

RECLAMATION

Managing Water in the West

September 3, 2008

Dear Customer:

Attached are the monthly water supply outlook and projected reservoir and river operating plans as prepared on September 3, 2008. The Beaverhead basin continues to be plagued by drought conditions and even with normal snowpack this season, the snowmelt runoff was only 47 percent of average. Fall and winter inflows are anticipated to remain below average. If you have any questions or concerns, please call me at (406) 247-7318.

Jeremy Giovando
Reservoir and River Operations



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

CLARK CANYON RESERVOIR OPERATIONS

Water Supply Forecasts and Reservoir Operations September 1, 2008

Storage (acre-feet):

		% Normal	% Full
Lima Reservoir:	25,200	67	30
Clark Canyon Reservoir:	57,900	45	33

Actual Inflows (1,000 Acre-Feet):

<u>Month</u>	<u>Inflow</u>	<u>Percent of Normal</u>	
<i>April-July, 2007</i>	<i>40.2</i>	<i>36</i>	
<i>April-July, 2008</i>	<i>52.9</i>	<i>47</i>	
October	11.6	50	8th Lowest of record
November	12.6	57	7th Lowest of record
December	12.3	64	
January	10.0	62	5th Lowest of record
February	8.5	58	5th Lowest of record
March	9.9	53	3rd Lowest of record
April	10.0	46	
May	11.1	41	
June	17.0	47	
July	14.7	53	
August	11.0	57	

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

<u>Agency</u>	<u>Inflow</u>	<u>Percent of Normal</u>
USBR	10.7	53
NRCS	n/a	n/a
Corps	n/a	n/a
Average	10.7	53

SNOTEL DATA:

Not available until next season.

CCRAOP V1.07 Run: 03-Sep-2008 13:17
 Based on Most Probable Inflow Forecast

CLARK CANYON RESERVOIR MONTHLY OPERATIONS

Clark Canyon Reservoir	2008	Initial Cont Elev				57.9 kaf 5516.99 ft				Maximum Cont Elev				310.1 kaf 5569.57 ft				Minimum Cont Elev				10.0 kaf 5489.22 ft				Total
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
Monthly Inflow	kaf	10.7	12.4	13.7	13.7	12.6	11.4	14.8	17.5	17.6	26.7	21.3	15.6	188.0												
Canyon Ditch Dmd	kaf	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	3.7	4.1	3.3	14.2												
Dillon Dmd	kaf	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	2.1	1.7	6.5												
West Side Canal Dmd	kaf	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	4.4	6.0	4.8	20.0												
COOP-Pt. Rocks Dmd	kaf	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.4	1.9	1.8	6.6												
Other Dmd	kaf	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	12.2	14.7	13.7	50.7												
CCWSCO Total Dmd	kaf	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8	23.3	28.8	25.3	98.0												
Dmd. sat by rtn fl	kaf	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	7.7	11.2	14.2	39.6												
CCWSCO rel. req.	kaf	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	15.6	17.6	11.1	58.4												
CCWSCO Deliv	kaf	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	15.6	17.6	11.1	58.4												
CCWSCO Short	kaf	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1												
Senior Users Dmd	kaf	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	6.7	6.0	8.9	28.4												
Dmd. sat by rtn fl	kaf	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.2	2.3	5.0	11.1												
Senior rel. req.	kaf	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.5	3.7	3.9	17.3												
Senior Users Deliv	kaf	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.5	3.7	3.9	17.3												
Senior Users Short	kaf	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-2.0	-1.6	-1.7	-7.4												
E.B. Dmd	kaf	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	10.2	13.8	5.8	38.7												
E.B. Div @ Bar.	kaf	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7	18.5	25.1	10.5	70.3												
East Bench Short	kaf	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0												
Gordon Spring Gain	cfs	20	20	20	20	20	20	20	20	20	20	20	20	20												
Min Release at Dam	cfs	30	30	30	30	30	30	30	30	100	100	100	100	100												
Total Irr Sto Dmd	kaf	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.2	38.6	46.4	25.5	146.0												
Total Dam Release	cfs	136	29	30	29	29	31	29	30	407	629	735	395	395												
Total Dam Release	kaf	8.1	1.8	1.8	1.8	1.8	1.7	1.8	1.8	25.0	37.4	45.2	24.3	152.5												
River flow bl dam	cfs	156	49	50	49	49	50	49	50	426	649	755	415	415												
Excess Release	cfs	0	0	0	0	0	0	0	0	0	0	0	0	0												
Excess Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
End-Month Content	kaf	60.5	71.1	83.0	94.9	105.7	115.4	128.4	144.1	136.7	126.0	102.1	93.4	93.4												
End-Month Elevation	ft	5517.94	5521.54	5525.19	5528.52	5531.31	5533.67	5536.65	5540.03	5538.46	5536.12	5530.40	5528.12	5528.12												
Net Change Content	kaf	2.6	10.6	11.9	11.9	10.8	9.7	13.0	15.7	-7.4	-10.7	-23.9	-8.7	35.5												

