF EXCLUSIVE FLOOD CONTROL	3012.50	1,368,157	400,838

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	2982.55	794,525	OCT 01, 2004
END OF YEAR	2982.22	789,477	SEP 30, 2005
ANNUAL LOW	2976.88	711,555	APR 26, 2005
ANNUAL HIGH	2985.52	841,056	JUL 09, 2005
HISTORIC HIGH	3005.59	1,214,417	JUL 12, 1965

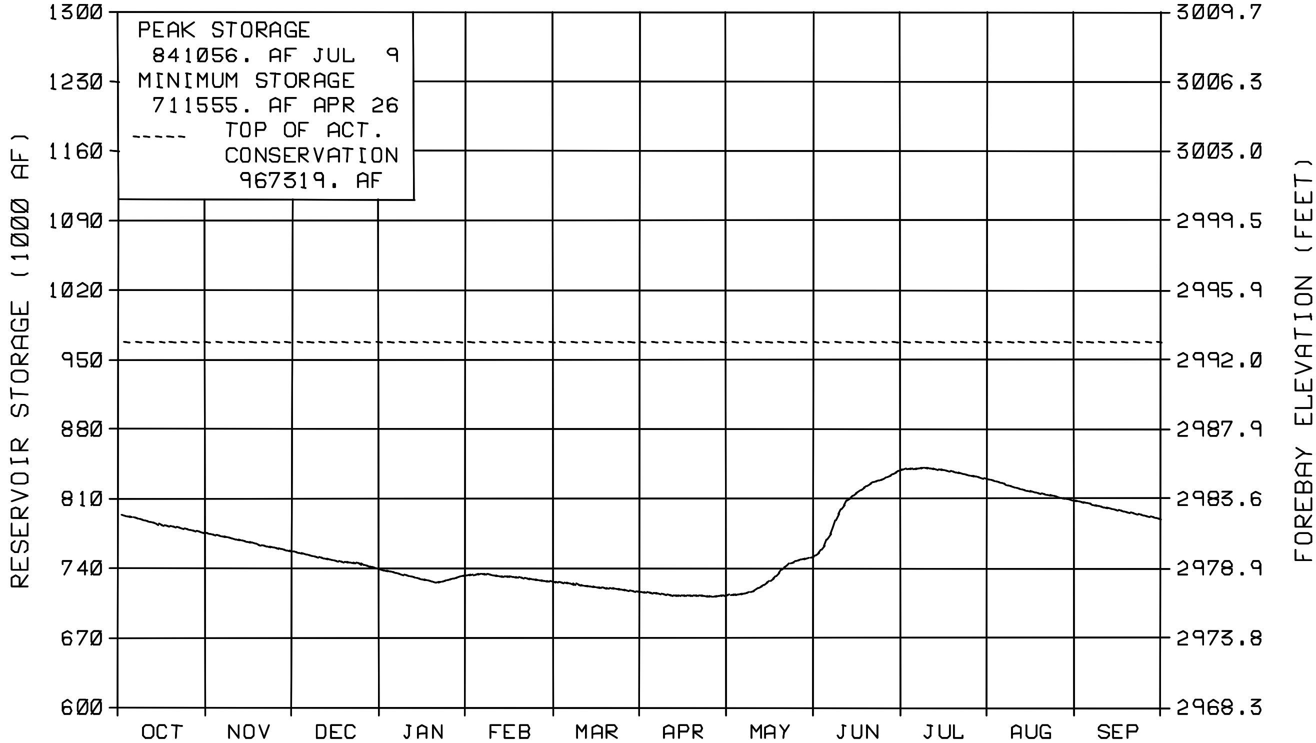
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	339,112	OCT 04-SEP 05	344,619	OCT 04-SEP 05
DAILY PEAK (CFS)	3,901	JUN 07, 2005	515	OCT 15, 2004
DAILY MINIMUM (CFS)	25	AUG 02, 2005	408	SEP 21, 2005
PEAK SPILL (CFS)			0	NONE
TOTAL SPILL (AF)			0	NONE

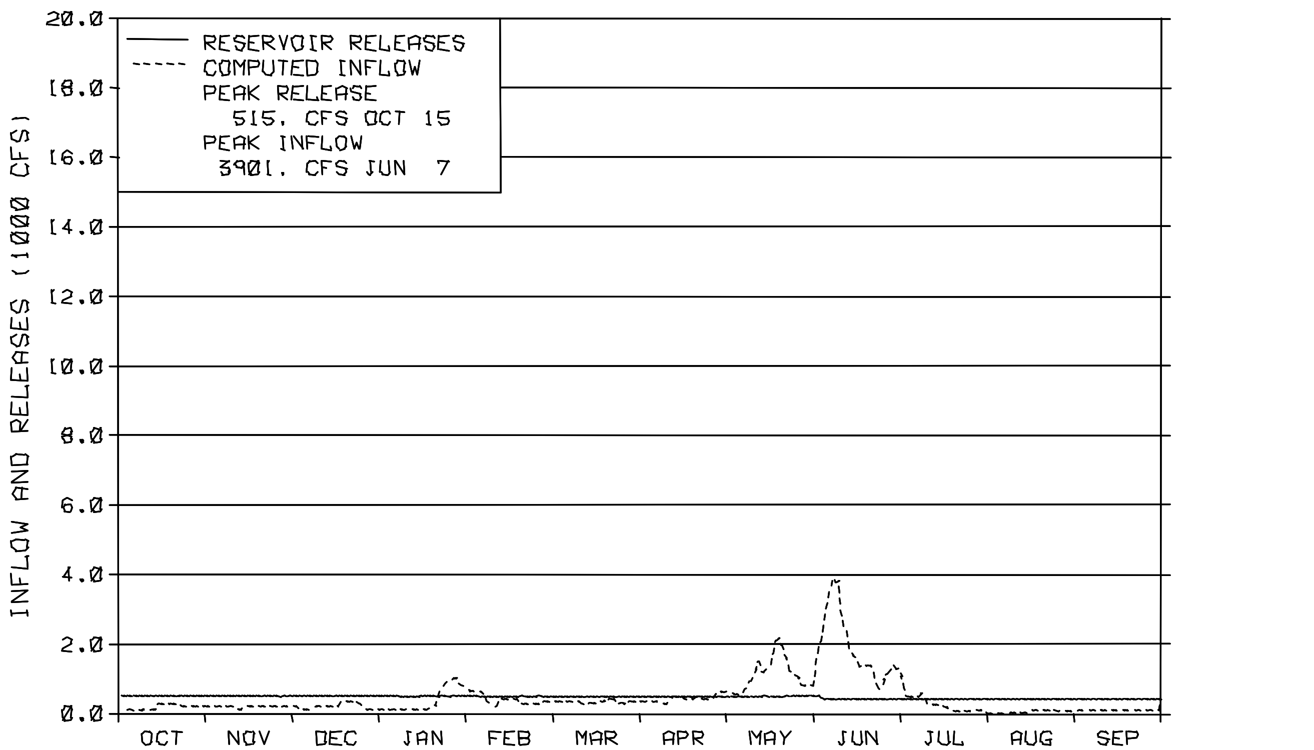
MONTH	INFLOW		OUTFLOW*		CONTENT	
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG
OCTOBER	11.8	53	31.4	69	775.0	99
NOVEMBER	11.9	54	30.2	84	756.7	99
DECEMBER	13.2	71	31.2	112	738.7	99
JANUARY	25.3	156	31.1	121	732.9	102
FEBRUARY	21.4	98	27.9	112	726.4	104
MARCH	20.8	42	30.7	87	716.5	101
APRIL	25.6	40	29.6	65	712.5	97
MAY	68.9	41	30.9	45	750.6	90
JUNE	112.4	59	25.1	26	837.9	87
JULY	17.0	27	25.8	33	829.1	87
AUGUST	4.3	22	25.9	43	807.5	91
SEPTEMBER	6.5	41	24.9	48	789.0	96
ANNUAL	339.1	50	344.6	58		
APRIL-JULY	223.9	46				

* Average for the 1957-2005 period.

FIGURE MTG8

LAKE ELWELL





WATER YEAR 2005

Milk River Project

The 120,000-acre Milk River Project, located in north-central Montana, is served by Sherburne, Fresno, and Nelson Reservoirs. Sherburne and Nelson Reservoirs are single-purpose irrigation structures. Fresno Reservoir has joint-use flood control space, provides a municipal water supply to several municipalities on or near the project, and serves as the primary irrigation storage structure for the Milk River Project. Approximately 101,500 acres are presently served by irrigation districts, 9,500 acres are served by private facilities; and between 5,000 and 6,000 acres are served supplemental water by the Ft. Belknap Indian Irrigation Project.

Sherburne Reservoir is located in Glacier National Park on Swiftcurrent Creek, a tributary of the St. Mary River in the Hudson Bay Drainage Basin. Lake Sherburne has a total capacity of 67,854 acre-feet at elevation 4788.0. The use of boundary waters of the St. Mary and Milk Rivers are divided between Canada and the United States by the 1909 Boundary Waters Treaty. The United States utilizes its entitlement to St. Mary River water by regulating flows through storage in Lake Sherburne and diverting St. Mary River flows through the St. Mary Canal to the Milk River basin. The river outlet works have a capacity of 2,100 cfs at elevation 4788.0 feet. The maximum combined discharge of the spillway and river outlet works is 4,000 cfs at a maximum water surface elevation of 4810.0 feet.

Water year 2004 provided precipitation extremes in both valley and mountain areas of the St. Mary River basin. The latter part of the year produced much above average precipitation, especially in the mountain areas. Valley areas for August and September were 158 and 65 percent of average respectively, while mountain areas were 237 and 124 percent of average respectively. Inflow to Lake Sherburne was 11,823 acre-feet, 185 percent of average during September. This resulted in storage in Lake Sherburne being increased to 18,631 acre-feet, 183 percent of average and 27 percent of normal full capacity, at elevation 4749.55 by the beginning of water year 2005. The St. Mary Canal was shutdown on September 21, 2004 and subsequently releases from Lake Sherburne were discontinued on September 22 until spring of 2005.

Although October precipitation in the mountain and valley areas was near to above normal, the overall fall precipitation in both these areas was below average. Cumulative valley precipitation from October to the end of December was 79 percent of average. During the same period cumulative mountain precipitation was 83 percent of average. Inflows during October through December varied from much above to below average; the inflows were 113, 87, and 159 percent of average, respectively. This resulted in storage at the end of December of 36,423 acre-feet, 185 percent of average.

On January 1, the Natural Resource and Conservation Service reported that mountain snowpack in the St. Mary basin was 68 percent of normal. This was mainly because of the below average November and December precipitation. Below average precipitation would continue throughout the winter. In addition, a warming pattern during January melted a significant amount of snow, especially at lower elevations. Subsequently the March 1 snowpack for the St. Mary basin was only 43 percent of average. Storm patterns improved slightly in March with near to above normal precipitation in both valley and mountain areas. Total inflow during January through March was 15,344 acre-feet, 187 percent of normal and the fourth highest inflow since 1930.

Generally, diversions into the St. Mary Canal in the spring began as soon as weather permits, which in mild years can be as early as March. In 2005, the prospect of continued drought in the Milk River basin indicated that irrigation water would possibly be needed very early in the season; therefore diversions to the St. Mary Canal were initiated on March 27. Releases from Lake Sherburne preceded the canal diversion on March 25. Even with slightly improved precipitation during March snowpack still accumulated at much below average rates. The snow pack peaked on April 2, near the normal time; however, the April 1 estimation of snow water content was only 47 percent of normal. The April 1 water supply forecast for April through July runoff indicated that the runoff would be 75,800 acre-feet, 73 percent of normal

Once releases were started, storage decreased until May 9 when warm weather began to increase streamflows and thus beginning the snowmelt runoff season for 2005. Diversion to the St. Mary Canal averaged 504 cfs during April and 618 cfs during May. Releases from Lake Sherburne were increased during April and early May to maintain diversion rates for the St. Mary Canal. Releases were then reduced briefly to approximately 37 cfs on May 19 to increase storage as the flow of the St. Mary River appeared to be adequate to meet the canal diversions. However cooler temperatures in late May slowed the snowmelt runoff and releases once again were increased through the end of the month. During this time, valley precipitation for April and May was near to below average; however mountain precipitation remained much below average. Finally in early June due to prevailing warmer temperatures and rainfall in the mountains, the snowmelt runoff remained steady and releases from Lake Sherburne were reduced to approximately 40 cfs from June 4 through June 23.

Precipitation during June was much above average in both the valley and mountain areas. Conversely, July was much below average in these areas. Consequently, the cumulative water year precipitation through the end of July for valley and mountain areas was 96 and 79 percent of average, respectively. The snowmelt runoff was essentially melted out during the third week of June which is approximately three weeks earlier than normal. Lake Sherburne storage peaked on July 6 at 61,316 acre-feet, at elevation 4784.02, which was 6,538 acre-feet and 3.98 feet from normal full capacity. The actual April through July runoff was approximately 75,200 acre-feet, 72 percent of normal.

During late summer and early fall, the precipitation in the St. Mary basin improved significantly. Precipitation in the mountains above Lake Sherburne resulted in August and September monthly precipitation being 102 and 178 percent of average, respectively. Consequently inflows increased during August and September to 80 and 85 percent of average, respectively. Inflow for the water year totaled 121,402 acre-feet, 84 percent of average. This was 16,941 acre-feet or 12 percent less than the inflow experienced during water year 2004. Storage on September 30, 2005, was 12,180 acre-feet, 119 percent of normal.

According to preliminary data, diversions from the St. Mary River to the Milk River totaled 182,900 acre-feet, 121 percent of the long-term average. The long-term average annual diversion is 150,900 acre-feet and the 1972-2002 average is 168,900 acre-feet. The largest diversion previously recorded was 277,500 acre-feet during 1989. Canal diversions for water year 2005 were discontinued on September 12 because of the hydrologic conditions and for maintenance on the canal. Canal maintenance is generally delayed until the irrigation demands on the Milk River are significantly reduced. In addition, flow in the St. Mary River was below average, which provided that most of the United States share of water could be stored in Lake Sherburne for future use without excess loss to Canada. The gates at Lake Sherburne were closed on September 13.

The Corps of Engineers recently completed the analysis on flood stages for Swiftcurrent Creek and the St. Mary River. From this analysis, flood benefits can be estimated for Lake Sherburne. During 2005, Lake Sherburne prevented approximately $6,400 worth of local flood damages. This is the first year flood damages prevented were estimated for Lake Sherburne.

Additional hydrologic and statistical information pertaining to the operation of Sherburne Reservoir during 2005 can be found in Table MTT10-A and Figure MTG9.

Fresno Reservoir is located above all project lands on the Milk River near Havre, Montana. A sediment re-survey done during 1999 and finalized during 2000 determined the normal full pool capacity was 92,880 acre-feet, a loss of 10,517 acre-feet from the previous capacity. The new revised elevation-area-capacity data was used beginning in water year 2001. The top 32,802 acre-feet is used jointly for flood control and conservation and is not filled until the start of the spring runoff. Fresno stores the natural flow of the Milk River along with water diverted into the Milk River from the St. Mary River and Lake Sherburne. Stored water is used principally for irrigation, but Havre and Chinook, Montana, have contracted for a minimum flow in the river of 25 cfs during the winter to maintain a suitable water quality for municipal use. The city of Harlem and the Hill County Water District have also contracted for municipal use.

During water year 2004 there was some relief to the drought conditions in the Milk River basin. Cumulative precipitation was 120 percent of normal at the end of September. This provided improved soil moisture leading into water year 2005. Inflow into Fresno Reservoir during September was 25,000 acre-feet, 96 percent of normal. Consequently, with reduced irrigation demands, Fresno Reservoir slowly filled to a storage content of 42,372 acre-feet, 106 percent of normal and 46 percent of full capacity to begin water year 2005. Releases were reduced to winter levels of approximately 40 cfs on September 28 near the end of water year 2004. No additional releases were made from Fresno Reservoir to transfer water to Nelson Reservoir during fall of 2004.

Drought conditions prevailed once again at the start of water year 2005; the accumulated precipitation from October through December was 70 percent of normal. Reservoir inflow was also much below average into Fresno from October to December and storage decreased steadily throughout the fall. The end of December storage was 38,770 acre-feet, 104 percent of average and 42 percent of normal full capacity.

By January 1, the Natural Resource and Conservation Service reported the snowpack in the Milk River basin at 34 percent of average. The much below average precipitation during January continued the trend of below average snow accumulation. Snowpack on February 1 was only 3 percent of average thus producing a March through July runoff forecast for Fresno Reservoir of only 43,000 acre-feet, 52 percent of average.

Storage at the end of February was 37,645 acre-feet, 106 percent of average. In the Milk River basin the spring runoff season generally occurs from March through June. Therefore, the peak snowpack and most reliable water supply runoff forecast for the Milk River basin is generally at the beginning of March. During 2005, the precipitation in February remained much below average and snowpack in the Milk River basin on March 1 was essentially gone. The only pockets of snowpack that remained in the upper Milk River basin were generally located on the northern slopes of hills and some larger coulees. The March 1 water supply forecast reflected the lack of snow by indicating that 37,000 acre-feet of runoff could be expected, which was only 44 percent of normal. Based upon this forecast, Fresno Reservoir was not expected to fill to the top of the conservation pool. Also in March, Reclamation and the Milk River irrigation districts began to discuss water supply. The irrigation water supply did not appear to be favorable because of the forecasted runoff for Fresno Reservoir. Fortunately, the precipitation during March and April was above average, which postponed any early irrigation demands.

When the minor amount of snow that remained began to melt, runoff below Fresno Reservoir began in mid-March; the new diversion capability of the rehabilitated Dodson Diversion Dam provided enough water to Nelson Reservoir that only a small amount of water needed to be transferred from Fresno Reservoir for the start of the irrigation season. Approximately 5,000 acre-feet of runoff was delivered to Nelson Reservoir during March 20 though April 15, before releases were initiated from Fresno Reservoir. Following the April 19 Milk River Joint Board of Control (MRJBC) meeting it was determined that 2,600 acre-feet of additional water needed to be transferred to satisfy the initial allotments before the start of irrigation. However due to high canal and reservoir losses there was only approximately 1,300 acre-feet of net inflow at Nelson Reservoir during April 16 through May 3; therefore more water would have to be transferred later in the irrigation season.

The initial meeting with the MRJBC regarding water supply was on March 15. The proposed allotment was approximately 1.5 acre-feet per acre. Even though there was minimal snowpack anticipated to runoff in the Milk River basin, the near average storage would allow for most irrigation demands to be met. On April 19 another meeting was held to discuss the water supply. Reclamation proposed a more conservative irrigation allotment for 2005 based on the continued low snowpack conditions. It was recommended and agreed upon that the total season allotment should be approximately 1.3 acre-feet per acre. Then on June 21, there was a meeting with MRJBC to reassess allotments. Based on storage conditions the MRJBC elected to increase irrigation allotments. This increase did not have an associated volume; in contrast, each district was allotted all necessary water to irrigate through at least the end of August. Irrigation releases from Fresno Reservoir were initiated on May 4 and peaked at 1,138 cfs on August 4. In the latter part of the irrigation season conference calls were held with the MRJBC to discuss water supply. It was determined the available water was sufficient to provide irrigation into September, however water needed to be transferred to Nelson Reservoir to ensure equitable distribution. On August 2, it was agreed that the target flow at the United States Geological Survey gaging station at Harlem, MT would be 600 cfs. This would provide sufficient water for users and allow approximately 200 cfs to reach Nelson Reservoir. There was another call made on August 30 and it was determined releases from Fresno Reservoir would be adjusted to maintain the 200 cfs into Nelson Reservoir through September 15th.

By May 1, cumulative valley precipitation was only 73 percent of normal. However, much above average precipitation in June increased the cumulative precipitation to 113 percent of normal by July 1. This helped to satisfy much of the early irrigation demand which allowed more water to be diverted from the St. Mary system to Fresno Reservoir. Consequently reservoir storage continued to increase until July 7, when storage peaked at 95,701 acre-feet at elevation 2575.57 or 0.57 feet above the spillway crest. The average releases for June, July and August were 336, 837, and 939 cfs, respectively, which cumulatively were slightly below normal for the prime irrigation months. The extremely low snowpack in the Milk River basin ultimately affected the runoff volumes. The actual March through July inflow for Fresno Reservoir, excluding St. Mary canal water, was approximately 30,200 acre-feet, 36 percent of average. Inflow to Fresno Reservoir peaked during this time at 2,234 cfs, on June 10.

July through September precipitation was below average and by end of September, the cumulative water year precipitation was 90 percent of average. Total inflow for the year was 216,152 acre-feet, 80 percent of average. This was 29,169 acre-feet or 16 percent more than the inflow experienced during water year 2004. Diversions from the St. Mary River basin to the Milk River basin accounted for about 76 percent of the inflow to Fresno Reservoir during 2005. Storage on September 30, 2005 was 46,249 acre-feet, 116 percent of average and 50 percent of normal full capacity.

The Corps of Engineers estimated that during 2005 Fresno Reservoir prevented approximately $25,900 worth of local flood damages. Fresno did not contribute to the reduction of flood damages downstream on the Missouri River below Fort Peck Reservoir. Since 1950 Fresno Dam and reservoir has reduced flood damages by a total of $13,085,200.

Additional hydrologic and statistical information pertaining to the operation of Fresno Reservoir during 2003 can be found in Table MTT10-B and Figure MTG10.

Nelson Reservoir, located near Malta, Montana, is an off-stream reservoir which receives its water supply from the Milk River by diversion through the Dodson South Canal. Nelson Reservoir is the only source of supply for the lower portion of the Malta Irrigation District. Nelson Reservoir can also serve the Glasgow Irrigation District when water is not available from Fresno Reservoir. In 1999 a sediment re-survey was performed and then finalized during 2000-01. Since Nelson Reservoir operation began in 1916, the measured

total volume loss due to sedimentation was 446 acre-feet. The new revised elevation-area capacity data was implemented at the beginning of water year 2002. Nelson Reservoir now has a total capacity of 78,950 acre-feet and an active capacity of 60,810 acre-feet.

Nelson Reservoir began the 2005 water year with a storage content of 58,639 acre-feet, at elevation 2216.50, 103 percent of average and 74 percent of normal full capacity. Storage increased through October into mid-November with diversions of natural flow from the Milk River. The inflow during this time totaled approximately 10,700 acre-feet. Beginning in late November storage decreased through the winter until early March. Minimal natural runoff in the Milk River was available for diversion during March and April. Therefore releases from Fresno Reservoir to transfer storage were necessary to ensure that Malta and Glasgow Irrigation Districts would have sufficient water for the beginning of the irrigation season. Approximately 1,300 acre-feet were transferred to Nelson Reservoir prior to the irrigation season. The total net inflow prior to irrigation season, March 20 through May 3, was approximately 5,400 acre-feet. Irrigation releases from Nelson Reservoir began on May 6 and continued though September 20. From the end of April storage steadily decreased until early June when irrigation demands were satisfied. Beginning in June, storage increased until early July when once again irrigation demands increased. Storage in Nelson Reservoir peaked at 63,292 acre-feet at elevation 2217.74 on July 10. During 2005 there was piping plover nesting on the shores of Nelson Reservoir. It was determined by U.S. Fish and Wildlife Service biologist that the nest could be moved to ensure there was enough freeboard for refilling Nelson during June. The biologist also determined later that the plover eggs were not fertile. No other nests or hatches of piping plovers were observed during 2005. Canal flows past the Nelson Feeder Canal gaging station during June and July totaled 29,938 acre-feet. Releases to the Milk River were made for use by Glasgow Irrigation District during May and again during July and August. The total storage released for Glasgow was approximately 11,600 acre-feet. Storage was drafted until mid-August when irrigation demands were decreased. In September demands decreased significantly and inflows to the reservoir increased thus allowing storage to be recovered through the end of the water year. Water that was diverted into Nelson Reservoir during August and September totaled 31,819 acre-feet. Total flow past the Feeder Canal gaging station into Nelson Reservoir during water year 2005 was 86,973 acre-feet. Storage on September 30, 2005 was 58,308 acre-feet at elevation 2216.41, 103 percent of average and 74 percent of normal full capacity.

Additional hydrologic and statistical information pertaining to the operation of Nelson Reservoir during 2005 can be found in Table MTT10-C and Figure MTG11.

Important Events - 2005

March 1: Milk River runoff forecast indicates only 44 percent of normal runoff.

March 25: Releases begin from Lake Sherburne.

March 27: St. Mary Canal begins to divert.

March 29: St. Mary Canal diversions are discontinued due to leak in river siphon.

March 31: St. Mary Canal diversion reinitiated after welding repairs to river siphon.

April 15: Releases from Fresno Reservoir are increased to transfer water to Nelson Reservoir.

April 19: Reclamation and the irrigation districts met in Malta again to review the water supply and plan beginning date for irrigation diversion. Allotment was set at 1.3 acre-feet per acre.

May 4: Irrigation release are initiated from Fresno Reservoir

May 6: Irrigation releases are initiated from Nelson Reservoir

June 21: Reclamation and the irrigation districts met in Malta. During the meeting the Milk River Joint Board of Control determined that due to the good precipitation and decreased irrigation demands that the allotment for the 2005 irrigation season would be increased to allow a 2nd irrigation.

June 3: Inflow to Lake Sherburne peaked for the year at 1,164 cfs.

June 10: Inflow to Fresno Reservoir peaked at 2,233 cfs.

July 6: Lake Sherburne storage peaks for the year at 61,316 acre-feet, at elevation 4784.02, which is 3.98 feet from normal full pool.

July 7: Fresno Reservoir storage peaks for the year at 95,701 acre-feet at elevation 2575.57, 0.57 feet above normal full pool.

July 10: Nelson Reservoir storage peaks for the year at 63,292 acre-feet at elevation 2217.74, 3.86 feet below normal full pool.

August 2: Allotments are once again increased during a conference call between Reclamation and the Milk River Joint Board of Control. New allotments specify no set increase in volume; irrigators are allowed fall irrigation water. The releases are adjusted to maintain approximately 200 cfs inflow to Nelson Reservoir.

September 2-12: Additional water from what was needed to maintain the St. Mary Canal diversion was released from Lake Sherburne to satisfy requirements under the Boundary Waters Treaty.

September 12: St. Mary Canal diversions are discontinued.

September 13: Lake Sherburne releases are discontinued.

September 15: Releases from Fresno Reservoir are reduced and the irrigation season for the Milk River Project ends. The Ft. Belknap Indian Irrigation Project continues to take water for another eight days.

September 20: Releases from Nelson Reservoir are discontinued.

September 23: Releases from Fresno Reservoir are set at approximately 40 cfs for the duration of the winter.

TABLE MTT10-A
HYDROLOGIC DATA FOR 2005
SHERBURNE RESERVOIR (MILK RIVER PROJECT)

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	4729.30	3,061	3,061
TOP OF ACTIVE CONSERVATION	4788.00	67,854	64,793

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	4749.55	18,631	OCT 01, 2004
END OF YEAR	4742.29	12,180	SEP 30, 2005
ANNUAL LOW	4737.64	8,526	SEP 10, 2005
ANNUAL HIGH	4784.02	61,316	JUL 06, 2005
HISTORIC HIGH	4788.30	68,371	JUN 30, 1986

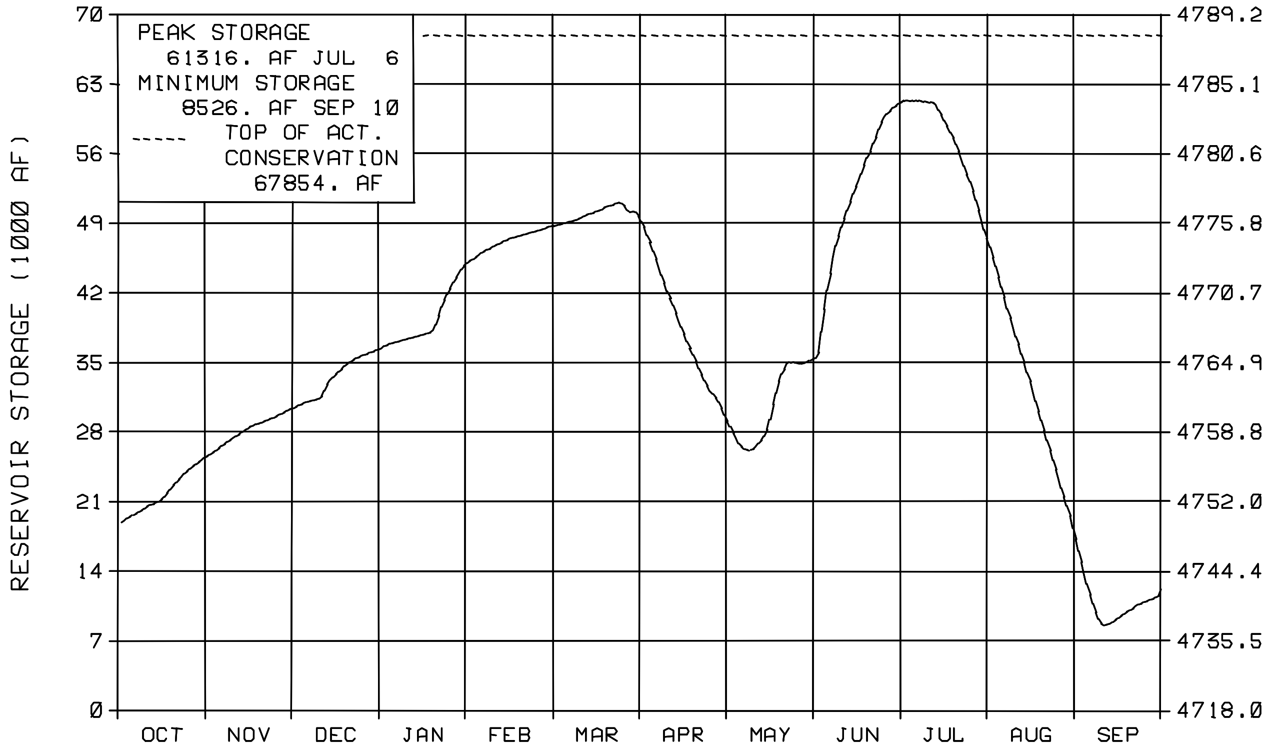
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	121,402	OCT 04-SEP 05	127,853	OCT 04-SEP 05
DAILY PEAK (CFS)	1,164	JUN 03, 2005	687	AUG 31, 2005
DAILY MINIMUM (CFS)	34	DEC 09, 2004	0	*

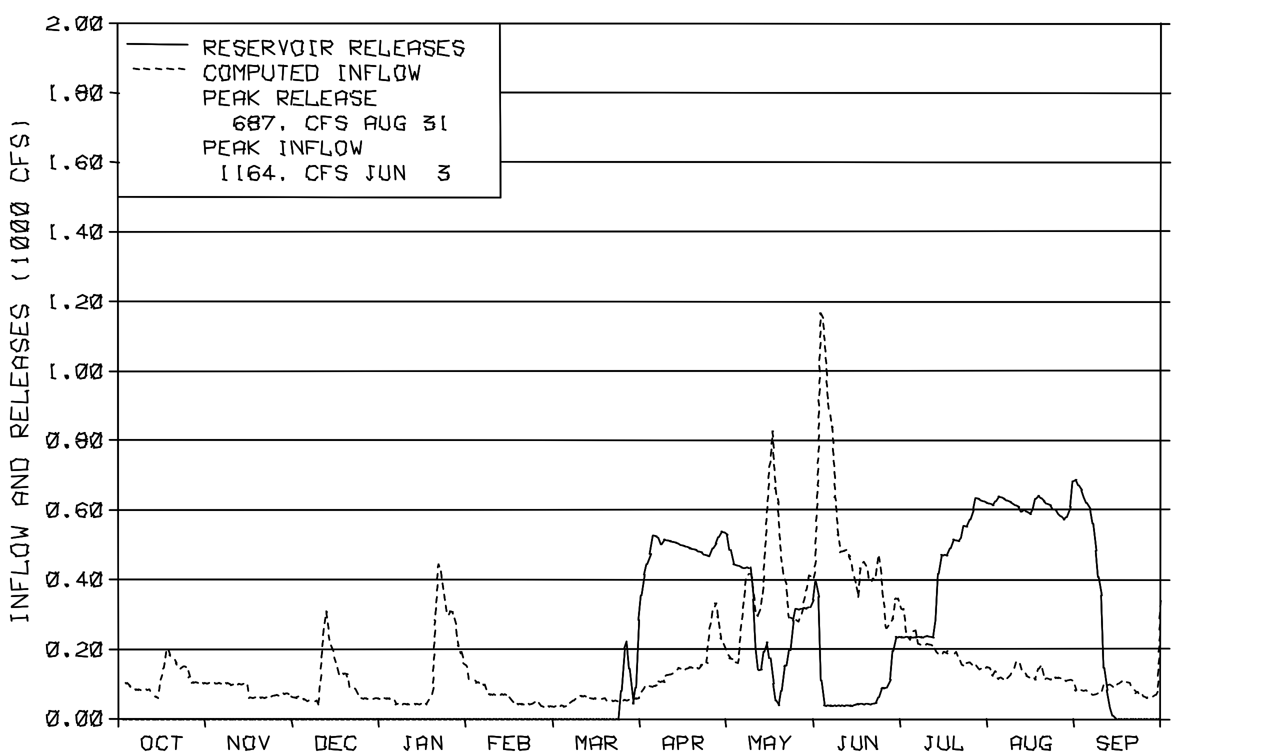
* During nonirrigation season

MONTH	INFLOW		OUTFLOW*		CONTENT	
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG
OCTOBER	6.9	113	0.0	---	25.5	226
NOVEMBER	4.9	87	0.0	---	30.4	194
DECEMBER	6.0	159	0.0	---	36.4	185
JANUARY	8.7	311	0.0	---	45.1	200
FEBRUARY	3.4	143	0.0	---	48.6	195
MARCH	3.2	107	2.1	55	49.7	200
APRIL	9.2	102	29.2	210	29.7	141
MAY	22.9	71	17.4	87	35.3	112
JUNE	31.0	74	5.4	28	60.9	111
JULY	12.1	57	25.6	103	47.4	94
AUGUST	7.6	80	37.9	117	17.2	66
SEPTEMBER	5.1	85	10.4	47	12.2	120
ANNUAL	121.4	84	127.9	90		
APRIL-JULY	75.2	70				

* Average for the 1955-2005 period.

FIGURE MTG9
LAKE SHERBURNE





WATER YEAR 2005

TABLE MTT10-B
HYDROLOGIC DATA FOR 2005
FRESNO RESERVOIR (MILK RIVER PROJECT)
NEW SEDIMENT SURVEY DATA EFFECTIVE 10/1/2000

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	2530.00	448	448
TOP OF ACTIVE CONSERVATION	2567.00	60,346	59,898
TOP OF JOINT USE	2575.00	92,880	32,534

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	2560.47	42,372	OCT 01, 2004
END OF YEAR	2562.04	46,249	SEP 30, 2005
ANNUAL LOW	2557.95	36,602	JAN 28, 2005
ANNUAL HIGH	2575.57	95,701	JUL 07, 2005
HISTORIC HIGH	2579.35	154,023	APR 03, 1952

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	216,152	OCT 04-SEP 05	212,275	OCT 04-SEP 05
DAILY PEAK (CFS)	2,234	JUN 10, 2005	1,138	AUG 04, 2005
DAILY MINIMUM (CFS)	0	*	42	OCT 14, 2004

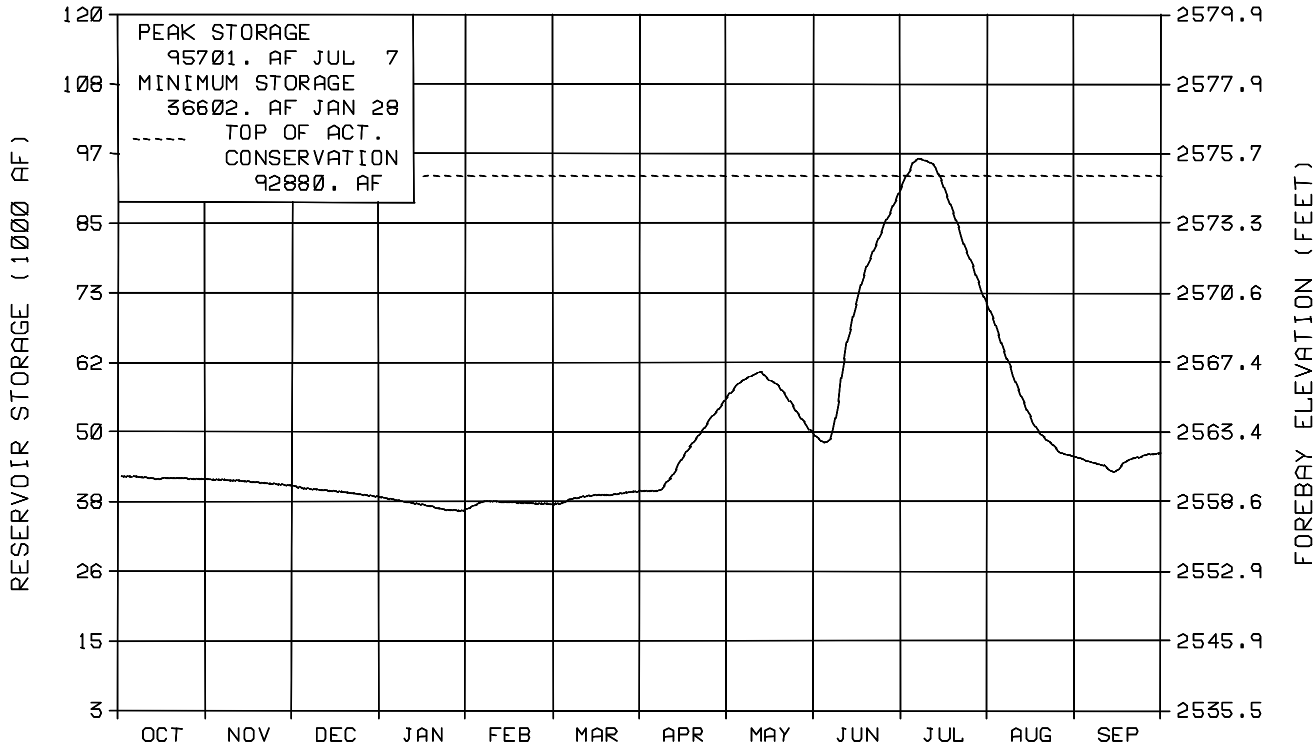
* During nonirrigation season

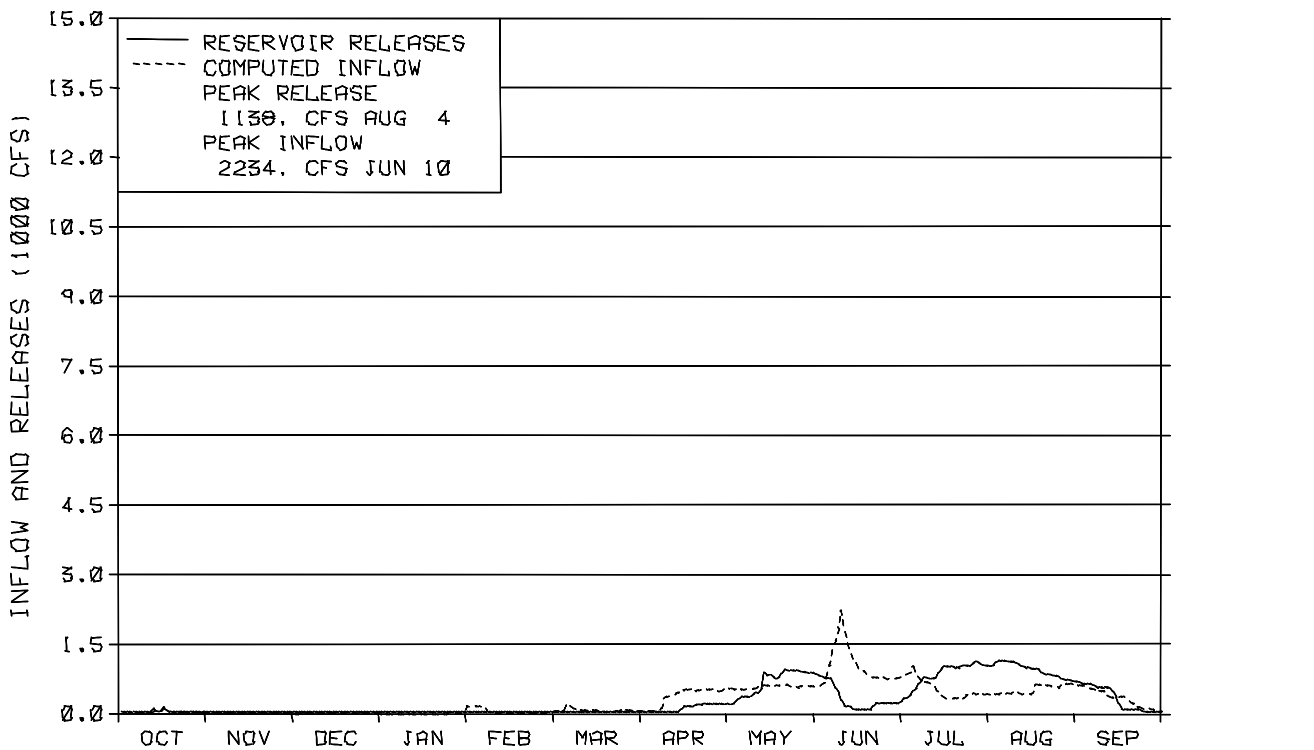
MONTH	INFLOW		OUTFLOW*		CONTENT	
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG
OCTOBER	2.6	35	3.1	41	41.8	107
NOVEMBER	1.5	73	2.7	88	40.6	105
DECEMBER	1.0	96	2.8	108	38.8	104
JANUARY	1.1	215	2.8	110	37.0	103
FEBRUARY	3.1	92	2.5	105	37.6	106
MARCH	5.0	16	2.8	42	39.8	76
APRIL	22.0	56	7.0	34	54.9	78
MAY	35.3	81	40.7	84	49.5	76
JUNE	60.3	132	20.0	41	89.8	145
JULY	33.0	93	51.5	93	71.3	161
AUGUST	32.0	97	57.7	128	45.5	122
SEPTEMBER	19.3	74	18.6	83	46.2	116
ANNUAL	216.2	80	212.3	80		
APRIL-JULY	150.6	92				

* Average for the 1949-2005 period.

