RECLAMATION
Managing Water in the West

September 11, 2006

Dear Customer:

Attached is the monthly water supply outlook and projected reservoir and river operating plans as prepared on September 11, 2006. We hope the information will be useful to you in your water management decisions and making plans for the summer recreation season. If you have any questions or concerns or need further information, please call me during the day at (406) 247-7318.

Tim H. Felchle
Reservoir and River Operations

U. S. Department of the Interior
Bureau of Reclamation
Montana Area Office
River and Reservoir Operations

CANYON FERRY RESERVOIR OPERATIONS
Water Supply Forecasts and Reservoir Operations
September 1, 2006

Present Elevation & Storage: 3788.86 & 1,627,328 acre-feet (94 percent of normal)

Actual Inflows (1,000 Acre-Feet):

Month	Inflow	Percent of Normal
April-July, 2005	1,364.2	67
Annual Inflow, 2005	2071.4	68
October	207.7	73
November	219.7	74
December	193.8	80
January	226.0	102
February	170.2	77
March	223.7	83
April	382.6	110
May	598.8	105
June	548.9	71
July	157.1	46
August	90.2	53

September 1 Forecast of September Inflow - 1,000 Acre-Feet):

Agency	Inflow	Percent of Normal
USBR	117.5	55
NRCS	N.A.	N.A.
CORPS	N.A.	N.A.
Average	**117.5**	**55**

Snowpack Conditions:

Snow and Precipitation Data Unavailable

CFRAOP V0.44 Run: 11-Sep-2006 13:36
Based on Most Probable Inflow Forecast

CANYON FERRY LAKE MONTHLY OPERATIONS

Canyon Ferry Reservoir Initial Cont 1627.3 kaf Elev 3788.86 ft Maximum Cont 1993.0 kaf Elev 3800.00 ft Minimum Cont 445.5 kaf Elev 3732.31 ft

2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Reservoir Inflow	kaf	117.5	171.7	186.6	173.7	165.6	166.3	215.6	295.6	486.8	654.3	255.8	133.0	3022.5
Evaporation Loss	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HV Canal Diversions	kaf	12.0	0.0	0.0	0.0	0.0	0.0	4.0	11.0	22.0	17.0	21.0	21.0	108.0
HV Pump Turbines	kaf	14.3	0.0	0.0	0.0	0.0	0.0	5.9	16.1	28.8	18.6	20.9	21.8	126.4
Turbine Release	kaf	184.7	173.3	204.1	242.2	241.5	216.2	232.7	216.6	230.9	277.2	223.9	222.6	2665.9
Turbine Release	cfs	3104	2818	3430	3939	3928	3893	3785	3640	3755	4659	3641	3620	
Spill/Waste	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
River Release	kaf	199.0	173.3	204.1	242.2	241.5	216.2	238.6	232.7	259.7	295.8	244.8	244.4	2792.3
River Release	cfs	3344	2818	3430	3939	3928	3893	3880	3911	4224	4971	3981	3975	
Min Release	cfs	3344	2818	2835	3939	3928	3893	3880	3911	3959	3707	3981	3975	
Total Dam Release	kaf	211.0	173.3	204.1	242.2	241.5	216.2	242.6	243.7	281.7	312.8	265.8	265.4	2900.3
Total Dam Release	cfs	3546	2818	3430	3939	3928	3893	3946	4096	4581	5257	4323	4316	
End-Month Content	kaf	1533.8	1532.2	1514.7	1446.2	1370.3	1320.4	1293.4	1345.3	1550.4	1891.9	1881.9	1749.5	
End-Month Elevation	ft	3785.9	3785.8	3785.3	3783.0	3780.4	3778.6	3777.7	3779.5	3786.4	3797.0	3796.7	3792.7	
Net Change	kaf	-93.5	-1.6	-17.5	-68.5	-75.9	-49.9	-27.0	51.9	205.1	341.5	-10.0	-132.4	122.2