CCRAOP V1.07 Run: 03-Sep-2008 13:17

Based on Minimum Probable Inflow Forecast; DMP Allotments: EB=2.7 AF/acre & CCWSC=3.5 AF/acre

CLARK CANYON RESERVOIR MONTHLY OPERATIONS

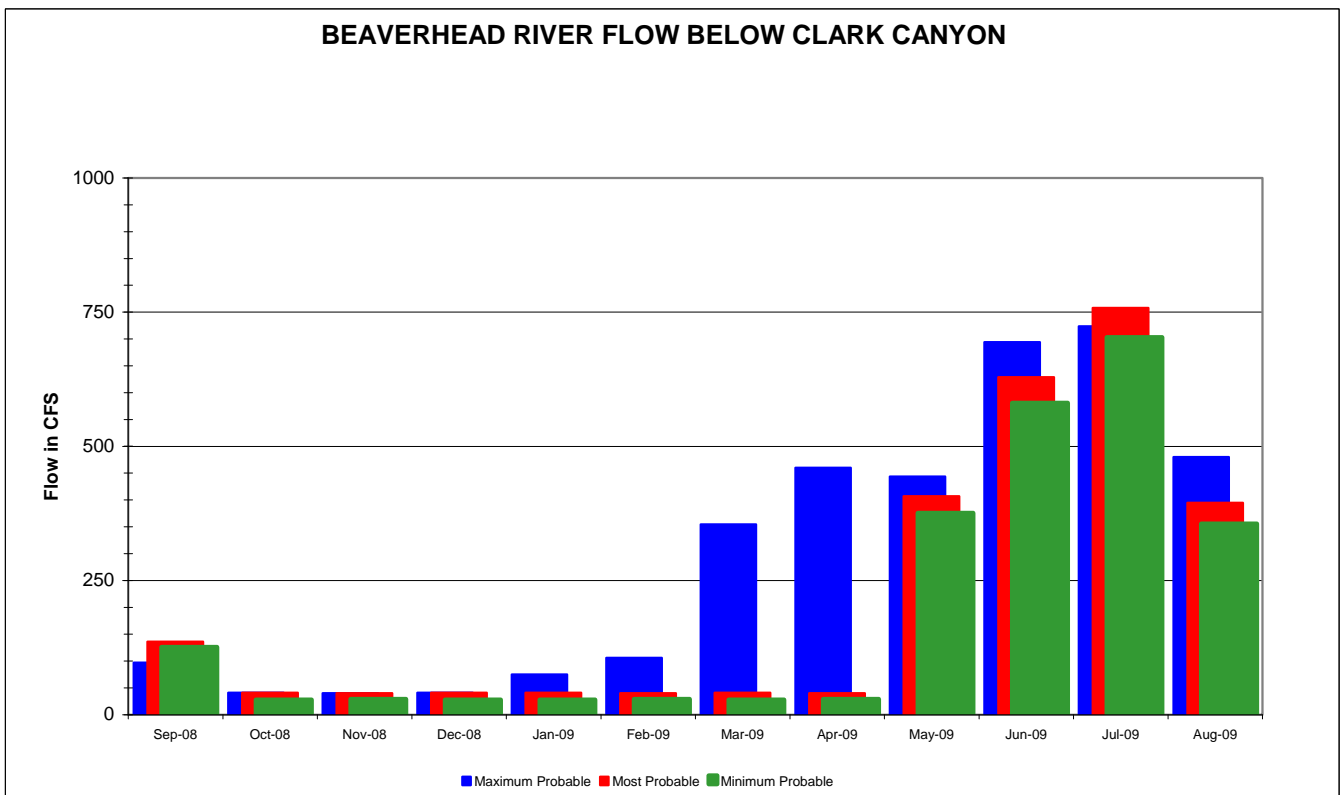
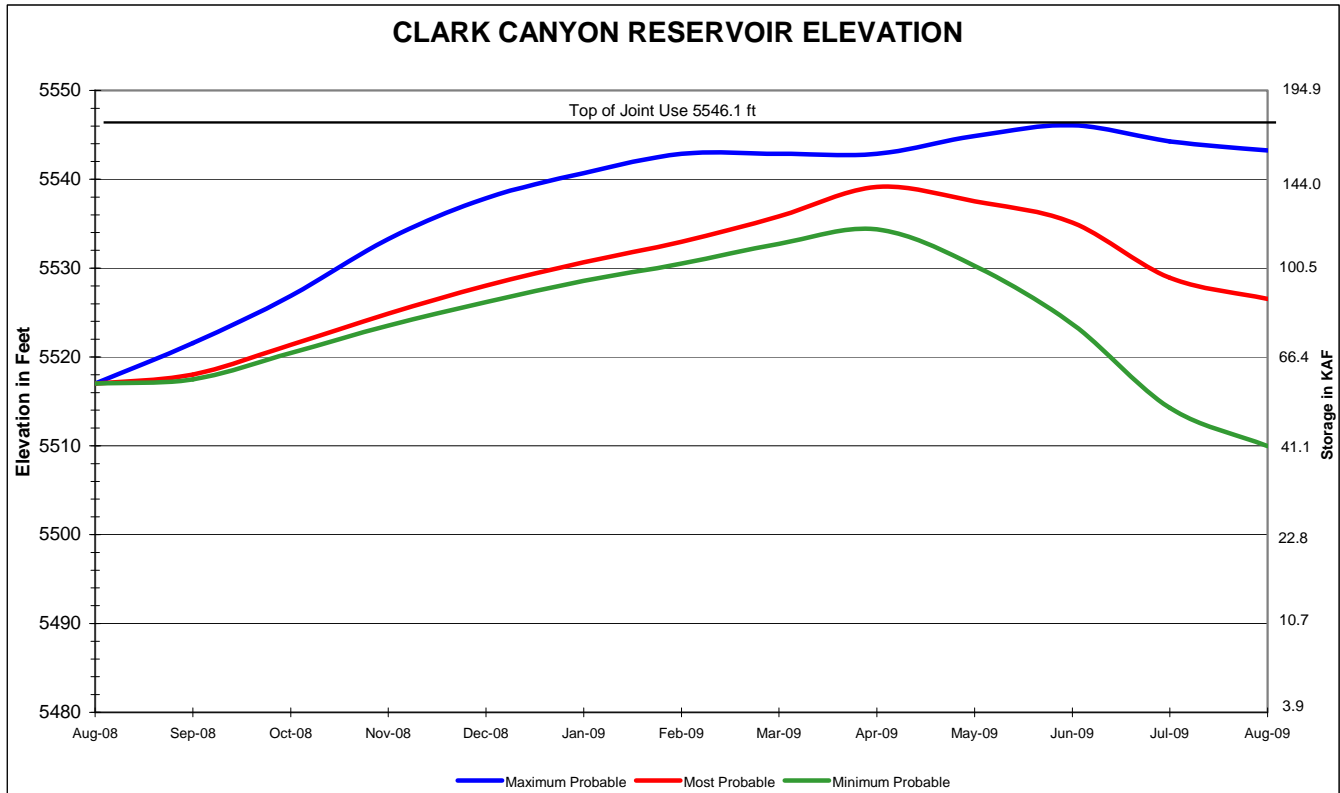
Clark Canyon Reservoir	2008	Initial Cont Elev 57.9 kaf 5516.99 ft				Maximum Cont Elev 310.1 kaf 5569.57 ft				Minimum Cont Elev 10.0 kaf 5489.22 ft				Total
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
Monthly Inflow	kaf	8.7	10.1	11.4	10.7	10.4	9.0	10.7	8.6	6.2	11.1	16.1	12.0	125.0
Canyon Ditch Dmd	kaf	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.2	3.6	2.9	12.4
Dillon Dmd	kaf	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.4	1.8	1.5	5.7
West Side Canal Dmd	kaf	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.9	5.3	4.2	17.6
COOP-Pt. Rocks Dmd	kaf	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.2	1.7	1.5	5.7
Other Dmd	kaf	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	10.7	12.9	12.0	44.3
CCWSCO Total Dmd	kaf	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	20.4	25.3	22.1	85.7
Dmd. sat by rtn fl	kaf	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	5.9	8.3	12.5	31.7
CCWSCO rel. req.	kaf	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	14.5	17.0	9.6	54.0
CCWSCO Deliv	kaf	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	14.5	17.0	9.6	54.0
CCWSCO Short	kaf	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.1	2.4	1.3	7.7
Senior Users Dmd	kaf	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	6.7	6.0	8.9	28.4