FIGURE MTG10

FRESNO RESERVOIR





WATER YEAR 2005

TABLE MTT10-C
HYDROLOGIC DATA FOR 2005
NELSON RESERVOIR (MILK RIVER PROJECT)
NEW SEDIMENT SURVEY DATA EFFECTIVE 10/1/2001

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	2200.00	18,140	18,140
TOP OF ACTIVE CONSERVATION	2221.60	78,950	60,810

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	2216.50	58,639	OCT 01, 2004
END OF YEAR	2216.41	58,308	SEP 30, 2005
ANNUAL LOW	2212.30	44,503	AUG 09, 2005
ANNUAL HIGH	2217.74	63,292	JUL 10, 2005
HISTORIC HIGH	2221.60	79,224	JUL 12, 1965

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	40,185	OCT 04-SEP 05	40,516	OCT 04-SEP 05
DAILY PEAK (CFS)	324	AUG 18, 2005	502	JUL 15, 2005
DAILY MINIMUM (CFS)	0	*	0	*

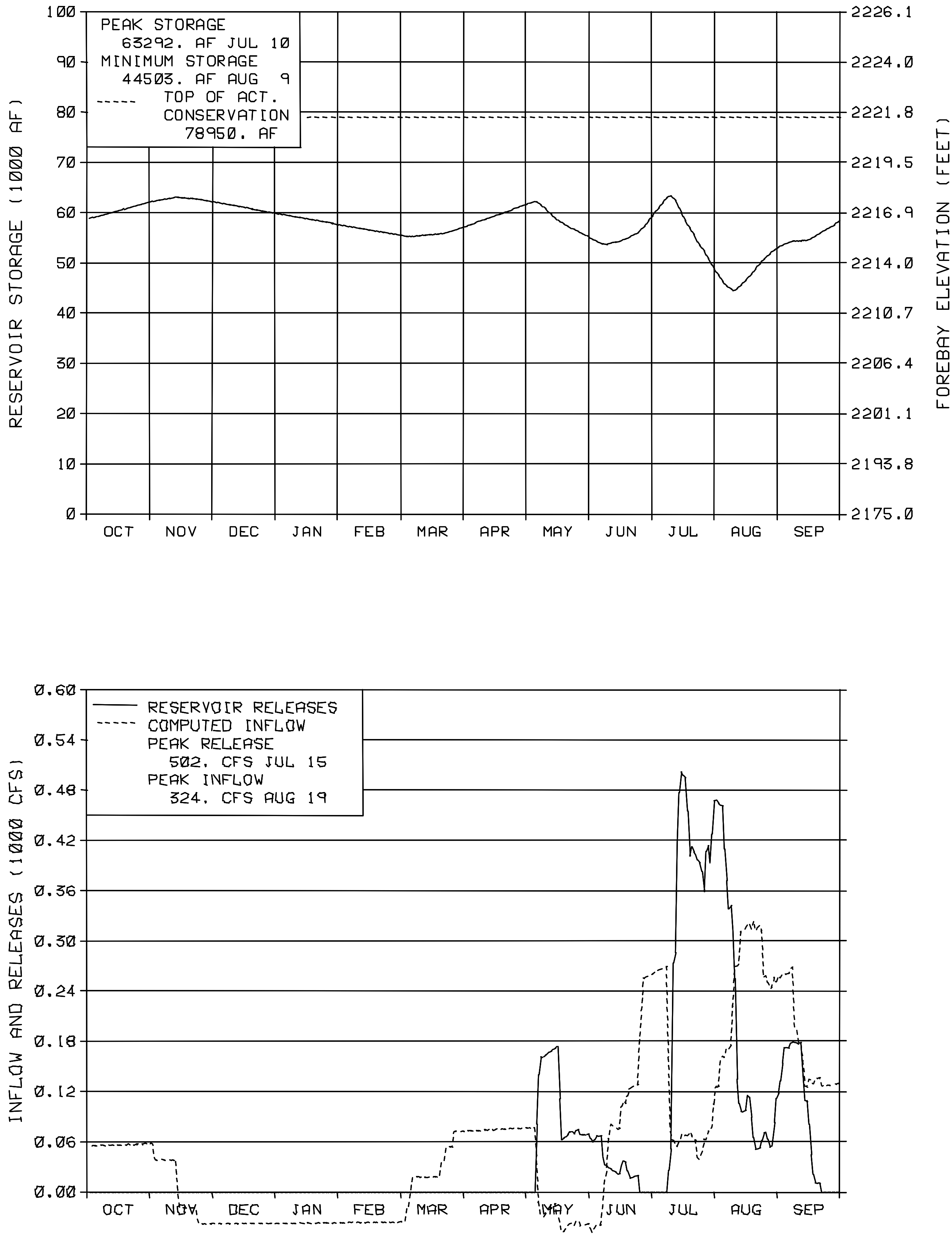
* During nonirrigation season

MONTH	INFLOW*		OUTFLOW*		CONTENT	
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG
OCTOBER	3.5	85	0.0	---	62.1	105
NOVEMBER	0.0	---	0.0	---	62.1	106
DECEMBER	-2.3	---	0.0	---	59.8	106
JANUARY	-2.3	---	0.0	---	57.5	104
FEBRUARY	-2.0	---	0.0	---	55.5	103
MARCH	1.5	116	0.0	---	57.0	105
APRIL	4.4	64	0.0	---	61.4	102
MAY	-0.8	---	5.5	75	55.1	91
JUNE	5.4	70	1.7	223	58.8	98
JULY	7.3	152	17.3	176	48.8	89
AUGUST	15.4	222	11.2	146	53.0	98
SEPTEMBER	10.1	171	4.8	134	58.3	103
ANNUAL	40.2	102	40.5	104		
APRIL-JULY	16.4	63				

* Average for the 1947-2005 period.

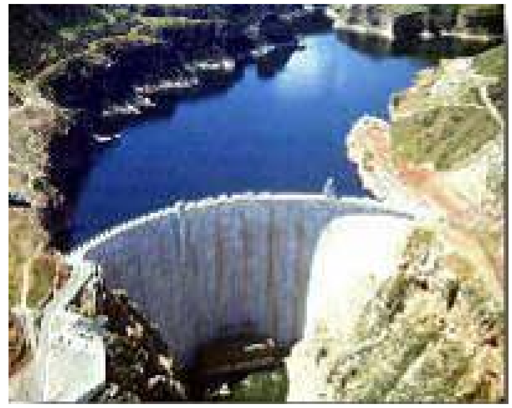
FIGURE MTG11

NELSON RESERVOIR



WATER YEAR 2005

Bighorn Lake and Yellowtail Powerplant



Bighorn Lake (P-S, MBP) is located on the Bighorn River about 45 miles southwest of Hardin, Montana. It has a total capacity of 1,328,360 acre-feet. The dam and reservoir were built for power generation, irrigation, flood control, fish and wildlife and recreation. The nameplate capacity of Yellowtail Powerplant is 250,000 kilowatts. Provisions have been made for gravity diversions from the reservoir to the proposed Hardin Unit which contains 42,600 acres of irrigable lands needing a full water supply and 950 acres to receive a supplemental supply. Stored water can also be used to irrigate additional lands along the Yellowstone River. Reclamation has negotiated an industrial water service contract with Pennsylvania Power & Light, MT (PPL-MT), formerly known as Montana Power Company (MPC) for 6,000 acre-feet. All other industrial water service contracts with different entities expired as of May 1982, and none were renewed. Bull Lake, Boysen and Buffalo Bill Reservoirs are three major tributary reservoirs located in Wyoming upstream of Bighorn Lake. Because these reservoirs are operated and managed by the Wyoming Area Office (WYAO), all reservoir and river operations in the Bighorn River Basin are closely coordinated between the Montana Area Office (MTAO) and WYAO.

In 1982, a hydrographic and a topographic survey was conducted and a new elevation-area-capacity table and curve was developed. The 1982 survey determined that Bighorn Lake has a storage capacity of 1,328,360 acre-feet and a surface area of 17,279 acres at reservoir elevation 3657.0 (the top of the spillway gates). Since closure in 1965, the reservoir has accumulated a sediment volume of 53,950 acre-feet below reservoir elevation 3657. This volume represents a 3.9 percent loss in capacity and an average annual loss of 3,224 acre-feet from November 1965 through July 1982. Sediment was deposited at the annual rate of 0.314 acre-feet per square mile during that period. The revised area-capacity table was put into effect on August 1, 1986, reflecting the new storage levels.

Water year 2004 marked the fifth consecutive year of severe drought in the Bighorn Basin. Total annual inflow to Bighorn Lake was 42 percent of average totaling 1,041,572 acre-feet. This was the second lowest annual inflow experienced since construction of Yellowtail Dam. However, runoff during August and September appeared to give signs that the drought was finally letting up. The August-September inflow to Bighorn Lake improved to 66 percent of average, totaling 229,741 acre-feet and was the eighth lowest of record. With storage in Bighorn Lake over 50 feet below the top of the joint-use pool in August, releases from Bighorn Lake to the Bighorn River were maintained between 1,300-1,500 cfs during August and September 2004. With inflows averaging over 2,100 cfs during September, storage slowly increased. By the beginning of water year 2005, storage in Bighorn Lake had increased to 710,342 acre-feet at elevation 3593.63. This was about 70 percent of normal and was also 359,687 acre-feet or 46.37 feet below the top of the joint-use pool. This was also 13.57 feet or 75,586 acre-feet lower than at the beginning of water year 2004.

Streamflows in the Bighorn River Basin, including the Wind and Shoshone Rivers, were well below normal during water year 2004 and remained below normal as they entered water year 2005. Irrigation demands in 2004 caused storages in Boysen and Buffalo Bill Reservoirs located on the Wind and Shoshone Rivers to be drafted to 91 and 101 percent of average, respectively. With year-end reservoir levels much improved over a year ago, the WYAO established the minimum winter releases out of these reservoirs at flow rates of 400 and 150 cfs, respectively, in an effort to continue conserving storages for the next irrigation season.

Even though the tributary flow between Boysen and Buffalo Bill Reservoirs to Bighorn Lake was 69 percent of average during October through March, the operations of Boysen and Buffalo Bill Reservoirs actually had a more significant impact on the low inflow to Bighorn Lake during the fall and winter of 2004-2005. The October-March inflow totaled 468,271 acre-feet and was only 49 percent of average, the fourth lowest of record since the construction of Yellowtail Dam. As the fall and winter progressed, the inflow to Bighorn Lake steadily declined. During December, one of the coldest months of the winter, runoff into Bighorn Lake dropped to 37 percent of average. The extreme cold temperatures attributed to much of the water flowing into Bighorn Lake to form into ice storage. On December 24, the average daily inflow to Bighorn Lake dropped to a low for the year of 67 cfs.

The fall and winter of 2004-2005 for the Bighorn River Basin started out very mild and dry. Snows accumulated at near record low rates in the higher elevations during October before turning to near normal rates during early November through the middle of November. From about the middle of November through April, winter storms were less frequent over the Bighorn Basin and mountain snowpack accumulated at well below normal rates. On January 1, the Natural Resources Conservation Service (NRCS) measured mountain snowpack in the Bighorn Basin at about 86 percent of normal. The Wind and Shoshone River Basins, major tributaries of the Bighorn River, were measured at 100 and 66 percent of average, respectively. This was 11 percent higher in the Wind River Basin and 22 and 8 percent lower in the Shoshone and Bighorn River Basins respectively than reported on January 1, 2004.

As the winter continued, winter snow fell over the mountains of the Wind River Basin above Boysen Reservoir at near normal rates. However, this was not true for the Shoshone River Basin above Buffalo Bill Reservoir. Snow fell in the Shoshone River Basin at near record low rates. Snowpack in the Wind River Basin was near normal through January and dropped to about 85-88 percent of average during February through April. Snowfall in the Shoshone River Basin was light and by the middle of November, snowpack in the basin had declined to less than average and essentially remained this way throughout the winter. During October through March, the accumulative valley and mountain precipitation was 71 and 77 percent of average, respectively. By April 1, the mountain snowpack in the Bighorn River Basin was measured at 75 percent of average. Even though this was well below normal, this was still a considerable improvement over that reported on April 1, 2004 where the mountain snowpack was reported at only 67 percent of average. The Wind and Shoshone River Basins, major tributaries of the Bighorn River, were measured at 82 and 59 percent of normal, respectively. On April 1, 2004, the mountain snowpack in these basins reported snowpack at 64 and 62 percent of average, respectively.

Wintry spring storms frequented the Bighorn River Basin during April and early May with most of the activity occurring in the Wind River watershed. The spring storms produced abundant precipitation in the basin. Valley and mountain precipitation was measured at 161 and 86 percent of average respectively during April and improved to 177 and 159 percent of average respectively during May. During June, the mountain precipitation amounts continued near normal while the valley precipitation declined to 68 percent of average. As the snowpack continued to accumulate in the mountains of the Wind River Basin, the mountain snowpack in the remainder of the Bighorn River Basin began to melt out. In April, the streamflows began to increase and inflow to Bighorn Lake improved to 60 percent of average during April.

Storage levels in Boysen and Buffalo Bill Reservoirs were quickly filling during May. The storage level in Boysen Reservoir rose over 4 feet while the storage level in Buffalo Bill Reservoir rose over 15.5 feet. By the end of May, storage in Boysen was only 2 feet below the top of the joint-use pool while storage in Buffalo Bill Reservoir was only 6 feet below the top of the conservation pool. With inflow to Boysen and Buffalo Bill Reservoirs averaging 5,360 cfs and 3,520 cfs, respectively during the last week of May, it was necessary for WYAO to maintain high releases out of these projects. By the end of May, releases from Boysen Reservoir were being maintained at 3,550 cfs while releases from Buffalo Bill Reservoir to the Shoshone River were being maintained at 1,650 cfs. Heavy rains in early May accompanied by the mountain snowmelt and high releases from Boysen and Buffalo Bill Reservoirs finally triggered the streamflow into Bighorn Lake to increase substantially. Beginning on May 4 inflow to Bighorn Lake increased from about 1,500 cfs to a peak for the year of 13,371 cfs on May 12. The inflow to Bighorn Lake then quickly receded but continued to average over 6,200 cfs during the remainder of the month. During May, Bighorn Lake rose 36.7 feet and gained 230,978 acre-feet of storage. On May 31, Bighorn Lake had a storage content of 913,396 acre-feet at elevation 3624.91. This was 156,633 acre-feet or 15.09 feet below the top of the joint-use pool. To best assure filling Bighorn Lake to the top of the joint-use pool, the releases from Bighorn Lake to the Bighorn River were maintained at 1,500 cfs through May.

By late June, several record high temperatures were being reported across much of Montana and Wyoming. These high temperatures continued to melt the high elevation snow. Accompanied by rains, inflow to Bighorn Lake remained near average during June, averaging over 7,600 cfs. With storage levels in Boysen and Buffalo Bill Reservoirs at near full capacity, WYAO was now required to increase flows considerably from Boysen and Buffalo Bill to control the runoff into each of these reservoirs. By late June, releases from Boysen Reservoir to the Wind River were increased to 5,580 cfs while the releases from Buffalo Bill Reservoir were increased to 5,927 cfs. These releases combined with other tributary flows in the basin accounted for a total inflow of 13,287 cfs on June 26, only 84 cfs lower than the record amount recorded on May 12.

As storage in Bighorn Lake quickly filled during June, releases from Bighorn Lake to the Bighorn River were being gradually increased from 1,500 cfs on May 31 to a peak discharge of 6,739 cfs on July 7. On June 26, storage in Bighorn Lake entered the exclusive flood control pool and continued to increase until reaching a peak content of 1,106,987 acre-feet at elevation 3642.82 on July 1. This was 36,958 acre-feet or 2.82 feet above the top of the joint-use pool.

By early July much of the high elevation snows were now melted out. Inflow to Bighorn Lake began to quickly recede from 7,829 cfs on July 1 to 1,428 cfs by July 22. All flood storage was successfully evacuated from the exclusive flood pool on July 11. As the inflows receded, the releases from Bighorn Lake to the Bighorn River were also gradually reduced from a peak discharge of 6,739 cfs on July 7 to the desired minimum fishery flow of 2,500 cfs on July 15. On this date, Bighorn Lake had a storage content of 1,050,523 acre-feet at elevation 3638.42 and was 9,506 acre-feet or 1.58 feet below the top of the joint-use pool.

During July there was some uncertainty whether or not the persistent drought for the past 5 consecutive years was really over. Valley and mountain precipitation fell well below normal during July to 38 and 58 percent of average, respectively. Inflow to Bighorn Lake during July quickly dropped to 59 percent of average, totaling 188,167 acre-feet, the 14th lowest of record since construction of the dam. Actual April-July runoff into Bighorn Lake during 2005 was 42 percent of normal and totaled 1,065,041 acre-feet, 672,892 acre-feet or nearly 3 times higher than last year. By the end of July, storage in Bighorn Lake had dropped to 1,020,506 acre-feet at elevation 3635.85, about normal for this time of year. To continue conserving storage in Bighorn Lake, releases to the Bighorn River were maintained near the desired minimum fishery flow of 2,500 cfs through the remainder of the year.

Precipitation in the Bighorn Basin upstream of Bighorn Lake was above average during August and dropped to well below average during September. Valley precipitation during August and September was 107 and 70 percent of average, respectively, while the mountain precipitation was 151 and 79 percent of average, respectively. The August-September inflow was 90 percent of average, totaling 314,673 acre-feet. The precipitation received during August and September helped reduce irrigation demands, allowing storage to fluctuate about 2-3 feet during August and September. By the end of the water year on September 30, storage in Bighorn Lake had reached 1,000,506 acre-feet at elevation 3634.03. This was 290,164 acre-feet or 40.40 feet higher that at the end of water year 2004 and also 69,523 acre-feet or 5.97 feet below the top of the joint-use pool.

Annual runoff into Bighorn Lake totaled 1,847,984 acre-feet and will be recorded as the 10th lowest annual runoff of record since construction of Yellowtail Dam. This was 74 percent of average and 32 percent or 806,412 acre-feet greater than the total runoff experienced during water year 2004. The total amount of water released to the Bighorn River during 2005 was 1,530,369 acre-feet, 66 percent of normal.

The persistent extended drought severely impacted the operations of Bighorn Lake and the Bighorn River Basin. There was difficulty in managing the critically low water supply in the Bighorn Basin and balancing it among the various competing interest groups. However with strict conservation measures implemented early in the year, it was possible to provide limited opportunities early in the season for partial lake recreation on Bighorn Lake, protect the lake fishery interests, and provide habitat for the renowned trout fishery downstream of Yellowtail Afterbay Dam. Throughout the winter and early spring, releases to the Bighorn River were maintained at 1,500 cfs, about 1,000 cfs below the desired minimum flow of 2,500 cfs required to support a healthy river fishery. Even though the seasonal runoff forecasts prepared in January through June indicated Bighorn Lake would reach desirable levels for flat-water recreation, there was some uncertainty about whether or not the Lake would reach appropriate levels required to open Horseshoe Bend Marina. Although Horseshoe Bend Marina and concessions were never opened in 2005, there were still opportunities to launch boats at Ok-A-Beh and Barry’s Landing around Bighorn Lake. During June through the remainder of the year, releases from Bighorn Lake to the Bighorn River were finally increased and maintained at or above the desired minimum fishery flow rate of 2,500 cfs.

The Corps of Engineers estimated that during 2005, Bighorn Lake did not prevent any local flood damages but did prevent $10,480,900 in flood damages downstream on the Missouri River below Fort Peck Reservoir. Since construction of Yellowtail Dam in 1965, Bighorn Lake has reduced flood damages by a total of $111,733,200.

Total generation produced at Yellowtail Powerplant during 2005 was 569,535,000 kilowatt-hours, 60 percent of the long term average since construction of the powerplant in 1967. This was 255,808 kilowatt-hours more than generated during the record low year of 2003 and 246,908 kilowatt-hours more than generated in 2004. All of the water released from the dam was released through the powerplant with exception of 256 acre-feet which was released through the spillway to flush out the spillway tunnel and get it ready for inspection on June 21.

Important Events - Water Year 2005

October 7 & 12: The BIA requested all irrigation diversions to the Bighorn Canal (Canal) be discontinued for the 2004 irrigation season. Turbine releases were gradually decreased to maintain a total release of 1,500 cfs (1,500 cfs to the Bighorn River and 0 cfs to the Bighorn Canal).

October 25-November 15: A 21-day outage was scheduled on Unit No. 4 to allow for annual mechanical/electrical maintenance. Power generation also indicated flows in the Bighorn River were lower than anticipated. In response, turbine releases were adjusted to maintain river release at 1,500 cfs. Turbine releases were adjusted to maintain river flows at 1,500 cfs.

December 28-29: Power generation indicated flows in the Bighorn River were lower than anticipated. Turbine releases were adjusted to maintain river releases at 1,500 cfs.

January 15: Power generation indicated flows in the Bighorn River were lower than anticipated. Turbine releases were adjusted to maintain river releases at 1,500 cfs.

February 5: Recent flow measurements indicated flows in the Bighorn River were higher than anticipated. Turbine releases were adjusted to maintain river releases at 1,500 cfs.

March 2: Recent flow measurements indicated flows in the Bighorn River were higher than anticipated. Turbine releases were adjusted to maintain river releases at 1,500 cfs.

April 6: Reclamation attended and participated in the Bighorn Interagency Coordination Meeting at the National Park Service's Little Bighorn Battlefield National Monument near Crow Agency, MT to discuss the operations of Bighorn Lake and Bighorn River. Tim Felchle, Chief of Reservoir and River Operations, presented the water supply outlook and the proposed operations of Bighorn Lake and Bighorn River for the 2005 season.

April 7: Recent flow measurements indicated flows in the Bighorn River were higher than anticipated. Turbine releases were adjusted to maintain river releases at 1,500 cfs.

April 14-15: A special operation was performed at Yellowtail Dam and Afterbay Dam in an attempt to determine the leakage and seepage flow downstream of Yellowtail Dam. Power turbine releases were adjusted and maintained at 1,500 cfs while the releases through the sluice gates of the Afterbay were adjusted to maintain the Afterbay Reservoir at a constant level. The flow rate through the sluice gates was determined from a rating curve and table used at the USGS streamgaging station near the St. Xavier gaging station. These values were then used to determine the amount of leakage and seepage downstream of Yellowtail Dam.

May 21-24: Outages were scheduled on May 21 for Unit Nos. 3 & 4 and on May 24 for Unit Nos. 1 & 2 to allow for maintenance on the electrical transformers, KCB/KCD and KCA/KCC, respectively.

May 31: Spring rains accompanying the snowmelt runoff increased inflow to Bighorn Lake considerably. With storage only about 20 feet below the top of the conservation pool, turbine releases were increased to maintain a total release of 2,000 cfs (2,000 cfs to the Bighorn River and 0 cfs to the Bighorn Canal).

<u>June 2-6</u>: Spring rains accompanying the snowmelt runoff increased inflow to Bighorn Lake to over 6,500 cfs. BIA also requested irrigation diversions to the Bighorn Canal be initiated and gradually increased to 200 cfs by June 6. With storage about 15 feet below the top of the conservation pool, turbine release were gradually increased to maintain a total release of 2,650 cfs (2,500 cfs to the Bighorn River and 150 cfs to the Bighorn Canal). Recent flow measurements also indicated flows in the Bighorn River were lower than anticipated. In response, turbine releases were adjusted to maintain river releases at 2,500 cfs.

<u>June 8-9</u>: Frequent spring rains accompanying the snowmelt runoff continued to increase inflow to Bighorn Lake. Storage in Bighorn Lake was rising about 1 foot per day. To slow the rate of rise of storage in Bighorn Lake, turbine release were gradually increased to maintain a total release of 3,650 cfs (3,500 cfs to the Bighorn River and 150 cfs to the Bighorn Canal).

<u>June 9-10</u>: The BIA reported a leak on the Bighorn Canal and requested all diversions to be discontinued until repairs on the canal can be completed. In response, the turbine releases were maintained at a total of 3,650 cfs (3,650 cfs to the Bighorn River and 0 cfs to the Bighorn Canal).

<u>June 10</u>: Inflow to Bighorn Lake continued to remain over 7,100 cfs. With Bighorn Lake less than 8 feet below the top of the joint-use pool, turbine release were gradually increased to maintain a total release of 4,100 cfs (4,100 cfs to the Bighorn River and 0 cfs to the Bighorn Canal).

<u>June 15-16</u>: The BIA reported maintenance on the Bighorn Canal was completed and requested a gradual increase in diversions to the canal. In response, the turbine releases were gradually increased to a maintain a total release of 4,580 cfs (4,180 cfs to the Bighorn River and 400 cfs to the Bighorn Canal). Recent flow measurements also indicated flows in the Bighorn River were lower than anticipated. Turbine releases were adjusted to maintain river releases at 4,180 cfs.

<u>June 21</u>: The level of the tailwater was maintained no higher than elevation 3183 to allow for inspection and maintenance of the spillway tunnel on Yellowtail Dam.

<u>June 21-26</u>: Near record high temperatures continued to melt the high elevation snow in the Bighorn Basin. To control the rate of rise of storages in Boysen and Buffalo Bill Reservoirs, the WYAO increased releases significantly out of these reservoirs, producing a significant increase in inflows to Bighorn Lake. To control the rate of rise of storage in Bighorn Lake, the turbine releases were gradually increased to maintain a total release of 7,600 cfs (7,200 cfs to the Bighorn River and 400 cfs to the Bighorn Canal).

<u>June 24</u>: The BIA reported another leak on the Bighorn Canal and requested reductions in diversions to the Bighorn Canal. For a brief period, diversions to the Bighorn Canal were reduced by 150 cfs to allow for the repairs to be made.

<u>June 28-29</u>: Even though WYAO gradually reduced releases out of Boysen and Buffalo Bill Reservoirs, inflow to Bighorn Lake continued to remain over 12,000 cfs. To continue slowing the rate of rise of storage in Bighorn Lake, turbine releases were increased to maintain a total release of 7,280 cfs (6,870 cfs to the Bighorn River and 410 cfs to the Bighorn River). Recent flow

measurements also indicated flows in the Bighorn River were higher than anticipated. Turbine releases were adjusted to maintain river release at 6,870 cfs.

June 29-30: The BIA requested a reduction in diversions to the Bighorn Canal. With inflow to Bighorn Lake dropping to less than 9,400 cfs, WAPA inquired and requested more flexibility in power operations and distribution of power without jeopardizing flood control operations. In response, turbine releases were decreased to maintain a total release of 6,940 cfs (6,640 cfs to the Bighorn River and 300 cfs to the Bighorn Canal).

July 1: The BIA requested an increase in diversions to the Bighorn Canal. In response, turbine releases were maintained at a total release of 6,940 cfs (6,540 cfs to the Bighorn River and 400 cfs to the Bighorn Canal).

July 5: The BIA requested a reduction in diversions to the Bighorn Canal. In response, turbine releases were maintained at a total release of 6,940 cfs (6,640 cfs to the Bighorn River and 300 cfs to the Bighorn Canal).

July 6-7: The BIA reported another leak on the Bighorn Canal and requested reductions in diversions to the Bighorn Canal. In response, turbine releases were reduced to maintain a total release of 6,900 cfs (6,750 cfs to the Bighorn River and 150 cfs to the Bighorn Canal).

July 7-9: The BIA reported maintenance work on the Bighorn Canal was completed and requested an increase in diversions to the Bighorn Canal. In response, turbine releases were reduced to maintain a total release of 6,900 cfs (6,500 cfs to the Bighorn River and 400 cfs to the Bighorn Canal).

July 11-13: Inflow to Bighorn Lake has dropped to less than 3,000 cfs. With less than 0.5 feet of flood storage remaining in the exclusive flood pool, turbine releases were gradually reduced to slow the evacuation rate of storage in Bighorn Lake. The BIA had also requested reductions in diversions to the Bighorn Canal. In response, turbine releases were gradually reduced to a total release of 4,000 cfs (3,650 cfs to the Bighorn River and 350 cfs to the Bighorn Canal).

July 14-15: Inflow to Bighorn Lake continued to remain at less than 3,000 cfs. The BIA had also requested an increase in diversions to the Bighorn Canal. In response, turbine releases were gradually reduced to a total release of 2,950 cfs (2,500 cfs to the Bighorn River and 450 cfs to the Bighorn Canal).

July 23: Power generation indicated flows in the Bighorn River were lower than anticipated. Turbine releases were adjusted to maintain total release at 2,950 cfs (2,500 cfs to the Bighorn River and 450 cfs to the Bighorn Canal).

July 25: Recent flow measurements indicated flows in the Bighorn River were lower than anticipated. Turbine releases were adjusted to maintain total release at 2,900 cfs (2,500 cfs to the Bighorn River and 400 cfs to the Bighorn Canal).

July 27: The BIA requested a reduction in diversions to the Bighorn Canal. In response, turbine releases were adjusted to maintain a total release of 2,900 cfs (2,550 cfs to the Bighorn River and 350 cfs to the Bighorn Canal).

August 1: The BIA requested an increase in diversions to the Bighorn Canal. In response, turbine releases were adjusted to maintain a total release of 2,900 cfs (2,500 cfs to the Bighorn River and 400 cfs to the Bighorn Canal).

August 16-17: Power generation indicated flows in the Bighorn River were much lower than anticipated. The BIA also requested an increase in diversions to the Bighorn Canal. In response, turbine releases were gradually adjusted to maintain total release at 2,900 cfs (2,500 cfs to the Bighorn River and 400 cfs to the Bighorn Canal).

August 24: Recent flow measurements indicated flows in the Bighorn River and Bighorn Canal were lower than anticipated. Turbine releases were adjusted to maintain total release at 2,815 cfs (2,500 cfs to the Bighorn River and 315 cfs to the Bighorn Canal).

September 6: The BIA requested a reduction in diversions to the Bighorn Canal. In response, turbine releases were adjusted to maintain a total release of 2,850 cfs (2,500 cfs to the Bighorn River and 350 cfs to the Bighorn Canal).

September 14: The BIA requested a reduction in diversions to the Bighorn Canal. In response, turbine releases were adjusted to maintain a total release of 2,800 cfs (2,500 cfs to the Bighorn River and 300 cfs to the Bighorn Canal).

September 19-20: The BIA requested a reduction in diversions to the Bighorn Canal. In response, turbine releases were adjusted to maintain a total release of 2,700 cfs (2,500 cfs to the Bighorn River and 200 cfs to the Bighorn Canal).

September 20-21: Power generation indicated flows in the Bighorn River were lower than anticipated. Turbine releases were adjusted to maintain total release at 2,700 cfs (2,500 cfs to the Bighorn River and 200 cfs to the Bighorn Canal).

September 26-29: With the 2005 irrigation season essentially over, the BIA requested gradual reductions in diversions to the Bighorn Canal until being completely shut off on September 29. Turbine releases were gradually reduced to maintain a total release of 2,500 cfs (2,500 cfs to the Bighorn River and 0 cfs to the Bighorn Canal).

Additional hydrologic and statistical information pertaining to the operations of Bighorn Lake during 2005 can be found on Table MTT11 and MTG12.

For more detailed information on the operations of Boysen and Buffalo Bill Reservoirs during 2005, refer to the narratives for Boysen Reservoir and Powerplant and Shoshone Project under the responsibility of the Wyoming Area Office.

TABLE MTT11
HYDROLOGIC DATA FOR 2005
BIGHORN LAKE (YELLOWTAIL DAM)

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	3547.00	493,584	493,584
TOP OF ACTIVE CONSERVATION	3614.00	829,687	336,103
TOP OF JOINT USE	3640.00	1,070,029	240,342
TOP OF EXCLUSIVE FLOOD CONTROL	3657.00	1,328,360	258,331

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	3593.63	710,342	OCT 01, 2004
END OF YEAR	3634.03	1,000,506	SEP 30, 2005
ANNUAL LOW	3583.29	711,812	APR 08, 2005
ANNUAL HIGH	3642.82	1,106,987	JUL 01, 2005
HISTORIC HIGH	3656.43	1,365,198	JUL 06, 1967

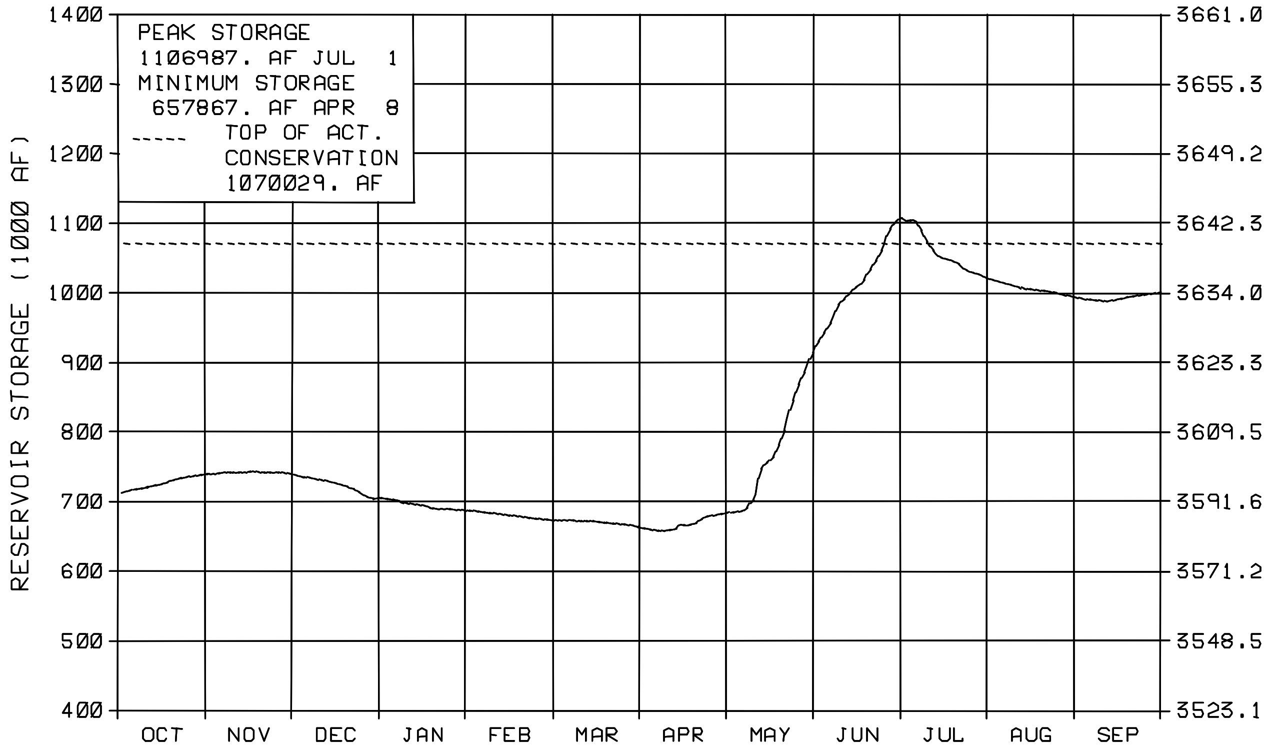
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW*	DATE
ANNUAL TOTAL (AF)	1,847,983	OCT 04-SEP 05	1,530,368	OCT 04-SEP 05
DAILY PEAK (CFS)	13,371	MAY 12, 2005	6,739	JUL 07, 2005
DAILY MINIMUM (CFS)	67	DEC 24, 2004	1,452	APR 27, 2005
PEAK SPILL (CFS)			0	NONE
TOTAL SPILL (AF)			0	NONE

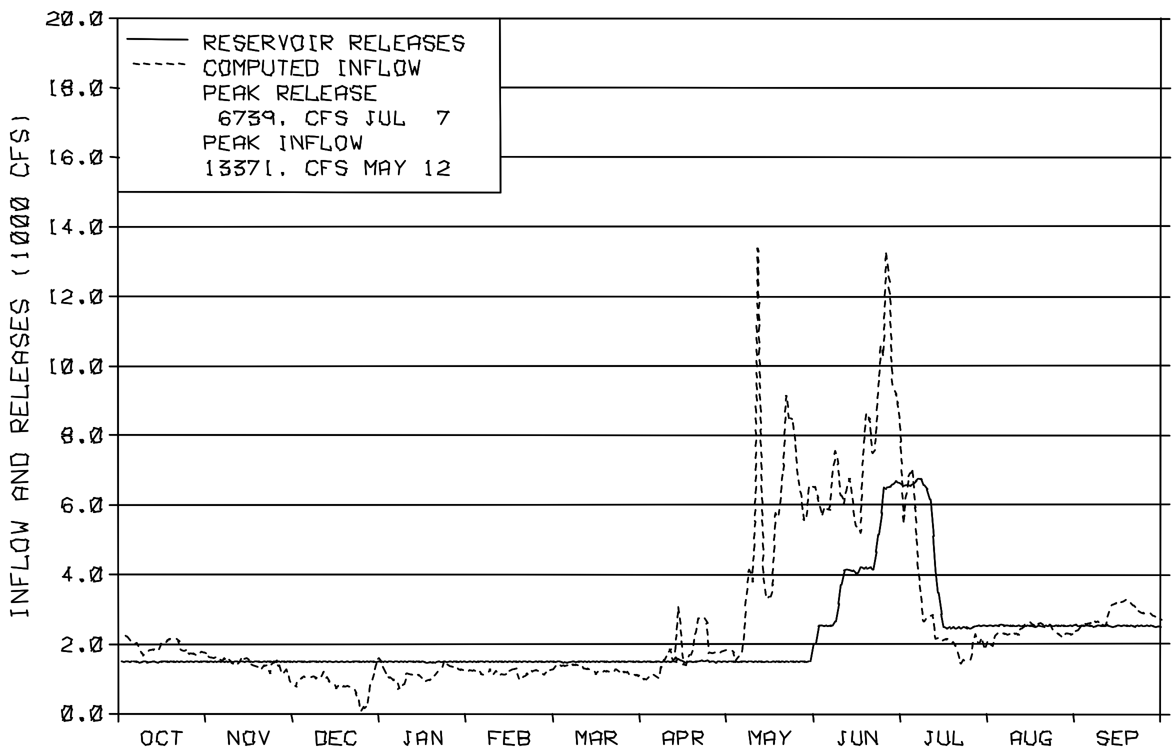
*Discharge to the Bighorn River

MONTH	INFLOW		OUTFLOW*				CONTENT	
	KAF	% OF AVG	CANAL KAF	% OF AVG	RIVER KAF	% OF AVG	KAF	% OF AVG
OCTOBER	117.9	62	2.0	46	91.5	52	739.4	73
NOVEMBER	83.7	52	0.0	---	88.8	49	738.3	76
DECEMBER	53.9	37	0.0	---	92.0	49	704.4	76
JANUARY	69.6	49	0.0	---	91.6	50	686.6	79
FEBRUARY	65.5	46	0.0	---	83.1	50	673.3	80
MARCH	77.6	43	0.0	---	91.8	49	663.0	80
APRIL	104.3	60	0.0	---	89.1	49	682.4	83
MAY	319.2	124	0.0	---	93.2	50	913.4	104
JUNE	453.4	102	13.4	62	252.0	95	1,104.8	107
JULY	188.2	59	23.9	86	252.8	90	1,020.5	99
AUGUST	145.4	86	22.5	84	154.8	89	993.1	98
SEPTEMBER	169.3	95	16.5	88	149.6	98	1,000.5	98
ANNUAL	1,848.0	74	78.3	70	1,530.4	66		
APRIL-JULY	1,065.0	58						

* Average for the 1967-2005 period.

FIGURE MTG12
BIGHORN LAKE





WATER YEAR 2005

CLIMATE SUMMARY

Considering that during water year 2005 the Bighorn Basin of Wyoming remained in the moderate to severe drought category, overall water supply conditions in the Basin were much improved from the past five years. Mountain snowpack above Boysen Reservoir was near normal through the winter months and the April-July snowmelt runoff into Boysen was slightly above average. In the Buffalo Bill watershed conditions were not as favorable, as the snowpack accumulated at a rate that was less than 60 percent of the thirty year average. However, spring precipitation was well above average and the April-July snowmelt runoff that entered Buffalo Bill Reservoir was 77 percent of average.

Precipitation during October was above average in the Shoshone drainage and the Wind River Mountains, but lower elevation sites in the Wind River basin received less than average moisture. Temperatures in both basins were very close to average for the month. Snow began to accumulate in the mountains of both the Shoshone and Wind River basins following a storm that passed through Wyoming on October 19th and 20th. As was the case with most of the storms that tracked through the Bighorn Basin during the winter of 2004-2005, the southern mountains of the Wind River Range received the greatest snowfall with progressively less accumulation moving north. Another storm at the end of the month brought additional snowfall and on November 1st the Shoshone and Wind River basin snowpack was 103 and 166 percent of average, respectively. November temperatures in the Wind River basin remained near normal while the Shoshone basin averaged about three degrees above average. Precipitation was below average in both the Wind and Shoshone basins and well below average accumulation of snow occurred. A storm on the weekend following Thanksgiving brought the best chance for precipitation and one to two feet of snow fell in the higher mountains of the southern Wind River Range but did not reach into the Shoshone basin.

Comparisons to average can be misleading at the beginning and end of the snow season and the high percentages reported on November 1st fell rapidly as the month progressed. By December 1st the snowpack in the Shoshone basin had dropped to 59 percent of average while the Wind River basin snowpack was right on average. Precipitation during December was below average at lower elevation stations but the snowpack on January 1st reflected an increase from December 1st levels in both the Wind and Shoshone basins. Temperatures in the Shoshone basin were about seven degrees above average in December with the Wind River basin about four degrees warmer than normal. On January 1st the snowpack in the Wind River basin was 109 percent of average and the Shoshone basin was at 66 percent. Above average temperatures continued in the Shoshone and Wind River basins during January, with both basins about five degrees warmer than normal. A major storm on January 6th and 7th blanketed the region, with the Deer Park Snotel in the southern Wind River Mountains receiving over 30 inches of snow. Other locations in the Wind River Range reported from one to two feet of new snow while most reports from the Shoshone drainage were around one foot of new accumulation. The storm provided a boost to the snowpack in both basins but little precipitation fell in the mountains during the remainder of the month. By February 1st the snowpack was down to 101 percent of average in the Wind River basin and 59 percent of average above Buffalo Bill Reservoir. The month of February was much drier than normal, especially in the Wind River valley where many of the Weather Service sites received no precipitation. The only notable snowfall in the Boysen watershed during February occurred on the 12^{th} and 13^{th} with Snotel sites in the southern Wind River Mountains getting about a foot of snow. Over the month the snowpack above Boysen lost seven percent to average, falling to 94 percent of average on March 1. While no major storms passed through the Shoshone drainage in February, enough snow fell during the month to maintain the snowpack at 58 percent of average on March 1^{st}. February temperatures in both the Shoshone and Wind River basins averaged about two degrees warmer than normal.

Near normal temperatures continued during March and precipitation in both the Shoshone and Wind River basins was about 80 percent of average. Snowpack in both basins changed little during March when compared to average. Conditions in April followed the trend of previous months with normal temperatures and the snowpack changing very little over the course of the month when compared to average. Precipitation in the Shoshone basin continued to track below average but the Boysen watershed did receive slightly above average precipitation during April. The snowpack declined through most of the month, but widespread precipitation in central and northern Wyoming on the 27^{th} turned it around and on May 1^{st} the snowpack above Buffalo Bill and Boysen was 57 and 94 percent of average, respectively. Along with the much needed precipitation, the storm on April 27^{th} also brought colder temperatures, which continued through the middle of May. A front that entered the basin around May 7^{th} brought more rain to the lower elevations and snow to the mountains. As a result of the cold temperatures and snowfall, the snowpack in both the Shoshone and Wind River basins rose through the first half of the month. As temperatures rebounded around the 15^{th}, the snowpack began to melt out rapidly during the following week and the peak inflow to Buffalo Bill Reservoir of 8,402 cfs occurred on May 21^{st}. The snowmelt ended abruptly, especially in the Wind River Mountains as another storm stalled over Wyoming on Memorial Day weekend. Rainfall totals from one half to an inch or more were common in the Wind River basin and the mountain snowpack was accumulating once more. The Shoshone basin didn't receive as much precipitation but colder temperatures did reduce the inflow to Buffalo Bill Reservoir. While there was some accumulation of snowpack in both the Shoshone and Wind River basins at times during the month, the overall result was a loss. In the Shoshone drainage the snowpack fell 22 percent, to 35 percent of average on June 1^{st}. The snowpack in the Wind River basin was 86 percent of average on June 1^{st}, an eight percent drop during May. As was the case in May, it took the first half of June before temperatures returned to more seasonal norms. As temperatures in the mountains reached the 60's and 70's, a second round of runoff began as the remaining snowpack melted. Inflow to Buffalo Bill did not quite reach the flows that occurred in May but the inflow to Boysen peaked on June 24^{th} with an average flow for the day of 9,124 cfs. June precipitation remained above average in the Shoshone drainage, but fell well below average in the Wind River basin. Precipitation during the remainder of the summer was below average in the Wind River basin while the Shoshone basin received slightly above average precipitation for the July through September period.

The 2005 mountain snow water content for the drainage basins in Wyoming is shown on Table WYT1. The 2005 water supply forecasts are shown on Table WYT2 and the 2005 precipitation in inches and the percent of average is shown on Table WYT3.