Canyon Ferry Power 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Turbine Release	cfs	3104	2818	3430	3939	3928	3893	3785	3640	3755	4659	3641	3620	
Tailwater Elev	ft	3650.8	3650.7	3650.8	3650.8	3650.8	3650.8	3650.8	3650.8	3650.9	3650.9	3650.8	3650.8	
Average Head	ft	136.6	135.2	134.7	133.3	130.9	128.7	127.3	127.8	132.2	140.9	146.0	143.9	
Average Power	mw	31.6	27.8	35.3	41.2	40.4	39.4	37.8	36.3	38.7	51.9	40.5	39.8	
Average Kwh/Af		123	119	125	127	125	123	121	120	125	135	135	133	126
Generation	gwh	22.759	20.646	25.445	30.668	30.080	26.490	28.131	26.100	28.800	37.382	30.132	29.581	336.214
End-Month Power Cap	mw	60	60	60	60	60	59	59	60	60	60	60	60	

Hauser 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Missouri Gain	kaf	5.2	9.1	8.4	8.8	9.0	9.3	10.2	9.0	5.4	13.1	1.3	3.3	92.1
End-Month Content	kaf	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	
Release	kaf	204.2	182.4	212.5	251.0	250.5	225.5	248.8	241.7	265.1	308.9	246.1	247.7	2884.4
Release	cfs	3432	2966	3571	4082	4074	4060	4046	4062	4311	5191	4002	4028	
Turbine Release	cfs	3432	2966	3571	4082	4074	4060	4046	4062	4311	4740	4002	4028	
Turbine Bypass	cfs	0	0	0	0	0	0	0	0	0	451	0	0	
Generation	gwh	8.599	7.679	8.947	10.569	10.548	9.495	10.476	10.178	11.162	11.877	10.362	10.429	120.321

Holter 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Missouri Gain	kaf	4.1	2.1	1.4	1.1	1.6	2.2	3.3	2.3	3.3	10.3	6.0	4.4	42.1
End-Month Content	kaf	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	
Release	kaf	208.3	184.5	213.9	252.1	252.1	227.7	252.1	244.0	268.4	319.2	252.1	252.1	2926.5
Release	cfs	3501	3001	3595	4100	4100	4100	4100	4101	4365	5364	4100	4100	
Min Release	cfs	3500	3000	3000	4100	4100	4100	4100	4100	4100	4100	4100	4100	
Turbine Release	cfs	3501	3001	3595	4100	4100	4100	4100	4101	4365	5364	4100	4100	
Turbine Bypass	cfs	0	0	0	0	0	0	0	0	0	0	0	0	
Generation	gwh	17.746	15.719	18.222	21.475	21.475	19.397	21.475	20.787	22.863	27.189	21.475	21.475	249.298

CFRAOP V0.44 Run: 11-Sep-2006 13:37
Based on Minimum Probable Inflow Forecast

CANYON FERRY LAKE MONTHLY OPERATIONS

Canyon Ferry Reservoir Initial Cont 1627.3 kaf Elev 3788.86 ft Maximum Cont 1993.0 kaf Elev 3800.00 ft Minimum Cont 445.5 kaf Elev 3732.31 ft