Dmd. sat by rtn fl	kaf	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.9	2.0	5.0	10.4
Senior rel. req.	kaf	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	4.8	4.0	3.9	18.0
Senior Users Deliv	kaf	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	4.8	4.0	3.9	18.0
Senior Users Short	kaf	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	-2.1	-1.7	-1.7	-7.7
E.B. Dmd	kaf	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	8.9	12.7	5.1	34.5
E.B. Div @ Bar.	kaf	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	16.2	23.1	9.3	62.8
East Bench Short	kaf	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.4	3.4	1.2	8.9
Gordon Spring Gain	cfs	20	20	20	20	20	20	15	15	15	15	15	15	
Min Release at Dam	cfs	30	30	30	30	30	30	30	30	30	30	30	30	
Total Irr Sto Dmd	kaf	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	35.5	44.1	22.8	134.8
Total Dam Release	cfs	121	29	30	29	29	31	29	30	376	581	703	356	
Total Dam Release	kaf	7.2	1.8	1.8	1.8	1.8	1.7	1.8	1.8	23.1	34.6	43.2	21.9	142.5
River flow bl dam	cfs	141	49	50	49	49	50	44	45	390	597	717	371	
Excess Release	cfs	0	0	0	0	0	0	0	0	0	0	0	0	
Excess Release	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
End-Month Content	kaf	59.4	67.7	77.3	86.2	94.8	102.1	111.0	117.8	100.9	77.4	50.3	40.4	
End-Month Elevation	ft	5517.54	5520.43	5523.49	5526.12	5528.49	5530.40	5532.61	5534.23	5530.09	5523.52	5514.01	5509.68	
Net Change Content	kaf	1.5	8.3	9.6	8.9	8.6	7.3	8.9	6.8	-16.9	-23.5	-27.1	-9.9	-17.5