TABLE WYTI

2005 MOUNTAIN SNOW WATER CONTENT'
AS A PERCENT OF THE 1971-2000 AVERAGE

DRAINAGE BASIN	JAN 1		FEB 1		MAR 1		APR 1		MAY 1	
	INCHES	%	INCHES	%	INCHES	%	INCHES	%	INCHES	%
BULL LAKE	5.68	102	7.48	102	8.35	92	10.15	90	10.00	96
BOYSEN	7.16	109	9.42	101	10.72	94	12.67	90	13.23	94
BUFFALO BILL	5.76	66	7.26	59	8.81	58	10.96	60	11.09	57

A composite of the following Natural Resources Conservation rvation Service SNOTEL sites was used to determine snow water content and percent of average for the basins:

Bull Lake .... Cold Springs, Elkhart Park, Hobbs Park, and St. Lawrence Alt;

Boysen Burroughs Creek, Cold Springs, Hobbs Park, Kirwin, Little Warm, St. Lawrence Alt, South Pass, Togwotee Pass, Townsend Creek, and Younts Peak;

Buffalo Bill ....Biackwater, Evening Star, Kirwin, Marquette, Sylvan Lake, Sylvan Road, and Younts Peak

TABLE WYT2

2005 WATER SUPPLY FORECASTS OF APRIL - JULY SNOWMELT RUNOFF

	JAN 1		FEB 1		MAR 1		APR 1		MAY 1		JUN 1		ACTUAL APR-JULY		% OF APRIL FORECAST RECEIVED
	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG	KAF	% OF AVG	
BULL LAKE	150	108	150	108	135	97	135	97	140	100	160	115	154.6	111	115
BOYSEN	525	92	510	89	400	70	400	70	420	73	575	100	589.2	103	147
BUFFALO BILL	500	75	450	68	425	64	400	60	400	60	485	73	513.4	77	128

Averages are based on the1 975-2004 period

TABLE WYT3

PRECIPITATION IN INCHES AND PERCENT OF AVERAGE

BASIN	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%	IN.	%
VALLEY PRECIPITATION '																								
BUFFALO BILL																								
MONTHLY PRECIP AND % OF AVERAGE	1.62	148	0.45	41	0.60	58	134	117	0.38	42	0.90	83	0.91	70	3.35	160	2.78	140	0,87	58	2.13	168	1.30	99
YEAR-TO-DATE PRECIP AND % OF AVERAGE	1.62	148	2.07	95	2.67	83	4.01	92	4.39	84	5.29	84	6.20	81	9.55	98	12.33	105	13.20	100	15.33	1.06	16.63	105
BOYSEN																								
MONTHLY PRECIP AND % OF AVERAGE	0.62	81	0.37	74	0.13	45	0.31	118	0.04	11	0.50	82	1.35	112	3.75	204	0.49	39	0.18	20	0.63	96	0.63	66
YEAR-TO-DATE PRECIP AND % OF AVERAGE	0.62	81	0.99	78	0.99	78	1.43	79	1.47	68	1.97	71	3.32	83	7.07	121	7.56	.07	7.47	97	8.37	97	9.00	94
BULL LAKE																								
MONTHLY PRECIP AND % OF AVERAGE	0.45	72	0.39	90	0.16	71	0.14	71	0.05	18	0.25	52	1.58	1.38	4.07	228	0.59	46	017	17	0.69	89	0.73	71
YEAR-TO-DATE PRECIP AND % OF AVERAGE	0.45	72	0.39	90	1.00	78	1.14	77	1.19	68	1.44	65	3.02	89	7.09	137	7.68	119	7.85	106	8.54	104	29.27	100
MOUNTAIN PRECIPITATION 2																								
BUFFALO BILL																								
MONTHLY PRECIP AND % OF AVERAGE	2.80	117	1.40	38	2.20	71	1.90	63	1.50	60	2.10	75	2.70	79	5.20	137	3.10	103	1.10	50	3.10	194	2.60	118
YEAR-TO-DATE PRECIP AND % OF AVERAGE	2.80	117	4.20	69	6.40	70	8.30	70	9.80	67	11.90	68	14.60	70	19.80	80	22.80	93	23.60	80	25.60	86	27.20	92
BOYSEN																								
MONTHLY PRECIP AND % OF AVERAGE	2.90	138	1.60	53	2.30	92	2.60	104	1.20	55	1.80	62	3.30	94	4.90	144	2.20	92	0.80	47	2.00	143	1.60	80
YEAR-TO-DATE PRECIP AND % OF AVERAGE	2.90	138	4.50	88	6.80	89	9.40	93	10.60	86	12.40	82	15.70	84	20.60	93	22.80	93	23.60	90	25.60	93	27.20	92
BULL LAKE																								
MONTHLY PRECIP AND % OF AVERAGE	2.70	135	1.70	77	1.40	82	2.20	138	0.90	56	1.80	75	3.40	106	4.90	144	1.70	74	0.30	20	1.99	136	0.70	37
YEAR-TO-DATE PRECIP AND % OF AVERAGE	2.70	135	4.40	105	5.80	98	8.00	1.07	8.90	98	10.70	93	14.10	96	19.00	105	20.70	101	21.00	96	22.90	98	23.60	94

[1] A composite of the following National Weather Service stations was used to determine monthly valley precipitation and percent of average for the drainage basins:

Bull Lake........Burris, Diversion Dam, and Dubois;

Boysen........ Boysen Darn, Burris, Diversion Darn, Dubois, Lander, and Riverton;

Buffalo Bill......Buffalo Bill Dam, Lake Yellowstone, and Tower Falls

[2] A composite of the following Natural Resources Conservation Service SNOTEL sites was used to determine monthly mountain precipitation and percent of average for the drainage basins:

Bull Lake.........Cold Springs, Elkhart Park, Hobbs Park, and St. Lawrence Alt;

Boysen...........Burroughs Creek, Cold Springs, Hobbs Park, Kirwin, Little Warm, St. Lawrence Alt, South Pass, Togwotee Pass, Townsend Creek. and Younts Peak;

Buffalo Bill.......Blackwater, Evening Star, Kirwin, Marquette, Sylvan Lake, Sylvan Road, and Younts Peak

Averages for Valley Precipitation are based on the 1975-2004 period

Averages for Mountain Precipitation are based on the 1971-2000 paved

FLOOD BENEFITS

Reservoir	Local	Main Stem	2005 Total	Previous Accumulation	1950 - 2005 Accumulation Total
Bull Lake[2]	$ 0	$ 0	$ 0	$ 2,690,300	$ 2,690,300
Boysen	$ 0	$ 6,968,100	$ 0	$81,283,800	$88,251,900
Buffalo Bill[2]	$ 422,100	$ 0	$ 0	$10,567,300	$10,989,400

1/ This data is received from the Army Corps of Engineers Omaha District Office and is revised every October. The period of assessment is 1950 through 2005.
2/ No space is allocated to flood control, but some flood protection is provided by operation for other purposes.

Riverton Unit

The Riverton Project was reauthorized as the Riverton Unit Pick-Sloan Missouri Basin Program (P-S MBP) on September 25, 1970. Major facilities of this unit are Bull Lake Reservoir, Wind River Diversion Dam, Wyoming Canal, Pilot Butte Powerplant, Pilot Butte Reservoir, and Pilot Butte Canal. The major facilities provide water for irrigation of about 76,000 acres on the Midvale Irrigation District (Midvale). The water supply comes partly from the natural flow of the Wind River and partly from water stored in Bull Lake and Pilot Butte Reservoirs.

Bull Lake Reservoir is located on Bull Lake Creek, a tributary of the Wind River near Crowheart, Wyoming. Bull Lake has an active capacity of 151,737 acre-feet (AF), and is above all unit land. It is the principal storage facility for the unit and is operated by Midvale under contract with Reclamation. A small amount of incidental flood control benefit is provided by normal operation for other purposes. Bull Lake also provides a water resource for enhancing fish, wildlife, and recreation.

Bull Lake held 89,664 AF of water at the start of water year 2005, which was 116 percent of the normal end of September content and 59 percent of capacity. Irrigation diversions into the Wyoming Canal ended on September 30, 2004. Releases from Bull Lake were reduced to approximately 25 cfs at the end of the irrigation season to conserve the remaining storage in Bull Lake.

During water year 2004, Midvale entered into an agreement with Reclamation that allowed the storage of Boysen water in Bull Lake by exchange. Because of this agreement, Bull Lake ended the water year at a higher content. Once irrigation season ended, the Boysen water in Bull Lake was transferred back to Boysen at a rate of approximately 20 cfs to provide a winter flow in Bull Lake Creek. Inflow during October, November, and December was well above average and the content of Bull Lake began to increase as soon as irrigation releases ended. By the end of December, storage in Bull Lake had increased to 102,960 AF, which was 135 percent of average. On January 1, snowpack in the basin above Bull Lake was 102 percent of average. Water supply forecasts were prepared each month, beginning in January and continuing through June, for the April-July snowmelt runoff period. The January forecast indicated the April-July snowmelt runoff would be approximately 150,000 AF, which was 108 percent of average. Precipitation in the mountains above Bull Lake was above average during January and the snowpack remained above average through the month. On February 1st the snowpack was the same as it was on January 1st, 102 percent of average, and the April-July snowmelt runoff forecast remained at 150,000 AF. Inflow during January and February continued to exceed average and at the end of February, Bull Lake held 104,741 AF of water at elevation 5788.87 feet. Precipitation during February and March was below average and by April 1st the snowpack had fallen to 90 percent of average. The forecasts prepared on March 1st and April 1st both indicated the April-July inflow to Bull Lake would be about 135,000 AF.

Midvale began diverting water into Wyoming Canal on April 7th, utilizing the natural flow in the Wind River to flush the canal system and irrigation deliveries began on April 20th. Releases from Bull Lake were increased as irrigation water was needed to supplement diversions from the Wind River prior to the start of runoff. April precipitation was above average and the snowpack improved to 96 percent of average on May 1st, resulting in a small increase in the May 1 forecast to 140,000 AF. As Wind River flows increased in mid-May, project demands were met with natural flow from the river and Bull Lake releases were cut back. Flows in Bull Lake Creek above Bull Lake were also increasing at this time and the reservoir level rose over eleven feet in the last half of May, to

5800.67 feet on May 31st. Cooler temperatures moved into the area at the end of May and remained until mid-June, slowing the runoff considerably. When warmer weather returned, a second round of runoff began and inflow to Bull Lake peaked on June 21st at 1,972 cfs. Higher releases were required to control the rate at which Bull Lake was rising and the peak release of 1,900 cfs occurred on June 22nd. As inflows subsided, releases were adjusted as necessary to control the reservoir level which was approaching the top of the active conservation pool. The reservoir reached a maximum content of 151,390 AF on July 10th at elevation of 5804.66 feet. This was 1,069 AF and 0.34 feet below the top of the active conservation pool. Inflow to Bull Lake remained near normal during July, but as flows in the Wind River declined and the use of Bull Lake storage was needed to satisfy the irrigation demand, the reservoir level began to fall. August and September inflows were below average while above average releases were made during the period and Bull Lake ended the water year with 66,804 AF of water in storage at elevation 5774.02 feet. For the first time since the 2000 irrigation season, releases from Bull Lake for irrigation continued into October.

Actual April-July inflows totaled 154,602 AF, 111 percent of average. Total inflow to Bull Lake for the water year was 202,308 AF, which was 108 percent of average. The flow of the Wind River above the mouth of Bull Lake Creek was estimated to be 97 percent of average, totaling 403,509 AF during the April-July period. The total diversion into the Wyoming Canal for the April-September period was 340,964 AF, 100 percent of average.

Additional hydrologic and statistical information pertaining to Bull Lake operations during 2005 can be found in Table WYT4 and Figure WYG1.

Pilot Butte Reservoir, an off-stream reservoir near Kinnear, Wyoming, receives its water supply from the Wind River through the Wyoming Canal. Pilot Butte Reservoir has a total capacity of 33,721 AF. Of this amount, 3,803 AF is allocated for inactive and dead storage and 29,918 AF for active conservation storage. Pilot Butte Dam and the Wyoming Canal which supplies the reservoir are operated by Midvale under contract with Reclamation.

Pilot Butte Reservoir began water year 2005 with a total storage content of approximately 18,764 AF at elevation 5441.24 feet. Diversions into the Wyoming Canal ended on September 30th and the reservoir level continued to fall until releases to Pilot Canal ended on October 5, 2004. As natural flow in the Wind River became available following the 2004 irrigation season, diversions into Wyoming Canal were reinstated on October 11th in order to refill Pilot Butte Reservoir. Diversions continued through October 23rd when storage in the reservoir reached 27,903 AF at elevation 5453.27 feet. After diversions into the lake were terminated for the year, the reservoir level slowly fell through the winter as evaporation reduced the content. Storage on March 31st was 26,941 AF at elevation 5452.10 feet. Diversions into Pilot Butte began on April 9th and the reservoir reached its maximum storage content for the year of 32,311 AF at elevation 5458.42 feet on July 14, 2005. Releases from Pilot Butte began on April 4th to flush the canal and irrigation deliveries were initiated on April 20th. Water supply conditions in 2005 were much improved over the past few years and storage in Pilot Butte remained above average into August. At the end of water year 2005, Pilot Butte held 15,435 AF of water at elevation 5436.17 feet, with irrigation deliveries from Pilot Canal continuing into October.

Total generation at the Pilot Butte Powerplant in water year 2005 was 4,482,000 kilowatt-hours (kWh). During water year 2005, 48,783 AF or 28 percent of the water that entered the reservoir was used to generate power at Pilot Butte Powerplant.

Additional hydrologic and statistical information pertaining to Pilot Butte Reservoir during 2005 can be found in Table WYT5 and Figure WYG2.

TABLE WYT4
HYDROLOGIC DATA FOR WATER YEAR 2005
BULL LAKE RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	5739.00	722	722
TOP OF ACTIVE CONSERVATION	5805.00	152,459	151,737
STORAGE-ELEVATION DATA	**ELEVATION (FEET)**	**STORAGE (AF)**	**DATE**
BEGINNING OF YEAR	5783.24	89,664	OCT 01, 2004
END OF YEAR	5774.02	66,804	SEP 30, 2005
ANNUAL LOW	5774.02	66,804	SEP 30, 2005
HISTORIC LOW*	5743.03	6,228	MAR 31, 1950
ANNUAL HIGH	5804.66	151,390	JUL 10, 2005
HISTORIC HIGH	5805.70	154,677	AUG 10, 1965

* Prior to 1952 daily records are not available. End of month data was used to determine the historic low.

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	202,308	OCT 04-SEP 05	225,033	OCT 04-SEP 05
DAILY PEAK (cfs)	1,972	JUNE 21, 2005	1,900	JUN 22, 2005
DAILY MINIMUM (cfs)	10	MAR 13, 2005	23	OCT 27, 2004
PEAK SPILLWAY FLOW (cfs)			0	
TOTAL SPILLWAY FLOW (AF)			0	

	INFLOW		OUTFLOW		CONTENT	
MONTH	KAF	% of Avg*	KAF	% of Avg*	KAF	% of Avg*
OCTOBER	10.0	200	2.0	30	97.5	129
NOVEMBER	5.5	196	1.4	56	101.5	134
DECEMBER	2.9	121	1.5	75	103.0	135
JANUARY	2.8	133	1.5	75	104.3	137
FEBRUARY	1.8	113	1.3	81	104.7	137
MARCH	1.6	89	1.5	83	104.8	137
APRIL	3.9	111	3.4	100	105.3	138
MAY	41.9	158	8.1	56	139.0	157
JUNE	60.7	100	50.0	216	149.7	119
JULY	48.2	99	51.8	112	146.0	114
AUGUST	18.2	83	44.2	95	120.0	115
SEPTEMBER	4.9	51	58.2	161	66.8	86
ANNUAL	202.3	108	225.0	121		

APRIL - JULY INFLOW (AF)	
ACTUAL	AVERAGE
154,602	139,400

* Average for the 1975-2004 period

FIGURE WYG1

BULL LAKE RESERVOIR NEAR LENORE

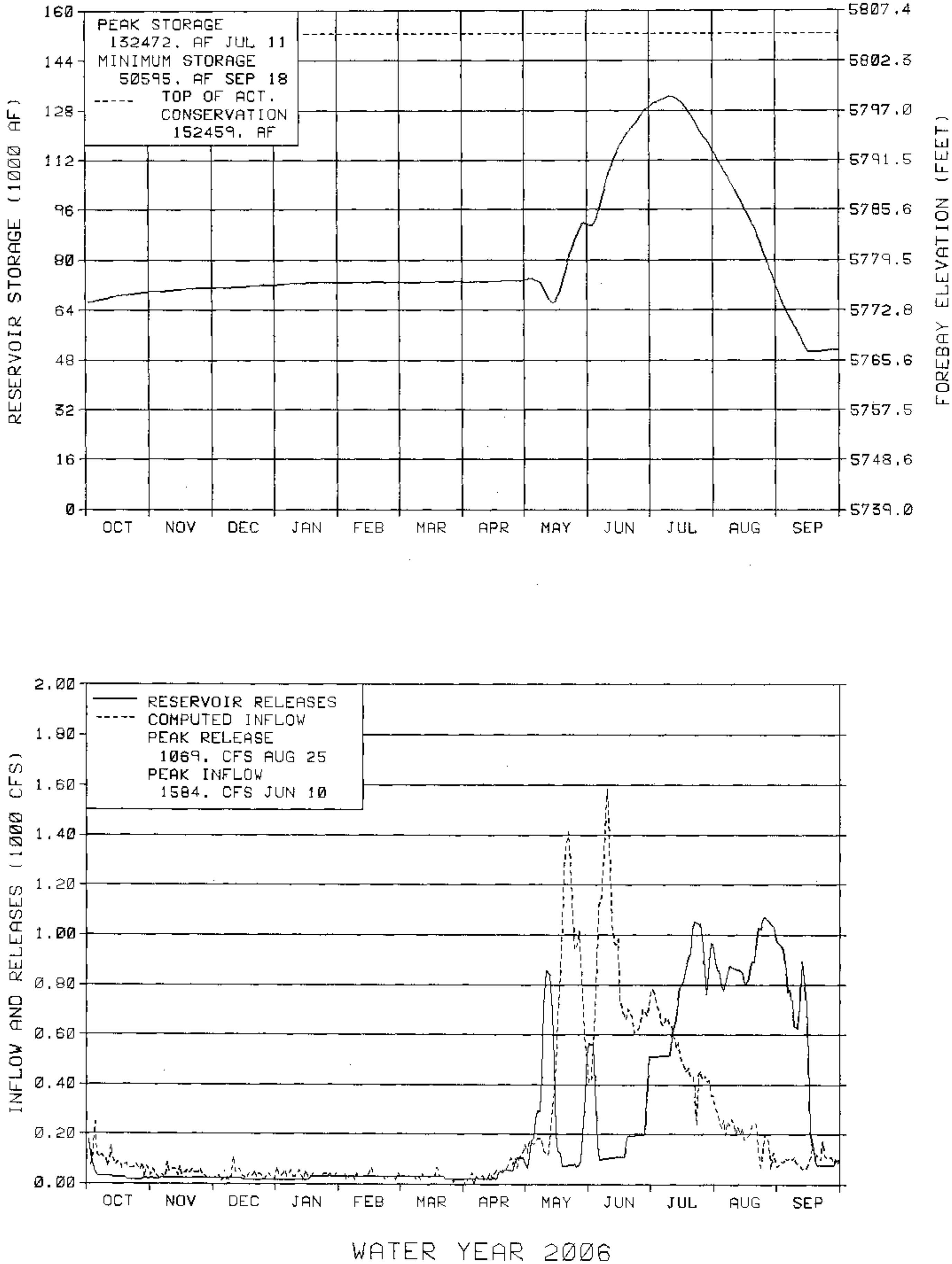


TABLE WYT5
HYDROLOGIC DATA FOR WATER YEAR 2005
PILOT BUTTE RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	5410.00	3,803	3,803
TOP OF ACTIVE CONSERVATION	5460.00	33,721	29,918

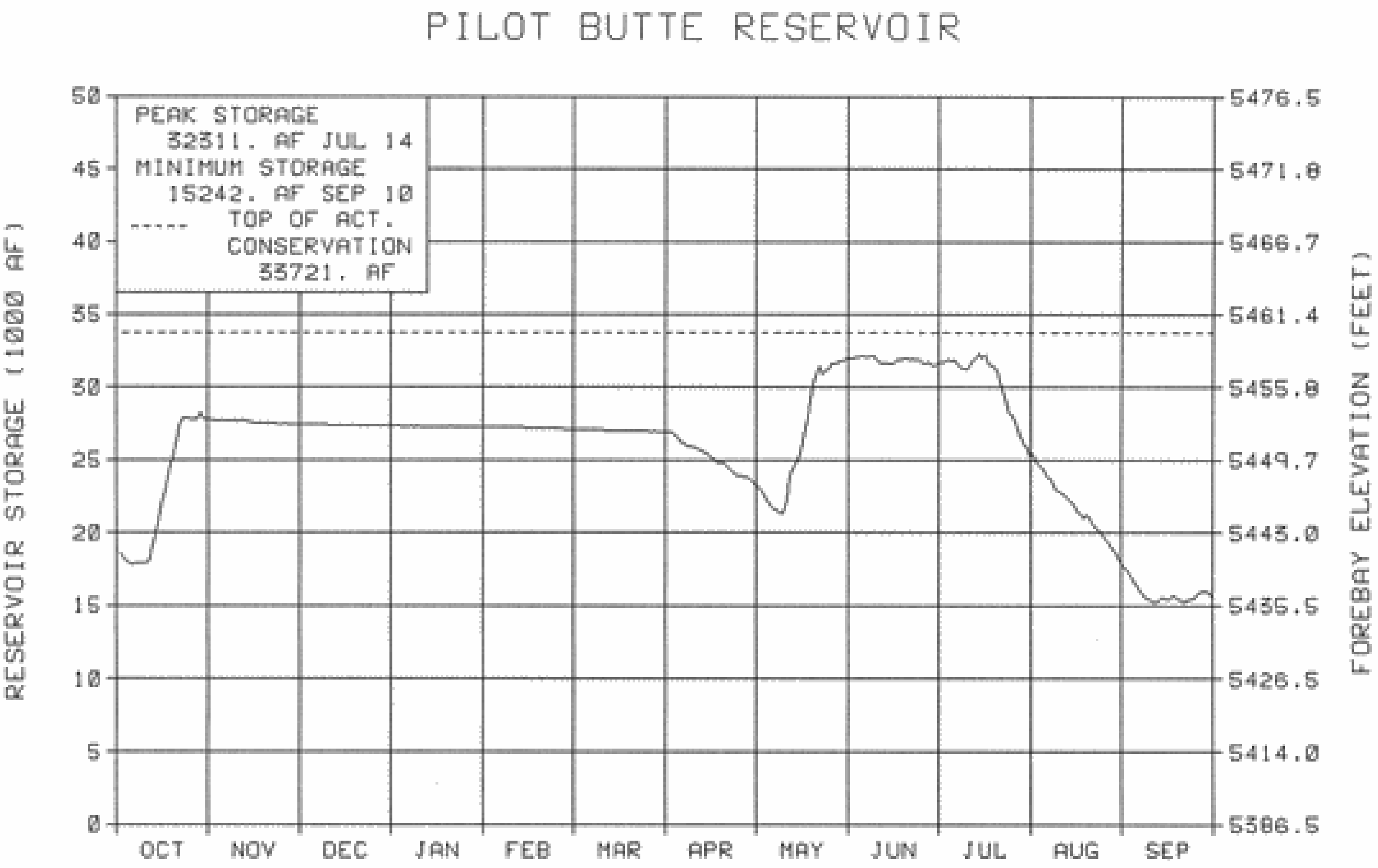
STORAGE-ELEVATION DATA	ELEVATION (FEET)	STORAGE (AF)	DATE
BEGINNING OF YEAR	5441.24	18,764	OCT 01, 2004
END OF YEAR	5436.17	15,435	SEP 30, 2005
ANNUAL LOW	5435.86	15,242	SEP 10, 2005
HISTORIC LOW	5409.96	3,792	SEP 19, 2001
ANNUAL HIGH	5458.42	32,311	JUL 14, 2005
HISTORIC HIGH	5460.00	36,910	7/7/73 & 6/24/89

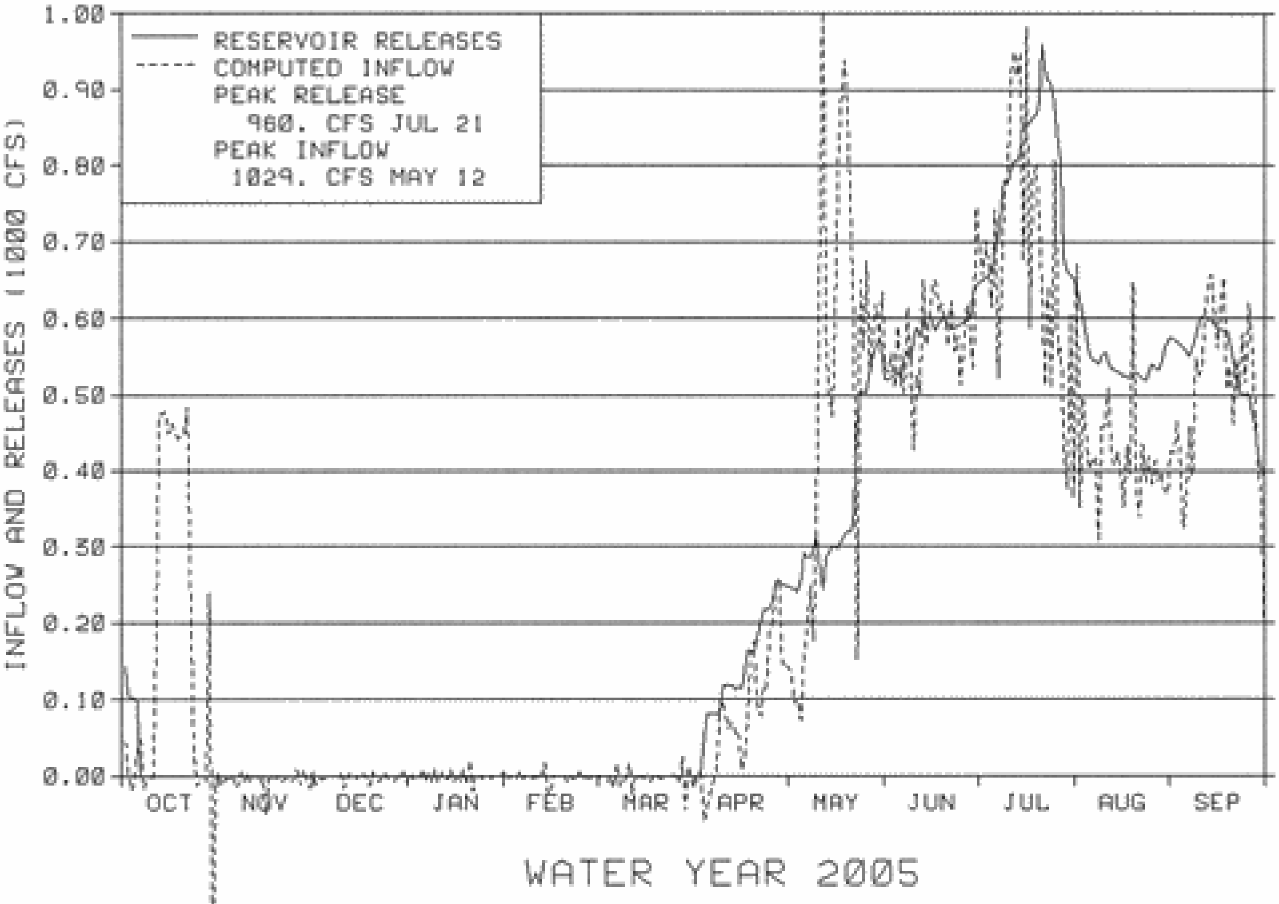
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	177,071	OCT 04-SEP 05	179,546	OCT 04-SEP 05
DAILY PEAK (cfs)	2,042	MAY 12, 2005	960	JULY 21, 2005
DAILY MINIMUM (cfs)	0	WINTER MONTHS	0	WINTER MONTHS
PEAK SPILLWAY FLOW (cfs)			0	
TOTAL SPILLWAY FLOW (AF)			0	

	INFLOW*		OUTFLOW		CONTENT	
MONTH	KAF	% of Avg**	KAF	% of Avg**	KAF	% of Avg**
OCTOBER	10.1	119	1.1	55	27.8	123
NOVEMBER	-0.3	0	0.0	0	27.5	116
DECEMBER	-0.1	0	0.0	0	27.4	116
JANUARY	-0.1	0	0.0	0	27.3	116
FEBRUARY	-0.1	0	0.0	0	27.1	116
MARCH	-0.2	0	0.0	0	26.9	105
APRIL	4.8	58	8.3	160	23.5	82
MAY	30.4	136	21.9	86	32.0	126
JUNE	34.0	88	34.3	94	31.6	114
JULY	41.8	99	48.1	103	25.4	110
AUGUST	26.0	79	33.7	93	17.7	90
SEPTEMBER	29.9	125	32.2	119	15.4	95
ANNUAL	177.1	98	176.0	98		

* Negative values are the result of calculated inflow based on reservoir release and change in reservoir content.
** Average for the 1975-2004 period.

FIGURE WYG2


PILOT BUTTE RESERVOIR
PEAK STORAGE
32311. AF JUL 14
MINIMUM STORAGE
15242. AF SEP 10
TOP OF ACT. CONSERVATION
33721. AF
RESERVOIR STORAGE (1000 AF)
FOREBAY ELEVATION (FEET)
50
45
40
35
30
25
20
15
10
5
0
5476.5
5471.0
5466.7
5461.4
5455.8
5449.7
5443.0
5435.5
5426.5
5414.0
5386.5
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP


RESERVOIR RELEASES
COMPUTED INFLOW
PEAK RELEASE
960. CFS JUL 21
PEAK INFLOW
1029. CFS MAY 12
INFLOW AND RELEASES (1000 CFS)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
WATER YEAR 2005

Boysen Reservoir and Powerplant

Boysen Reservoir (P-S MBP) is located on the Wind River above Thermopolis, Wyoming. The dam and reservoir were built for flood control, power generation, irrigation, recreation, and fish and wildlife. Boysen Reservoir has a total capacity of 892,226 AF. Of this amount, 219,181 AF is allocated for inactive and dead storage, 522,413 AF for active conservation storage, and 150,632 AF for exclusive flood control storage. Of the amount allocated for active conservation, 144,229 AF is specifically allocated for joint-use flood control storage. All of the joint-use space is located between elevation 4717.00 feet and elevation 4725.00 feet, which is the top of the spillway gates when closed. The exclusive flood control space is located between elevation 4725.00 feet and elevation 4732.20 feet. When the reservoir rises above elevation 4724.50 feet, the spillway gates must be partially opened to maintain ½ foot of the gates above the water to prevent over-topping of the gates. When all flood control space is filled, releases cannot be controlled to less than 14,000 cfs.

Irrigation water is provided from the reservoir for several units, both upstream and downstream of Boysen Dam. Water is furnished downstream to about 7,500 acres in the Hanover-Bluff Unit (P-S MBP) and 3,400 acres on the Lucerne Canal in the Owl Creek Unit (P-S MBP). Supplemental water is also furnished to other irrigation districts and to a number of individual water users below the Dam. The Bighorn Canal Irrigation District and Hanover Irrigation District receive water under long term contracts with Reclamation. Depending on availability, water is also provided to Bluff Irrigation District, Kirby Ditch Company, Lower Hanover Canal Association, Bighorn Canal Irrigation District, and Hanover Irrigation District utilizing temporary water service contracts. In addition, water is provided on a demand basis, by exchange, to Midvale, Riverton Valley, and LeClair Irrigation Districts located on the Wind River upstream of the reservoir. Riverton Valley and LeClair Irrigation Districts hold long term contracts with Reclamation.

Water year 2005 began with 515,208 AF of water stored in Boysen Reservoir, which was 91 percent of the 30 year average. The corresponding reservoir elevation of 4711.60 feet was 13.4 feet below the top of the joint use pool. Irrigation releases for the 2004 season ended on September 30, 2004, as the demand for irrigation water fell below the planned fall and winter release of 400 cfs. With a release of 400 cfs and above average October inflow, the reservoir level began to rise and on October 31st storage in the reservoir had increased to 557,732 AF. Precipitation during October was below average at the lower elevation Weather Service stations but snowpack in the mountains began to accumulate following a storm on October 19th and 20th. Another storm on the 31st brought additional snow to the Wind River Mountains and the snowpack stood at 166 percent of average on November 1st. Boysen Reservoir inflow continued to be above average during November and December and as winter approached, the snowpack began to level out at near average conditions. By the end of December, the reservoir storage had increased to 605,243 AF at elevation 4717.48 feet.

Forecasts of April-July snowmelt runoff were prepared at the beginning of each month beginning in January and continuing through June. On January 1st the snowpack in the mountains above Boysen was 109 percent of average and the forecast indicated approximately 525,000 AF of water, 92 percent of average, would enter Boysen Reservoir during the April-July snowmelt runoff period. Precipitation during January was above average at lower elevations but the snowpack accumulation in the mountains was below average and fell to 101 percent of average on February 1st. With snow conditions declining from the previous month, compared to average, the February 1 forecast of April-July runoff was lowered to 510,000 AF. February was warmer and much drier than normal and the snowpack dropped below average. Many of the Weather Service observers in the Wind River valley received no precipitation during the month. Inflow during February was slightly above average and with the reservoir release maintained at 400 cfs, Boysen content continued to make good gains. At the end of February, Boysen Reservoir held 638,870 AF of water at elevation 4719.46 feet. This was the second highest content at the end of February in the fifty-four years since the Dam was closed. The March 1 snowpack in the basin was still pretty good at 94 percent of average, but the prospect of a warm and dry weather pattern continuing through the spring made the previous forecasts look high. The March 1 snowmelt runoff forecast was lowered substantially to 400,000 AF, which was 70 percent of average. March precipitation was below average, while temperatures remained above average and the snowpack fell a little further below average during the month. The reservoir continued to rise through March and recorded the highest end of March content of record, 653,505 AF at elevation 4720.29 feet. On April 1st the snowpack in the basin was 90 percent of average and the forecast of April-July snowmelt runoff remained at 400,000 AF.

With the reservoir less than five feet from the top of the active conservation pool, releases were increased on April 1st to control the rate of fill. Irrigation demands required further increases beginning on April 3rd. Both temperature and precipitation were near normal in April and the snowpack remained near 90 percent of average through the month. Little snowmelt runoff occurred during April and inflows could not match the release from the Dam. The reservoir level dropped 1.27 feet over the month, with a ½ foot drop occurring between April 12th and 13th during a flushing flow release.

For the first time since 1999, conditions were such that a flushing flow release could be made below Boysen Dam. Flushing flows are designed to simulate high runoff events which occurred in the river prior to flows being controlled by the dam. The rapidly increasing flows flush the fine sediment from the spawning gravels in the river, improving the spawning habitat for trout. Early on the morning of April 12th releases were increased from 950 cfs to 3,000 cfs, with another increase to 5,000 cfs occurring five hours later. The 5,000 cfs release was maintained for ten hours and then gradually reduced to 950 cfs, where it remained through the end of the month. During the flushing flow, approximately 7,500 AF of water was released above the amount needed to meet the irrigation demand.

With the runoff delayed into May, the forecast on May 1st was increased to 420,000 AF. Colder than normal temperatures continued to delay the runoff and precipitation during that same period was well above average. In anticipation of the expected runoff, releases from the Dam were gradually increased through the first half of the month and the reservoir level dropped slightly. When warmer temperatures moved in to the basin during the last half of the month inflows increased rapidly. In response to the runoff, releases were increased to powerplant capacity of approximately 2,300 cfs on May 18th. As the reservoir rose to within three feet of the top of the joint use pool on May 25th, releases in excess of 2,300 cfs were required and a spillway release was initiated. By the end of May the reservoir had risen to elevation 4722.92 feet and the release from the Dam was approximately 3,500 cfs. Cooler weather and more precipitation returned during the last week of May and inflows dropped from a peak of almost 8,000 cfs on May 25th to about 4,300 cfs on the 31st.

June was a repeat of May as the first half of the month was colder and wetter than normal. Inflows continued to slowly fall, as did the reservoir level with releases maintained at 3,500 cfs. During the middle of the month spillway releases were reduced for about a week before temperatures climbed above average and a second round of runoff began. There was still plenty of snow in the high country and as summertime temperatures arrived, the melt out was on again with inflows to Boysen peaking higher than they did in May. Daily inflows averaged over 7,000 cfs from June 19th through June 26th, peaking at 9,124 cfs on the 24th. The reservoir reached a maximum content of 740,026 AF at elevation of 4724.92 feet on June 27th. This was only 1,568 AF and .08 feet below the top of the joint use pool. To control the reservoir level and to provide adequate freeboard on the spillway gates, releases through the spillway were increased through the period of high inflows and the maximum total release to the river of 5,580 cfs occurred on June 26th. The warm temperatures brought the remaining snow off rapidly and following the peak, inflows fell off quickly. As inflows declined and the reservoir level began to fall, the release through the spillway was also reduced and the spillway gates were closed on July 8th. As conditions allowed, the release was gradually reduced to approximately 1,400 cfs to provide adequate flows for irrigation needs as well as evacuating some storage from the reservoir. At the end of July the content of the reservoir stood at 710,152 AF at elevation 4723.37 feet. Inflow during July, August, and September was about 60 percent of average while releases above irrigation demand were maintained through the period. As a result, the reservoir level slowly fell through the remainder of the water year.

Actual inflow for the April-July period totaled 589,216 AF, which was 103 percent of average. Total inflow to Boysen during water year 2005 was 945,178 AF, 98 percent of average. The reservoir ended the water year at 4719.06 feet with a content of 631,932 AF. This was 112 percent of the average end of September content. During water year 2005, Boysen Powerplant generated 56,523,000 kWh of electricity, about 80 percent of average and 26,384,000 kWh more than was generated in 2004. Of the 828,458 AF of water released from Boysen in water year 2005, 670,425 AF was discharged through the powerplant and 158,033 AF bypassed the powerplant.

Important Events - 2005

September 30, 2004: Irrigation demand fell below the planned fall and winter release of 400 cfs, ending storage use accounting. The fall and winter release for water year 2005 was set at 400 cfs.

October 15, 2004: Boysen Reservoir fall water information meeting was held in Worland to discuss water year 2004 operations, expected 2005 operation, and the winter release.

March 22, 2005: Boysen Reservoir spring water information meeting was held in Worland to discuss the water supply and proposed operation of Boysen Reservoir in 2005.

April 3, 2005: The release from the Dam was increased to meet irrigation demand and evacuate storage in anticipation of spring runoff.

April 12-13, 2005: Reservoir releases were adjusted as requested by Wyoming Game and Fish to provide a flushing flow in the river below Boysen Dam.

May 25-July 8, 2005: Releases were made through the spillway gates.

June 27, 2005: Boysen Reservoir reached a maximum elevation for the water year of 4724.92 feet.

October 1, 2005: The release from Boysen Reservoir was reduced to the planned winter release of 950 cfs.

Additional hydrologic and statistical information pertaining to the operation of Boysen Reservoir can be found in Table WYT6 and Figure WYG3.

TABLE WYT6
HYDROLOGIC DATA FOR WATER YEAR 2005
BOYSEN RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	4685.00	219,181	219,181
TOP OF ACTIVE CONSERVATION	4717.00	597,365	378,184
TOP OF JOINT USE	4725.00	741,594	144,229
TOP OF EXCLUSIVE FLOOD CONTROL	4732.20	892,226	150,632

STORAGE-ELEVATION DATA	ELEVATION (FEET)	STORAGE (AF)	DATE
BEGINNING OF YEAR	4711.60	515,208	OCT 01, 2004
END OF YEAR	4719.06	631,932	SEP 30, 2005
ANNUAL LOW	4711.60	515,208	OCT 01, 2004
HISTORIC LOW ELEVATION *	4684.18		MAR 18, 1956
HISTORIC LOW CONTENT *		235,737	SEP 24, 2002
ANNUAL HIGH	4724.92	740,026	JUN 27, 2005
HISTORIC HIGH	4730.83	922,406	JUL 06, 1967

* Because storage space in a reservoir is lost as sediment is trapped behind the dam, reservoirs are resurveyed periodically to determine actual capacity. Based on the 1994 resurvey of Boysen Reservoir, the historic low content of 235,737 AF occurred at an elevation that was 2.69 feet higher than the historic low elevation.

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	945,178	OCT 04-SEP 05	828,458*	OCT 04-SEP 05
DAILY PEAK (cfs)	9,124	JUN 24, 2005	5,580	JUN 26, 2005
DAILY MINIMUM (cfs)	51	MAR 23, 2005	387	FEB 25, 2005
PEAK SPILLWAY FLOW (cfs)**			3,994	JUN 28, 2005
TOTAL SPILLWAY FLOW (AF)**			150,009	MAY 26-JUL 8, 2005

* Of the 828,458 AF of water released from Boysen Reservoir, 158,033 AF bypassed the powerplant.
**Spillway flow refers to water released through the spillway to control the reservoir level.

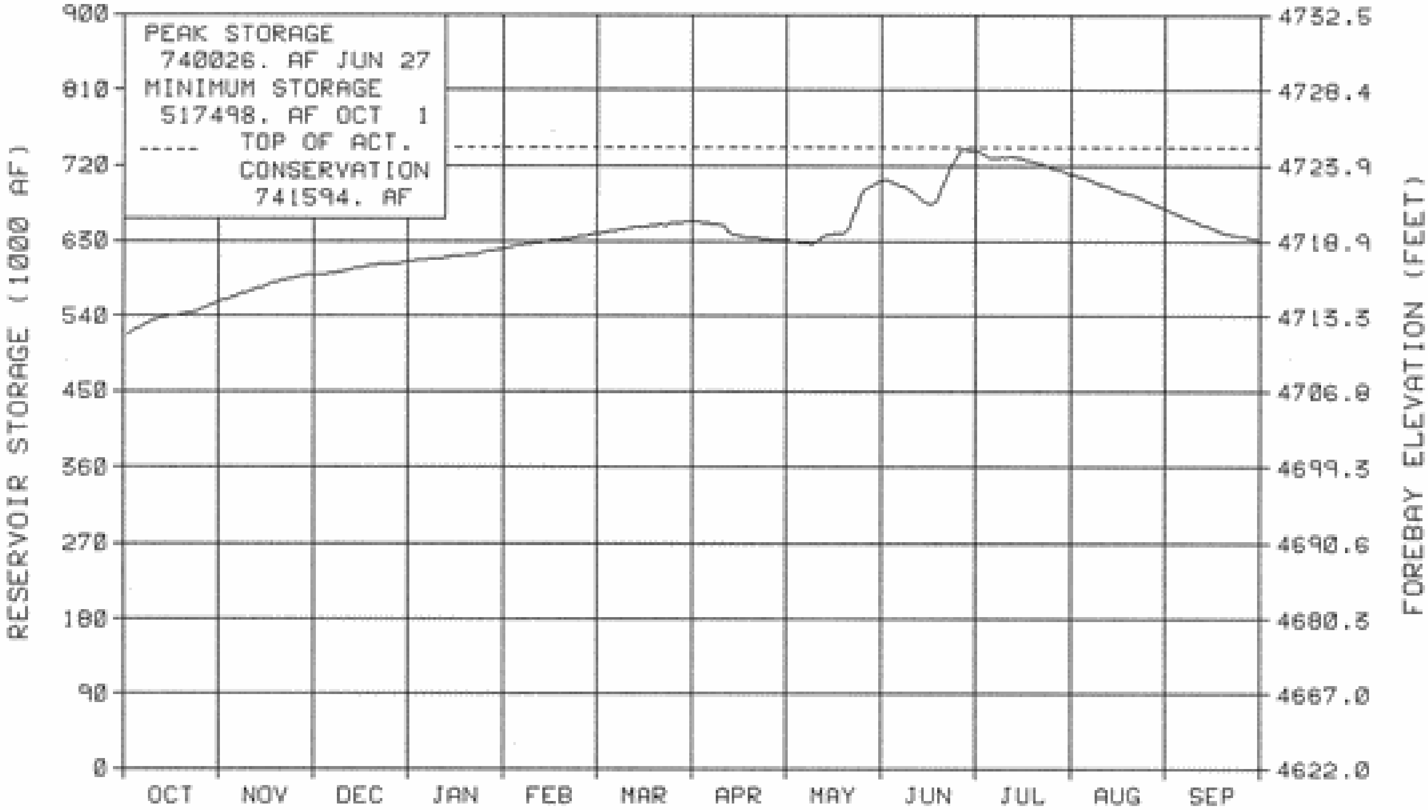
	INFLOW		OUTFLOW		CONTENT	
MONTH	KAF	% of Avg*	KAF	% of Avg*	KAF	% of Avg*
OCTOBER	67.4	110	24.8	37	557.7	99
NOVEMBER	55.1	113	23.8	40	589.0	106
DECEMBER	41.1	106	24.8	40	605.2	113
JANUARY	42.4	116	25.1	43	622.5	121
FEBRUARY	38.7	102	22.3	43	638.9	127
MARCH	39.3	73	24.7	39	653.5	132
APRIL	38.9	79	61.1	86	631.2	133
MAY	187.7	150	117.3	125	701.6	140
JUNE	264.6	106	228.7	171	737.5	121
JULY	98.1	66	125.4	86	710.2	117
AUGUST	39.4	61	81.4	88	668.2	115
SEPTEMBER	32.6	59	68.9	93	631.9	112
ANNUAL	945.2	98	828.5	85		

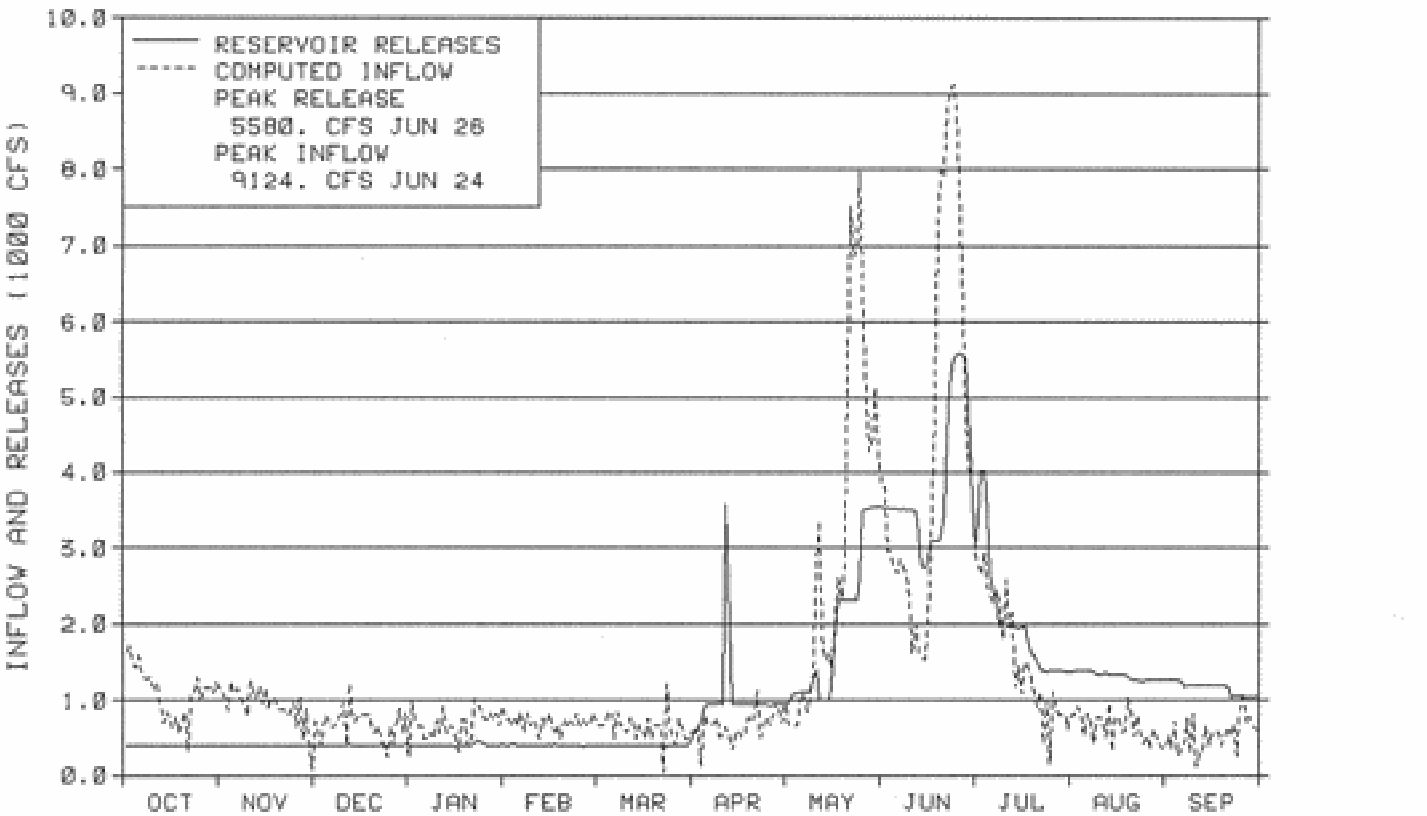
APRIL - JULY INFLOW (AF)	
ACTUAL	AVERAGE
589,216	572,400

- Average for the 1975-2004 period

FIGURE WYG3

BOYSEN RESERVOIR





WATER YEAR 2005

Anchor Reservoir

Anchor Reservoir (P-S MBP) is located on the South Fork of Owl Creek, a tributary of the Bighorn River near Thermopolis, Wyoming. It has a total storage capacity of 17,228 AF, of which 17,160 AF is active storage. It was constructed to furnish a supplemental irrigation supply for the Owl Creek Unit (P-S MBP). The dam was completed in November 1960. However, several major sinkholes developed in the lower portion of the reservoir after it began to fill, and corrective work to plug the sinkholes has not been successful. There have also been substantial water losses through a rock waste area just upstream from the dam. Two dikes, in service since 1979, partition off the portions of the reservoir with high seepage losses. The top of the dikes are at elevation 6415.00 feet, however, when the reservoir rises above elevation 6412.80 feet, water flows through a notch in one of the dikes into the sinkhole area. The reservoir is operated not to exceed elevation 6412.80 feet. Operation and maintenance of Anchor Dam is performed by contract with Owl Creek Irrigation District. To prevent damage to the dikes and minimize the chance of creating new sinkholes, a reservoir restriction is in place at Anchor Reservoir. Reclamation requires notification from the irrigation district any time the reservoir level is expected to exceed elevation 6400.00 feet. Operation above 6400.00 feet will be directed by Wyoming Area Office (WYAO) staff to avoid overtopping of the dikes.