2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Reservoir Inflow	kaf	105.8	154.5	167.9	165.4	150.8	149.7	194.0	217.8	284.8	324.7	149.1	99.1	2163.6
Evaporation Loss	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HV Canal Diversions	kaf	12.0	4.0	0.0	0.0	0.0	0.0	4.0	11.0	22.0	17.0	21.0	21.0	112.0
HV Pump Turbines	kaf	14.3	5.0	0.0	0.0	0.0	0.0	5.2	14.0	26.9	19.4	23.3	24.6	132.7
Turbine Release	kaf	174.9	174.0	172.4	176.8	179.9	158.3	168.8	155.6	156.0	149.4	154.6	186.6	2007.3
Turbine Release	cfs	2939	2830	2897	2875	2926	2850	2745	2615	2537	2511	2514	3035	
Spill/Waste	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
River Release	kaf	189.2	179.0	172.4	176.8	179.9	158.3	174.0	169.6	182.9	168.8	177.9	211.2	2140.0
River Release	cfs	3180	2911	2897	2875	2926	2850	2830	2850	2975	2837	2893	3435	
Min Release	cfs	3180	2911	2897	2875	2926	2850	2830	2850	2975	2837	2893	3435	
Total Dam Release	kaf	201.2	183.0	172.4	176.8	179.9	158.3	178.0	180.6	204.9	185.8	198.9	232.2	2252.0
Total Dam Release	cfs	3381	2976	2897	2875	2926	2850	2895	3035	3332	3122	3235	3776	
End-Month Content	kaf	1531.9	1503.4	1498.9	1487.5	1458.4	1449.8	1465.8	1503.0	1582.9	1721.8	1672.0	1538.9	
End-Month Elevation	ft	3785.8	3784.9	3784.7	3784.4	3783.4	3783.1	3783.7	3784.9	3787.5	3791.8	3790.3	3786.0	
Net Change	kaf	-95.4	-28.5	-4.5	-11.4	-29.1	-8.6	16.0	37.2	79.9	138.9	-49.8	-133.1	-88.4

Canyon Ferry Power 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Turbine Release	cfs	2939	2830	2897	2875	2926	2850	2745	2615	2537	2511	2514	3035	
Tailwater Elev	ft	3650.8	3650.7	3650.7	3650.7	3650.7	3650.7	3650.7	3650.7	3650.7	3650.7	3650.7	3650.8	
Average Head	ft	136.5	134.7	134.1	133.9	133.2	132.6	132.7	133.6	135.5	139.0	140.3	137.4	
Average Power	mw	29.5	27.8	28.6	28.3	28.8	27.7	26.5	25.0	24.3	24.5	24.7	30.9	
Average Kwh/Af		121	119	119	119	119	118	117	116	116	118	119	123	119
Generation	gwh	21.247	20.698	20.563	21.018	21.397	18.628	19.679	17.993	18.087	17.618	18.369	22.967	238.264
End-Month Power Cap	mw	60	60	60	60	60	60	60	60	60	60	60	60	

Hauser 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Missouri Gain	kaf	1.8	4.0	4.8	7.1	4.5	7.2	8.6	7.8	0.4	1.9	1.9	0.9	50.9
End-Month Content	kaf	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	
Release	kaf	191.0	183.0	177.2	183.9	184.4	165.5	182.6	177.4	183.3	170.7	179.8	212.1	2190.9
Release	cfs	3210	2976	2978	2991	2999	2980	2970	2981	2981	2869	2924	3449	
Turbine Release	cfs	3210	2976	2978	2991	2999	2980	2970	2981	2981	2869	2924	3449	
Turbine Bypass	cfs	0	0	0	0	0	0	0	0	0	0	0	0	
Generation	gwh	8.043	7.705	7.462	7.744	7.765	6.969	7.690	7.469	7.718	7.189	7.571	8.930	92.255

Holter 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Missouri Gain	kaf	2.4	1.5	1.3	0.6	0.1	1.1	1.9	1.1	1.2	7.8	4.7	3.1	26.8
End-Month Content	kaf	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	
Release	kaf	193.4	184.5	178.5	184.5	184.5	166.6	184.5	178.5	184.5	178.5	184.5	215.2	2217.7
Release	cfs	3250	3001	3000	3001	3001	3000	3001	3000	3001	3000	3001	3500	
Min Release	cfs	3250	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3500	
Turbine Release	cfs	3250	3001	3000	3001	3001	3000	3001	3000	3001	3000	3001	3500	
Turbine Bypass	cfs	0	0	0	0	0	0	0	0	0	0	0	0	
Generation	gwh	16.474	15.719	15.206	15.719	15.719	14.193	15.719	15.206	15.719	15.206	15.719	18.332	188.931

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CANYON FERRY LAKE MONTHLY OPERATIONS

Canyon Ferry Reservoir Initial Cont 1627.3 kaf Elev 3788.86 ft Maximum Cont 1993.0 kaf Elev 3800.00 ft Minimum Cont 445.5 kaf Elev 3732.31 ft