CCRAOP V1.07 Run: 03-Sep-2008 13:18
 Based on Maximum Probable Inflow Forecast

CLARK CANYON RESERVOIR MONTHLY OPERATIONS

Clark Canyon Reservoir	2008	Initial Cont Elev				57.9 kaf 5516.99 ft				Maximum Cont Elev				310.1 kaf 5569.57 ft				Minimum Cont Elev				10.0 kaf 5489.22 ft				Total
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
Monthly Inflow	kaf	18.9	20.2	27.3	22.6	18.1	16.5	21.8	27.4	37.3	47.6	35.2	24.4	317.3												
Canyon Ditch Dmd	kaf	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	3.7	4.1	3.3	14.2												
Dillon Dmd	kaf	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	2.1	1.7	6.5												
West Side Canal Dmd	kaf	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	4.4	6.0	4.8	20.0												
COOP-Pt. Rocks Dmd	kaf	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.4	1.9	1.8	6.6												
Other Dmd	kaf	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	12.2	14.7	13.7	50.7												
CCWSCO Total Dmd	kaf	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8	23.3	28.8	25.3	98.0												
Dmd. sat by rtn fl	kaf	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	8.1	12.7	10.1	38.5												
CCWSCO rel. req.	kaf	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	15.2	16.1	15.2	59.5												
CCWSCO Deliv	kaf	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	15.2	16.1	15.2	59.5												
CCWSCO Short	kaf	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2												
Senior Users Dmd	kaf	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	6.7	6.0	8.9	28.4												
Dmd. sat by rtn fl	kaf	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.3	2.6	3.6	11.0												
Senior rel. req.	kaf	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.4	3.4	5.3	17.4												
Senior Users Deliv	kaf	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.4	3.4	5.3	17.4												
Senior Users Short	kaf	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-1.9	-1.5	-2.3	-7.5												
E.B. Dmd	kaf	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	10.2	13.8	5.8	38.7												
E.B. Div @ Bar.	kaf	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7	18.5	25.1	10.5	70.3												
East Bench Short	kaf	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0												
Gordon Spring Gain	cfs	25	25	25	25	25	25	25	20	25	25	25	25													
Min Release at Dam	cfs	30	30	30	30	75	100	175	300	300	300	50	50													
Total Irr Sto Dmd	kaf	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.2	38.1	44.6	31.0	147.2												
Total Dam Release	cfs	97	29	30	29	75	139	355	460	444	694	701	480													
Total Dam Release	kaf	5.8	1.8	1.8	1.8	4.6	7.7	21.8	27.4	27.3	41.3	43.1	29.5	213.9												
River flow bl dam	cfs	123	54	55	54	99	164	379	481	468	719	725	504													
Excess Release	cfs	0	0	0	0	0	38	179	160	18	54	0	0													
Excess Release	kaf	0.0	0.0	0.0	0.0	0.0	2.1	11.0	9.5	1.1	3.2	0.0	0.0	26.9												
End-Month Content	kaf	71.0	89.4	114.9	135.7	149.2	158.0	158.0	158.0	168.0	174.3	166.4	161.3													
End-Month Elevation	ft	5521.51	5527.02	5533.55	5538.25	5541.08	5542.87	5542.87	5542.87	5544.86	5546.09	5544.54	5543.53													
Net Change Content	kaf	13.1	18.4	25.5	20.8	13.5	8.8	0.0	0.0	10.0	6.3	-7.9	-5.1	103.4												

CLARK CANYON RESERVOIR



WATER YEAR 2008