Storage in Anchor Reservoir at the beginning of water year 2005 was 429 AF at elevation 6360.40 feet. The reservoir level remained fairly constant through the winter months and as inflows began to increase in April, releases for irrigation also increased. The snowpack at the Owl Creek Snotel above Anchor reached a peak around the first of April but almost all the snow had melted by the middle of the month. As temperatures warmed in mid-May, inflow began to exceed the release and by the end of May storage in Anchor had increased to 4,060 AF. The maximum daily inflow for the year of 352 cfs occurred on May 20th. Cooler weather during the first half of June brought snow to the mountains and slowed the inflow to Anchor. As more seasonable temperatures returned to the watershed, a second round of runoff entered the reservoir. Anchor reached a maximum content of 5,093 AF at elevation 6403.33 feet on June 25th. The reservoir level dropped rapidly during July as water was released for irrigation. By the end of the month, storage in Anchor was 283 AF with the reservoir level falling over 47 feet in slightly over one month. The reservoir remained at approximately this level through the end of the water year.

Hydrologic and statistical data pertaining to Anchor Reservoir operations during 2005 can be found in Table WYT7 and Figure WYG4. The negative inflows displayed in Figure WYG4 are the result of calculated inflow based on reservoir release and change in reservoir content. During some periods, evaporation and seepage from the reservoir could exceed inflow.

TABLE WYT7
HYDROLOGIC DATA FOR WATER YEAR 2005
ANCHOR RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	6343.75	68	68
TOP OF ACTIVE CONSERVATION*	6441.00	17,228	17,160

* District operation has been restricted to elevation 6400.00 feet or less to prevent damage to the dikes and to minimize the chance of creating new sinkholes. Operations above elevation 6400.00 feet are directed by Reclamation.

STORAGE-ELEVATION DATA	ELEVATION (FEET)	STORAGE (AF)	DATE
BEGINNING OF YEAR	6360.40	429	OCT 01,2004
END OF YEAR	6355.50	269	SEP 30, 2005
ANNUAL LOW	6355.00	254	NOV 19, 2004
HISTORIC LOW			
ANNUAL HIGH	6403.33	5,093	JUN 25, 2005
HISTORIC HIGH	6418.52	9,252	JUL 03, 1967

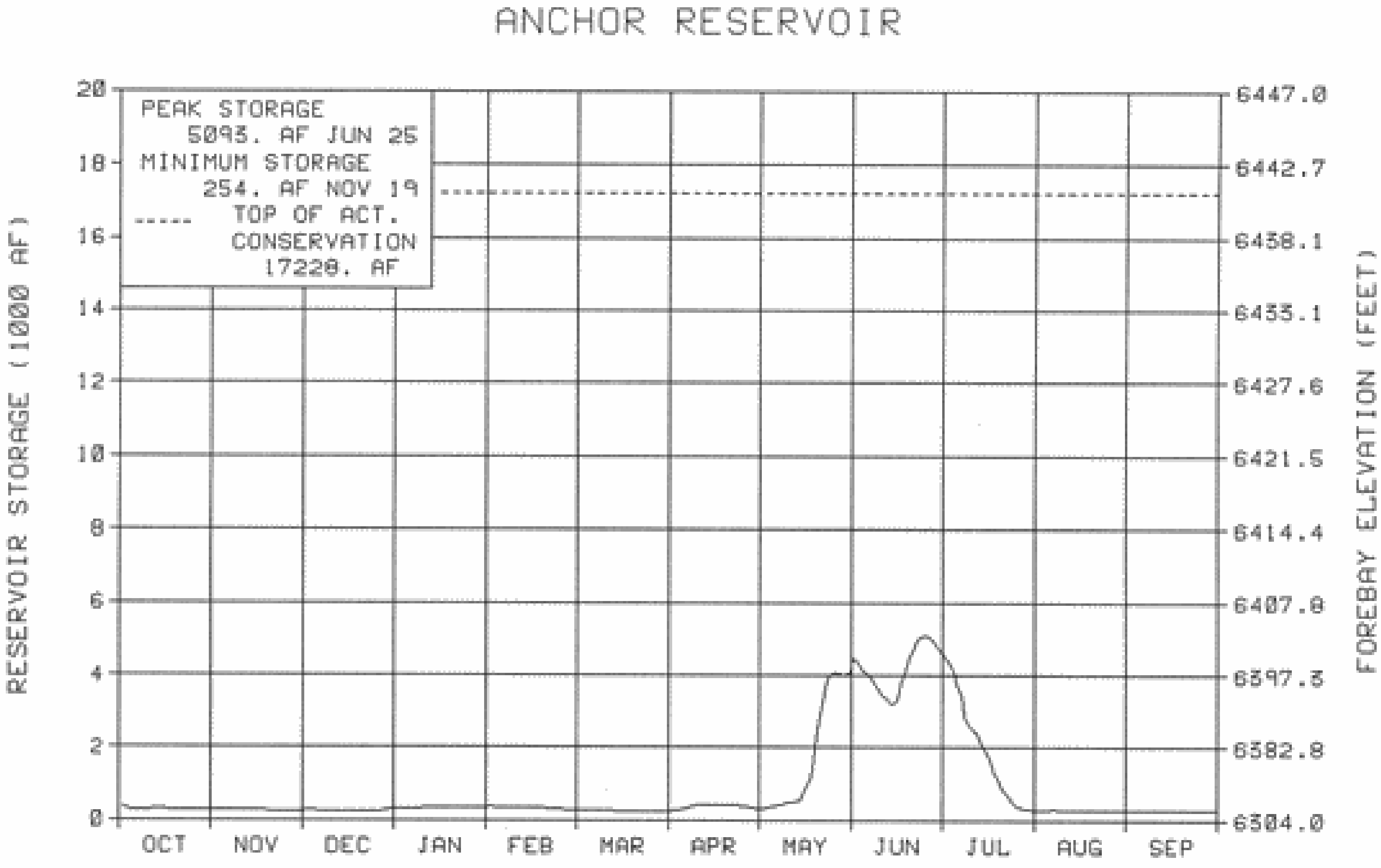
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW *	DATE
ANNUAL TOTAL (AF)	14,804	OCT 04-SEP 05	14,966	OCT 04-SEP 05
DAILY PEAK (cfs)	352	MAY 20, 2005	138	JUL 07, 2005
DAILY MINIMUM (cfs)	0	WINTER MONTHS	0	WINTER MONTHS
PEAK SPILLWAY FLOW (cfs)			0	
TOTAL SPILLWAY FLOW (AF)			0	

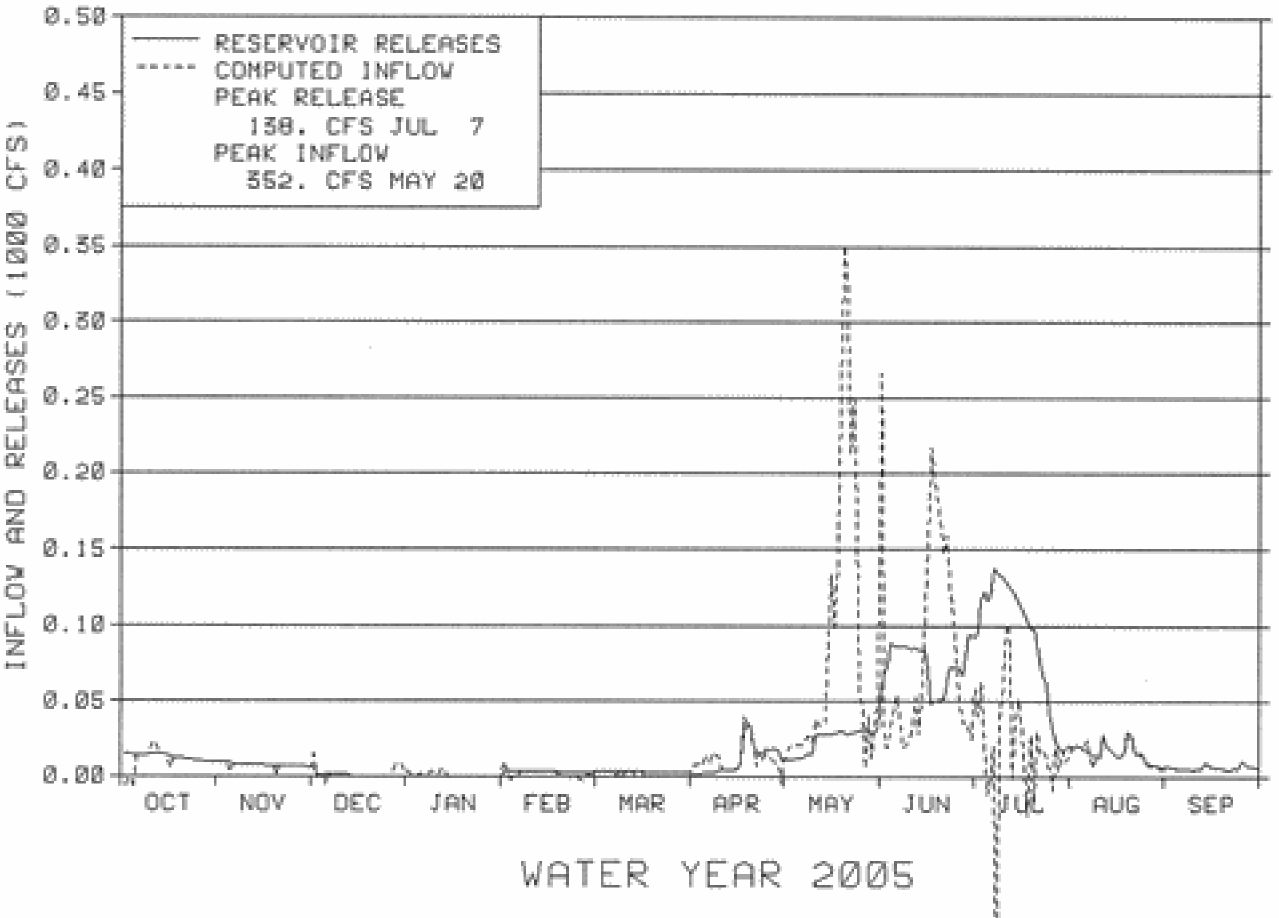
* Outflow is water released from the Dam to Owl Creek. When the reservoir level rises above approximately 6412.80 feet, water flows through a notch in one of the dikes into the sinkhole area. This water is neither measured nor accounted for. In 2005, no water flowed over the notch in the dike.

	INFLOW		OUTFLOW*		CONTENT	
MONTH	KAF	% of Avg*	KAF	% of Avg*	KAF	% of Avg*
OCTOBER	0.6	96	0.8	109	0.3	111
NOVEMBER	0.4	122	0.4	114	0.3	125
DECEMBER	0.1	40	0.0	14	0.3	161
JANUARY	0.1	80	0.0	6	0.4	213
FEBRUARY	0.1	37	0.1	134	0.3	133
MARCH	0.1	42	0.2	71	0.3	82
APRIL	0.7	101	0.6	132	0.3	61
MAY	5.2	120	1.5	45	4.1	259
JUNE	5.0	69	4.4	81	4.6	138
JULY	1.2	51	5.5	167	0.3	12
AUGUST	0.9	554	1.0	54	0.3	39
SEPTEMBER	0.4	56	0.4	37	0.3	80
ANNUAL	14.8	86	15.0	88		

* Average is for the 1991-2004 period. This period was used because of the availability of data at Anchor Reservoir.

FIGURE WYG4


ANCHOR RESERVOIR
PEAK STORAGE
5093. AF JUN 25
MINIMUM STORAGE
254. AF NOV 19
TOP OF ACT. CONSERVATION
17220. AF
RESERVOIR STORAGE (1000 AF)
FOREBAY ELEVATION (FEET)
20
18
16
14
12
10
8
6
4
2
0
6447.0
6442.7
6438.1
6433.1
6427.6
6421.5
6414.4
6407.0
6397.3
6382.8
6304.0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP


RESERVOIR RELEASES
COMPUTED INFLOW
PEAK RELEASE
130. CFS JUL 7
PEAK INFLOW
352. CFS MAY 20
INFLOW AND RELEASES (1000 CFS)
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
WATER YEAR 2005

Shoshone Project & Buffalo Bill Unit

The primary features of the original Shoshone Project included Buffalo Bill Dam and Reservoir, Shoshone and Heart Mountain Powerplants, and the canal and lateral systems for the Willwood, Frannie, Garland, and Heart Mountain Divisions. In 1982, The Buffalo Bill Dam and Reservoir Modifications, Shoshone Project, Wyoming, was authorized as the Buffalo Bill Unit (P-S MBP). The principal modifications to Buffalo Bill Dam included raising the height of the Dam by 25 feet, reconstructing the Shoshone Powerplant, construction of the Buffalo Bill Powerplant, construction of the Spirit Mountain Energy Dissipation Structure, pressurizing a portion of the Shoshone Canyon Conduit, enlarging and gating the spillway, constructing a visitor's center, and constructing the North Fork, South Fork, and Diamond Creek Dikes. The North and South Fork dust abatement dikes were designed to impound water in areas of the enlarged reservoir that would be dry during periods when the reservoir elevation is low, thereby reducing the dust producing area of the reservoir. The Diamond Creek protective dike prevents the enlarged reservoir from inundating Irma Flats.

Controlled releases are made from Buffalo Bill Reservoir at four points: (1) Shoshone Canyon Conduit, (2) Shoshone Powerplant, (3) the gated spillway, and (4) two river outlets (jetflow valve and 4X5 high pressure gates). Water for the Willwood, Frannie, and Garland Divisions of the Shoshone Project is diverted from the Shoshone River below Buffalo Bill Reservoir. The Heart Mountain Division is irrigated by water released at the dam through a high-level outlet to the Shoshone Canyon Conduit and Heart Mountain Canal. Irrigation releases for the project land along the Shoshone River are made through the Shoshone Powerplant, the river outlets, or through the Shoshone Canyon Conduit and Buffalo Bill or Heart Mountain Powerplants. Project works presently serve about 93,000 acres in the four divisions.

The Heart Mountain Powerplant, Shoshone Project, with a nameplate capability of 6,000 kilowatts (kW) and maximum discharge capacity of 360 cfs, is located at the end of the Shoshone Canyon Conduit, which obtains its water from a high-level outlet, elevation 5233.00 feet, at Buffalo Bill Dam. The powerplant is located 3.5 miles below the dam and discharges into the Shoshone River. During the summer months, the water released through the powerplant is used to satisfy a portion of the irrigation demand of lands diverting directly from the river.

The Shoshone Powerplant, reconstructed as part of the Buffalo Bill Unit (P-S MBP), is located on the left bank of the Shoshone River at the toe of Buffalo Bill Dam and releases water directly into the Shoshone River. After 56 years of continuous use, the Shoshone Powerplant became obsolete because of safety problems beyond economical repair. On March 21, 1980, the original plant was taken out of service. In 1992 one of the three generating units was replaced with a new unit having a nameplate capability of 3,000 kW. In accordance with the Buffalo Bill Reservoir Enlargement Winter Release Operation Agreement, a flow of at least 100 cfs is released to the Shoshone River at the base of the dam at all times. This is normally achieved by the use of the Shoshone Powerplant. A maximum release of approximately 200 cfs can be made through the Shoshone Powerplant.

The Buffalo Bill Powerplant, Buffalo Bill Unit (P-S MBP), with a nameplate capability of 18,000 kW, is located about one mile downstream of Buffalo Bill Dam on the right bank of the Shoshone River. Water for generation at this powerplant is supplied through a portion of the Shoshone Canyon Conduit, which was pressurized as part of the Buffalo Bill modification. The maximum discharge capacity of the three units at the Buffalo Bill Powerplant is 930 cfs. The powerplant first generated power on July 15, 1992.

Spirit Mountain Powerplant, Buffalo Bill Unit (P-S MBP), with a nameplate capability of 4,500 kW and discharge capacity of 560 cfs, is a newly constructed energy dissipator powerplant located about one mile downstream of Buffalo Bill Dam on the right side of the Shoshone River. Water released through the Shoshone Canyon Conduit for Heart Mountain Canal or Heart Mountain Powerplant must be routed through the Spirit Mountain Powerplant or through associated sleeve valves to dissipate energy in the transition from the pressurized portion of the Shoshone Canyon Conduit to the free flow portion of the conduit. The discharge from the powerplant must be carried away from the plant by use of the free-flow conduit and operation of the powerplant depends on the availability of the conduit to carry discharged water.

Buffalo Bill Dam and Reservoir, located on the Shoshone River above Cody, Wyoming, is a multipurpose facility that provides water for domestic, irrigation, municipal, fish and wildlife, power, and recreational use. It also provides a small amount of incidental flood control, although no storage space is specifically reserved for this purpose. The total storage capacity of the reservoir is 646,565 AF at elevation 5393.50 feet, the top of the active conservation pool.

Following the enlargement of Buffalo Bill Reservoir, winter releases from the Dam to the Shoshone River were based on criteria provided in the ***Revised Instream Flow Operation Agreement for Buffalo Bill Reservoir Enlargement***. This agreement also stipulated that an instream flow would be implemented at the end of the ten year term of the agreement, based on data collected and studies performed by the Wyoming Game and Fish Department. A new agreement entitled ***Buffalo Bill Reservoir Enlargement Winter Release Operation Agreement*** (Agreement), replaced the ***Revised Instream Flow Operation Agreement for Buffalo Bill Reservoir Enlargement*** at the beginning of water year 2005. According to the Agreement, winter releases from Buffalo Bill Reservoir shall provide a minimum winter release of 100 cfs in the river at the Shoshone Powerplant. Additional winter releases up to a combined total of 350 cfs in the river below Buffalo Bill Powerplant will be provided based on the conditions and criteria set forth in the Agreement. When the required release is greater than 100 cfs, the amount above 100 cfs will be made through the most efficient use of the Shoshone and Buffalo Bill Powerplants.

Storage in Buffalo Bill Reservoir at the beginning of water year 2005 was 438,829 AF of water at elevation 5365.87 feet. The reservoir level continued to slowly fall during the first half of October as releases for irrigation continued to exceed inflow. By October 19th releases to the Shoshone River for irrigation were no longer required and the release to the Shoshone River was reduced to 150 cfs in accordance with the Agreement. Irrigation deliveries to the Heart Mountain Canal were discontinued on October 20th. The release of 150 cfs was maintained until April 13th, when increases were required to meet the irrigation demands of the downstream districts.

Once releases to the canal and river for irrigation ended, the reservoir began to recover and at the end of October there was 440,183 AF of water in storage at elevation 5366.04 feet. Inflow during October, November, and December was near or above average each month and by the end of December storage in the reservoir had increased to 461,015 AF. Precipitation during the October through December period was about 70 percent of average in the mountains and the snowpack in the Buffalo Bill watershed stood at 66 percent of average on January 1st.

Forecasts of the April-July snowmelt runoff are made each month beginning in January and continuing through June for Buffalo Bill Reservoir. Conditions on January 1st indicated that 500,000 AF of runoff could be expected to flow into Buffalo Bill Reservoir during the April through July period, which was 75 percent of the 30 year average. Snowfall was below average during the month of January and by February 1st the snowpack had fallen to 59 percent of average, a seven percent decline from the previous month. With the snowpack falling further below average, the February 1 snowmelt runoff forecast was decreased to 450,000 AF. During February, March, and April, reservoir inflows were below average each month while the mountain snowpack above Buffalo Bill Reservoir remained between 55 and 60 percent of average. The March and April forecasts were each reduced by 25,000 AF, resulting in an April 1 forecast of 400,000 AF. Releases from the Dam were increased on April 13th to meet downstream irrigation needs and Heart Mountain Canal deliveries were initiated on April 15th. Inflows began to increase during the last week of April before a cold front stopped the runoff with temperatures that dipped into the upper teens. At the end of April, Buffalo Bill Reservoir held 483,224 AF of water at elevation 5372.18 feet.

The May 1 forecast remained at 400,000 AF, which was 60 percent of the average April-July inflow to Buffalo Bill Reservoir. Temperatures remained cool during the first half of May and widespread precipitation between May 7th and May 11th added to the snowpack at a time when it would typically be melting. When more seasonable temperatures returned to the basin, the snowpack melted rapidly with a peak inflow of 8,402 cfs occurring on May 21st. Provisional data from the U S Geological Survey shows that the inflow on the North Fork of the Shoshone River peaked at 5,520 cfs on May 21st and the peak on the South Fork of 3,260 cfs also occurred on May 21st. With the reservoir rising as much as two feet per day, releases to the river were increased to slow the rate of fill. By the end of the month the reservoir had risen to elevation 5387.45 feet, holding 598,265 AF of water. Inflow during May was 117 percent of average and the amount of snow remaining in the mountains indicated that the June 1 forecast should be increased to 485,000 AF.

The weather during June followed a pattern that was similar to May, as a storm on Memorial Day weekend brought cold, rain, and snow back to the basin. The cool and wet conditions persisted through the first half of the month and inflow from snowmelt decreased. As the month progressed and warmer temperatures returned, a second surge of runoff entered the reservoir. Inflows rose above 5,000 cfs on June 18th and remained above that level for nine days with a peak of 6,716 cfs on June 24th. The reservoir was less than three feet from the top of the active conservation pool at the time and a spillway release was initiated on June 22nd. The maximum daily average release to the river that occurred during the spill was 5,927 cfs on June 26th. The reservoir reached a maximum elevation of 5392.04 feet on June 24th, 1.46 feet below the top of the active conservation pool. The corresponding content of 634,738 AF was 11,827 AF less than the active capacity of the reservoir. As inflows receded and the reservoir level began to fall, the spillway release was also reduced and on June 27th the spillway gates were closed. At the end of June, the reservoir content was 625,532 AF at elevation 5390.89 feet. The spillway gates were opened over the Fourth of July weekend to prevent the reservoir from rising as inflows increased once again. Following the holiday, releases were reduced as rapidly as inflow conditions allowed and on July 8th the river release was lowered to only what was required to satisfy irrigation demand. Control of the release to the river was turned over to the Shoshone Irrigation District at this time and releases were adjusted as necessary to satisfy downstream water users. Once the runoff ended, inflows declined substantially and the monthly inflow for July was 58 percent of average. The reservoir ended the month with storage of 592,628 AF at elevation 5386.72 feet.

Inflow during August and September was below average and at the end of water year 2005, the reservoir held 450,274 AF of water at elevation 5367.60 feet. The end of September content was 104 percent of the 1993-2004 average for the enlarged reservoir. The total inflow to Buffalo Bill during the April through July runoff period was 513,419 AF, which was 77 percent of average. The total water year inflow of 679,928 AF was 80 percent of average.

Total energy generated at all powerplants that directly receive water out of Buffalo Bill Reservoir totaled 99,832,000 kWh in 2005. Of this total amount, Heart Mountain Powerplant generated 6,966,000 kWh, Buffalo Bill Powerplant generated 56,632,000 kWh, Shoshone Powerplant generated 21,846,000 kWh and Spirit Mountain Powerplant generated 14,388,000 kWh. The powerplants used 505,654 AF of water to generate this amount of energy, or 76 percent of the total water released from Buffalo Bill Reservoir during water year 2005. About 31 percent, or 205,397 AF of the total water released from Buffalo Bill Reservoir, was released to the Heart Mountain Canal for irrigation purposes.

Important Events - 2005

October 19, 2004: Irrigation releases to the Shoshone River were discontinued for the 2004 irrigation season, control of releases was returned to the Bureau of Reclamation, and a river release of 150 cfs was established for the winter.

October 20, 2004: Irrigation diversions to the Heart Mountain Canal were discontinued for the 2004 irrigation season.

March 30, 2005: Buffalo Bill Reservoir Public Information meeting was held in Powell to discuss water year 2004 operation and expected 2005 operation.

April 13, 2005: Releases from Buffalo Bill Reservoir were increased to meet downstream irrigation demand.

April 15, 2005: Irrigation releases to the Heart Mountain Canal were initiated for the 2005 irrigation season.

June 22 – June 27 and July 2 – July 4, 2005: Releases were made through the radial spillway gates.

June 24, 2005: Buffalo Bill Reservoir reached a maximum elevation for the water year of 5392.04 feet.

Additional hydrologic and statistical information pertaining to the operations of Buffalo Bill Reservoir during water year 2005 can be found in Table WYT8 and Figure WYG5.

TABLE WYT8
HYDROLOGIC DATA FOR WATER YEAR 2005
BUFFALO BILL RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	5259.60	41,748	41,748
TOP OF ACTIVE CONSERVATION	5393.50	646,565	604,817
STORAGE-ELEVATION DATA	**ELEVATION (FEET)**	**STORAGE (AF)**	**DATE**
BEGINNING OF YEAR	5365.87	438,829	OCT 01,2004
END OF YEAR	5367.60	450,274	SEP 30, 2005
ANNUAL LOW	5364.60	430,370	OCT 17, 2004
HISTORIC LOW*		19,080	JAN 31, 1941
ANNUAL HIGH	5392.04	634,738	JUN 24, 2005
HISTORIC HIGH	5393.51	646,647	JUL 30, 1996

* Prior to 1952 daily records are not available. End of month data was used to determine the historic low.

INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW*	DATE
ANNUAL TOTAL (AF)	679,928	OCT 04-SEP 05	460,002	OCT 04-SEP 05
DAILY PEAK (cfs)	8,402	MAY 21, 2005	5,927	JUN 26, 2005
DAILY MINIMUM (cfs)	32	NOV 30, 2004	120	OCT 20, 2004
PEAK SPILLWAY FLOW (cfs)			4,109	JUN 26, 2005
TOTAL SPILLWAY FLOW (AF)			44,148	JUN 22-JUL 4, 2005

*Daily peak and minimum are releases to the river

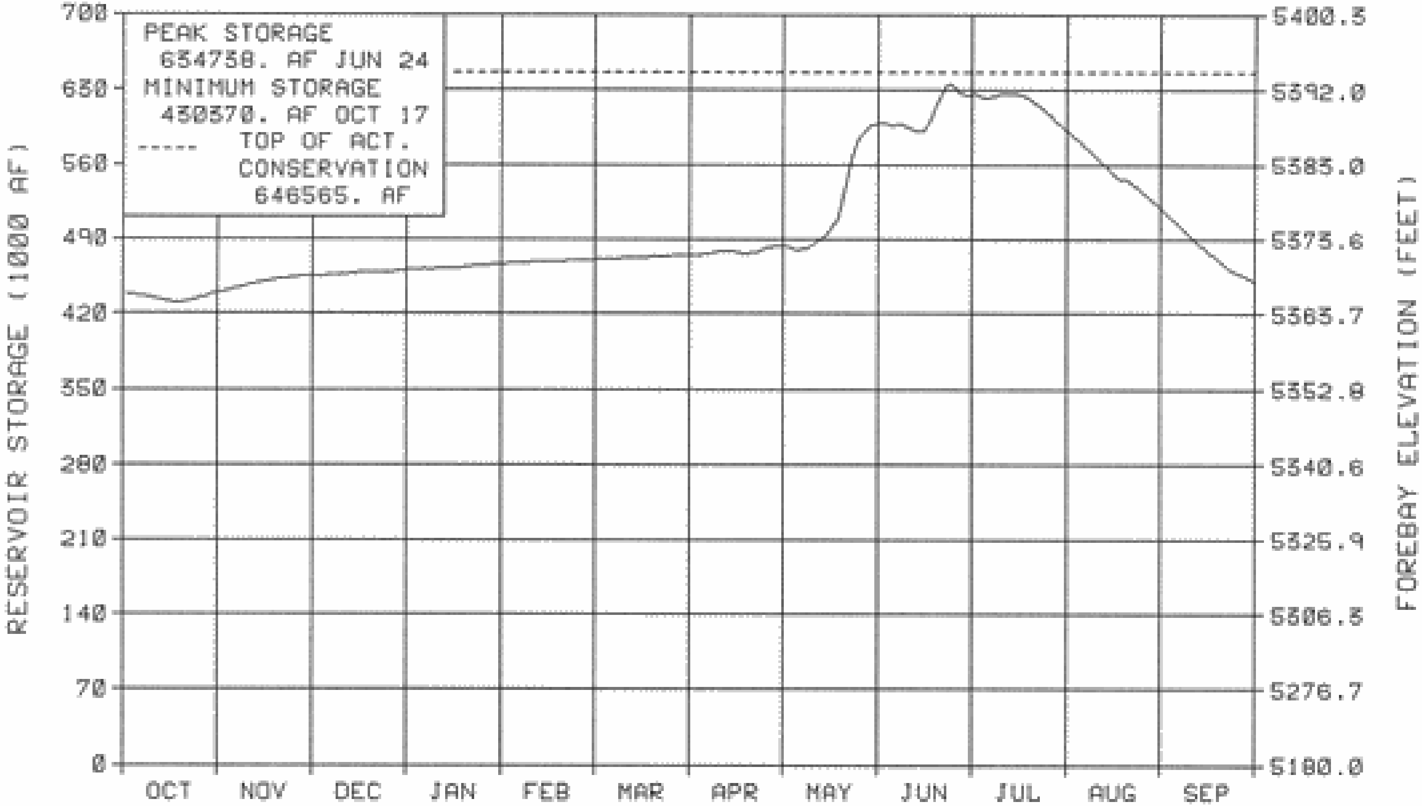
	INFLOW		OUTFLOW		CONTENT	
MONTH	KAF	% of Avg*	KAF	% of Avg*	KAF	% of Avg*
OCTOBER	36.0	153	34.6	94	440.2	108
NOVEMBER	24.0	117	9.0	46	455.1	112
DECEMBER	15.5	96	9.4	47	461.0	114
JANUARY	15.3	102	9.4	50	466.9	116
FEBRUARY	12.3	92	8.5	48	470.6	118
MARCH	14.2	74	9.7	43	475.1	122
APRIL	26.3	63	18.1	32	483.2	133
MAY	178.1	117	63.0	57	598.3	149
JUNE	209.3	71	182.1	108	625.5	114
JULY	99.7	58	132.6	73	592.6	106
AUGUST	29.0	61	103.8	94	518.1	105
SEPTEMBER	20.3	75	88.1	114	450.3	104
ANNUAL	680.0	80	668.3	80		

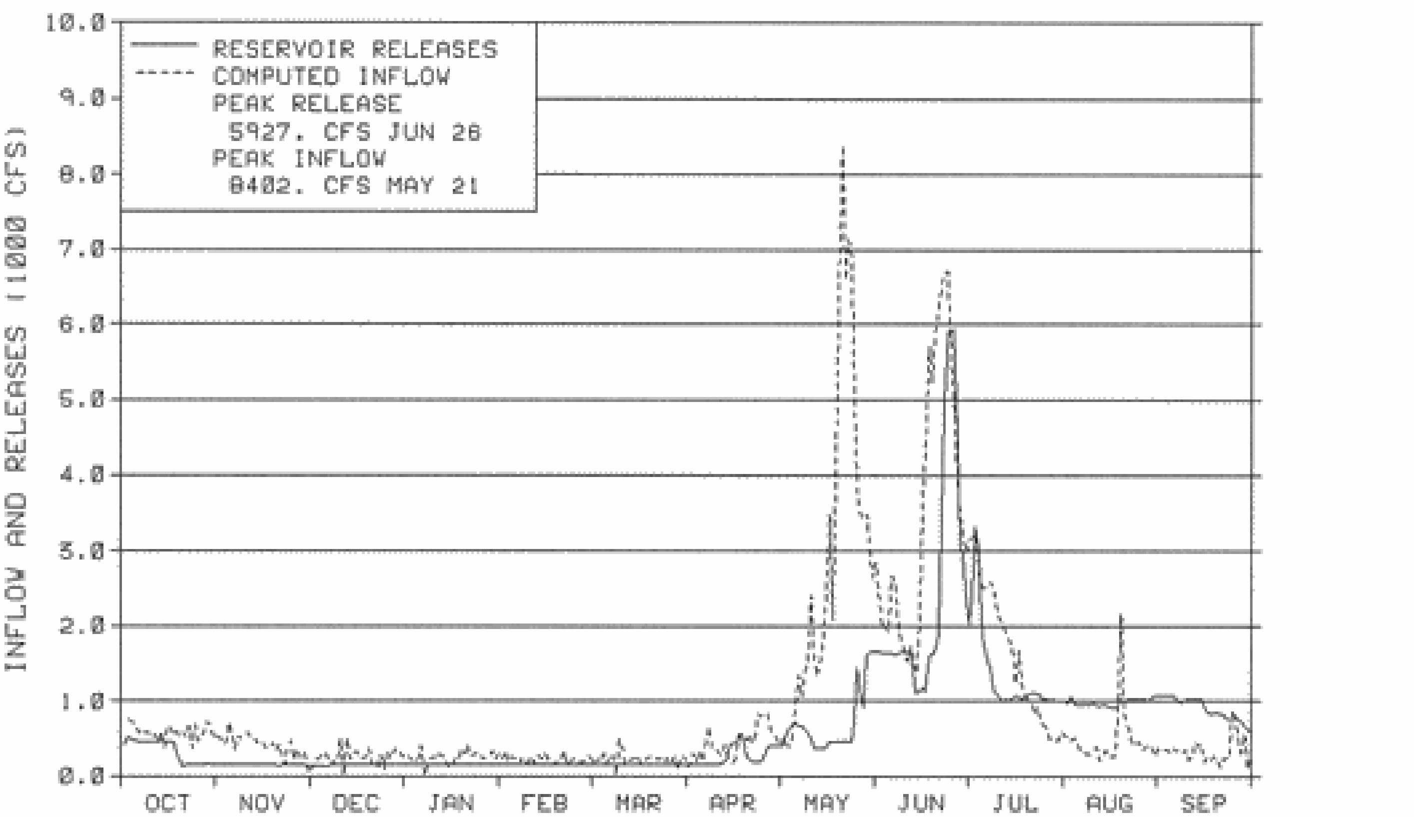
APRIL - JULY INFLOW (AF)	
ACTUAL	AVERAGE
513,419	662,600

* Average for inflow and outflow is the 1975-2004 period. Because of the enlargement of Buffalo Bill Reservoir in 1992, the period of record on which average content is based is 1993-2004.

FIGURE WYG5

BUFFALO BILL RESERVOIR





WATER YEAR 2005

Table WYT9

WATER YEAR 2005 ACTUAL OUTAGES FOR WYOMING POWERPLANTS

Facilities		Description of Work	Outage Dates
BOYSEN			
	Unit 1	Annual Maintenance & Governor Training	10/18/04 - 12/08/04
	Unit 1	Hi-Pot Testing	01/18/05 - 01/24/05
	Unit 1	Governor Oil Pumps & Wicket Gate Problems	02/15/05 - 03/02/05
	Unit 1	Disconnect Switch B-563 Maintenance & Governor	03/14/05 - 03/21/05
	Unit 2	Governor Training	10/18/04 - 10/22/04
	Unit 2	Annual Maintenance	12/14/04 - 01/07/05
	Unit 2	Hi-Pot Testing	01/10/05 - 01/12/05
	Unit 1	Disconnect Switch B-563 Maintenance	03/14/05 - 03/17/05
PILOT BUTTE			
	Unit 1	Annual Maintenance	01/12/05 - 02/11/05
	Unit 1	Bus Work	02/28/05 - 03/10/05
	Unit 1	Governor Oil Pump	05/11/05 - 05/18/05
	Unit 1	Penstock Low Pressure	05/26/05 - 05/31/05
	Unit 1	Water in Turbine Bearing	06/06/05 - 06/13/05
	Unit 2	Annual Maintenance	01/12/05 - 02/11/05
	Unit 2	Bus Work	02/28/05 - 03/10/05
	Unit 2	Penstock Low Pressure	05/26/05 - 05/31/05
	Unit 2	Water in Turbine Bearing	06/06/05 - 06/13/05

Table WYT9 (Continued)
WATER YEAR 2005 ACTUAL OUTAGES FOR WYOMING POWERPLANTS

Facilities		Description of Work	Outage Dates
BUFFALO BILL			
Buffalo Bill Powerplant			
	Unit 1	Annual Maintenance	11/29/04 - 12/22/04
	Unit 2	Annual Maintenance	12/20/04 - 01/06/05
	Unit 3	Annual Maintenance	01/18/05 - 02/16/05
Shoshone Powerplant			
	Unit 3	Annual Maintenance	11/09/04 - 11/20/04
Heart Mountain Powerplant			
	Unit 1	Annual Maintenance	10/18/04 - 11/10/04
	Unit 1	Exciter Replacement	12/01/04 - 01/04/05
	Unit 1	Penstock Coating	01/12/05 - 02/17/05
	Unit 1	Exciter Wiring	03/07/05 - 03/15/05
	Unit 1	Penstock Recoating	03/24/05 - 03/29/05
	Unit 1	Exciter Work	04/26/05 - 06/10/05
	Unit 1	Doble Testing	09/19/05 - 09/21/05
Spirit Mountain Powerplant			
	Unit 1	Annual Maintenance	02/28/05 - 04/15/05

SUMMARY OF RESERVOIR OPERATIONS FOR BENEFIT OF FISH AND WILDLIFE, ENVIRONMENT AND RECREATION

Bull Lake Reservoir

During water year 2004, Midvale and Reclamation entered into an agreement whereby Reclamation could store up to 10,000 AF of Boysen water in Bull Lake and exchange Bull Lake storage for Boysen Reservoir water which is diverted from the Wind River at the Wind River Diversion Dam when runoff conditions are conducive to allow for such an exchange. The storage water released from Boysen was exchanged for an equal quantity of water held in Bull Lake, which was to be transferred back to Boysen following the irrigation season. When irrigation deliveries to the Riverton unit ended on September 30, 2004, Bull Lake Reservoir held 89,664 AF of water. Of the 89,664 AF held in Bull Lake, 19,565 AF was Boysen water in Bull Lake (9,565 AF was Boysen storage carried over from a similar agreement in 2003 plus 10,000 AF of water exchanged during 2004). When irrigation releases from Bull Lake ended for the season, a release of approximately 20 to 25 cfs was maintained as the Boysen water in Bull Lake was transferred back to Boysen Reservoir, providing a winter flow in Bull Lake Creek. Inflow to Bull Lake was above average through most of the winter and the lake level rose through the period. Releases in excess of inflow were required during periods in late April and early May to supplement Midvale's natural flow diversion as cool weather slowed the runoff. As temperatures warmed in mid-May, releases from Bull Lake were reduced while inflows increased and the reservoir began to rise once again. As the lake continued to rise, releases were increased to control the reservoir level. Once the runoff began to subside, the release from Bull Lake was adjusted as necessary to satisfy irrigation demands on the Riverton Unit. Reservoir levels in water year 2005 varied from a maximum elevation of 5804.66 feet on July 10 to a minimum elevation of 5774.02 feet on September 30, or a range of 30.64 feet of fluctuation. During water year 2005 conditions were such that no Boysen water was exchanged and held in Bull Lake during the irrigation season but 11,345 AF of Boysen storage water remained in Bull Lake at the end of the water year from the 2004 agreement. This water will be transferred back to Boysen during the winter months to provide a winter flow in Bull Lake Creek. At the end of water year 2005, the content of Bull Lake was 66,804 AF, with 11,345 AF of the total being Boysen storage water in Bull Lake.

Boysen Reservoir

Boysen Reservoir storage at the beginning of water year 2005 was 90 percent of average and 69 percent of capacity. Following the 2004 irrigation season, the release from Boysen Dam was set at approximately 400 cfs and was maintained at that rate until irrigation demands required increased flows. The month of April is normally when many species of fish spawn in the upper few feet of the reservoir. To insure a successful spawn, it is important to limit the amount of drawdown on the reservoir during April. On April 1st, releases were increased in anticipation of snowmelt runoff and the upcoming irrigation season. The reservoir level declined slowly through the month and on April 30 was 1.27 feet lower than it was on March 31. May inflow was well above average and the reservoir elevation increased 3.90 feet during the month. The reservoir level was at 4722.50 feet going into the Memorial Day weekend, which was 15.30 feet higher than at the beginning of the holiday weekend in 2004. For the first time since 1999, storage in Boysen and the expected inflow during the April-July snowmelt runoff period were such that a request by Wyoming Game and Fish (WGF) for a flushing flow in the river below Boysen could be accommodated. On April 12th, the release from Boysen Dam was increased in two increments from 950 cfs to 3,000 cfs and then from 3,000 cfs to 5,000 cfs. The 5,000 cfs release was maintained for ten hours and then gradually lowered over the next day back to 950 cfs. Flushing flows are a means of simulating high runoff events that, prior to the closure of the dam, occurred naturally in the river and improved spawning habitat for trout by removing sediment from the spawning gravels in the river. To accomplish the flushing flow, approximately 7,500 AF of water was released from Boysen Dam.

Buffalo Bill Reservoir

Due to the prolonged drought, large areas of the reservoir bed were exposed for extended periods of time and have become overgrown with weeds and grasses. As the reservoir filled this year, these areas were inundated for the first time in five or six years and provided an excellent source of food, cover, and spawning habitat.

Following the 2004 irrigation season the release from Buffalo Bill Reservoir was set at approximately 150 cfs, based on winter release criteria that were effective beginning in water year 2005. The new criteria are the result of studies performed since the enlargement of Buffalo Bill Reservoir and are contained in a document entitled ***Buffalo Bill Reservoir Enlargement Winter Release Operation Agreement***. A winter release of 100 cfs, 150 cfs, 200 cfs, or 350 cfs will be provided below Buffalo Bill Powerplant based on the total inflow to Buffalo Bill Reservoir during the previous water year and the amount of storage in the reservoir and in the State account on September 30th. A release of 100 cfs will be maintained in the river at the Shoshone Powerplant at all times.

Reclamation continues to support the WGF Reservoir Research Branch in its efforts to assess fish population and species distribution in the enlarged reservoir through the use of hydro-acoustic technology and by providing WGF river access and an aluminum tube for planting fish in the Shoshone River off the deck of Buffalo Bill Powerplant.