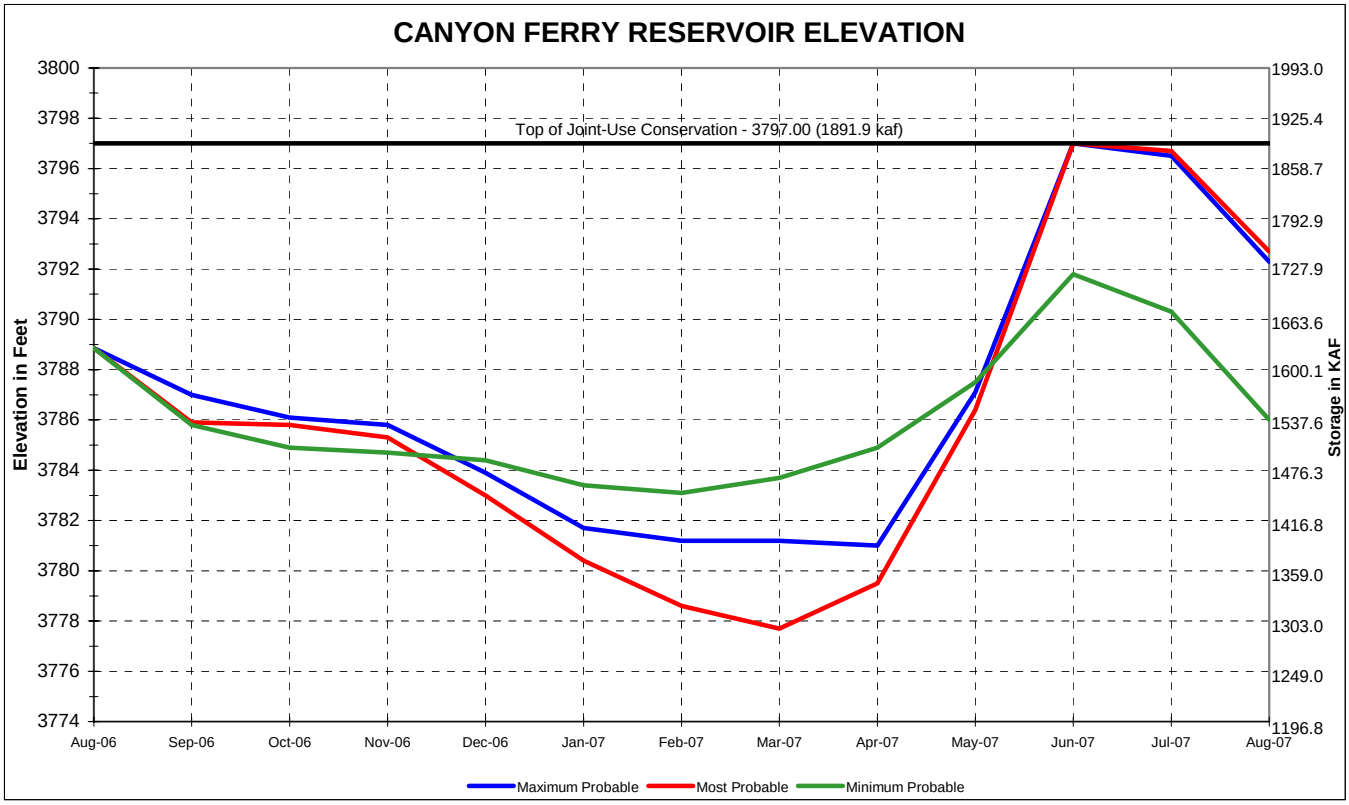
2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Reservoir Inflow	kaf	141.0	206.0	223.9	208.4	198.7	199.6	237.9	289.2	570.7	826.7	308.3	149.6	3560.0
Evaporation Loss	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HV Canal Diversions	kaf	7.0	0.0	0.0	0.0	0.0	0.0	4.0	11.0	12.0	16.0	17.0	16.0	83.0
HV Pump Turbines	kaf	8.3	0.0	0.0	0.0	0.0	0.0	5.5	15.1	15.4	17.4	17.0	16.7	95.4
Turbine Release	kaf	184.4	235.4	232.7	265.3	265.3	212.9	230.0	268.7	357.8	323.6	291.2	254.2	3121.5
Turbine Release	cfs	3099	3828	3911	4315	4315	3833	3741	4516	5819	5439	4736	4134	
Spill/Waste	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	149.7	0.0	0.0	149.7
River Release	kaf	192.7	235.4	232.7	265.3	265.3	212.9	235.5	283.8	373.2	490.7	308.2	270.9	3366.6
River Release	cfs	3238	3828	3911	4315	4315	3833	3830	4769	6070	8246	5012	4406	
Min Release	cfs	3238	3828	3911	4315	4315	3833	3825	3850	3711	3284	3731	3807	
Total Dam Release	kaf	199.7	235.4	232.7	265.3	265.3	212.9	239.5	294.8	385.2	506.7	325.2	286.9	3449.6
Total Dam Release	cfs	3356	3828	3911	4315	4315	3833	3895	4954	6265	8515	5289	4666	
End-Month Content	kaf	1568.6	1539.2	1530.4	1473.5	1406.9	1393.6	1392.0	1386.4	1571.9	1891.9	1875.0	1737.7	
End-Month Elevation	ft	3787.0	3786.1	3785.8	3783.9	3781.7	3781.2	3781.2	3781.0	3787.1	3797.0	3796.5	3792.3	
Net Change	kaf	-58.7	-29.4	-8.8	-56.9	-66.6	-13.3	-1.6	-5.6	185.5	320.0	-16.9	-137.3	110.4

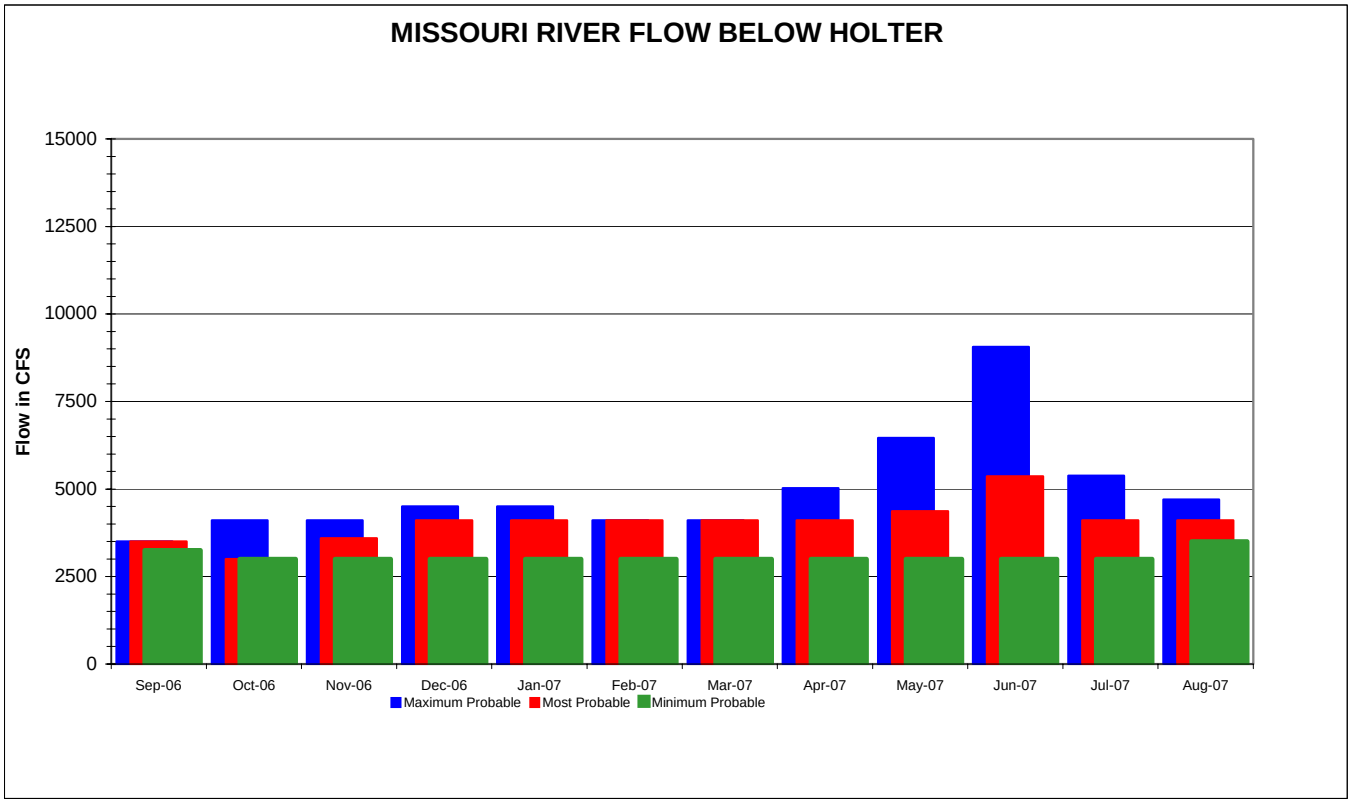
Canyon Ferry Power 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Turbine Release	cfs	3099	3828	3911	4315	4315	3833	3741	4516	5819	5439	4736	4134	
Tailwater Elev	ft	3650.8	3650.8	3650.8	3650.9	3650.9	3650.8	3650.8	3650.9	3651.1	3651.4	3650.9	3650.9	
Average Head	ft	137.1	135.7	135.1	133.9	131.9	130.6	130.4	130.2	133.0	140.7	145.8	143.5	
Average Power	mw	31.6	40.5	41.4	45.8	45.1	39.2	38.1	46.8	59.6	60.0	54.4	46.3	
Average Kwh/Af		124	128	128	128	127	124	123	125	124	133	139	136	129
Generation	gwh	22.781	30.139	29.779	34.060	33.584	26.369	28.339	33.667	44.305	43.200	40.481	34.470	401.174
End-Month Power Cap	mw	60	60	60	60	60	60	60	60	60	60	60	60	