At Buffalo Bill Reservoir, as the reservoir is drawn down, the lake bed is exposed to wind erosion which creates dust in the reservoir area and in the Town of Cody, Wyoming. As a part of the enlargement of Buffalo Bill Reservoir, dust abatement dikes were built on the upper ends of the North and South Fork arms of the reservoir to hold water in areas that would become dry as the reservoir level decreased, thus reducing the area of dry lake bed. During the periods from October 1, 2004, through February 3, 2005, the water surface elevation of Buffalo Bill Reservoir was below the top of the North Fork Dike (elevation 5370.00 feet). The maximum elevation of the pool behind the South Fork Dike of 5393.57 feet occurred on May 11, 2005, and the minimum elevation of 5388.60 feet occurred on September 29, 2005. At the maximum elevation, the pool behind the South Fork Dike covered 201 surface acres. On October 18, 2004, when the water surface elevation of Buffalo Bill Reservoir was at its low for the year of 5364.60 feet, the water surface elevation of the pool behind the North Fork Dike was approximately the same as the main reservoir and the water surface elevation of the pool behind the South Fork Dike was 5393.41 feet. At the minimum reported elevation of Buffalo Bill Reservoir, 196 more acres of land would have been exposed without the ability to store water behind the South Fork Dike.

The number of stoplogs at the outlet control structure on the South Fork Dike has been increased to maintain the static water level of the pond behind the dike at approximately 5391.00 feet at the end of the water year. The increased elevation provides a larger impoundment behind the dike, benefiting waterfowl as well as the fishery.

The Diamond Creek Dike was constructed to prevent Diamond Creek and the Irma Flats area from being inundated by the enlarged reservoir. Inflows from the Diamond Creek drainage enter Diamond Creek Reservoir which lies at the base of the dike. This water is then pumped into Buffalo Bill Reservoir in order to maintain the elevation of Diamond Creek Reservoir between a maximum of 5340.40 feet and a minimum of 5339.50 feet with the normal water surface elevation being 5340.00 feet. In water year 2005, 11,142 AF of water was pumped from Diamond Creek Reservoir into Buffalo Bill Reservoir.

Reservoir levels during all of water year 2005 were adequate for recreational activities on Buffalo Bill Reservoir.

WEATHER SUMMARY FOR NORTH AND SOUTH DAKOTA

October precipitation was much above normal at Dickinson Reservoir, above normal at Keyhole, Heart Butte and Jamestown Reservoirs, and below normal at the remaining reservoirs.

November precipitation was much below normal at Dickinson, Heart Butte and Jamestown Reservoirs and below normal at the remaining reservoirs, with Shadehill Reservoir recording no precipitation in November.

December precipitation was normal at Keyhole Reservoir and below to much below normal at the remaining reservoirs.

January precipitation was above normal at Angostura and Pactola Reservoirs and much below normal at Dickinson and Heart Butte Reservoirs and below normal at the remaining reservoirs.

February precipitation was much below normal at Dickinson, Heart Butte and Jamestown Reservoirs, and below normal at the remaining reservoirs.

March precipitation was normal at Dickinson and Heart Butte Reservoirs, much below normal at Jamestown Reservoir and below normal at the remaining reservoirs.

April precipitation was above normal at Angostura and much below at Heart Butte and Jamestown Reservoirs, slightly below normal at Dickinson Reservoir and below normal at the remaining reservoirs.

May precipitation was much above normal at Dickinson, Heart Butte and Jamestown Reservoirs, above normal at Pactola and Shadehill, near normal at Belle Fourche, and below normal at the remaining reservoirs.

June precipitation was much above at Dickinson, Heart Butte and Jamestown Reservoirs, above normal at Angostura Reservoir and below normal at the remaining reservoirs.

July precipitation was above normal at Dickinson Reservoir, near normal at Deerfield Reservoir, slightly below normal at Heart Butte Reservoir and below normal at the remaining reservoirs.

August precipitation was normal at Dickinson Reservoir, below normal at Deerfield and Keyhole Reservoirs and above normal at the remaining reservoirs.

September precipitation was above normal at Jamestown Reservoir, much below normal at Dickinson and Heart Butte Reservoirs and below normal at the remaining reservoirs.

Total annual precipitation for Reclamation facilities in North Dakota, South Dakota, and Northeastern Wyoming are shown on Table DKT1.

TABLE DKT1 Total Annual Precipitation for Reclamation Reservoirs in North Dakota, South Dakota, and Northeastern Wyoming in Inches			
Reservoir	**2005 Total**	**Average Total**	**Percent**
Angostura 1/	64.90	65.83	99
Belle Fourche 2/	39.34	55.70	71
Deerfield	12.78	20.87	61
Keyhole 3/	13.21	35.60	37
Pactola	16.98	21.10	80
Shadehill 4/	23.67	32.61	73
Dickinson	21.80	16.35	133
Lake Tschida	16.66	15.75	106
Jamestown	21.47	18.49	116

1/ Angostura Reservoir's annual precipitation includes data from Oelrichs, SD, Hot Springs, SD, Newcastle, WY, and Red Bird, WY climate stations.

2/ Belle Fourche Reservoir's annual precipitation includes data from Newell, SD, Spearfish, SD, and Sundance, WY climate stations.

3/ Keyhole Reservoir's annual precipitation includes data from Gillette, WY and Sundance, WY climate conditions.

4/ Shadehill Reservoir's annual precipitation includes data from Camp Crook and Lemmon, SD climate stations.

Table DKT2 displays the changes in storage content between September 30, 2004, and September 30, 2005, at reservoirs in North and South Dakota and eastern Wyoming.

TABLE DKT2 Comparison of End-of-Month Storage Content for Reservoirs in North Dakota, South Dakota, and Northeastern Wyoming in Acre-Feet			
Reservoir	**Storage September 30, 2004**	**Storage September 30, 2005**	**Change in Storage**
Angostura	54,703	57,779	3,076
Belle Fourche	31,503	19,352	-12,151
Deerfield	14,127	13,115	-1,012
Keyhole	94,389	77,138	-17,251
Pactola	42,615	36,131	-6,484
Shadehill	99,303	81,365	-17,938
Dickinson	5,870	2,228	-3,642
Lake Tschida	56,666	57,391	725
Jamestown	26,143	29,114	2,971

FLOOD BENEFITS FOR RESERVOIRS IN NORTH AND SOUTH DAKOTA AND EASTERN WYOMING

Several Bureau of Reclamation reservoirs in northeastern Wyoming, South Dakota, and North Dakota provided flood relief during Water Year (WY) 2005. They are: Lake Tschida on the Heart River near Glen Ullin, North Dakota; Shadehill on the Grand River near Shadehill, South Dakota; Angostura on the Cheyenne River near Hot Springs, South Dakota; Pactola on Rapid Creek near Rapid City, South Dakota; Keyhole on the Belle Fourche River near Moorcroft, Wyoming; and Jamestown on the James River near Jamestown, North Dakota.

The information on the distribution of flood damages prevented is provided by the Corps of Engineers. The distributions of flood damages prevented for each reservoir are as follows:

FLOOD DAMAGE PREVENTED IN 2005
ACCUMULATED TOTAL 1950-2005

	Local	Main-Stem	2005 Total	Previous Accumulations	1950-2005 Accum Totals
Lake Tschida	$0	$9,700	$9,700	$13,295,800 *	$13,305,500
Shadehill	$0	$4,300	$4,300	$9,028,200	$9,032,500
Angostura	$0	$0	$0	$21,100	$21,100
Pactola	$0	$0	$0	$3,116,500 *	$3,116,500
Keyhole	$0	$6,500	$6,500	$3,756,200 *	$3,762,700
Jamestown	$6,300	$0	$6,300	$86,801,000 *	$86,807,300
Total	$6,300	$20,500	$26,800	$116,018,800 *	$116,045,600

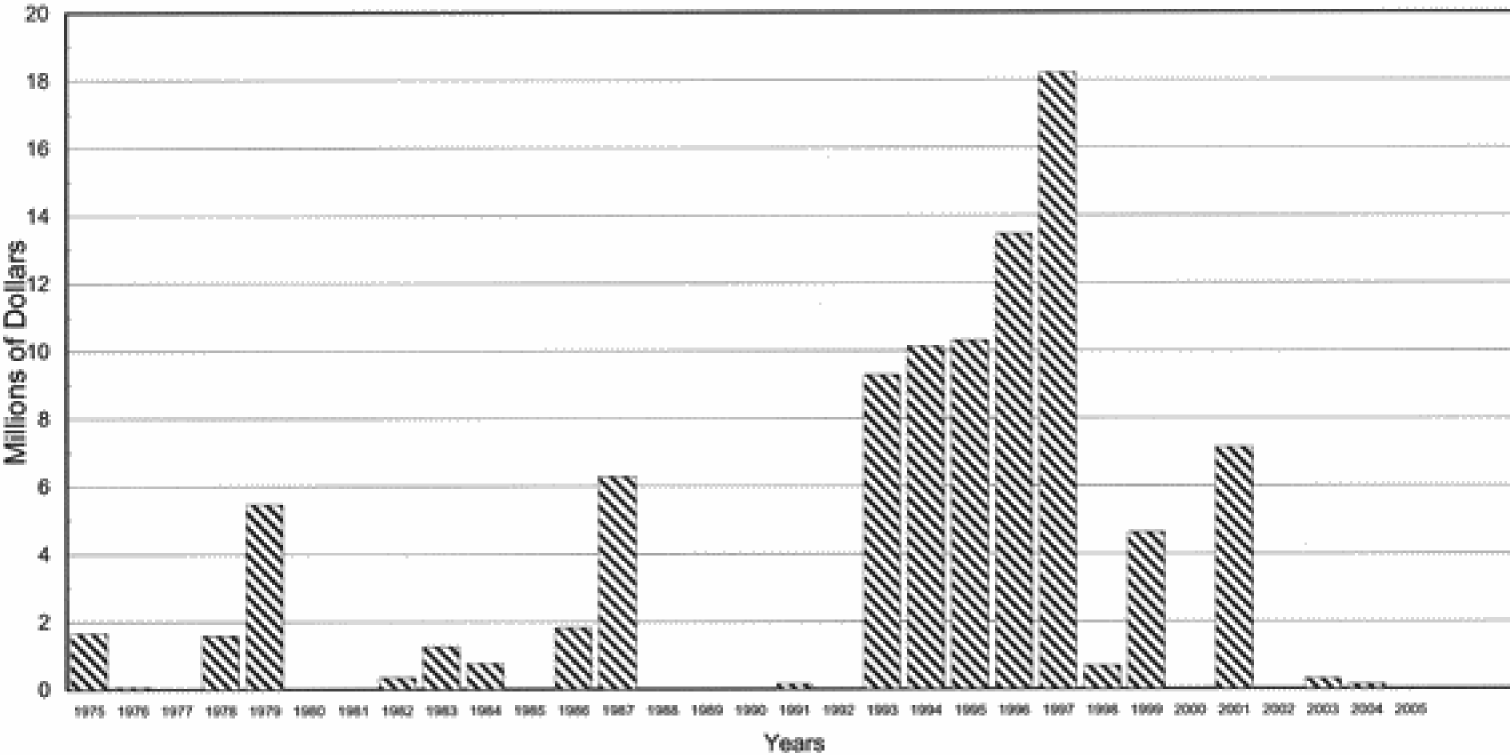
Flood damages prevented by Dakotas Area Office between Garrison and Gavins Point Dams are shown on Figure DKG1.

* - Adjusted in 2006 by the Corps of Engineers to account for previous rounding in accumulated years.

FIGURE DKG1

FLOOD DAMAGES PREVENTED

By Dakota Area Projects Between Garrison and Gavins Point Dams



UNIT OPERATIONAL SUMMERIES FOR WATER YEAR 2005

EDWARD ARTHUR PATTERSON LAKE

BACKGROUND

Edward Arthur Patterson Lake (Dickinson Reservoir) is located on the Heart River near Dickinson, North Dakota. The reservoir has a dead capacity of 356 acre-feet, an inactive capacity of 100 acre-feet and an active conservation capacity of 8,156 acre-feet (for a total storage capacity of 8,612 acre-feet at the top of conservation elevation 2420.00). Reservoir water is utilized for irrigating approximately 230 acres along the Heart River downstream of the dam and for municipal use by the Dickinson parks and Recreation District.

WATER YEAR 2005 OPERATIONS SUMMARY

The water surface elevation of Dickinson Reservoir at the beginning of water year 2005 was 2417.37 feet with storage of 5,843 acre-feet, which is 2.63 feet, and 2,769 acre-feet below the top of the conservation pool (elevation 2420.0). Dickinson Reservoir peaked at elevation 2420.55 feet on June 29th with 9,285 acre-feet of storage. Reservoir releases were made throughout the summer for irrigation of Dickinson-Heart River Mutual Aid Corporation lands and for municipal water needs by the Dickinson Parks and Recreation District. Water was also released through the river bypass valve to lower the reservoir elevation to facilitate coating of the bascule gate. The reservoir elevation on September 30, 2005 was 2412.02 feet with storage of 2,228 acre-feet, which is 7.98 feet, and 6,384 acre-feet below the top of conservation pool.

The maximum daily average discharge of 699 cfs occurred on July 1st. Reservoir net inflows for water year 2005 totaled 14,474 acre-feet, 74 percent of average. Precipitation for the water year totaled 21.80 inches, which is 133 percent of average.

MONTHLY STATISTICS FOR WY 2005

Record and near record inflows were recorded in the following months:
November inflows were the 3rd highest November inflows in 54 years of record.
April inflows were the 6th lowest April inflows in 54 years of record.
September inflows were the 4th highest September inflows in 54 years of record.

Record end of month content were recorded in the following months:
April E.O.M. content was the 6th lowest April E.O.M. content in 54 years of record.
July E.O.M. content was the 13th lowest July E.O.M. content in 54 years of record.
August E.O.M. content was the 3rd lowest August E.O.M. content in 54 years of record.
September E.O.M. content was the 3rd lowest September E.O.M. content in 54 years of record.

Additional statistical information on E.A. Patterson Lake and its operations during 2005 can be found on Table DKT3 and Figure DKG2.

TABLE DKT3
HYDROLOGIC DATA FOR 2005
E.A. PATTERSON DAM AND LAKE

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	2,405.00	456	456
TOP OF ACTIVE CONSERVATION	2,420.00	8,612	8,156
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL			

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	2,417.37	5,843	OCT 01, 2004
END OF YEAR	2,412.02	2,228	SEP 30, 2005
ANNUAL LOW	2,412.02	2,228	SEP 30, 2005
ANNUAL HIGH	2,420.55	9,285	JUN 29, 2005
HISTORIC HIGH	2,422.19	**9,348	MAR 21, 1997

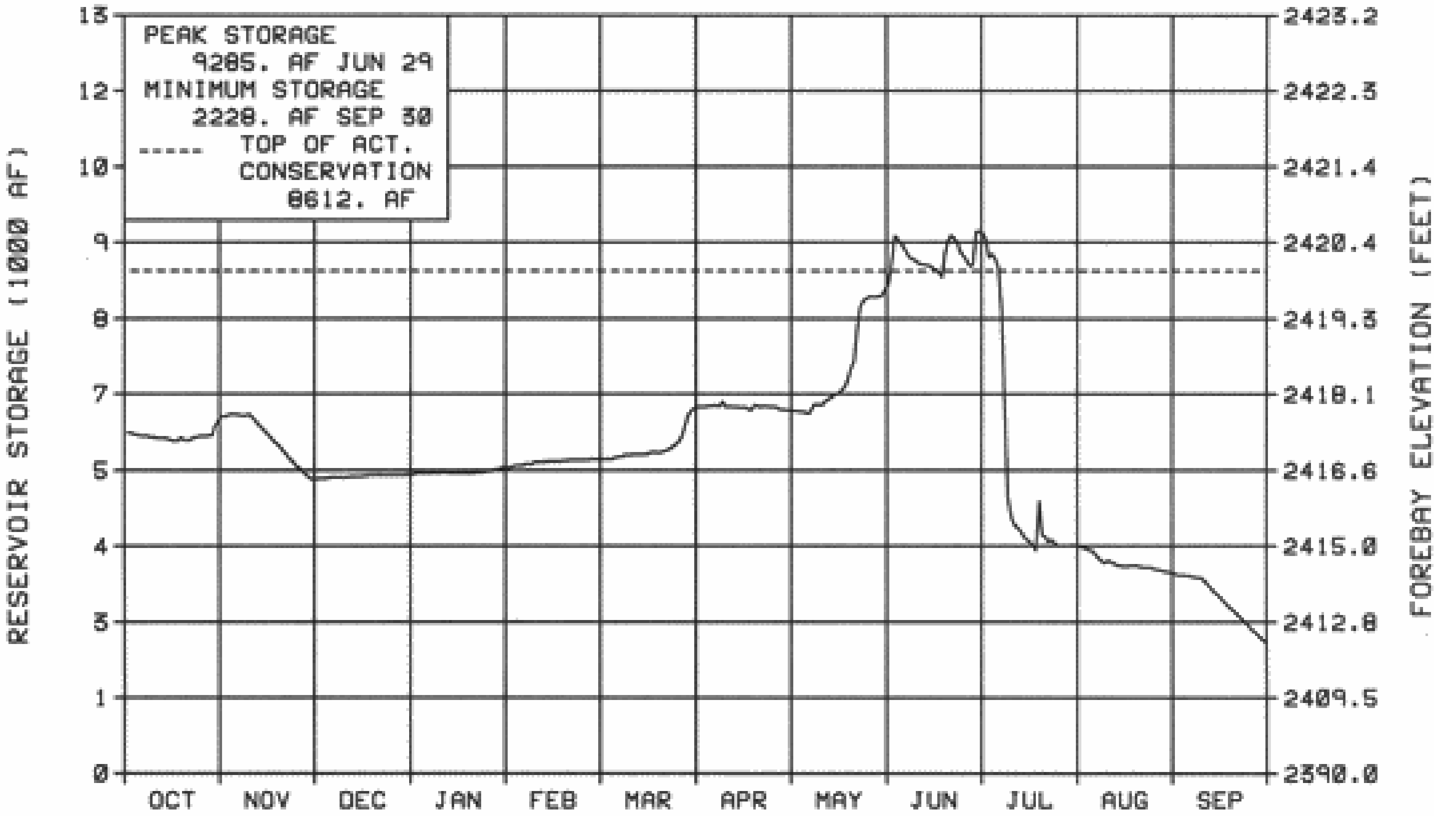
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	14,475	OCT 04-SEP 05	18,085	OCT 04-SEP 05
DAILY PEAK (CFS)	686	JUL 01, 2005	699	JUL 01, 2005
DAILY MINIMUM (CFS)	0	*	0	*

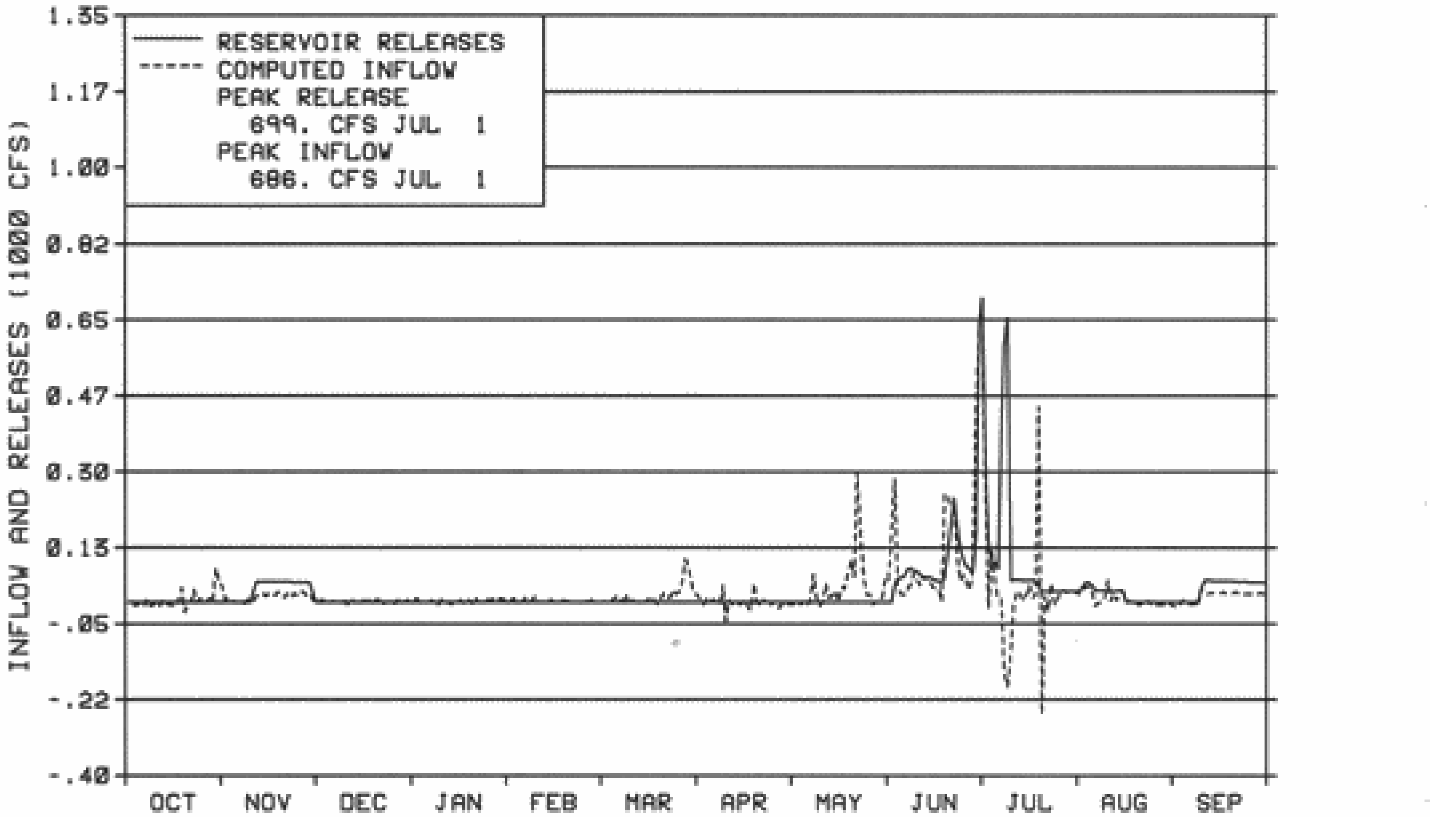
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	243	100	0	NA	6,113	109
NOVEMBER	664	535	1,732	1,037	5,045	91
DECEMBER	84	69	0	NA	5,129	93
JANUARY	119	68	0	NA	5,248	94
FEBRUARY	138	12	0	NA	5,386	90
MARCH	903	12	0	NA	6,256	90
APRIL	-29	NA	0	NA	6,227	89
MAY	2,078	89	0	NA	8,305	120
JUNE	6,815	272	5,835	232	9,285	134
JULY	2,234	234	7,612	591	3,907	59
AUGUST	413	146	888	121	3,432	56
SEPTEMBER	812	2,195	2,016	665	2,228	38
ANNUAL	14,475	74	18,085	93		
APRIL-JULY	11,098	111				

* Frequently observed during fall and winter months
** Due to new area-capacity table, the capacity that corresponds to the new historic high elevation is less than a previous historic high capacity amount (11,520 AF @ Elevation 2421.08 on June 9, 1982)

FIGURE DKG2

E. A. PATTERSON LAKE





WATER YEAR 2005

LAKE TSCHIDA

BACKGROUND

Heart Butte Dam and Lake Tschida (Heart Butte Reservoir) is located on the Heart River near Glen Ullin, North Dakota. The reservoir has a dead storage capacity of 5,227 acre-feet, an active conservation capacity of 61,915 acre-feet (for a total storage capacity of 67,142 acre-feet at the top of active conservation elevation 2064.50), and an exclusive flood control space of 147,027 acre-feet. Flood control storage is located above the crest of an ungated glory-hole spillway. Lake Tschida is primarily used for flood control and the authorized irrigation of up to 13,100 acres of which about 7,320 acres are now being irrigated.

WATER YEAR 2005 OPERATIONS SUMMARY

The water surface elevation of Heart Butte Reservoir at the beginning of water year 2005 was 2061.16 feet with storage of 56,605 acre-feet, which is 3.34 feet, and 10,537 acre-feet below the top of conservation pool (elevation 2064.50). Heart Butte Reservoir peaked at elevation 2066.46 on July 3rd with 73,773 acre-feet of storage. The reservoir elevation on September 30th 2005 was 2061.42 feet with storage of 57,391 acre-feet, which is 3.08 feet and 9,751 acre-feet below the top of conservation pool.

The maximum discharge of 952 cfs occurred on July 6th. Reservoir net inflows for water year 2005 totaled 35,526 acre-feet, 41 percent of average. Precipitation for the water year totaled 16.66 inches, which is 106 percent of average.

MONTHLY STATISTICS FOR WY 2005

Record and near record inflows were recorded in the following months:
April inflows were the 5th lowest April inflows in 56 years of record.
July inflows were the 8th highest July inflows in 56 years of record.

Record end of month content were recorded in the following months:
April E.O.M. content was the 10th lowest April E.O.M. content in 56 years of record.

Additional statistical information on Lake Tschida and its operations during 2005 can be found on Table DKT4 and Figure DKG3.

TABLE DKT4
HYDROLOGIC DATA FOR 2005
LAKE TSCHIDA

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	2,030.00	5,227	5,227
TOP OF ACTIVE CONSERVATION	2,064.50	67,142	61,915
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL	2,094.50	214,169	147,027

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	2,061.16	56,605	OCT 01, 2004
END OF YEAR	2,061.42	57,391	SEP 30, 2005
ANNUAL LOW	2,061.04	56,245	OCT 16, 2004
ANNUAL HIGH	2,066.46	73,773	JUL 03, 2005
HISTORIC HIGH	2,086.23	173,203	APR 09, 1952

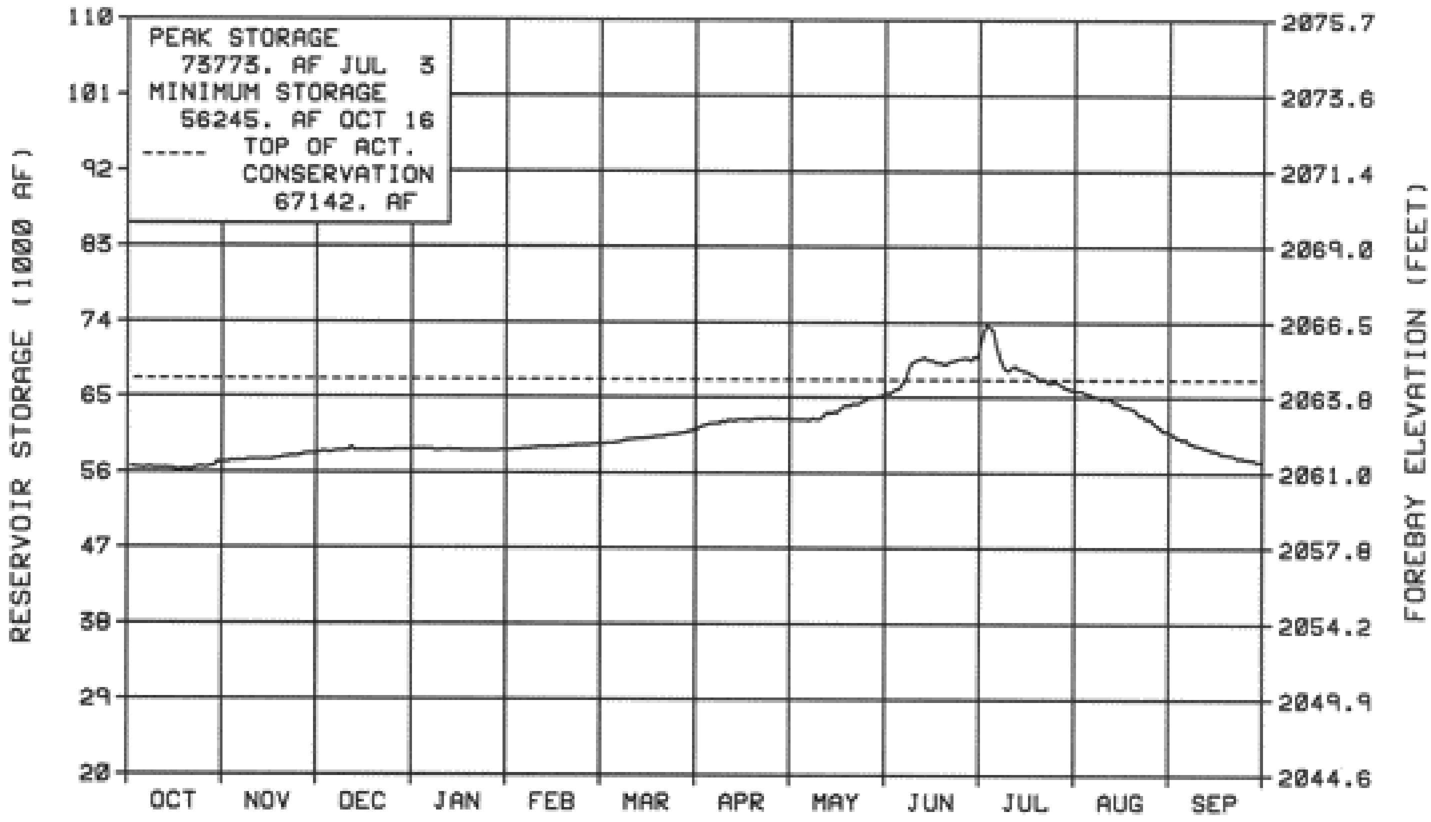
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	35,526	OCT 04-SEP 05	34,920	OCT 04-SEP 05
DAILY PEAK (CFS)	1,294	JUL 02, 2005	952	JUL 06, 2005
DAILY MINIMUM (CFS)	0	*	0	*

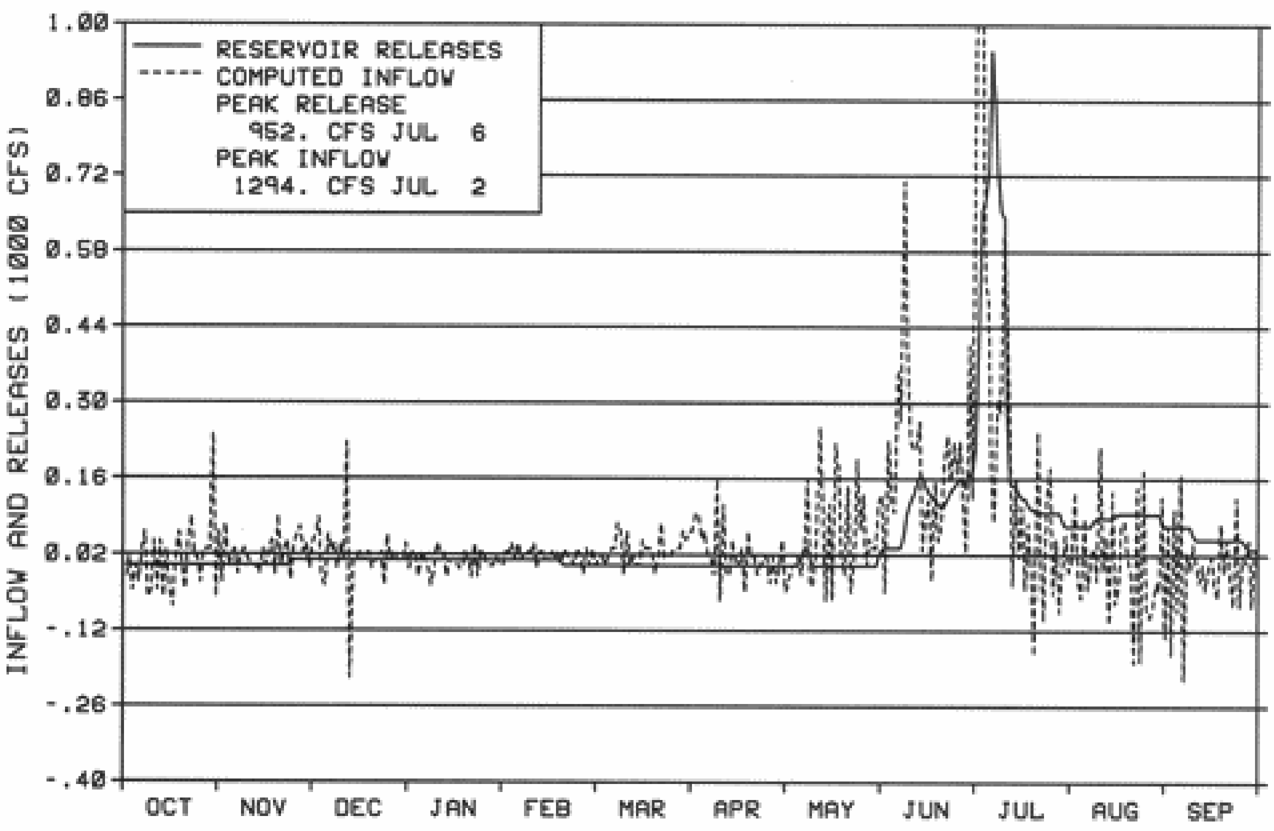
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	574	59	0	NA	57,240	98
NOVEMBER	1,243	105	147	10	58,336	100
DECEMBER	1,044	131	615	46	58,765	102
JANUARY	465	53	615	52	58,734	102
FEBRUARY	1,052	28	343	18	59,443	100
MARCH	1,681	6	0	NA	61,124	87
APRIL	1,389	6	0	NA	62,513	88
MAY	3,076	31	216	2	65,373	94
JUNE	11,057	108	6,621	73	69,809	99
JULY	13,917	317	17,864	223	65,862	98
AUGUST	192	17	5,368	103	60,686	96
SEPTEMBER	-163	NA	3,132	119	57,391	95
ANNUAL	35,526	41	34,920	41		
APRIL-JULY	29,439	61				

* Frequently observed during fall and winter months

FIGURE DKG3

LAKE TSCHIDA





WATER YEAR 2005

JAMESTOWN RESERVOIR

BACKGROUND

Jamestown Reservoir is located on the James River above Jamestown, North Dakota. The reservoir has a dead capacity of 822 acre-feet, an active conservation capacity of 24,535 acre-feet (for a total top of active conservation capacity of 25,357 acre-feet at elevation 1428.00), a joint-use capacity of 6,153 acre-feet, and an exclusive flood control space of 189,468 acre-feet. The exclusive flood control storage is below the crest of an ungated glory-hole spillway, and flood control releases are controlled by the gated outlets. The joint-use space is available for flood control at the beginning of spring runoff and is used for conservation purposes during the summer months.

WATER YEAR 2005 OPERATIONS SUMMARY

The water surface elevation of Jamestown Reservoir at the beginning of water year 2005 was 1428.35 feet with storage of 26,028 acre-feet, which is 0.35 feet, and 671 acre-feet above the top of the conservation pool (elevation 1428.00). Jamestown Reservoir peaked at elevation 1432.30 feet on May 10th with 34,611 acre-feet of storage. The reservoir elevation on September 30, 2005 was 1429.90 with storage of 29,114 acre-feet, which is 1.90 feet, and 3,757 acre-feet above the top of active conservation pool.

The maximum discharge of 202 cfs occurred on May 22nd. Reservoir net inflows for water year 2005 totaled 29,599 acre-feet, 68 percent of average. Precipitation for the water year totaled 21.47 inches at 116 percent of average.

MONTHLY STATISTICS FOR WY 2005

October inflows were the 7th highest October inflows in 52 years of record.
November inflows were the 10th highest November inflows in 52 years of record.
July inflows were the 10th highest July inflows in 52 years of record.
September inflows were the 10th highest September inflows in 52 years of record.

Record end of month content were recorded in the following months:
No record end of month content was recorded at Jamestown Reservoir

Additional statistical information on Jamestown Reservoir and its operations during 2005 can be found on Table DKT5 and Figure DKG4.

TABLE DKT5
HYDROLOGIC DATA FOR 2005
JAMESTOWN RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	1,400.00	822	822
TOP OF ACTIVE CONSERVATION	1,428.00	25,357	24,535
TOP OF JOINT USE	1,431.00	31,510	6,153
TOP OF EXCLUSIVE FLOOD CONTROL	1,454.00	220,978	189,468

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	1,428.35	26,028	OCT 01, 2004
END OF YEAR	1,429.90	29,114	SEP 30, 2005
ANNUAL LOW	1,428.11	25,568	OCT 06, 2004
ANNUAL HIGH	1,432.30	34,611	MAY 10, 2005
HISTORIC HIGH	1,445.91	126,067	MAY 05, 1997

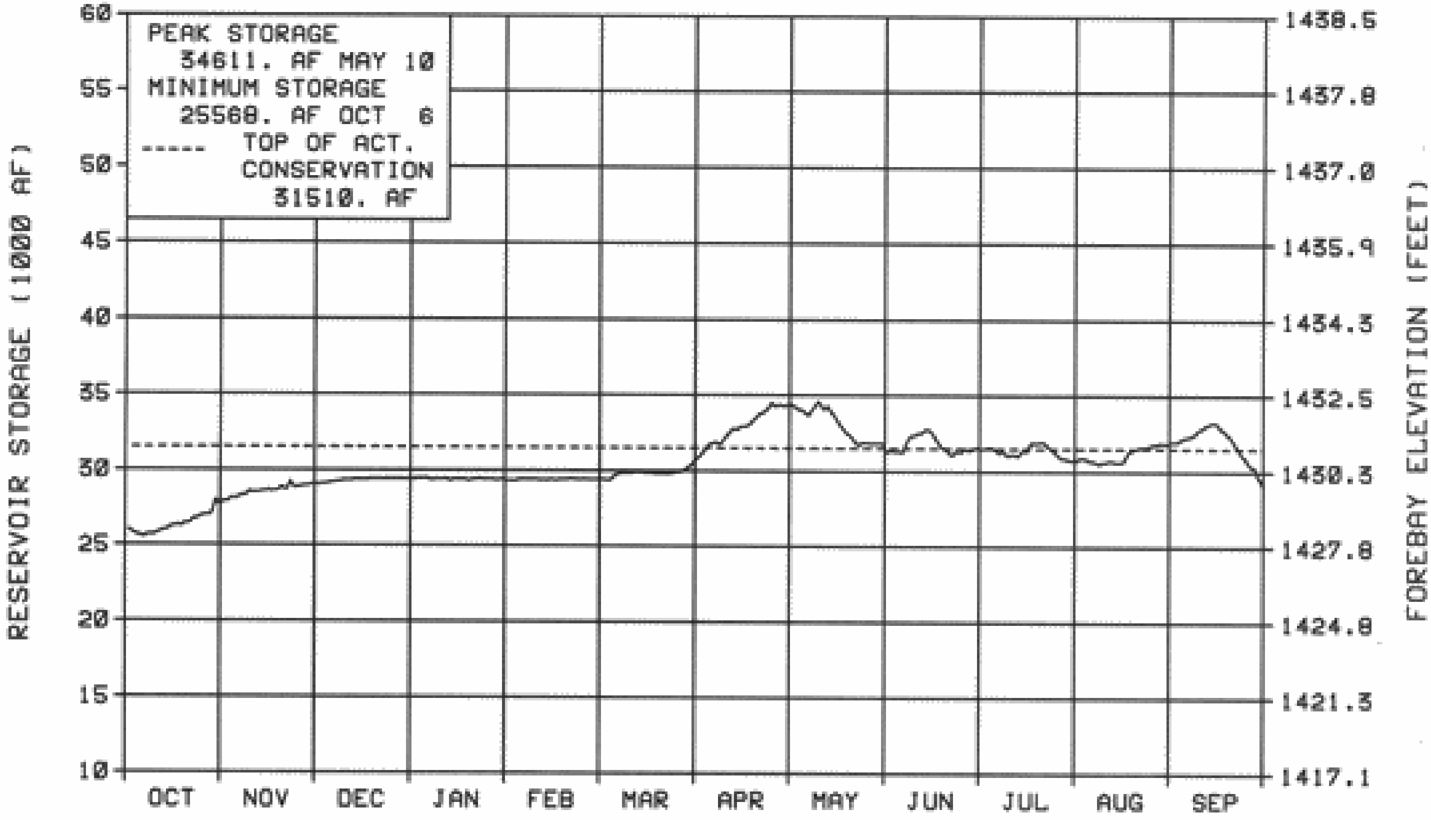
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	29,599	OCT 04-SEP 05	26,627	OCT 04-SEP 05
DAILY PEAK (CFS)	401	OCT 29, 2004	202	MAY 22, 2005
DAILY MINIMUM (CFS)	0	*	0	*

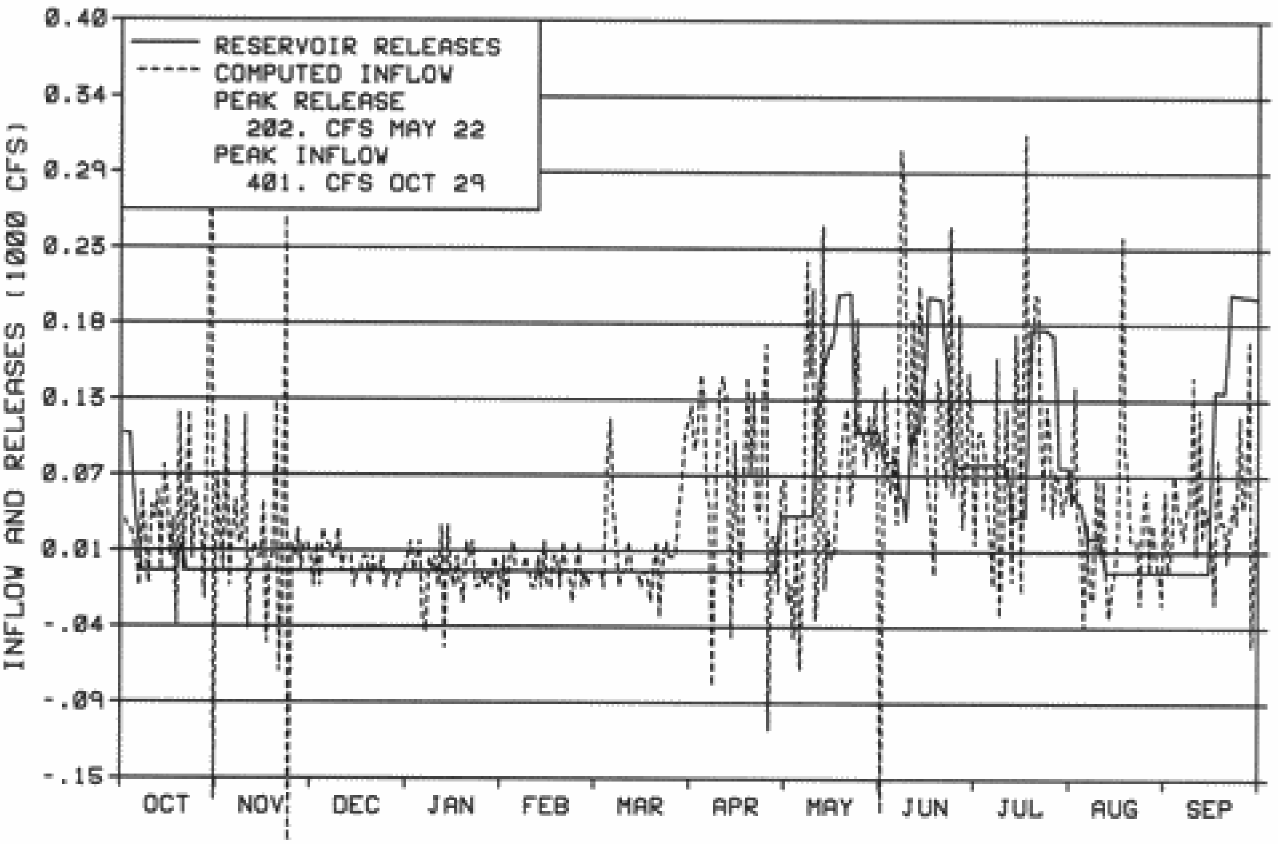
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	2,613	312	910	42	27,846	112
NOVEMBER	1,227	178	0	NA	29,073	119
DECEMBER	333	105	0	NA	29,407	120
JANUARY	-44	NA	0	NA	29,363	120
FEBRUARY	22	9	0	NA	29,385	119
MARCH	1,183	19	0	NA	30,567	101
APRIL	3,918	21	127	2	34,358	83
MAY	4,179	60	6,770	63	31,768	84
JUNE	6,300	224	6,487	91	31,580	95
JULY	5,265	174	6,081	122	30,765	98
AUGUST	1,942	72	752	17	31,955	108
SEPTEMBER	2,661	280	5,501	145	29,114	109
ANNUAL	29,599	68	26,627	62		
APRIL-JULY	19,662	63				

* Frequently observed during fall and winter months

FIGURE DKG4

JAMESTOWN RESERVOIR





WATER YEAR 2005

DEERFIELD RESERVOIR

BACKGROUND

Deerfield Reservoir is located on Castle Creek, a tributary of Rapid Creek above Rapid City. Deerfield Reservoir (Rapid Valley Project) and Pactola Reservoir (Rapid Valley Unit, P-S MBP), furnish a supplemental irrigation supply to about 8,900 acres in the Rapid Valley Water Conservancy District and furnish replacement water for a portion of the water used from Rapid Creek by Rapid City. The majority of prior rights to the flows of Rapid Creek during the irrigation season are held by individuals and ditch companies in the Rapid Valley Water Conservancy District.