Hauser 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Missouri Gain	kaf	10.0	13.0	9.3	9.4	8.9	11.9	13.3	11.8	17.2	34.1	13.3	10.8	163.0
End-Month Content	kaf	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	
Release	kaf	202.7	248.4	242.0	274.7	274.2	224.8	248.8	295.6	390.4	524.8	321.5	281.7	3529.6
Release	cfs	3406	4040	4067	4468	4459	4048	4046	4968	6349	8820	5229	4581	
Turbine Release	cfs	3406	4040	4067	4468	4459	4048	4046	4740	4740	4740	4740	4581	
Turbine Bypass	cfs	0	0	0	0	0	0	0	228	1609	4080	489	0	
Generation	gwh	8.534	10.460	10.190	11.568	11.545	9.466	10.476	11.877	12.272	11.877	12.272	11.861	132.398

Holter 2006		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Missouri Gain	kaf	5.6	3.7	2.0	2.0	2.5	2.9	3.6	3.1	6.7	14.5	9.4	7.2	63.2
End-Month Content	kaf	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	
Release	kaf	208.3	252.1	244.0	276.7	276.7	227.7	252.4	298.7	397.1	539.3	330.9	288.9	3592.8
Release	cfs	3501	4100	4101	4500	4500	4100	4105	5020	6458	9063	5382	4699	
Min Release	cfs	3500	4100	4100	4500	4500	4100	4100	4100	4100	4100	4100	4100	
Turbine Release	cfs	3501	4100	4101	4500	4500	4100	4105	5020	6458	7100	5382	4699	
Turbine Bypass	cfs	0	0	0	0	0	0	0	0	0	1963	0	0	
Generation	gwh	17.746	21.475	20.787	23.570	23.570	19.397	21.501	25.445	33.825	35.988	28.190	24.612	296.106

CANYON FERRY RESERVOIR





WATER YEAR 2006