In 1985, Deerfield Dam was modified to accommodate a larger flood as determined from the results of the Probable Maximum Flood analysis. These modifications consisted of raising the crest of the dam 38 feet, excavating an unlined auxiliary spillway, removing and filling in the old spillway, and extending the existing emergency gate passageway to the new control house at the higher crest elevation. The reservoir has a total capacity of 15,655 acre-feet with an additional 26,655 acre-feet of surcharge capacity.

During the winter of 1995-96 the hollow jet valves were removed to allow the installation of the jet flow valves as part of the outlet works modification contract. The work was done to improve fish habitat in 1.5 miles of the creek immediately downstream of the dam. The stream improvement project was a cooperative effort accomplished by the City of Rapid City, Rapid Valley Water Conservancy District, Black Hills Fly Fishers, Bureau of Reclamation, US Forest Service, and SD Game Fish and Parks. The project modified the outlet works of Deerfield Dam by installing Jet Flow Gates to allow greater minimum winter releases than the 6-in bypass is capable of providing.

WY 2005 OPERATIONS SUMMARY

Inflows for Deerfield Reservoir for WY 2005 totaled 5,686 acre-feet (58% of the average). The water year began with 14,127 acre-feet of storage, at elevation 5904.27. WY 2005 ended with Deerfield at elevation 5901.69 and storage content of 13,115 acre-feet. The peak reservoir elevation for the year was 5904.25 on October 1 with 14,119 acre-feet of storage.

Rapid Valley Water Conservancy District ordered 3,582 acre feet of water from Deerfield for the 2005 irrigation season.

The Annual Facility Review was done on June 16, 2005 by personnel from the Rapid City Field Office and the City of Rapid City.

An Emergency Management/Security orientation was conducted on March 3, 2005.

MONTHLY STATISTICS FOR WY 2005

October end of month (EOM) elevation, at Deerfield Reservoir (Deerfield), was above average. October inflow was below average. Releases are at 10 cfs. Deerfield finished the month 4.2 feet from full.

November EOM elevation, at Deerfield, was above average. November inflow was below average. Releases are at 10 cfs. Deerfield finished the month 4.7 feet from full.

December EOM elevation, at Deerfield, was above average. December inflow was below average. Releases are at 10 cfs. Deerfield finished the month 5.1 feet from full.

January EOM elevation, at Deerfield, was above average. January inflow was below average. Releases are at 10 cfs. Deerfield finished the month 5.4 feet from full.

February EOM elevation, at Deerfield, was above average. February inflow was below average. Releases are at 10 cfs. Deerfield finished the month 5.8 feet from full.

March EOM elevation, at Deerfield, was below average. March inflow was 6th lowest in 52 years of record. Releases are at 10 cfs. Deerfield finished the month 6.1 feet from full. Emergency Management/Security orientation held March 3, 2005.

April EOM elevation, at Deerfield, was below average. April inflow was 7th lowest in 52 years of record. Releases are at 10 cfs. Deerfield finished the month 5.8 feet from full.

May EOM elevation, at Deerfield, was below average. May inflow was much below average. Releases are at 8 cfs. Deerfield finished the month 5.2 feet from full.

June EOM elevation, at Deerfield, was slightly above average. June inflow was below average. Releases are at 8 cfs. Deerfield finished the month 5.1 feet from full.

July EOM elevation, at Deerfield, was above average. July inflow was 6th lowest in 52 years of record. Release is at 8 cfs. Deerfield finished the month 5.3 feet from full.

August EOM elevation, at Deerfield, was above average. August inflow was below average. Release is at 8 cfs. Deerfield finished the month 5.8 feet from full.

September EOM elevation, at Deerfield, was above average. September inflow was 7th lowest in 52 years of record. Release is at 8 cfs. Deerfield finished the month 6.3 feet from full.

Additional statistical information on Deerfield and its operations during 2005 can be found on Table DKT6 and Figure DKG5.

TABLE DKT6
HYDROLOGIC DATA FOR 2005
DEERFIELD RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	5,839.00	151	151
TOP OF ACTIVE CONSERVATION	5,908.00	15,655	15,504
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL			

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	5,904.27	14,127	OCT 01, 2004
END OF YEAR	5,901.69	13,115	SEP 30, 2005
ANNUAL LOW	5,901.69	13,115	SEP 30, 2005
ANNUAL HIGH	5,904.25	14,119	OCT 01, 2004
HISTORIC HIGH	5,909.05	16,157	FEB 25, 1985

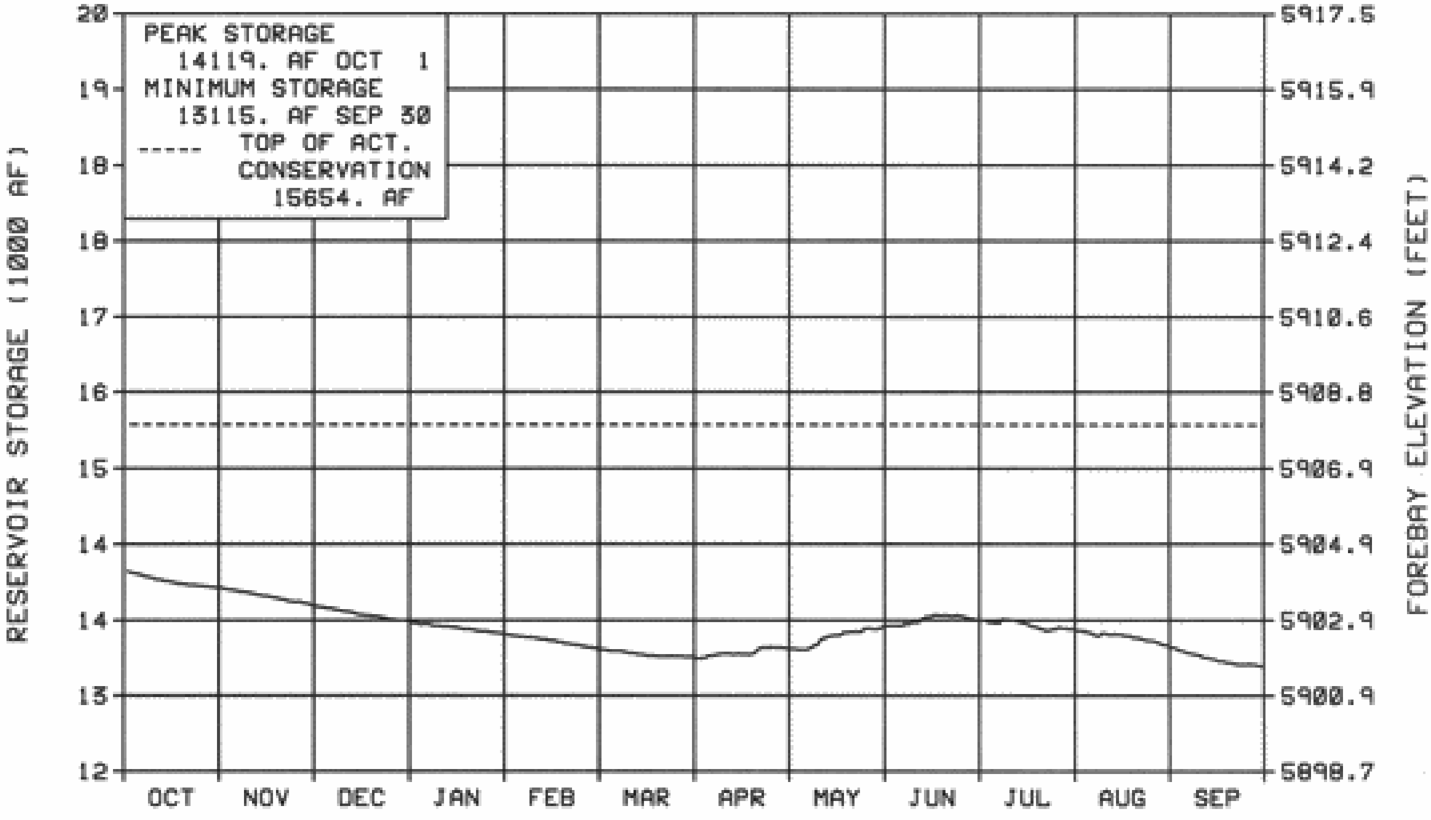
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	5,686	OCT 04-SEP 05	6,698	OCT 04-SEP05
DAILY PEAK (CFS)	36	MAY 11, 2005	10	OCT 04-MAY 05
DAILY MINIMUM (CFS)	0	*	8	MAY-SEPT 05

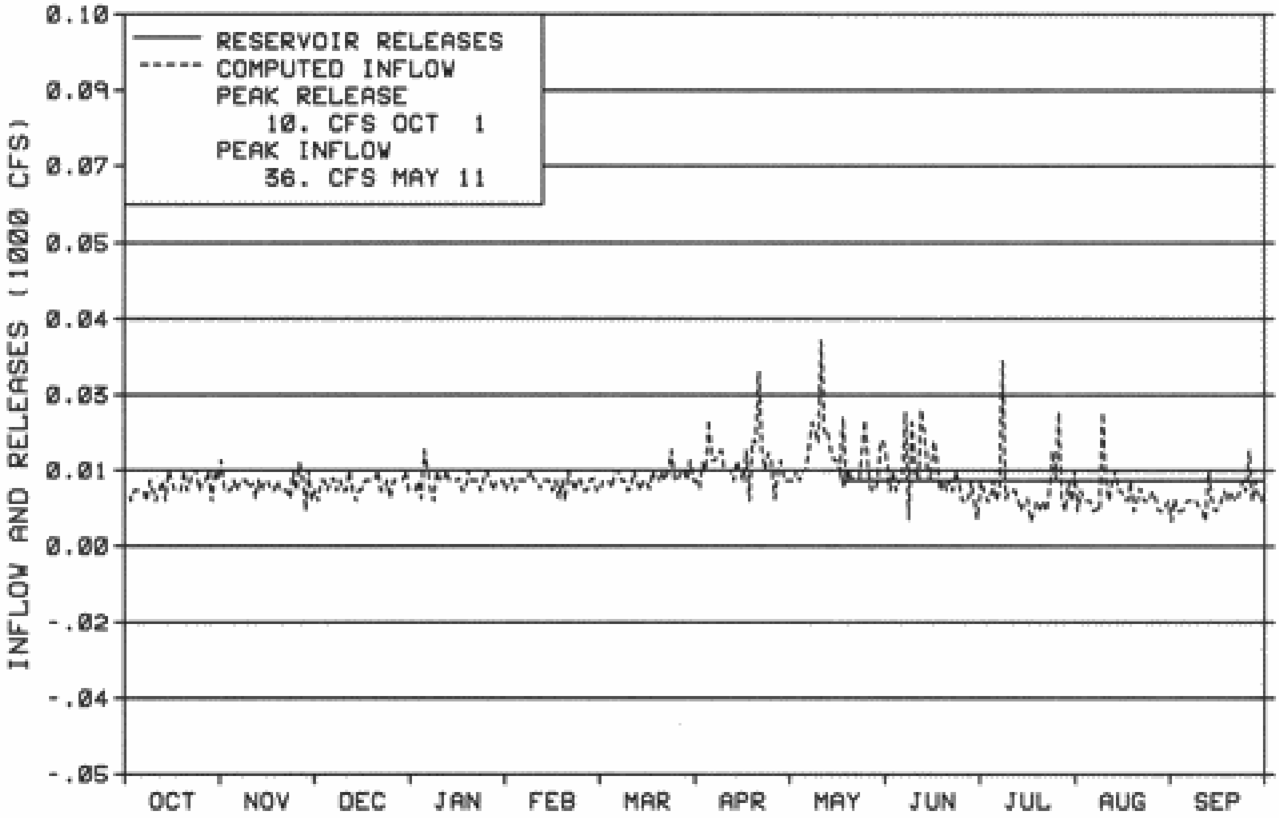
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	435	66	615	80	13,947	113
NOVEMBER	405	68	595	178	13,757	109
DECEMBER	438	70	615	214	13,580	105
JANUARY	482	77	615	214	13,447	101
FEBRUARY	412	71	555	184	13,304	98
MARCH	522	60	615	105	13,211	96
APRIL	688	58	595	56	13,304	95
MAY	790	59	557	43	13,537	97
JUNE	539	45	476	38	13,600	98
JULY	398	47	492	43	13,506	99
AUGUST	301	44	492	39	13,315	102
SEPTEMBER	276	45	476	39	13,115	106
ANNUAL	5,686	58	6,698	69		
APRIL-JULY	2,415	53				

* Frequently observed during fall and winter months

FIGURE DKG5

DEERFIELD RESERVOIR





WATER YEAR 2005

PACTOLA RESERVOIR

BACKGROUND

Pactola Reservoir, Rapid Valley Unit (P-S MBP), located on Rapid Creek above Rapid City, South Dakota, acts in conjunction with Deerfield Reservoir, Rapid Valley Project, to furnish a supplemental irrigation supply to about 8,900 acres in the Rapid Valley Water Conservancy District, replacement water for Rapid City, and a supply of domestic water for private water systems both above and below the city. The reservoir is also operated to provide flood control. It has a conservation capacity of 55,972 acre-feet (54,955 acre-feet active) and 43,057 acre-feet of exclusive flood control space. The flood control space is all below the ungated spillway crest, and releases in this pool are controlled by the river outlet works. Rapid City has contracts for Pactola and Deerfield Reservoir water. The Rapid Valley Sanitation District and C&J Sanders Water Company also have contracts for water service from Pactola Reservoir. Operation of the two reservoirs is integrated to maintain as much water as possible in the upstream facility, Deerfield Reservoir, and at the same time maintain a uniform outflow from Deerfield to maximize fishery benefits in the stream between the reservoirs. Since no inflow forecasts are available, the reservoir is normally operated as full as possible. Two Snowtel (North Rapid Creek and Blind Park) sites were installed in the Pactola and Deerfield drainage basin in May of 1990.

As part of the Safety Examination of Existing Structures (Safety of Dams) Program, a study was made in the early 1980's to determine the adequacy of Pactola Dam, Spillway, and Reservoir to safely pass the new Inflow Design Flood (IDF) determined on the basis of present day hydrologic technology. The studies showed that the facility was not able to safely handle the new IDF. Modification work was completed in 1987 and provided sufficient surcharge storage and spillway capacity to pass the IDF. Modification work consisted of raising the crest of the dam 15 feet, widening the existing rock-cut spillway chute and stilling basin from 240 feet to 425 feet, relocating Highway 385 to the new dam crest, extending the existing gate access shaft to the higher crest elevation, and reconstructing a new two-level gate control house at the higher crest elevation.

WY 2005 OPERATIONS SUMMARY

Storage in Pactola Reservoir at the beginning of the year was 42,615 acre-feet at elevation 4562.99, which is 13,357 acre-feet and 17.21 feet below the top of the conservation pool. The inflows for WY 2005 totaled 13,871 acre-feet (39 % of average) and were 4th lowest in 50 years of record.

The water year maximum storage of 43,844 acre-feet occurred on June 22, 2005 and the annual minimum storage of 36,131 acre-feet occurred on September 30, 2005 (end of WY 2005). At the end of WY 2005, storage was 36,131 acre-feet at elevation 4553.28 ft, 19,841 acre-feet and 26.9 ft below the top of the conservation pool.

An Emergency Management/Security orientation was conducted on March 3, 2005.

The Annual Facility Review was done on October 13, 2004 by personnel from the Rapid City Field Office and the City of Rapid City.

The City of Rapid City ordered 3084 acre-feet from Pactola to meet needs over and above natural flow releases required to meet prior rights in Rapid Creek during the summer of 2005. The operation of Pactola Reservoir provided minimal local and mainstream flood relief during WY 2005. The flood plain through Rapid City is designed to pass 6,500 cfs without major property damage, but some areas of the bicycle path near Canyon Lake will inundate at 350 to 400 cfs. Spring releases from Pactola Dam peaked during early July at 99 cfs.

MONTHLY STATISTICS FOR WY 2005

October end of month (EOM) elevation, at Pactola Reservoir (Pactola), was above average. October inflow was below average. Release at 20 cfs. Pactola ended the month 17.4 feet from full.

November EOM elevation and November inflow, at Pactola, were below average. Release at 20 cfs. Pactola ended the month 17.8 feet from full.

December EOM elevation and December inflow, at Pactola, were below average. Release at 20 cfs. Pactola ended the month 18.1 feet from full.

January EOM elevation and January inflow, at Pactola, were below average. Release at 20 cfs. Pactola ended the month 18.0 feet from full.

February EOM elevation and February inflow, at Pactola, were below average. Release at 20 cfs. Pactola ended the month 18.1 feet from full.

March EOM elevation and March inflow, at Pactola, were below average. Release at 20 cfs. Pactola ended the month 17.8 feet from full. Emergency Management/Security orientation held March 3, 2005.

April EOM elevation, at Pactola, was below average. April inflow was the 4th lowest in 49 years of record. Release at 20 cfs. Pactola ended the month 17.3 feet from full.

May EOM elevation, at Pactola, was much average. May inflow was the 4th lowest in 49 years of record. Release at 20 cfs. Pactola ended the month 16.2 feet from full.

June EOM elevation, at Pactola, was below average. June inflow was the 8th lowest in 49 years of record. Release at 51 cfs. Pactola ended the month 15.8 feet from full.

July EOM elevation, at Pactola, was 9th lowest in 49 years of record. July inflow was the 2nd lowest in 49 years of record. Release at 38 cfs. Pactola ended the month 21.5 feet from full.

August EOM elevation, at Pactola, was 10th lowest in 49 years of record. August inflow was the 4th lowest in 49 years of record. Release at 51 cfs. Pactola ended the month 23.9 feet from full.

September EOM elevation, at Pactola, was 10th lowest in 49 years of record (tie with 1988). September inflow was the lowest in 49 years of record. Release at 36 cfs. Pactola ended the month 26.9 feet from full.

Additional statistical information on Pactola and its operations during 2005 can be found on Table DKT7 and Figure DKG6.

TABLE DKT7
HYDROLOGIC DATA FOR 2005
PACTOLA RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	4,456.10	1,017	1,017
TOP OF ACTIVE CONSERVATION	4,580.20	55,972	54,955
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL	4,621.50	99,029	43,057

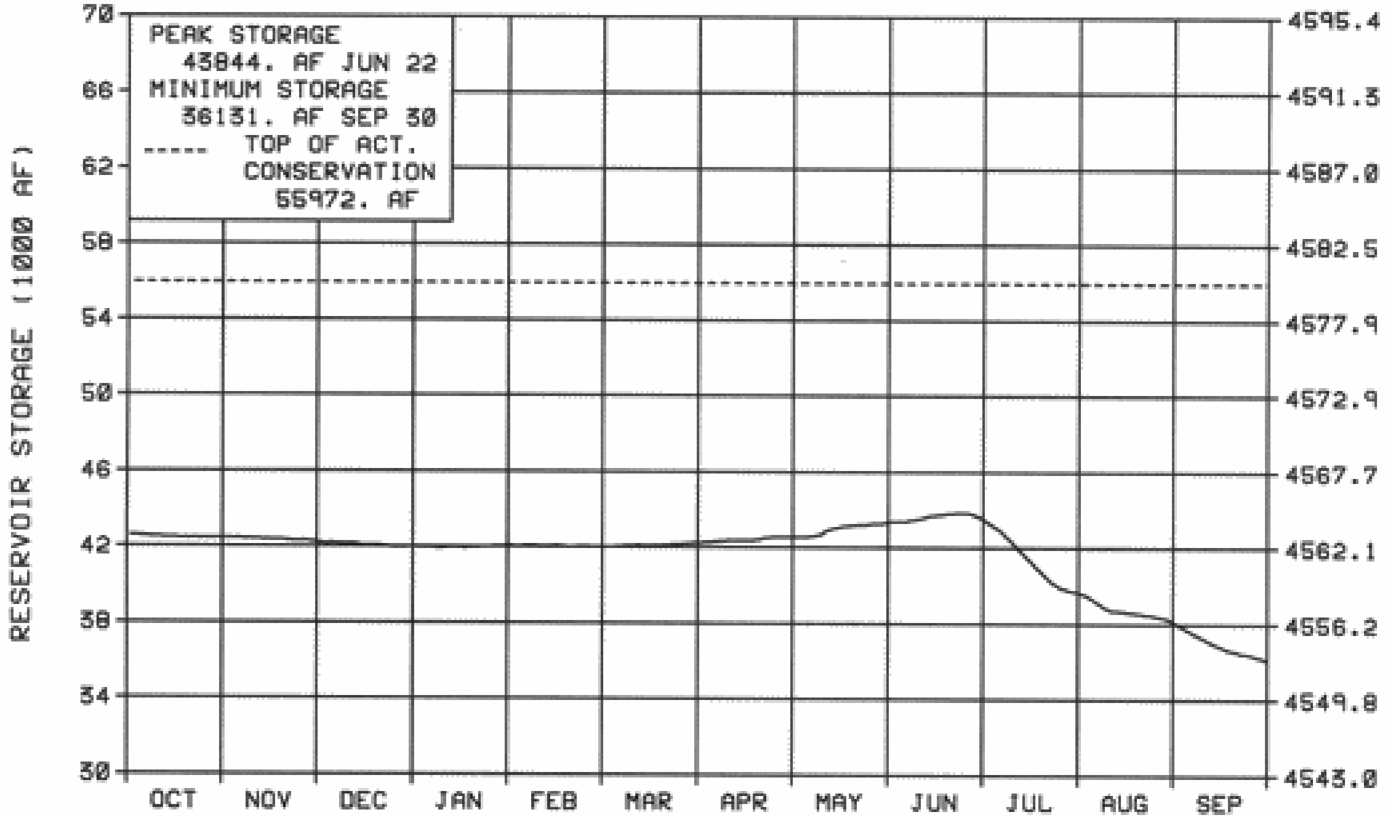
STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	4,562.99	42,615	OCT 01, 2004
END OF YEAR	4,553.28	36,131	SEP 30, 2005
ANNUAL LOW	4,553.28	36,131	SEP 30, 2005
ANNUAL HIGH	4,564.72	43,844	JUN 22, 2005
HISTORIC HIGH	4,585.87	61,105	MAY 19, 1965

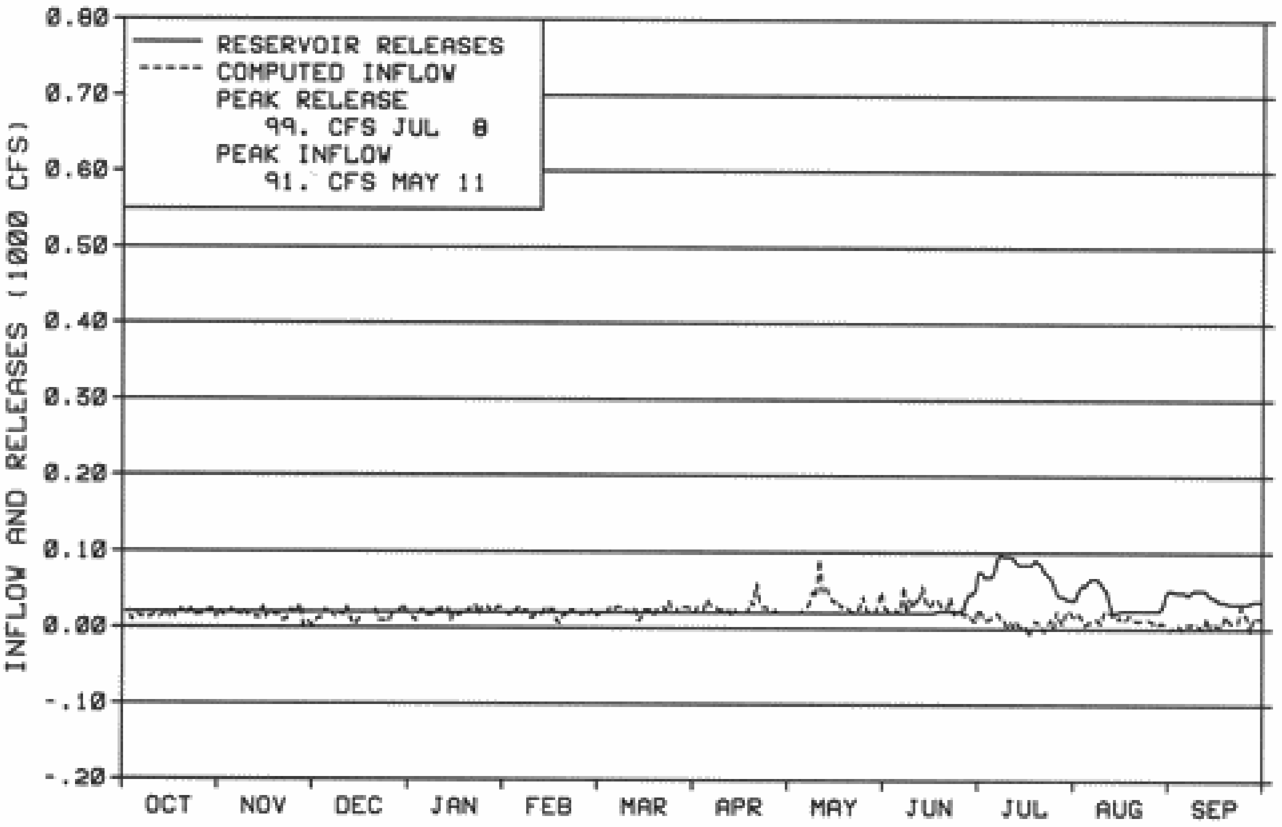
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	13,871	OCT 04-SEP 05	20,355	OCT 04-SEP 05
DAILY PEAK (CFS)	91	MAY 11, 2005	99	JUL 08, 2005
DAILY MINIMUM (CFS)	0	JUL-SEP, 2005	20	OCT-JUN 05

MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	1,061	51	1,230	74	42,446	95
NOVEMBER	959	64	1,190	88	42,215	94
DECEMBER	1,020	80	1,230	89	42,005	94
JANUARY	1,293	98	1,230	94	42,068	94
FEBRUARY	1,069	79	1,111	93	42,026	94
MARCH	1,433	60	1,230	71	42,229	93
APRIL	1,520	36	1,190	42	42,559	91
MAY	2,015	31	1,230	23	43,344	90
JUNE	1,682	25	1,440	24	43,586	90
JULY	627	17	4,537	86	39,676	85
AUGUST	709	26	2,300	57	38,085	85
SEPTEMBER	484	22	2,438	91	36,131	82
ANNUAL	13,871	39	20,355	59		
APRIL-JULY	5,844	28				

FIGURE DKG6

PACTOLA RESERVOIR





WATER YEAR 2005

ANGOSTURA RESERVOIR

BACKGROUND

Angostura Reservoir (P-S MBP), located on the Cheyenne River above Hot Springs, South Dakota, was built to service about 12,200 acres in the Angostura Unit (P-S MBP) and for power generation. It has a total capacity of 130,700 acre-feet with an additional surcharge capacity of 56,400 acre-feet. Its principle use is for irrigation of the Angostura Unit, which diverts its water from a high-level outlet at the dam. In the early years, water surplus to irrigation needs was released to the river through a small power plant with a nameplate capacity of 1,200 kilowatts. Because of the low runoff, and because actual irrigation diversions were higher than previously anticipated, it was concluded that continued operation of the power plant was economically infeasible. Except for a few operations of less than 24 hours each, the plant was last operated in February 1959. In 1966, the plant was officially closed and the equipment was declared surplus in March 1968. Disposal of this equipment was completed in 1971. Releases for irrigation are made through the canal outlet works into the Angostura Main Canal having a design capacity of 290 cfs. Releases to the Cheyenne River are only made when the reservoir is assured of filling.

WY 2005 OPERATIONS SUMMARY

Angostura began WY 2005 at an elevation of 3165.53 ft, and storage of 54,703 acre-feet. Total inflows for the water year were 38,586 acre-feet (48 % of average). Peak inflows occurred in June, totaling 18,632 acre-feet for the month.

Water users were allocated full allotments of project water. Releases for irrigation began May 23 and reached a peak of 265 cfs on August 11. The irrigation release was terminated on September 20, with 57,620 acre-feet remaining in storage. Total irrigation releases were 35,510 acre-feet. Storage on September 30, 2005 was 57,779 acre-feet at elevation 3166.70, which is 72,989 acre-feet and 20.50 ft below the top of conservation pool.

Reclamation's Sedimentation and River Hydraulics Group of the Technical Service Center in Denver conducted a sedimentation survey of Angostura Reservoir in 2004 and provided a survey report and new Area and Capacity Tables in August of 2005. The last survey was done in 1979. Angostura Reservoir accumulated 7,716 acre-feet of sediment since the last survey. Since construction in 1949, Angostura has accumulated 36,867 acre-feet of sediment. The sedimentation rate from 1949 through 2004 has averaged 670 acre-feet per year. The new Area and Capacity Tables will be used, beginning, in WY 2006.

Tabletop Emergency Management exercise held December 2, 2004.

Annual Emergency Management/Security orientation was conducted on March 8, 2005.

The Annual Facility Review was done on May 5, 2005 by personnel from the Rapid City Field Office.

MONTHLY STATISTICS FOR WATER YEAR 2005

October end-of-month (EOM) elevation, at Angostura Reservoir (Angostura), was 3rd lowest in 53 years of record. October inflow was slightly below average. Angostura ended the month 21.1 feet from full.

November EOM elevation, at Angostura, was 3rd lowest in 53 years of record. November inflow was below average. Angostura ended the month 20.4 feet from full.

December EOM elevation, at Angostura, was 3rd lowest in 53 years of record. December inflow was slightly above average. Angostura ended the month 19.7 feet from full.

January EOM elevation, at Angostura, was 3rd lowest in 53 years of record. January inflow was above average. Angostura ended the month 18.9 feet from full.

February EOM elevation, at Angostura, was 3rd lowest in 53 years of record. February inflow was below average. Angostura ended the month 17.9 feet from full.

March EOM elevation March inflow, at Angostura, was 3rd lowest in 53 years of record. Angostura ended the month 17.2 feet from full. Emergency Management/Security orientation held March 8, 2005.

April EOM elevation, at Angostura, was 3rd lowest in 53 years of record. April inflow was below average. Angostura ended the month 16.4 feet from full.

May EOM elevation, at Angostura, was 2nd lowest in 53 years of record. May inflow was below average. Began filling the canal on May 23rd. Angostura ended the month 15.9 feet from full.

June EOM elevation, at Angostura, was 6th lowest in 53 years of record. June inflow was slightly below average. Angostura ended the month 11.1 feet from full.

July EOM elevation, at Angostura, was 6th lowest in 53 years of record. July inflow was below average. Angostura ended the month 14.8 feet from full.

August EOM elevation, at Angostura, was 6th lowest in 53 years of record. August inflow was below average. Angostura ended the month 18.3 feet from full.

September EOM elevation, at Angostura, was 4th lowest in 53 years of record. September inflow was below average. Irrigation releases ended Sept 20th. Angostura ended the month 20.5 feet from full.

Additional statistical information on Angostura and its operations during 2005 can be found on Table DKT8 and Figure DKG7.

TABLE DKT8
HYDROLOGIC DATA FOR 2005
ANGOSTURA RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	3,163.00	48,325	48,325
TOP OF ACTIVE CONSERVATION	3,187.20	130,768	82,443
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL			

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	3,165.53	54,703	OCT 01, 2004
END OF YEAR	3,166.70	57,779	SEP 30, 2005
ANNUAL LOW	3,165.52	54,677	OCT 01, 2004
ANNUAL HIGH	3,176.33	86,981	JUN 24, 2005
HISTORIC HIGH	3,189.37	**152,228	MAY 20, 1978

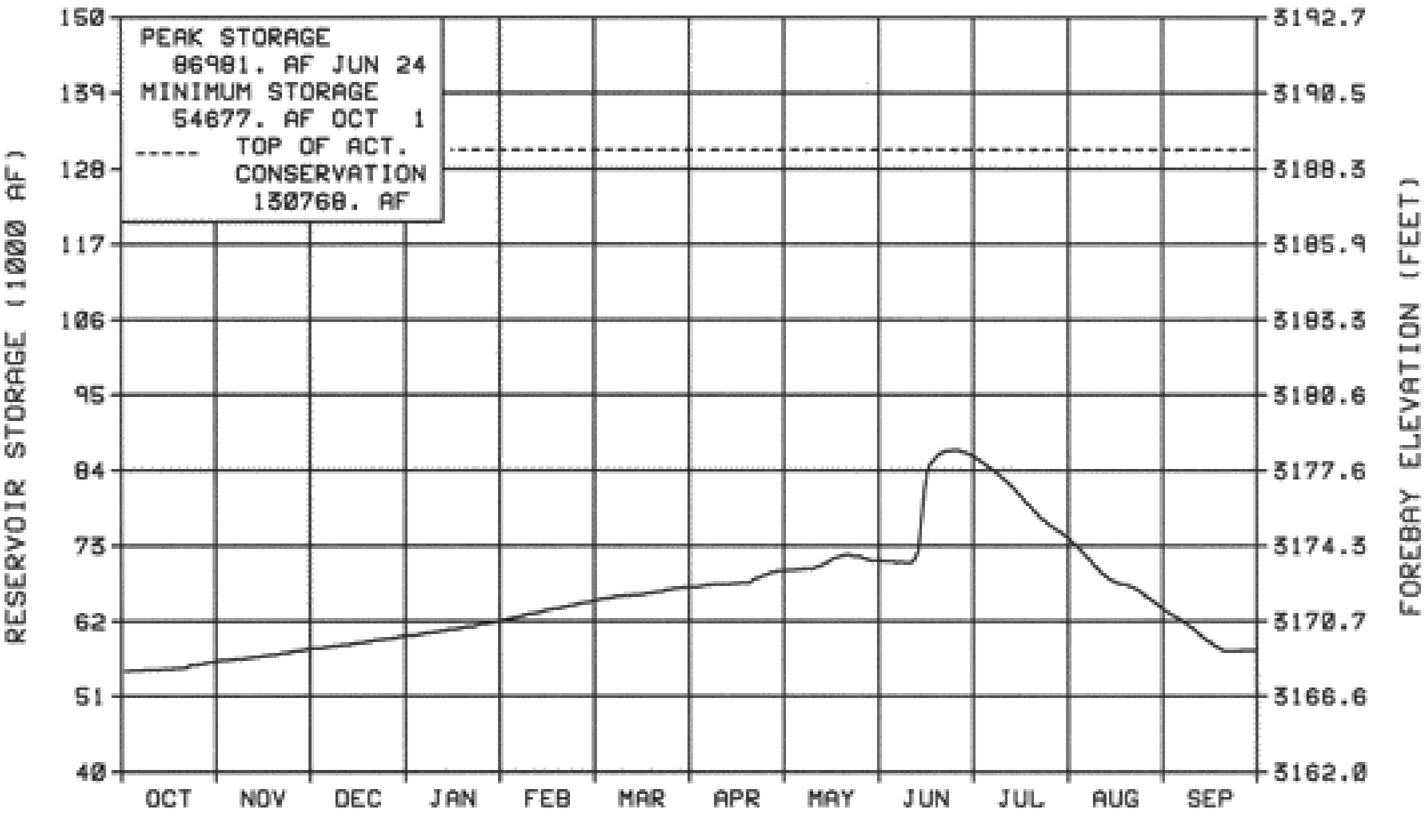
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	38,586	OCT 04-SEP 05	35,510	OCT 04-SEP 05
DAILY PEAK (CFS)	2,443	JUN 15, 2005	265	AUG 11, 2005
DAILY MINIMUM (CFS)	0	*	0	*

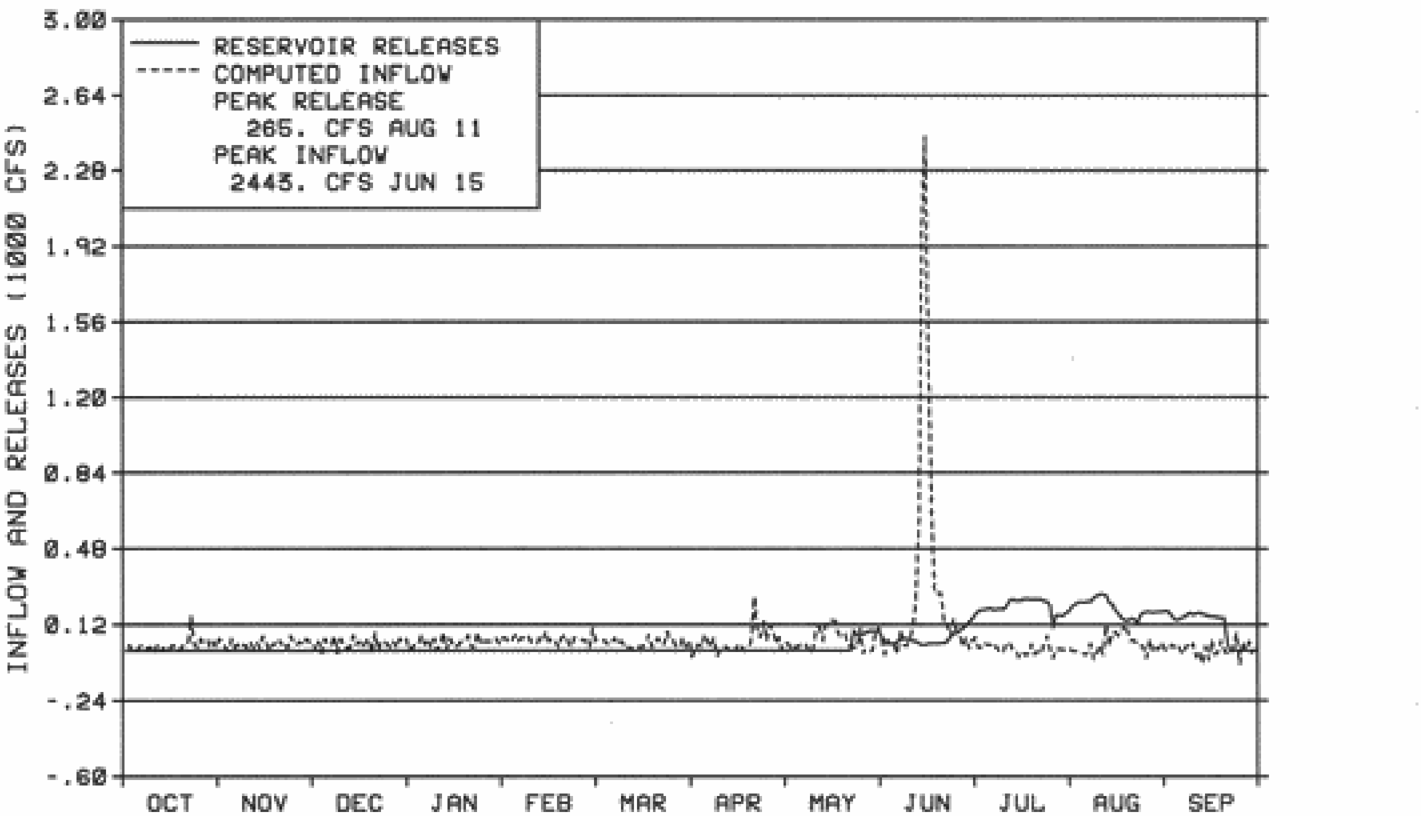
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	1,430	87	0	NA	56,133	55
NOVEMBER	1,859	81	0	NA	57,992	57
DECEMBER	1,864	104	0	NA	59,856	58
JANUARY	2,337	113	0	NA	62,194	59
FEBRUARY	2,756	61	0	NA	64,950	60
MARCH	2,088	18	0	NA	67,037	58
APRIL	2,313	29	0	NA	69,350	58
MAY	3,012	17	1,490	11	70,872	57
JUNE	18,632	93	3,282	16	86,222	69
JULY	514	7	12,538	76	74,198	64
AUGUST	1,566	48	12,063	90	63,701	60
SEPTEMBER	214	19	6,136	107	57,779	57
ANNUAL	38,586	48	35,510	44		
APRIL-JULY	24,471	46				

* Frequently observed during fall and winter months
** Due to new area-capacity table, the capacity that corresponds to the new historic high elevation is less than a previous high capacity amount (169,020 AF @ Elevation 3189.0 on June 18, 1962)

FIGURE DKG7

ANGOSTURA RESERVOIR





WATER YEAR 2005

KEYHOLE RESERVOIR

BACKGROUND

Keyhole Reservoir (P-S MBP) located on the Belle Fourche River below Moorcroft, Wyoming, has a conservation capacity of 193,753 acre-feet (185,801 acre-feet active) and 140,462 acre-feet of exclusive flood control space. It was constructed to furnish a supplemental irrigation supply to 57,000 acres in the Belle Fourche Project and for flood control. Keyhole Reservoir is subject to the Belle Fourche River Compact, and the inflows and storage in the reservoir are allocated 10 percent to Wyoming users and 90 percent to South Dakota users, subject to prior rights. On January 3, 1963, the Belle Fourche Irrigation District executed a long-term contract for the use of 7.7 percent of active storage space in the reservoir. This space will be used to store water belonging to the irrigation district under its prior water right along with the District's pro rata share of storable inflows to Keyhole Reservoir. On January 1, 1985, the Crook County Irrigation District's contract for 18,080 acre-feet of space in Keyhole Reservoir became effective. The allocated space is used by each organization to store its pro rata share of inflows to Keyhole Reservoir. The flood control space at Keyhole Reservoir is all located above an ungated spillway. The spillway capacity is 11,000 cfs at maximum water surface elevation. The downstream safe channel capacity is 3,000 cfs. Formulas for forecasting inflows have not been developed. Research by the Soil Conservation Service during water years 1992 through 1994 show that inflow forecasting to Keyhole Reservoir is not reliable since there is no consistent snow pack and precipitation is highly cyclical. No further efforts to develop forecast models are planned.

WY 2005 OPERATIONS SUMMARY

Keyhole reservoir started WY 2005 with an elevation of 4085.38 and storage of 94,389 acre feet. Inflows for WY 2005 totaled a negative 985 acre-feet, which was 6th lowest in 54 years of record. Average inflows for a water year are 16,171 acre-feet. On May 20, 2005, Keyhole reached its peak elevation for WY 2005 at elevation 4086.54, 12.76 feet below top of conservation.

Keyhole ended WY 2005 at an elevation of 4081.75 ft, with storage of 77,138 acre-feet, which is 17.55 feet and 116,615 acre-feet below top of conservation.

Reclamation's Sedimentation and River Hydraulics Group of the Technical Service Center in Denver conducted a sedimentation survey of Angostura Reservoir in 2003 and provided a survey report and new area and capacity tables in July of 2005. The last survey was done in 1978. Keyhole Reservoir accumulated 5,082 acre-feet of sediment since the last survey. Since construction in 1952, Keyhole has accumulated 12,495 acre-feet of sediment. The sedimentation rate from 1952 through 2003 has averaged 240 acre-feet per year. The new Area and Capacity Tables will be used, beginning, in WY 2006.

Emergency Management/Security orientation conducted on March 9, 2005.

Irrigation releases began in June and continued through September with Crook County Irrigation

District taking 568 acre-feet and the Belle Fourche Irrigation District ordering 15,699 acre-feet.

The Annual Facility Review was done on July 14, 2005 by personnel from the Rapid City Field Office.

MONTHLY STATISTICS FOR WATER YEAR 2005

October end of month (EOM) elevation, at Keyhole Reservoir (Keyhole), was above average. October inflow was below average. Keyhole finished the month 14.0 feet from full.

November EOM elevation, at Keyhole, was above average. November inflow was below average. Keyhole finished the month 14.1 feet from full.

December EOM elevation, at Keyhole, was above average. December inflow was below average. Keyhole finished the month 14.1 feet from full.

January EOM elevation, at Keyhole, was above average. January inflow was below average. Keyhole finished the month 14.0 feet from full.

February EOM elevation, at Keyhole, was above average. February inflow was below average. Keyhole finished the month 13.9 feet from full.

March EOM elevation, at Keyhole, was above average. March inflow was 6th lowest in 53 years of record. Keyhole finished the month 13.8 feet from full. Emergency Management/Security orientation held March 9, 2005.

April EOM elevation, at Keyhole, was above average. April inflow was below average. Keyhole finished the month 13.6 feet from full.

May EOM elevation, at Keyhole, was above average. May inflow was slightly below average. Keyhole finished the month 12.8 feet from full.

June EOM elevation, at Keyhole, was above average. June inflow was below average. Began 100 cfs irrigation release, to the Belle Fourche Irrigation District, on June 28th. Keyhole finished the month 13.1 feet from full.

July EOM elevation, at Keyhole, was above average. July inflow was below average. Irrigation release is at 160 cfs. Annual facility inspection done on July 14. Keyhole finished the month 15.3 feet from full.

August EOM elevation, at Keyhole, was above average. August inflow was below average. Irrigation release is at 20 cfs. Keyhole finished the month 17.1 feet from full.

September EOM elevation, at Keyhole, was above average. September inflow was below average. Irrigation releases ended Sept 1st. Keyhole finished the month 17.6 feet from full.

Additional statistical information on Keyhole and its operations during 2005 can be found on Table DKT9 and Figure DKG8.

TABLE DKT9
HYDROLOGIC DATA FOR 2005
KEYHOLE RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	4,051.00	7,952	7,952
TOP OF ACTIVE CONSERVATION	4,099.30	193,753	185,801
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL	4,111.50	334,215	140,462

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	4,085.38	94,389	OCT 01, 2004
END OF YEAR	4,081.75	77,138	SEP 30, 2005
ANNUAL LOW	4,081.75	77,138	SEP 27, 2005
ANNUAL HIGH	4,086.54	100,530	MAY 20, 2005
HISTORIC HIGH	4,100.38	210,222	MAY 21, 1978

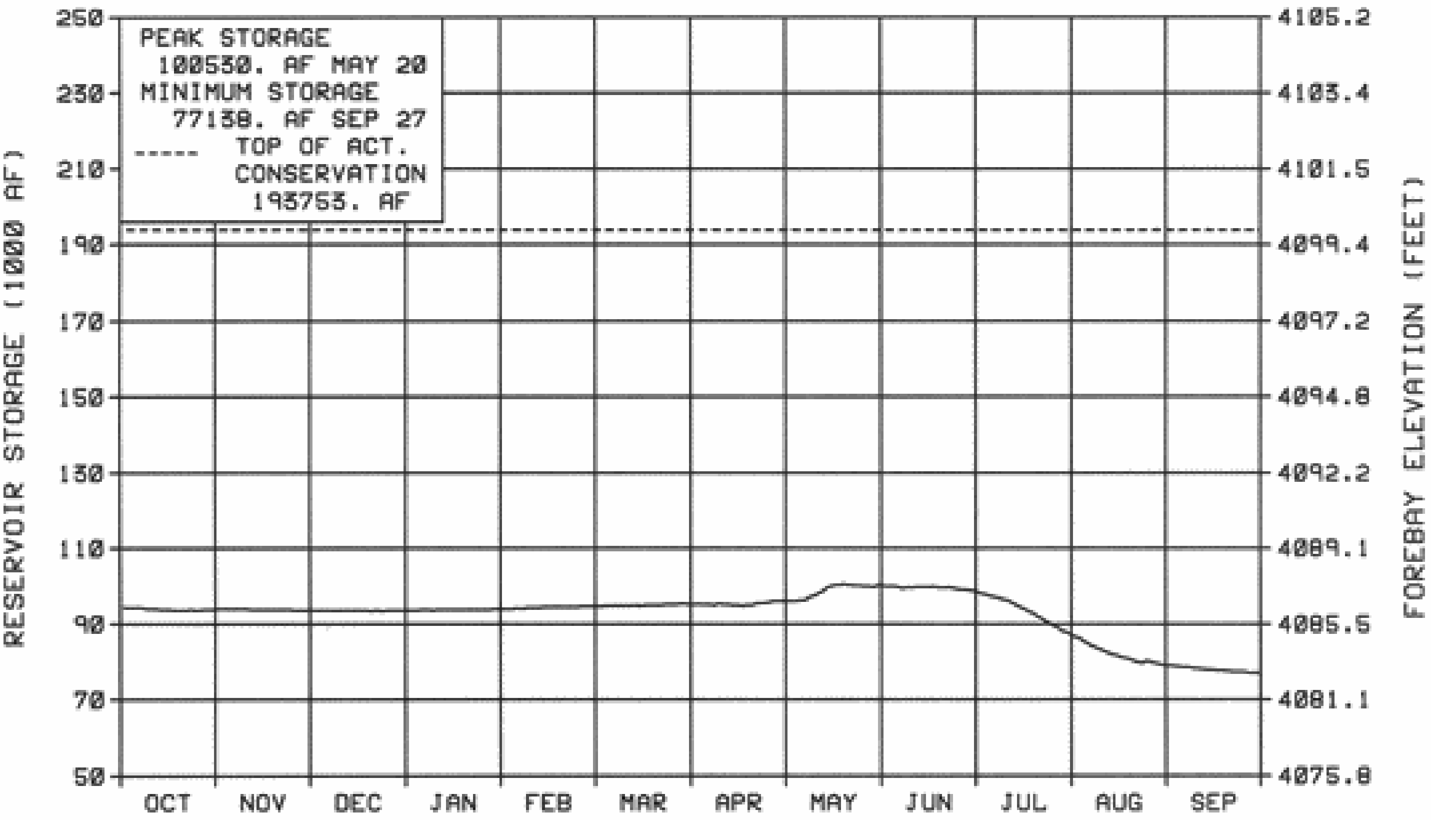
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	-985	OCT 04-SEP 05	16,266	OCT 04-SEP 05
DAILY PEAK (CFS)	406	MAY 14, 2005	204	JUL 20, 2005
DAILY MINIMUM (CFS)	0	*	0	*

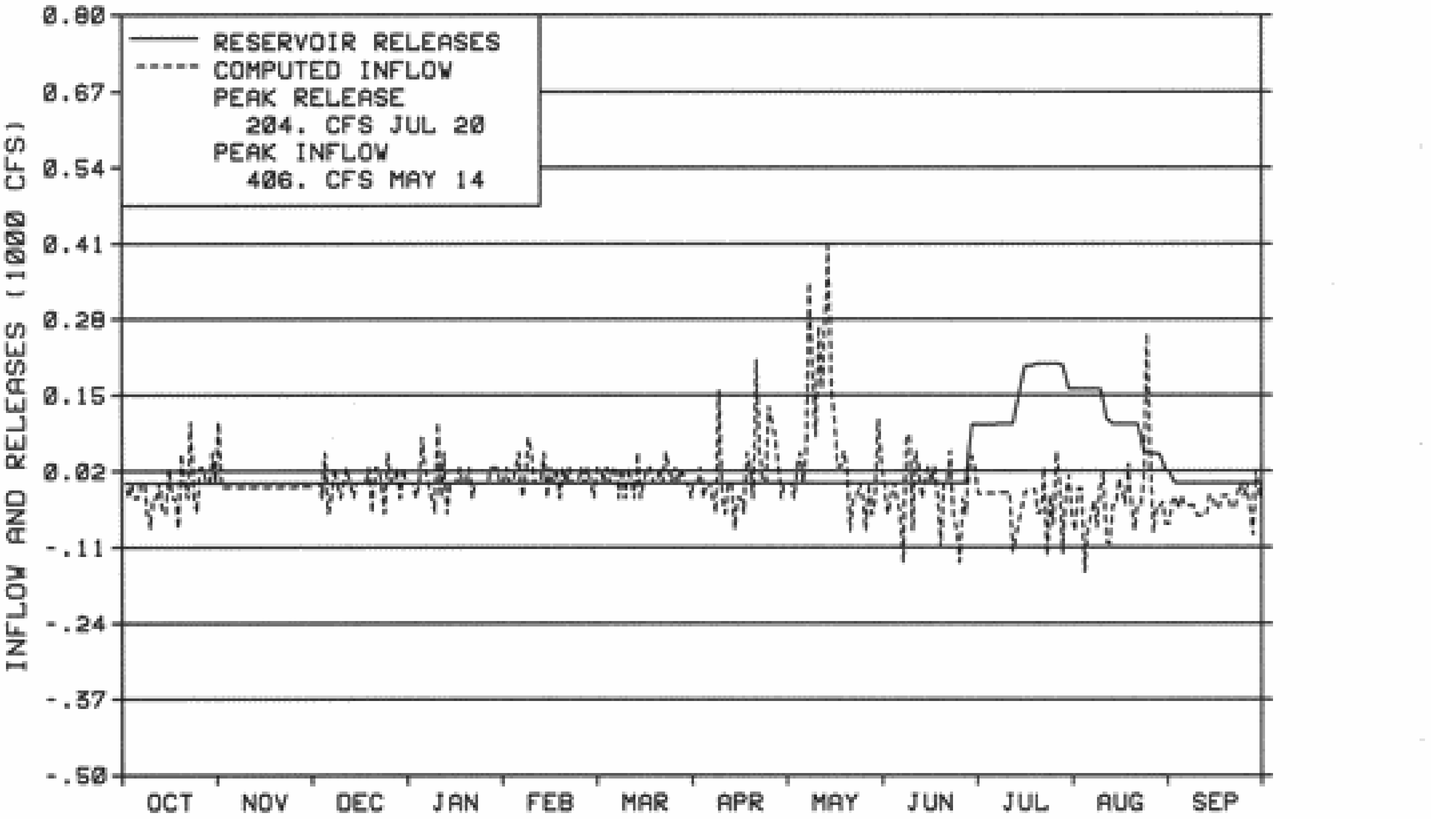
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	-410	NA	0	NA	93,979	106
NOVEMBER	-411	NA	0	NA	93,568	106
DECEMBER	0	NA	0	NA	93,568	106
JANUARY	411	92	0	NA	93,979	106
FEBRUARY	617	21	0	NA	94,596	103
MARCH	622	9	0	NA	95,218	98
APRIL	886	35	0	NA	96,104	98
MAY	4,046	89	0	NA	100,150	100
JUNE	-904	NA	496	24	98,750	97
JULY	-1,956	NA	9,493	227	87,301	90
AUGUST	-1,966	NA	6,258	161	79,077	87
SEPTEMBER	-1,919	NA	20	3	77,138	87
ANNUAL	-985	NA	16,266	110		
APRIL-JULY	2,072	21				

* Frequently observed during fall and winter months

FIGURE DKG8

KEYHOLE RESERVOIR





WATER YEAR 2005

SHADEHILL RESERVOIR

BACKGROUND

Shadehill Reservoir, a feature of the Shadehill Unit (P-S MBP), is located on the Grand River near Shadehill, South Dakota, and was constructed for irrigation of 9,700 acres, and for flood control, recreation, and fish and wildlife purposes. The reservoir has a dead and conservation capacity totaling 120,172 acre-feet with an additional exclusive flood control capacity of 230,004 acre-feet and a surcharge capacity of 119,560 acre-feet. Flood control space is all located above the crest of an un-gated glory-hole spillway. Because of the questionable quality of water, it was decided to postpone construction of distribution works for irrigation.

After further study, it was concluded that water from Shadehill Reservoir can be used for sustained irrigation if certain limitations of soils, leaching water, soil amendments, and drainage are met. A definite plan report covering 6,700 acres which meets these limitations has been completed, approved by the Commissioner, and released for distribution. On December 17, 1963, landowners within the area voted 24 to 21 against formation of an irrigation district. Further action on development of the area was deferred until the attitude of the landowners was more favorable. Pending more extensive irrigation development, an additional 51,500 acre-feet of space between elevations 2260 and 2272 was allocated to flood control. Allocations and evacuation of this space was made possible by modification of the outlet works in 1969 to permit a discharge of 600 cfs to the river. In June of 1975, the West River Conservancy Sub-District was formed combining all but one of the old individual contracts for water supply from the reservoir into one. Acreage contracted for by the District was 5,000 acres; however, only 3,064 acres were developed. On March 18, 1986, the contract between Reclamation and the West River Conservancy Sub-District was assigned to the Shadehill Water User District, an organization, which succeeded the Sub-District under South Dakota law. This contract has expired and presently conservation releases are meeting irrigation demands. Should irrigation releases be required a temporary water service contract will need to be executed with the Shadehill Water User District.

Because certain release criteria reduced the effectiveness of flood control operations in the zone between elevation 2260 and 2272, and because the Corps of Engineers has constructed Bowman Haley Reservoir upstream from Shadehill Reservoir with 53,800 acre-feet of flood control space, the Corps requested that the interim flood control agreement be terminated and that responsibility for the operations of Shadehill Reservoir when the pool is between elevations 2260 and 2272 revert to Reclamation. By a revised field working agreement dated May 15, 1972, it was agreed that the space between elevation 2260 and 2272 (51,500 acre-feet) be reallocated to conservation use. However, space below elevation 2272 will continue to be evacuated before the start of the spring runoff, but to a lesser extent than in the past.

WATER YEAR 2005 OPERATIONS SUMMARY

Shadehill reservoir began WY 2005 at elevation 2267.58 ft with storage of 99,303 acre-feet. The peak reservoir water elevation occurred on October l, with an elevation of 2267.55 ft.

Inflows for the water year were -1,076 acre-feet, which is the 2nd lowest in 54 years of record. Shadehill ended the water year at elevation 2263.23 ft with storage of 81,365 acre-feet.

All project irrigation demands were met from river maintenance releases. There were no storage releases for irrigation needed during water year 2005.

Emergency Management Tabletop exercise held April 7, 2005.

Annual inspection was done on May 11, 2005 by personnel from the Rapid City Field Office.

MONTHLY STATISTICS FOR WATER YEAR 2005

October end of month (EOM) elevation, at Shadehill Reservoir (Shadehill), was above average. October inflow was below average. Controlled release at 25 cfs. Shadehill finished the month 4.9 feet below top of conservation.

November EOM elevation, at Shadehill, was above average. November inflow was below average. Controlled release at 25 cfs. Shadehill finished the month 5.1 feet below top of conservation.

December EOM elevation, at Shadehill, was above average. December inflow was 5th lowest in 53 years of record. Controlled release at 25 cfs. Shadehill finished the month 5.5 feet below top of conservation.

January EOM elevation, at Shadehill, was above average. January inflow was 5th lowest in 53 years of record. Controlled release at 24 cfs. Shadehill finished the month 6.0 feet below top of conservation.

February EOM elevation, at Shadehill, was below average. February inflow was below average. Controlled release at 24 cfs. Shadehill finished the month 6.2 feet below top of conservation.

March EOM elevation, at Shadehill, was below average. March inflow was 3rd lowest in 53 years of record. Controlled release at 23 cfs. Shadehill finished the month 6.3 feet below top of conservation.

April EOM elevation, at Shadehill, was below average. April inflow was 2nd lowest in 53 years of record. Controlled release at 23 cfs. Shadehill finished the month 6.7 feet below top of conservation. Emergency Management Tabletop exercise held April 7, 2005.

May EOM elevation, at Shadehill, was 9th lowest in 53 years of record. May inflow was below average. Controlled release at 23 cfs. Shadehill finished the month 6.4 feet below top of conservation.

June EOM elevation, at Shadehill, was 8th lowest in 53 years of record. June inflow was below average. Controlled release at 23 cfs. Shadehill finished the month 6.5 feet below top of conservation.

July EOM elevation and July inflow, at Shadehill, was 8th lowest in 53 years of record. Controlled release at 23 cfs. Shadehill finished the month 7.2 feet below top of conservation.

August EOM elevation, at Shadehill, was 8th lowest in 53 years of record. August inflow was below average. Controlled release at 23 cfs. Shadehill finished the month 7.9 feet below top of conservation.

September EOM elevation, at Shadehill, was 8th lowest and September inflow was 5th lowest in 53 years of record. Controlled release at 23 cfs. The release was stopped, the stilling basin was dewatered, and the stilling basin floor was repaired on September 25-29. Shadehill finished the month 8.8 feet below top of conservation.

Additional statistical information on Shadehill and its operations during 2005 can be found on Table DKT10 and Figure DKG9.

TABLE DKT10
HYDROLOGIC DATA FOR 2005
SHADEHILL RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	2,250.80	43,869	43,869
TOP OF ACTIVE CONSERVATION	2,272.00	120,172	76,303
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL	2,302.00	350,176	230,004

STORAGE-ELEVATION DATA	ELEVATION (FT)	STORAGE (AF)	DATE
BEGINNING OF YEAR	2,267.58	99,303	OCT 01, 2004
END OF YEAR	2,263.23	81,365	SEP 30, 2005
ANNUAL LOW	2,263.23	81,365	SEP 30, 2005
ANNUAL HIGH	2,267.55	99,170	OCT 01, 2004
HISTORIC HIGH	2,297.90	318,438	APR 10, 1952

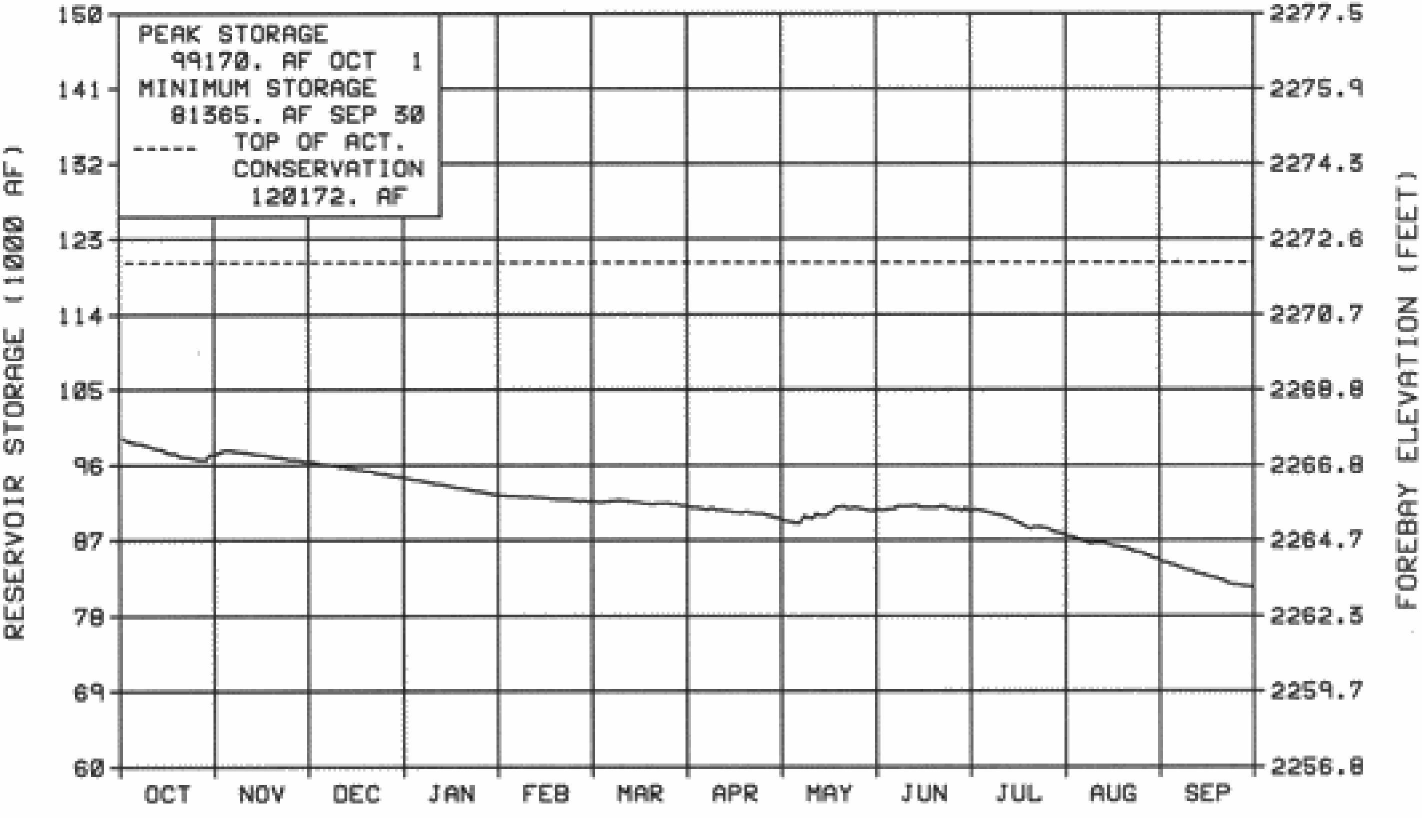
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	-1,076	OCT 04-SEP 05	16,862	OCT 04-SEP 05
DAILY PEAK (CFS)	418	MAY 08, 2005	25	OCT -DEC 04
DAILY MINIMUM (CFS)	0	*	10	JUN 09, 2005

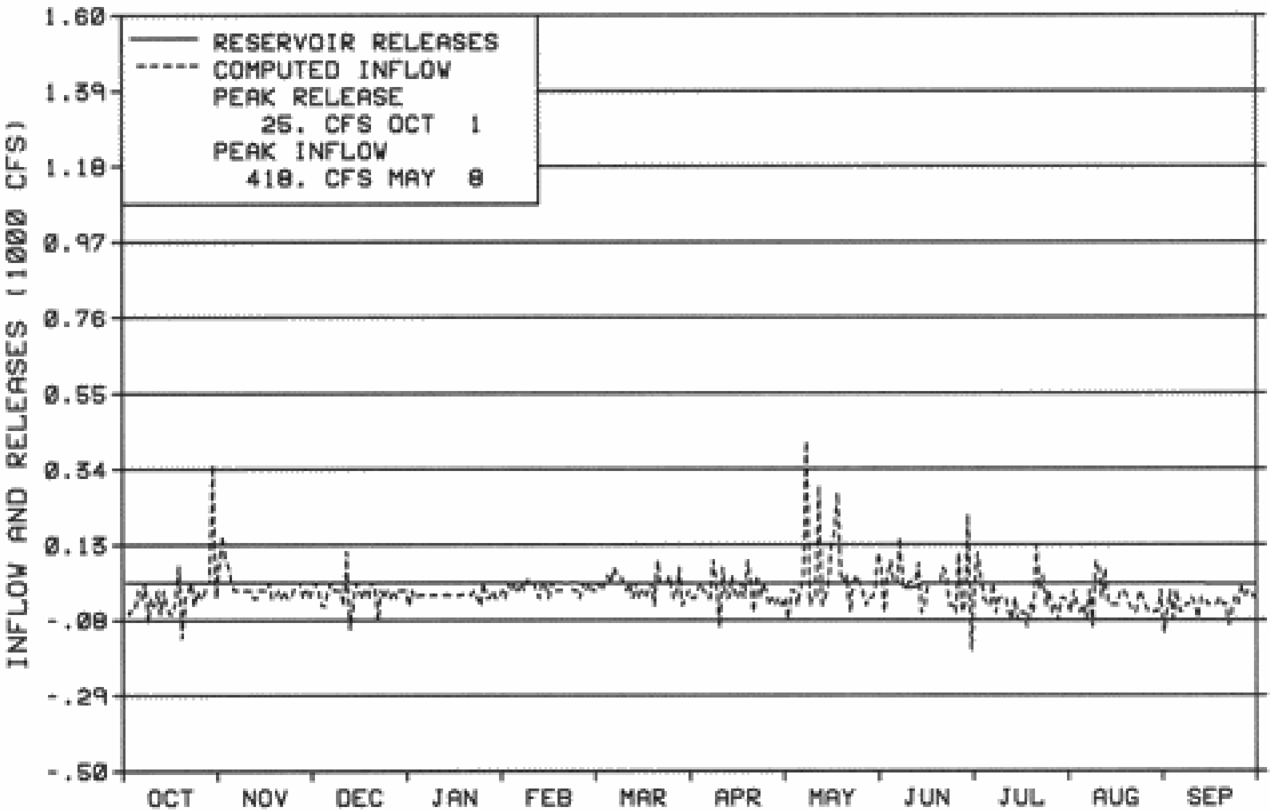
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	-510	NA	1,510	46	97,283	86
NOVEMBER	544	71	1,458	55	96,369	87
DECEMBER	-448	NA	1,489	60	94,432	86
JANUARY	-648	NA	1,472	61	92,312	86
FEBRUARY	637	19	1,308	61	91,641	84
MARCH	892	4	1,435	17	91,098	75
APRIL	-103	NA	1,388	9	89,607	72
MAY	2,510	23	1,434	15	90,683	72
JUNE	1,100	12	1,267	15	90,516	72
JULY	-1,408	NA	1,421	26	87,687	70
AUGUST	-1,771	NA	1,382	31	84,534	70
SEPTEMBER	-1,871	NA	1,298	36	81,365	70
ANNUAL	-1,076	NA	16,862	25		
APRIL-JULY	2,099	5				

* Frequently observed during fall and winter months

FIGURE DKG9

SHADEHILL RESERVOIR





WATER YEAR 2005

BELLE FOURCHE RESERVOIR

BACKGROUND

Belle Fourche Reservoir, located near Belle Fourche, South Dakota, is formed by Belle Fourche Dam on Owl Creek, a tributary of the Belle Fourche River. It has a total capacity of 192,077 acre-feet (185,277 acre-feet active). The reservoir is filled by diverting water from the Belle Fourche River through the Inlet Canal, which has a capacity of 1,300 cfs. The reservoir is used for irrigation of 57,000 acres in the Belle Fourche Project, which also receives a supplemental supply from Keyhole Reservoir. From November 1965 through May 1977, the active capacity of the reservoir was temporarily limited to 160,300 acre-feet at elevation 2981.8 feet until the damaged spillway was replaced.

When the Belle Fourche Reservoir storage right is satisfied by the reservoir filling, the South Dakota Department of Environment and Natural Resources provide guidelines for complying with water rights on the Belle Fourche River. The District is required to continue to bypass 5 cfs for domestic use prior to diverting the Johnson Lateral water right for up to 40 cfs. If flows into the diversion dam are greater than 45 cfs, the District is required to bypass up to 60 cfs for downstream irrigation rights. Any flows in excess of these amounts can be diverted into the reservoir and stored. If all of these rights are not needed, the District can divert flows into the reservoir.

WATER YEAR 2005 OPERATIONS SUMMARY

Belle Fourche Reservoir began WY 2005 at elevation 2944.03 and storage of 31,503 acre-feet.

> Significant Canal Operations:
>
> The Inlet Canal remained open all winter. Both North Canal and South Canal were turned on June 20. South Canal was shut off on September 17 and North Canal on September 26.

Inflows peaked in May with a total of 12,577 acre-feet for the month which is 91% of average. Inflows for WY 2005 were 76,917 acre-feet, which was 67% of average, and the 6th lowest in 54 years of record.

The reservoir ended the water year at elevation 2937.72 ft with storage of 19,352 acre-feet. The reservoir finished the year 37.28 feet from full.

Annual Emergency Management/Security orientation was conducted on March 16, 2005.

The annual settlement survey was completed. This survey is done approximately one month after the peak elevation for the year has occurred in the reservoir. Inclinometers readings were taken quarterly as required by the periodic monitoring schedule.
Annual inspection was April 27, 2005 by personnel from the Rapid City Field Office.

MONTHLY STATISTICS FOR WATER YEAR 2005

October end of month (EOM) elevation and October inflow, at Belle Fourche Reservoir (Belle Fourche), were below average. Belle Fourche ended the month 27.5 feet from full.

November EOM elevation, at Belle Fourche, was below average. November inflow was slightly above average. Belle Fourche ended the month 24.3 feet from full.

December EOM elevation, at Belle Fourche, was below average. December inflow was average. Belle Fourche ended the month 21.8 feet from full.

January EOM elevation, at Belle Fourche, was below average. January inflow was below average. Belle Fourche ended the month 19.7 feet from full.

February EOM elevation, at Belle Fourche, was below average. February inflow was below average. Belle Fourche ended the month 17.8 feet from full.

March EOM elevation, at Belle Fourche, was below average. March inflow was below average. Belle Fourche ended the month 16.1 feet from full. Emergency Management/Security orientation held March 16, 2005.

April EOM elevation, at Belle Fourche, was below average. April inflow was below average. Belle Fourche ended the month 14.7 feet from full.

May EOM elevation, at Belle Fourche, was 8th lowest in 53 years of record. May inflow was slightly below average. Belle Fourche ended the month 12.4 feet from full.

June EOM elevation, at Belle Fourche, was below average. June inflow was below average. Started irrigation releases on June 20th. Belle Fourche ended the month 11.8 feet from full.

July EOM elevation, at Belle Fourche, was 8th lowest in 53 years of record. Inflow was 2nd lowest in 53 years of record. Belle Fourche ended the month 19.8 feet from full.

August EOM elevation and August inflow, at Belle Fourche, were below average. Belle Fourche ended the month 28.5 feet from full.

September EOM elevation was the 8th lowest and September inflow was the 3rd lowest, in 53 years of record, at Belle Fourche. South Canal releases ended Sept 17th. North Canal releases ended Sept 26th. Belle Fourche ended the month 37.3 feet from full.

Additional statistical information on Belle Fourche and its operations during 2005 can be found on Table DKT11 and Figure DKG10.

TABLE DKT11
HYDROLOGIC DATA FOR 2005
BELLE FOURCHE RESERVOIR

RESERVOIR ALLOCATIONS	ELEVATION (FEET)	TOTAL RESERVOIR STORAGE (AF)	STORAGE ALLOCATION (AF)
TOP OF INACTIVE AND DEAD	2,927.00	6,800	6,800
TOP OF ACTIVE CONSERVATION	2,975.00	192,077	185,277
TOP OF JOINT USE			
TOP OF EXCLUSIVE FLOOD CONTROL			
STORAGE-ELEVATION DATA	**ELEVATION (FT)**	**STORAGE (AF)**	**DATE**
BEGINNING OF YEAR	2,944.03	31,503	OCT 01, 2004
END OF YEAR	2,937.72	19,352	SEP 30, 2005
ANNUAL LOW	2,937.17	18,476	SEP 25, 2005
ANNUAL HIGH	2,963.35	109,998	JUN 19, 2005
HISTORIC HIGH	2,975.80	198,455	MAY 12, 1978

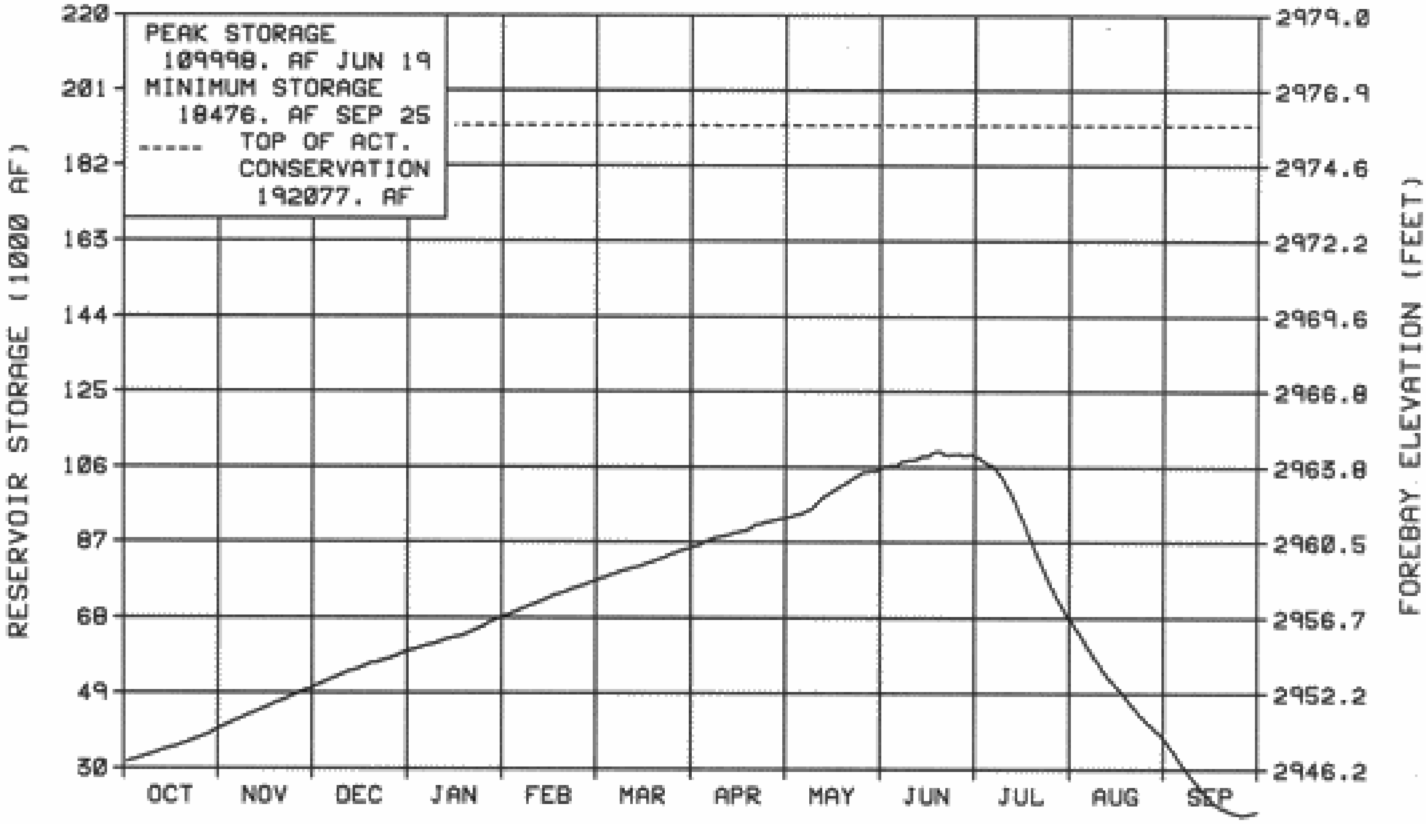
INFLOW-OUTFLOW DATA	INFLOW	DATE	OUTFLOW	DATE
ANNUAL TOTAL (AF)	76,917	OCT 04-SEP 05	89,067	OCT 04-SEP 05
DAILY PEAK (CFS)	478	APR 21, 2005	849	JUL 23, 2005
DAILY MINIMUM (CFS)	0	*	0	*

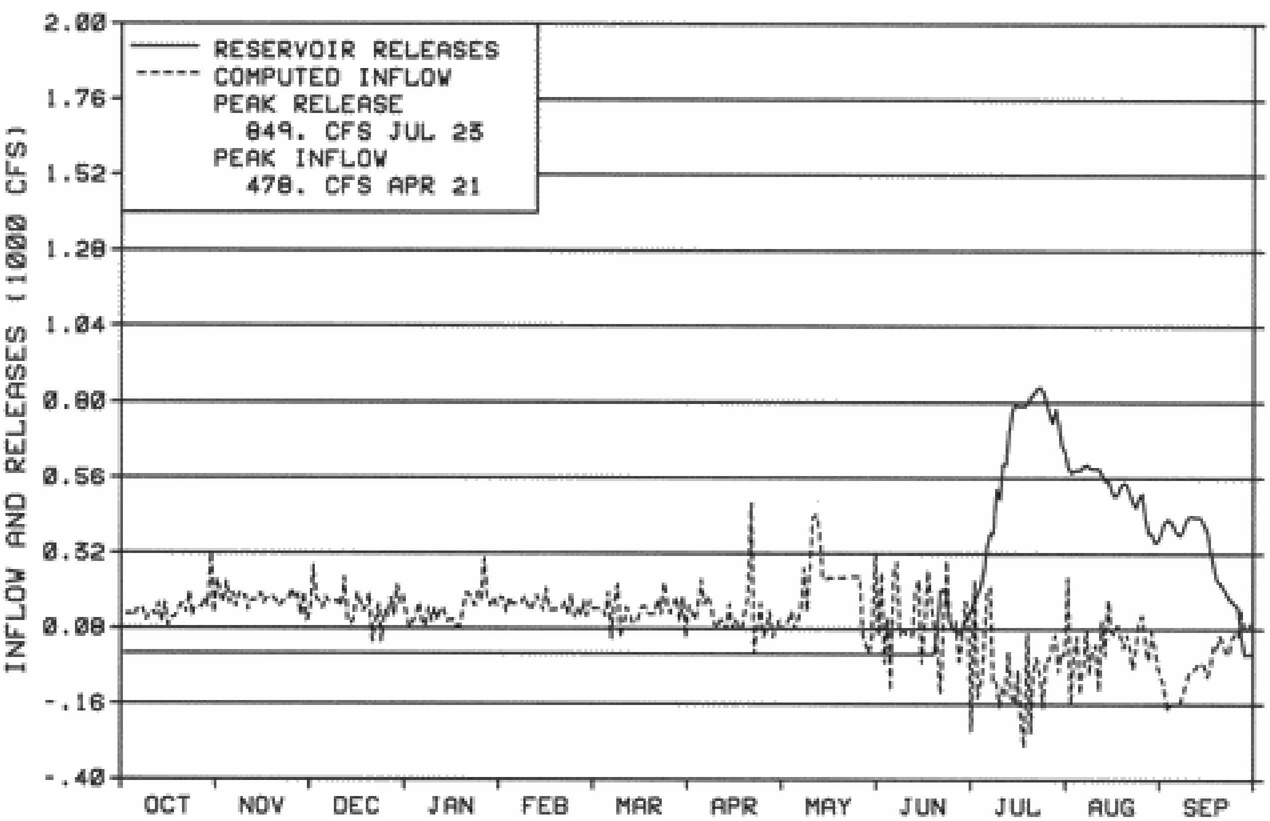
MONTH	INFLOW		OUTFLOW		CONTENT	
	AF	% OF AVG	AF	% OF AVG	AF	% OF AVG
OCTOBER	8,782	84	0	NA	40,285	57
NOVEMBER	10,155	102	0	NA	50,440	63
DECEMBER	9,351	100	0	NA	59,790	67
JANUARY	8,821	92	0	NA	68,611	70
FEBRUARY	8,495	82	0	NA	77,106	71
MARCH	8,386	51	0	NA	85,492	68
APRIL	7,552	55	0	NA	93,044	67
MAY	12,577	91	0	NA	105,621	73
JUNE	6,092	53	2,540	15	109,173	78
JULY	-3,431	NA	37,794	101	67,949	64
AUGUST	1533	84	31,951	89	37,531	52
SEPTEMBER	-1,395	NA	16,783	98	19,352	32
ANNUAL	76,917	67	89,067	77		
APRIL-JULY	22,790	53				

* Frequently observed during fall and winter months

FIGURE DKG10

BELLE FOURCHE RESERVOIR





WATER YEAR 2005

CORPS OF ENGINEERS MAIN STEM RESERVOIRS

The Missouri River main stem reservoir system consists of six reservoirs located on the Missouri River in Montana, North Dakota, South Dakota, and Nebraska. This reservoir system serves flood control, irrigation, navigation, power, municipal and industrial water supply, water quality control, fish and wildlife, and recreation. Based on information from the Corps' 2005 AOP, the capacity and storage allocations of the main stem system were updated to current values and are shown in downstream order as follows:

Reservoir Storage Allocation (1,000 Acre-Feet)

Dam	Permanent	Carryover Multiple Use	Annual Flood Control and Multiple Use	Exclusive Flood Control	Total Storage
Fort Peck	4,211	10,785	2,717	975	18,688
Garrison	4,980	13,130	4,222	1,489	23,821
Oahe	5,373	13,461	3,201	1,102	23,137
Big Bend	1,682	0	117	60	1,859
Fort Randall	1,517	1,607	1,309	985	5,418
Gavins Point	321	0	90	59	470
Totals	18,084	38,983	11,656	4,670	73,393

Each main stem facility serves a powerplant. The number of generating units and total nameplate capabilities are shown below:

Powerplant	Units	Capacity (Kilowatts)
Fort Peck	5	185,250
Garrison	5	517,750
Oahe	7	786,030
Big Bend	8	494,320
Fort Randall	8	320,000
Gavins Point	3	132,300
Totals	36	2,435,650

Main stem system releases are regulated to support the multiple use purposes of the reservoirs. The navigation season on the Missouri River below the dams normally is from late March to late November. Generally, releases from the system for navigation are higher during late summer and fall lowering the system storage. During that time, much of the system's hydropower is generated from the lower most projects. During closure of the navigation season, higher releases are made and more power is generated from the upstream Fort Peck and Garrison Reservoirs. This offsets the reduced release and generation from the downstream projects during winter closure of the river for navigation. The desired annual target system storage level is 57.0 million acre-feet on the first of March.

The regulation of Missouri River flows by the main stem storage provided benefits to nine water resource-related functions, including flood control, irrigation, navigation, power, municipal and industrial water supply, water quality control, fish and wildlife, and recreation. Table CET1 presents the regulation benefit for most of those functions as recorded in 2004-2005, 2003-2004, and the average. Benefits are defined as the tons of produce shipped, dollars of damages prevented, kilowatt hours of electricity produced, and reservoir elevation and river stages maintained. For the shipping information, estimates also were provided this year which included the sand, gravel, and waterway material shipped.

TABLE CET1
Main Stem Reservoir Water Regulation
Comparison with Past Regulations

Use of Regulated Water	Period of Use or Season	Totals	Totals	Long-Term
Navigation*	Mar. - Dec.	0.50 million tons (2005)	0.67 million tons (2004)	2.1 million tons[1]
Flood Damages Prevented	Jan. - Dec.	$109 million (2005)	$0.7 million (2004)	$24.8 billion[2]
Energy	Aug. - Jul.	5.6 billion KWH (Aug. 04-July 05)	7.4 billion KWH (Aug. 03-July 04)	9.7 billion KWH[3]

* Excludes sand, gravel, waterway material
2005 – 0.50 million tons (estimate only)
Including sand, gravel, waterway material
8.2 million tons (2004)
7.1 million tons (37-year long-term average)

The main stem reservoirs also provide supplemental water for irrigation and municipal uses and improves water quality in the river system.

[1]Average for 39 years 1967-2005 with the peak shipments in 1977 (2.1 million tons)
[2]Total damages prevented (1937-2005)
[3]Average Annual 1968-2005

A detailed description of the main stem system operations during 2005 is presented in annual operating reports prepared by and available for distribution from the U.S. Missouri River Basin Water Management Division, U.S. Army Corps of Engineers, Northwestern Division, Omaha, Nebraska.

ENERGY GENERATION

There are 14 Federal powerplants located in the Upper Missouri River Basin that are currently operating. Eight of the powerplants are operated and maintained by Reclamation and have a total capacity of 348,100 kilowatts. The other six have a total capacity of 2,435,650 kilowatts and are operated and maintained by the Corps. The Corps' powerplants are located on the main stem of the Missouri River. Generation from the 14 powerplants is marketed by the Department of Energy.

Total generation in the combined system in WY 2005 was 6,622.510 million kilowatt hours, 1,111.941 million kilowatt hours less than in WY 2004. A summary of the past 10 years of energy generation within the Upper Missouri River Basin is shown below.

USBR and COE Energy Generation Million KiloWatt Hours			
Year	USBR	COE	TOTAL
2005	1009.850	5612.660	6622.510
2004	688.367	7046.084	7734.451
2003	757.118	7783.378	8540.496
2002	708.594	7271.994	7980.588
2001	905.528	6521.944	7427.472
2000	1240.802	10363.931	11604.733
1999	2017.536	11073.228	13090.764
1998	1822.698	11435.586	13258.284
1997	2016.989	13942.025	15959.014
1996	1837.954	13788.867	15626.821

A comparison of 2004 and 2005 generation and other data from Missouri Basin Region powerplants is shown on Table CET2. Tables CET3, 4, and 5 show the monthly generation, power releases, and total downstream releases, respectively, for all Federal plants in the Missouri Basin Region. The annual energy generation for each of the last several years for all Reclamation, Corps, and combined plants is shown graphically on Figures CEG1, 3, and 5, respectively, Monthly generation for each month during the past several years is shown graphically on Figures CEG2, 4, and 6.

For a more detailed account of powerplants operation at Reclamation facilities during the year, refer to the 2005 operation summaries. Information on the Corps' powerplants operations can be obtained from the annual operating reports prepared by and available for distribution from the Reservoir Control Center, U.S. Army Corps of Engineers, Omaha, Nebraska.

TABLE CET2

ANNUAL ENERGY PRODUCTION DATA
WATER YEAR 2005

BUREAU PLANTS	INSTALLED CAPACITY (KW)	MILLION KILOWATT-HOURS GENERATED		WATER USED FOR GENERATION IN 2005			RIVER RELEASE 1,000 AF	TOTAL RELEASE 1,000 AF
		2004	2005	1,000 AF	PERCENT OF TOTAL RELEASE	KW-HOURS PER AF		
Canyon Ferry	50,000	239.085	279.478	2,301.608	90.27	121.43	2,450.310	2,549.757
Pilot Butte[1]	1,600	4.287	4.482	48.783	27.55	91.88	177.071	177.071
Boysen	15,000	30.139	56.523	670.425	80.92	84.31	828.458	828.458
Buffalo Bill Reservoir Units								
Shoshone	3,000	18.407	21.846	122.813	18.38	177.88	See below for	total.
Buffalo Bill	18,000	47.611	56.632	205.975	30.82	274.95	See below for	total.
Heart Mountain	6,000	9.121	6.966	37.310	5.58	186.71	See below for	total.
Spirit Mountain [2]	4,500	17.090	14.388	139.556	20.88	103.10	See below for	total.
Total for Buffalo Bill Reservoir[3]	31,500	92.229	99.832	505.654	75.66	197.43	460.002	668.360
Yellowtail	250,000	322.627	513.677	1,557.565	99.98	329.79	1,530.369	1,557.821
Subtotal	**348,100**	**688.367**	**953.992**	**5,084.035**	**87.94**	**187.64**	**5,446.210**	**5,781.467**
CORPS PLANTS								
Fort Peck	185,250	752.242	547.100	3,931.00	100.00	139.18	3,931.000	3,931.000
Garrison	517,750	1,569.371	1,344.500	10,483.00	100.00	128.26	10,483.000	10,483.000
Oahe	786,030	1,761.919	1,347.200	10,825.00	100.00	124.45	10,825.000	10,825.000
Big Bend	494,320	783.286	601.600	9,954.00	100.00	60.44	9,954.000	9,954.000
Fort Randall	320,000	1,482.875	1,126.800	11,032.00	100.00	102.14	11,032.000	11,032.000
Gavins Point	132,300	696.391	586.600	12,484.00	99.98	46.99	12,487.000	12,487.000
Subtotal	**2,435,650**	**7,046.084**	**5,553.800**	**58,709.00**	**99.99**	**94.60**	**58,712.000**	**58,712.000**
TOTAL MISSOURI BASIN	**2,783,750**	**7,734.451**	**6,507.792**	**63,793.04**	**98.91**	**102.01**	**64,158.210**	**64,493.467**

[1] River Release and Total Release at Pilot Butte Reservoir is computed inflow to Pilot Butte Reservoir due to the location of the powerplant at inlet of supply canal.

[2] Spirit Mountain Powerplant is used to dissipate energy in the transition from the pressurized portion of the Shoshone Canyon Conduit to the free flow section of the conduit. Water used for generation at Spirit Mountain Powerplant is then routed to Heart Mountain Canal or used for generation at Heart Mountain Powerplant.

[3] This represents the total for the four separate powerplants at Buffalo Bill Dam.

TABLE CET3

MONTHLY ENERGY GENERATION (MILLION KILOWATT-HOURS)

WATER YEAR 2005

MONTH	BUREAU OF RECLAMATION PLANTS								TOTAL
				BUFFALO BILL PLANTS					
	CANYON FERRY	PILOT BUTTE	BOYSEN	HEART MOUNTAIN	SPIRIT MOUNTAIN	BUFFALO BILL	SHOSHONE	YELLOWTAIL	TOTAL
October	22.274	0.302	1.325	0.287	1.283	1.318	1.809	19.214	**47.812**
November	22.371	0.000	1.595	0.000	0.000	0.000	1.139	24.578	**49.683**
December	22.614	0.000	1.775	0.000	0.000	0.000	1.911	33.840	**60.140**
January	24.363	0.000	1.665	0.000	0.000	0.000	1.687	24.384	**52.099**
February	19.352	0.000	1.249	0.000	0.000	0.000	1.478	26.118	**48.197**
March	19.787	0.000	1.369	0.000	0.000	0.000	1.647	27.829	**50.632**
April	18.973	0.000	4.442	0.000	0.000	1.473	1.777	25.993	**52.658**
May	17.168	0.311	8.562	0.000	0.588	7.337	2.115	25.829	**61.910**
June	26.000	0.577	11.350	2.326	3.061	12.776	2.102	103.728	**161.920**
July	34.261	1.102	9.765	2.880	3.265	12.207	2.190	103.462	**169.132**
August	27.244	1.164	7.302	0.994	3.253	12.223	2.084	54.618	**108.882**
September	25.071	1.026	6.124	0.479	2.938	9.298	1.907	44.084	**90.927**
TOTAL	**279.478**	**4.482**	**56.523**	**6.966**	**14.388**	**56.632**	**21.846**	**513.677**	**953.992**

MONTH	CORPS OF ENGINEERS PLANTS						TOTAL	MISSOURI BASIN TOTAL
	FORT PECK	GARRISON	OAHE	BIG BEND	FORT RANDALL	GAVINS POINT	TOTAL	MISSOURI BASIN TOTAL
October	32.800	92.000	53.000	21.700	70.700	39.800	**310.000**	**357.812**
November	36.800	97.700	57.600	26.900	43.500	26.600	**289.100**	**338.783**
December	48.000	119.500	106.700	51.000	65.000	36.900	**427.100**	**487.240**
January	52.900	118.200	129.900	58.600	73.200	40.600	**473.400**	**525.499**
February	42.800	90.200	75.800	37.200	35.600	25.300	**306.900**	**355.097**
March	38.500	93.700	147.400	65.800	87.300	41.400	**474.100**	**524.732**
April	43.000	129.700	124.300	53.900	103.800	52.900	**507.600**	**560.258**
May	47.100	125.200	99.400	46.900	122.000	60.300	**500.900**	**562.810**
June	46.400	115.200	115.100	53.400	102.900	60.700	**493.700**	**655.620**
July	58.100	125.500	150.700	57.700	135.700	61.700	**589.400**	**758.532**
August	58.100	127.500	178.100	79.500	146.700	68.200	**658.100**	**766.982**
September	42.600	110.100	109.200	49.000	140.400	72.200	**523.500**	**614.427**
TOTAL	**547.100**	**1,344.500**	**1,347.200**	**601.600**	**1,126.800**	**586.600**	**5,553.800**	**6,507.792**

TABLE CET4

WATER USED FOR POWER GENERATION (1,000 ACRE-FEET)
WATER YEAR 2005

	CANYON		PILOT	BUFFALO BILL RESERVOIR UNITS					FORT			BIG	FORT	GAVINS
MONTH	FERRY	BOYSEN	BUTTE	SHOSHONE	BUFF. BILL	HEART MTN.	SPIRIT MTN.[1]	YELLOWTAIL	PECK	GARRISON	OAHE	BEND	RANDALL	POINT
October	190.411	21.402	3.316	12.799	5.883	1.424	13.607	88.898	254.000	707.000	431.000	342.000	738.000	868.000
November	188.182	23.841	0.000	5.630	0.000	0.000	0.000	84.790	258.000	758.000	461.000	427.000	460.000	556.000
December	189.338	24.812	0.000	9.165	0.000	0.000	0.000	87.734	339.000	934.000	854.000	818.000	687.000	759.000
January	211.055	25.092	0.000	9.221	0.000	0.000	0.000	87.505	370.000	950.000	1,046.000	951.000	754.000	842.000
February	164.037	22.347	0.000	8.304	0.000	0.000	0.000	78.756	301.000	721.000	606.000	605.000	342.000	549.000
March	168.820	22.249	0.000	9.500	0.000	0.000	0.000	87.973	276.000	744.000	1,180.000	1,099.000	817.000	906.000
April	161.921	57.589	0.000	11.410	3.973	0.000	0.000	84.815	312.000	1,035.000	1,008.000	918.000	958.000	1,142.000
May	147.647	100.580	3.527	11.550	25.364	0.000	5.577	88.246	330.000	1,014.000	792.000	788.000	1,156.000	1,301.000
June	204.552	118.555	6.405	11.479	46.656	11.810	28.866	261.703	319.000	893.000	916.000	899.000	982.000	1,287.000
July	262.669	103.700	11.913	11.960	42.010	13.922	31.465	272.472	407.000	933.000	1,198.000	976.000	1,279.000	1,322.000
August	212.642	81.367	12.528	11.381	42.479	6.903	31.389	172.849	433.000	954.000	1,445.000	1,332.000	1,420.000	1,441.000
September	200.334	68.891	11.094	10.414	39.610	3.251	28.652	161.824	332.000	840.000	888.000	799.000	1,439.000	1,511.000
TOTAL	**2,301.608**	**670.425**	**48.783**	**122.813**	**205.975**	**37.310**	**139.556**	**1,557.565**	**3,931.000**	**10,483.000**	**10,825.000**	**9,954.000**	**11,032.000**	**12,484.000**

[1] Spirit Mountain Powerplant is used to dissipate energy in the transition from the pressurized portion of the Shoshone Canyon Conduit to the free flow section of the conduit. Water used for generation at Spirit Mountain Powerplant is then routed to Heart Mountain Canal or used for generation at Heart Mountain Powerplant

TABLE CET5

TOTAL RELEASE (1,000 ACRE-FEET)
WATER YEAR 2005

MONTH	CANYON FERRY	BOYSEN	PILOT BUTTE	BUFFALO BILL	YELLOWTAIL	FORT PECK	GARRISON	OAHE	BIG BEND	FORT RANDALL	GAVINS POINT
October	192.573	24.841	1.084	34.610	88.898	254.000	707.000	431.000	342.000	738.000	868.000
November	188.182	23.841	0.000	9.019	84.790	258.000	758.000	461.000	427.000	460.000	556.000
December	189.505	24.812	0.000	9.368	87.734	339.000	934.000	854.000	818.000	687.000	759.000
January	211.055	25.092	0.000	9.424	87.505	370.000	950.000	1,046.000	951.000	754.000	842.000
February	164.037	22.347	0.000	8.534	78.756	301.000	721.000	606.000	605.000	342.000	549.000
March	179.126	24.694	0.000	9.701	87.973	276.000	744.000	1,180.000	1,099.000	817.000	909.000
April	171.197	61.137	8.265	18.114	84.815	312.000	1,035.000	1,008.000	918.000	958.000	1,142.000
May	181.558	117.264	21.914	63.045	88.246	330.000	1,014.000	792.000	788.000	1,156.000	1,301.000
June	252.564	228.743	34.330	182.068	261.959	319.000	893.000	916.000	899.000	982.000	1,287.000
July	324.307	125.429	48.069	132.619	272.472	407.000	933.000	1,198.000	976.000	1,279.000	1,322.000
August	258.101	81.367	33.664	103.770	172.849	433.000	954.000	1,445.000	1,332.000	1,420.000	1,441.000
September	237.552	68.891	32.220	88.088	161.824	332.000	840.000	888.000	799.000	1,439.000	1,511.000
TOTAL	**2,549.757**	**828.458**	**179.546**	**668.360**	**1,557.821**	**3,931.000**	**10,483.000**	**10,825.000**	**9,954.000**	**11,032.000**	**12,487.000**

TABLE CET6

TOTAL RESERVOIR STORAGE CONTENTS (1,000 ACRE-FEET)
WATER YEARS 2004 AND 2005

BUREAU RESERVOIRS	TOP OF CONSERVATION CAPACITY [3]	DEAD AND INACTIVE CAPACITY	TOTAL STORAGE SEPTEMBER 30		END OF SEPTEMBER PERCENT OF AVERAGE	
			2004	2005	2004	2005
Clark Canyon	174.4	1.1	24.7	44.0	20	35
Canyon Ferry	1,891.9	396.0	1,398.9	1,550.6	82	91
Helena Valley	10.5	4.6	8.1	10.3	110	145
Gibson	96.5	0.0	22.5	5.1	80	18
Willow Creek	32.3	0.1	19.2	18.1	107	101
Pishkun	46.7	16.3	37.4	35.7	113	108
Lake Elwell	967.3	577.6	794.5	789.0	96	96
Sherburne	67.9	3.1	18.6	12.2	182	119
Fresno	92.9	0.4	42.4	46.2	106	116
Nelson	79.0	18.1	58.6	58.3	103	103
Bull Lake	152.5	0.7	89.7	66.8	116	86
Pilot Butte	33.7	3.8	18.8	15.4	115	95
Boysen	741.6	219.2	515.2	631.9	91	112
Anchor[1]	17.2	0.1	0.4	0.3	121	80
Buffalo Bill[2]	646.6	41.7	438.8	450.3	101	104
Bighorn Lake	1,070.0	493.6	710.3	1,000.5	70	98
E. A. Patterson	8.6	0.5	5.9	2.2	92	35
Lake Tschida	67.1	5.2	56.7	57.4	96	97
Jamestown Reservoir	31.5	0.8	26.1	29.1	90	101
Shadehill Reservoir	120.2	43.9	99.3	81.4	89	73
Angostura Reservoir	130.8	48.3	54.7	57.8	59	63
Deerfield Reservoir	15.7	0.2	14.1	13.1	105	97
Pactola Reservoir	56.0	1.0	42.6	36.1	89	75
Keyhole Reservoir	193.8	8.0	94.4	77.1	94	78
Belle Fourche Reservoir	192.1	6.8	31.5	19.4	47	29
Subtotal	**6,120.8**	**1,776.3**	**4,198.1**	**4,734.7**		
CORPS RESERVOIRS						
Fort Peck	17,713.0	4,211.0	8,969.0	9,286.0		
Garrison	22,332.0	4,980.0	11,645.0	11,861.0		
Oahe	22,035.0	5,373.0	10,316.0	10,267.0		
Big Bend	1,799.0	1,682.0	1,689.0	1,644.0		
Fort Randall	4,433.0	1,517.0	2,796.0	2,760.0		
Gavins Point	411.0	321.0	386.0	399.0		
Subtotal	**68,723.0**	**18,084.0**	**35,801.0**	**36,217.0**		
TOTAL UPPER MISSOURI BASIN	**74,843.8**	**19,860.3**	**39,999.1**	**40,951.7**		

[1] Percent of average content of Anchor Reservoir is based on an 14-year average, 1991-2004.

[2] Percent of average content of Buffalo Bill Reservoir is based on an 12-year average, 1993-2004; to reflect the operation of the reservoir since 1992 when the dam was raised and the capacity of the reservoir was increased to 646,565 acre-feet.

[3] Includes joint-use space.

TABLE CET7

WATER YEAR 2005
End-of-Month Reservoir Contents
(1,000 Acre-Feet)

RECLAMATION RESERVOIRS	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CLARK CANYON RESERVOIR	29.5	36.2	42.9	48.9	54.5	59.5	63.0	64.2	63.7	44.9	37.5	44.0
% of Average	23	27	31	35	39	40	40	39	38	30	29	35
CANYON FERRY RESERVOIR	1,393.7	1,410.3	1,405.4	1,370.4	1,378.1	1,381.6	1,389.4	1,584.4	1,937.8	1,816.1	1,669.4	1,550.6
% of Average	81	81	84	87	91	95	95	97	103	99	97	91
HELENA VALLEY RESERVOIR	7.6	7.2	6.9	6.6	6.4	10.4	10.2	9.7	10.3	7.1	8.7	10.3
% of Average	117	115	113	117	121	202	119	115	124	103	116	145
GIBSON RESERVOIR	26.5	27.1	32.6	40.9	46.9	56.0	73.6	96.0	90.2	33.2	5.6	5.1
% of Average	88	79	85	98	104	117	137	113	102	57	17	18
WILLOW CREEK	22.7	26.8	27.0	27.0	26.9	26.8	30.2	32.4	32.9	22.0	18.1	18.1
% of Average	116	133	132	130	127	120	123	115	113	92	95	101
PISHKUN RESERVOIR	36.6	36.1	35.8	35.6	35.2	34.8	35.0	45.8	43.9	30.3	32.2	35.7
% of Average	107	104	104	104	103	102	86	100	103	81	91	108
LAKE ELWELL (TIBER DAM)	775.0	756.7	738.7	732.9	726.4	716.5	712.5	750.6	837.9	829.1	807.5	789.0
% of Average	99	99	99	102	104	101	97	90	87	87	91	96
SHERBURNE LAKE	25.5	30.4	36.4	45.1	48.6	49.7	29.7	35.3	60.9	47.4	17.2	12.2
% of Average	226	193	185	201	195	200	141	112	111	94	66	119
FRESNO RESERVOIR	41.8	40.6	38.8	37.0	37.6	39.8	54.9	49.5	89.8	71.3	45.5	46.2
% of Average	107	105	104	103	106	76	78	76	145	160	122	116
NELSON RESERVOIR	61.8	62.1	59.8	57.5	55.5	57.0	61.5	47.3	58.5	48.4	53.1	58.3
% of Average	104	107	106	105	103	105	102	78	98	88	98	103
BULL LAKE	97.5	101.5	103.0	104.3	104.7	104.8	105.3	139.0	149.7	146.0	120.0	66.8
% of Average	129	134	135	137	137	137	138	157	119	114	115	86
PILOT BUTTE RESERVOIR	27.8	27.5	27.4	27.3	27.1	26.9	23.5	32.0	31.6	25.4	17.7	15.4
% of Average	123	116	116	116	116	105	82	126	114	110	90	95
BOYSEN RESERVOIR	557.7	589.0	605.2	622.5	638.9	653.5	631.2	701.6	737.5	710.2	668.2	631.9
% of Average	99	106	113	121	127	132	133	140	121	117	115	112
ANCHOR RESERVOIR	0.3	0.3	0.3	0.4	0.3	0.3	0.3	4.1	4.6	0.3	0.3	0.3
% of Average[1]	111	125	161	213	133	82	61	259	138	12	39	80
BUFFALO BILL RESERVOIR	440.2	455.1	461.0	466.9	470.6	475.1	483.2	598.3	625.5	592.6	518.1	450.3
% of Average[2]	108	112	114	116	118	122	133	149	114	106	105	104
BIGHORN LAKE	739.4	738.3	704.4	686.6	673.3	663.0	682.4	913.4	1,104.8	1,020.5	993.1	1,000.5
% of Average	73	76	76	79	80	80	83	104	107	99	98	98
E. A. PATTERSON LAKE	6.1	5.0	5.1	5.2	5.4	6.3	6.2	8.3	9.3	3.9	3.4	2.2
% of Average	97	80	82	84	79	79	79	110	125	55	52	35
LAKE TSCHIDA	57.2	58.3	58.8	58.7	59.4	61.1	62.5	65.4	69.8	65.9	60.7	57.4
% of Average	97	98	99	100	97	85	90	97	102	102	101	97
JAMESTOWN RESERVOIR	27.8	29.1	29.4	29.4	29.4	30.6	34.4	31.8	31.6	30.8	32.0	29.1
% of Average	103	110	111	110	109	88	70	75	85	88	97	101
SHADEHILL RESERVOIR	97.3	96.4	94.4	92.3	91.6	91.1	89.6	90.7	90.5	87.7	84.5	81.4
% of Average	89	90	89	88	85	75	73	73	74	73	73	73
ANGOSTURA RESERVOIR	56.1	58.0	59.9	62.2	65.0	67.0	69.4	70.9	86.2	74.2	63.7	57.8
% of Average	59	61	62	63	63	60	60	60	74	70	66	63
DEERFIELD RESERVOIR	13.9	13.8	13.6	13.4	13.3	13.2	13.3	13.5	13.6	13.5	13.3	13.1
% of Average	103	100	97	93	91	89	90	91	92	94	96	97
PACTOLA RESERVOIR	42.4	42.2	42.0	42.1	42.0	42.2	42.6	43.3	43.6	39.7	38.1	36.1
% of Average	87	86	86	87	86	86	84	83	83	79	78	75
KEYHOLE RESERVOIR	94.0	93.6	93.6	94.0	94.6	95.2	96.1	100.2	98.8	87.3	79.1	77.1
% of Average	94	94	94	94	92	86	86	87	87	81	78	78
BELLE FOURCHE RESERVOIR	40.3	50.4	59.8	68.6	77.1	85.5	93.0	105.6	109.2	67.9	37.5	19.4
% of Average	50	56	60	63	65	63	63	69	75	60	48	29
CORPS RESERVOIRS	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
FORT PECK RESERVOIR	8,963.0	8,961.0	8,829.0	8,749.0	8,732.0	8,773.0	8,773.0	8,935.0	9,448.0	9,472.0	9,325.0	9,286.0
GARRISON RESERVOIR	11,589.0	11,422.0	10,936.0	10,574.0	10,538.0	10,632.0	10,189.0	10,665.0	12,026.0	12,591.0	12,216.0	11,861.0
OAHE RESERVOIR	10,608.0	10,866.0	10,824.0	10,715.0	10,924.0	10,568.0	10,608.0	10,980.0	11,214.0	10,958.0	10,363.0	10,267.0
BIG BEND RESERVOIR	1,738.0	1,729.0	1,701.0	1,725.0	1,689.0	1,684.0	1,660.0	1,657.0	1,625.0	1,687.0	1,647.0	1,644.0
FORT RANDALL RESERVOIR	2,381.0	2,338.0	2,549.0	2,846.0	3,192.0	3,547.0	3,700.0	3,497.0	3,683.0	3,436.0	3,400.0	2,760.0
LEWIS AND CLARK LAKE	398.0	398.0	395.0	405.0	362.0	372.0	356.0	356.0	366.0	376.0	393.0	399.0

[1] Percent of average content of Anchor Reservoir is based on a 14-year average, 1991-2004; this is due to the availability of data for Anchor Reservoir.

[2] Percent of average content of Buffalo Bill Reservoir is based on an 12-year average, 1993-2004; to reflect the operation of the reservoir since 1992 when the dam was raised and the capacity of the reservoir was increased to 646,565 acre-feet.

TABLE CET8

WATER YEAR 2005
Monthly Inflow Amounts
(1,000 Acre-Feet)

RECLAMATION RESERVOIRS	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
CLARK CANYON RESERVOIR	6.5	8.3	8.4	7.7	7.1	6.5	5.1	5.6	13.0	14.2	12.9	11.5	106.8
% of Average	28	37	44	48	49	35	23	21	36	51	67	57	40
CANYON FERRY RESERVOIR	187.4	204.8	184.5	176.1	171.8	182.6	179.0	376.5	606.0	202.7	111.3	118.8	2,701.4
% of Average	65	69	76	80	77	68	51	66	79	60	65	56	68
HELENA VALLEY RESERVOIR	-0.6	-0.3	-0.3	-0.3	-0.3	4.8	4.2	13.2	13.9	15.6	20.0	15.1	85.1
% of Average	N/A	N/A	N/A	N/A	N/A	N/A	77	120	97	104	125	192	124
GIBSON RESERVOIR	13.6	10.4	10.4	13.0	9.6	11.7	25.0	116.6	107.4	34.7	17.8	10.4	380.6
% of Average	72	60	66	94	78	81	62	68	54	51	67	54	62
WILLOW CREEK	3.5	4.1	0.2	0.0	-0.2	-0.1	3.4	2.2	0.5	-0.5	0.4	0.0	13.7
% of Average	505	692	40	12	N/A	N/A	170	52	13	N/A	N/A	N/A	94
PISHKUN RESERVOIR	-0.8	-0.5	-0.3	-0.2	-0.4	-0.4	0.2	41.6	43.6	79.8	36.7	3.5	202.7
% of Average	N/A	N/A	N/A	N/A	N/A	N/A	2	116	75	116	87	27	89
LAKE ELWELL (TIBER DAM)	11.8	11.9	13.2	25.3	21.4	20.8	25.6	68.9	112.4	17.0	4.3	6.5	339.1
% of Average	53	54	71	156	98	42	40	41	59	27	22	41	50
SHERBURNE LAKE	6.9	4.9	6.0	8.7	3.4	3.2	9.2	22.9	31.0	12.1	7.6	5.4	121.4
% of Average	113	87	159	311	143	107	102	71	74	57	80	85	84
FRESNO RESERVOIR	2.6	1.5	1.0	1.1	3.1	5.0	22.0	35.3	60.3	33.0	32.0	19.3	216.2
% of Average	35	73	96	215	92	16	56	81	132	93	97	74	80
NELSON RESERVOIR	3.5	0.0	-2.3	-2.3	-2.0	1.5	4.4	-0.8	5.4	7.3	15.4	10.1	40.2
% of Average	85	N/A	N/A	N/A	N/A	116	64	N/A	70	152	222	171	102
BULL LAKE	10.0	5.5	2.9	2.8	1.8	1.6	3.9	41.9	60.7	48.2	18.2	4.9	202.4
% of Average	200	196	121	133	113	89	111	158	100	99	83	51	109
PILOT BUTTE RESERVOIR[1]	10.1	-0.3	-0.1	-0.1	-0.1	-0.2	4.8	30.4	34.0	41.8	26.0	29.9	176.2
% of Average	119	0	0	0	0	0	58	136	88	99	79	125	98
BOYSEN RESERVOIR	67.4	55.1	41.1	42.4	38.7	39.3	38.9	187.7	264.6	98.1	39.4	32.6	945.2
% of Average	110	113	106	116	102	73	79	150	106	66	61	59	97
ANCHOR RESERVOIR	0.6	0.4	0.1	0.1	0.1	0.1	0.7	5.2	5.0	1.2	0.9	0.4	14.8
% of Average[2]	96	122	40	80	37	42	101	120	69	51	554	56	86
BUFFALO BILL RESERVOIR	36.0	24.0	15.5	15.3	12.3	14.2	26.3	178.1	209.3	99.7	29.0	20.3	679.9
% of Average	153	117	96	102	92	74	63	117	71	58	61	75	80
BIGHORN LAKE	117.9	83.7	53.9	69.6	65.5	77.6	104.3	319.2	453.4	188.2	145.4	169.3	1,848.0
% of Average	62	52	37	49	46	43	60	124	102	59	86	95	74
E. A. PATTERSON LAKE	0.2	0.7	0.1	0.1	0.1	0.9	0.0	2.1	6.8	2.2	0.4	0.8	14.5
% of Average	55	341	49	58	8	12	N/A	127	343	259	112	486	73
LAKE TSCHIDA	0.6	1.2	1.0	0.5	1.1	1.7	1.4	3.1	11.1	13.9	0.2	-0.2	35.5
% of Average	33	81	103	55	20	5	7	41	119	424	14	N/A	43
JAMESTOWN RESERVOIR	2.6	1.2	0.3	0.0	0.0	1.2	3.9	4.2	6.3	5.3	1.9	2.7	29.6
% of Average	242	117	64	N/A	6	14	15	42	169	106	42	176	47
SHADEHILL RESERVOIR	-0.5	0.5	-0.4	-0.6	0.6	0.9	-0.1	2.5	1.1	-1.4	-1.8	-1.9	-1.1
% of Average	N/A	47	N/A	N/A	15	4	N/A	19	17	N/A	N/A	N/A	N/A
ANGOSTURA RESERVOIR	1.4	1.9	1.9	2.3	2.8	2.1	2.3	3.0	18.6	0.5	1.6	0.2	38.6
% of Average	61	59	94	105	52	15	26	18	126	12	55	20	50
DEERFIELD RESERVOIR	0.4	0.4	0.4	0.5	0.4	0.5	0.7	0.8	0.5	0.4	0.3	0.3	5.7
% of Average	55	58	60	67	63	52	51	51	39	41	37	39	50
PACTOLA RESERVOIR	1.1	1.0	1.0	1.3	1.1	1.4	1.5	2.0	1.7	0.6	0.7	0.5	13.9
% of Average	47	54	70	85	69	52	32	29	25	17	24	22	36
KEYHOLE RESERVOIR	-0.4	-0.4	0.0	0.4	0.6	0.6	0.9	4.0	-0.9	-2.0	-2.0	-1.9	-1.0
% of Average	N/A	N/A	N/A	94	23	8	38	83	N/A	N/A	N/A	N/A	N/A
BELLE FOURCHE RESERVOIR	8.8	10.2	9.4	8.8	8.5	8.4	7.6	12.6	6.1	-3.4	1.5	-1.4	76.9
% of Average	72	99	100	89	89	49	57	86	60	N/A	95	N/A	65

[1] Negative values are the result of calculated inflow based on reservoir release and change in reservoir content.

[2] Percent of average inflow for Anchor Reservoir is based on a 14-year average, 1991-2004, this is due to the availability of data for Anchor Reservoir.

FIGURE CEGI
ANNUAL GENERATION AT USBR PLANTS

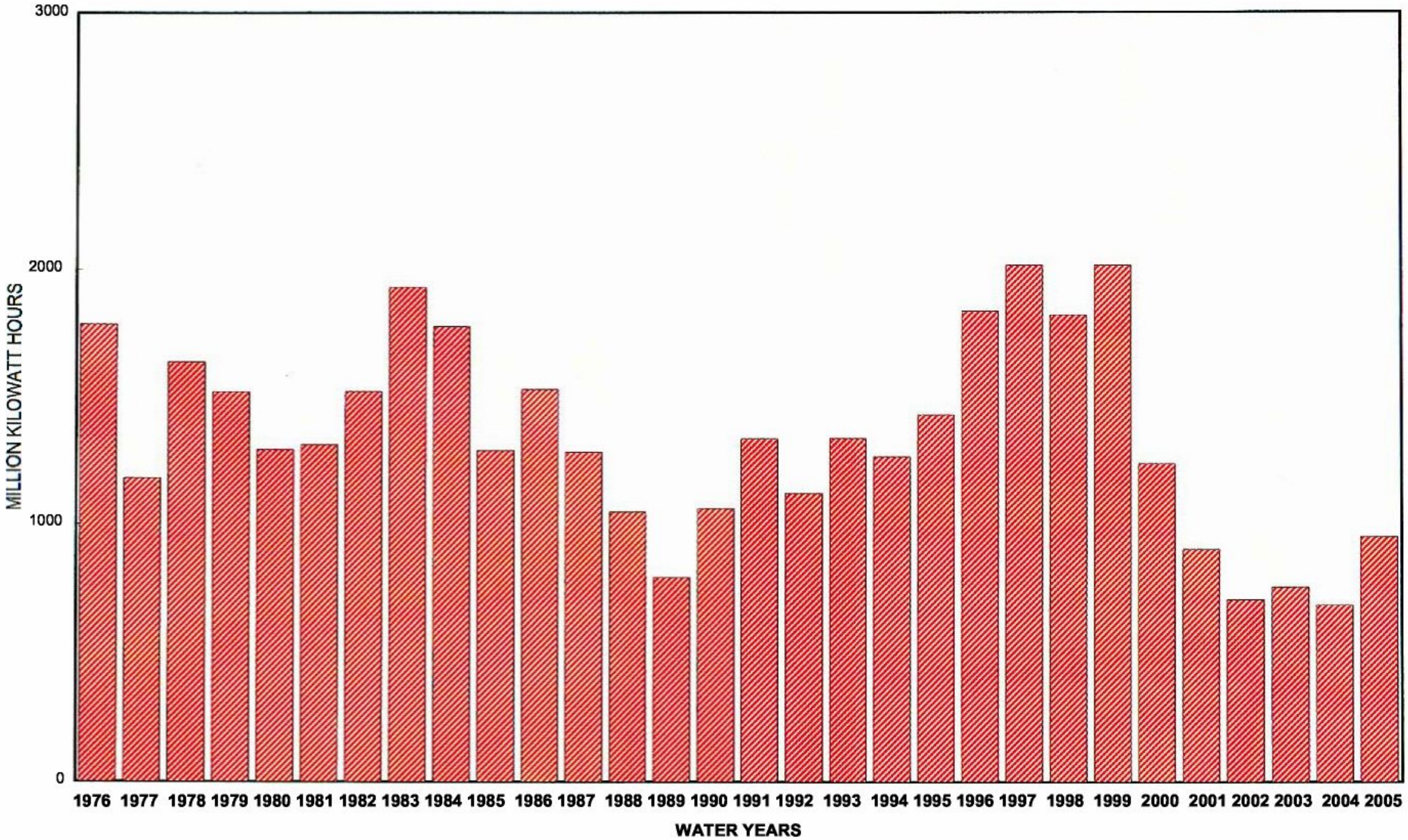


FIGURE CEG2

MONTHLY GENERATION AT USBR PLANTS

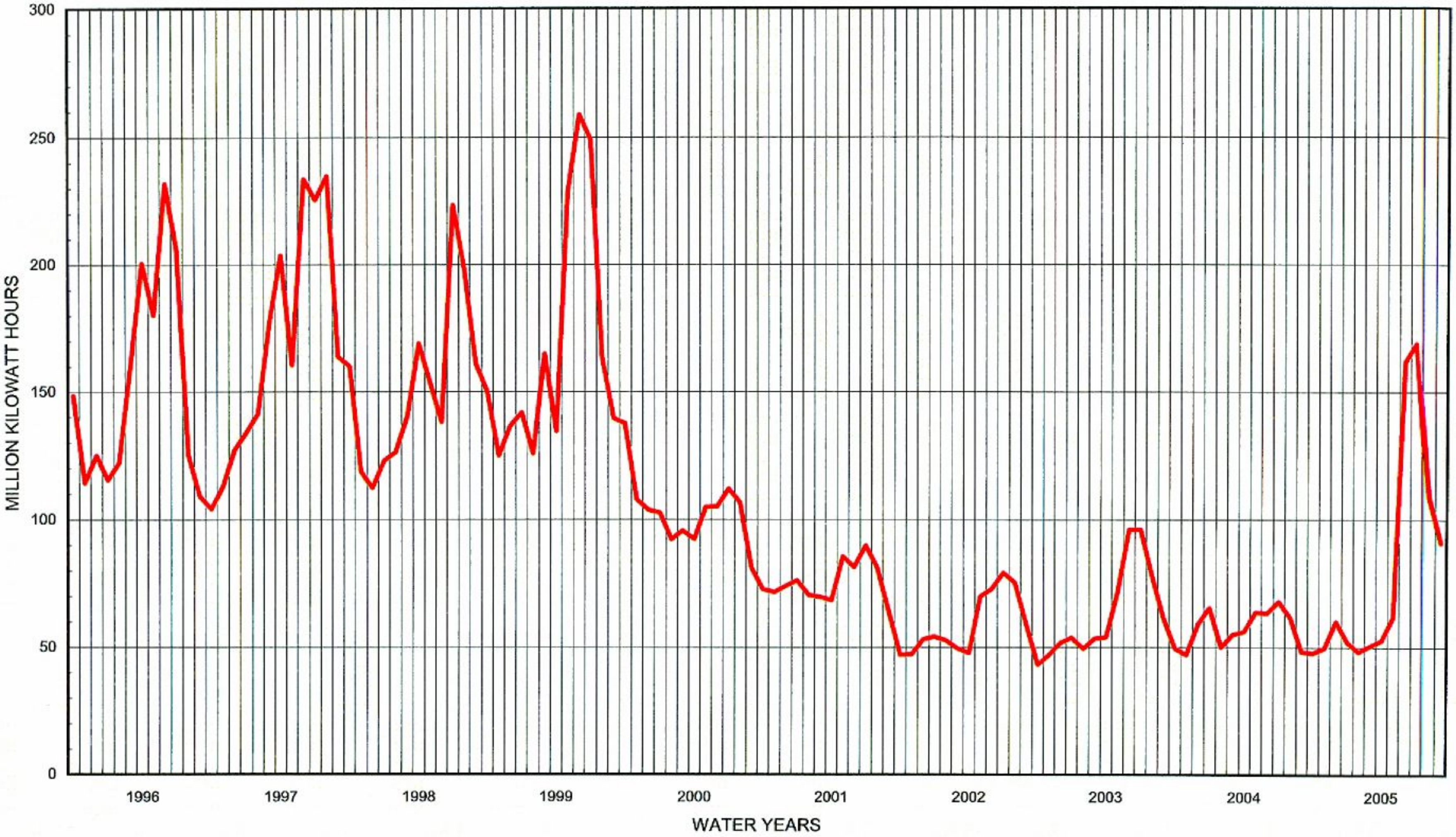


FIGURE CEG3

ANNUAL GENERATION AT COE PLANTS

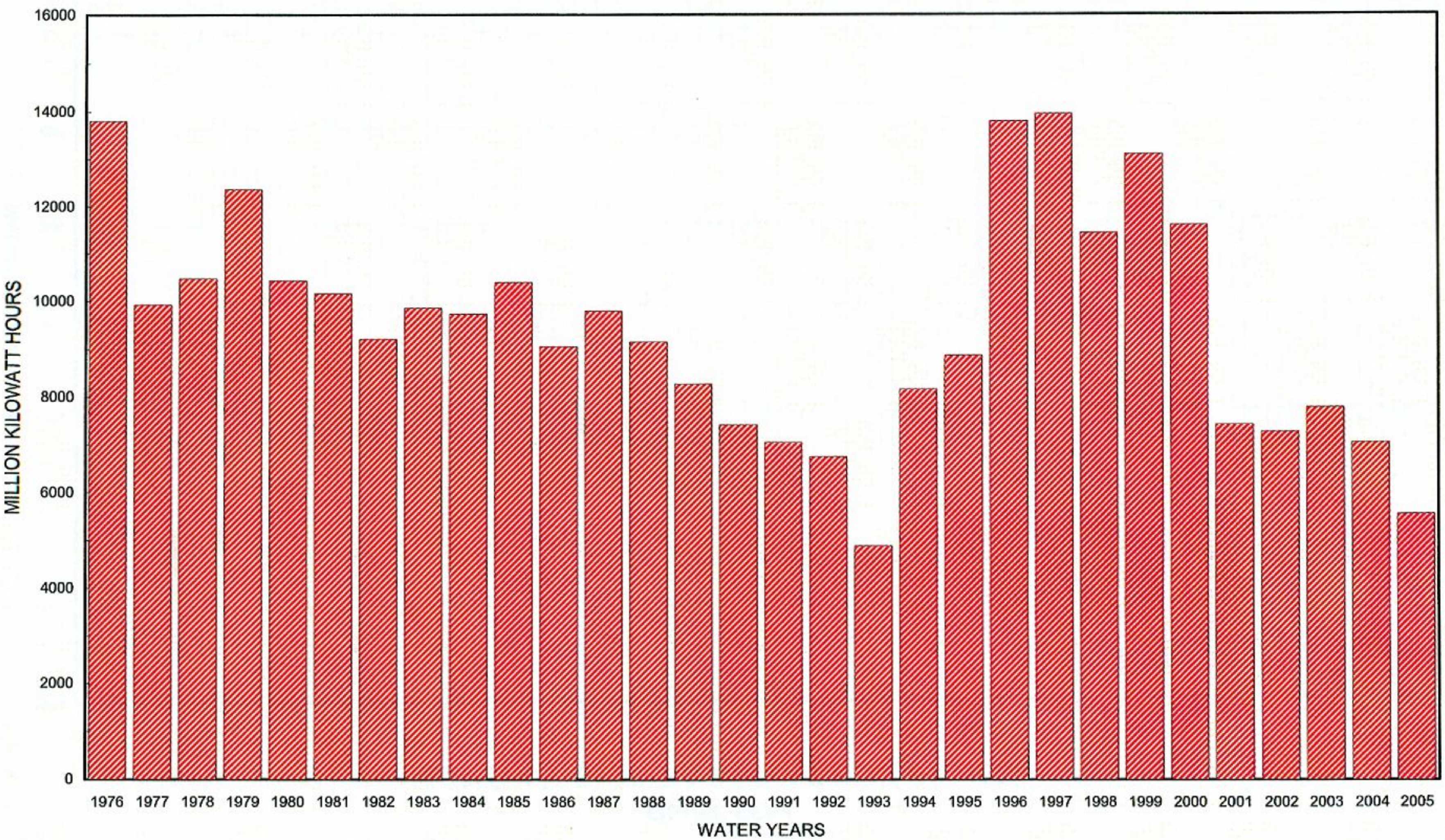


FIGURE CEG4

MONTHLY GENERATION AT COE PLANTS

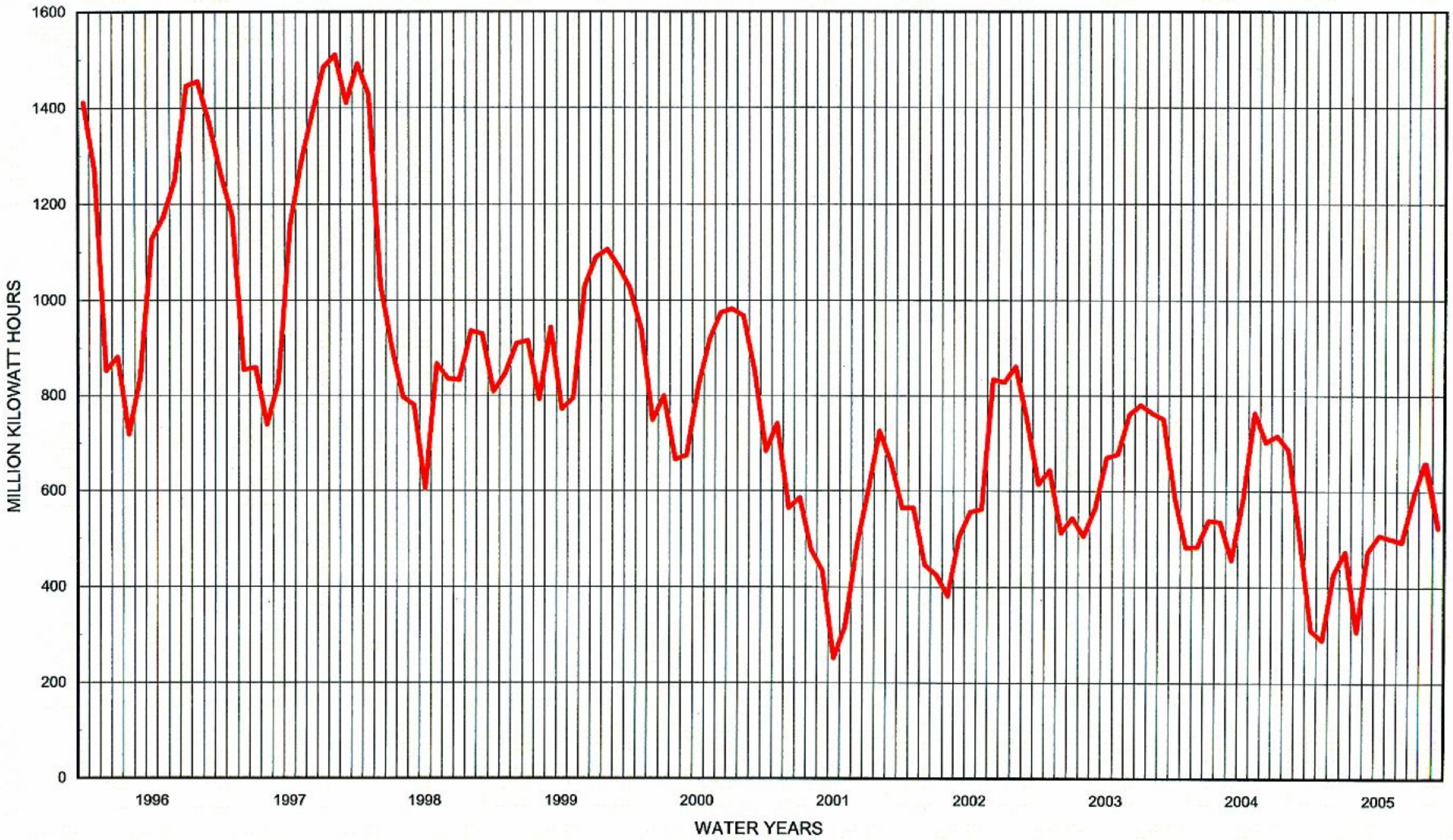


FIGURE CEG5

ANNUAL GENERATION - USBR & COE PLANTS

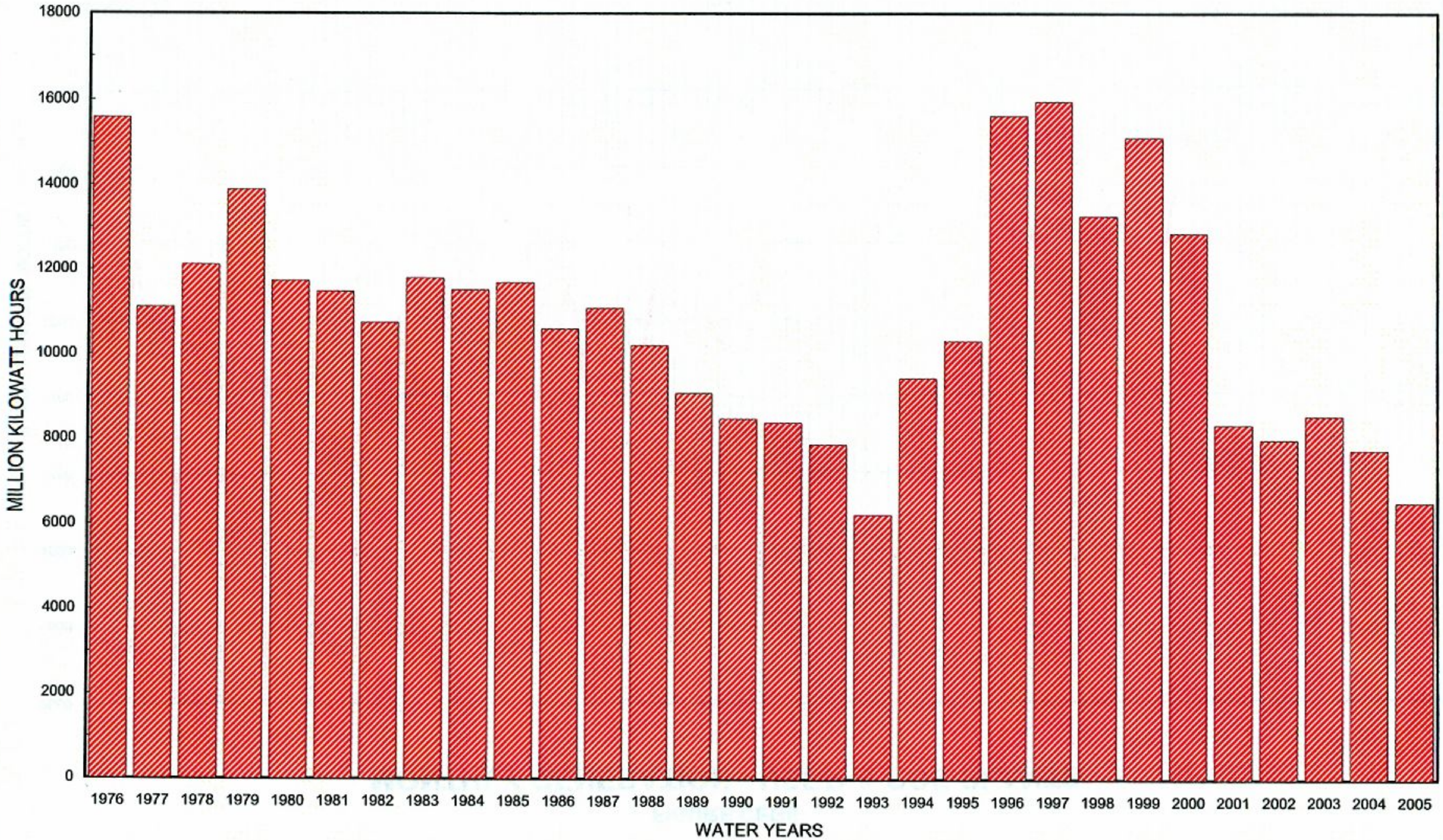


FIGURE CEG6

MONTHLY GENERATION - USBR & COE PLANTS