

COLORADO-BIG THOMPSON MONTHLY OPERATIONS

HYDROLOGY OPERATIONS

Green Mtn Reservoir		Initial Cont Elev 7925.05 ft				Maximum Cont Elev 7949.91 ft				Minimum Cont Elev 7795.72 ft				Total
2010		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Dillon Inflow	kaf	6.1	4.9	4.4	4.0	3.6	4.3	8.2	40.5	74.8	38.2	15.8	7.8	212.6
Dillon-Grn Mtn Gain	kaf	6.4	4.8	4.2	3.8	3.2	4.1	8.8	28.3	48.9	26.8	13.3	8.4	161.0
Undepleted Inflow	kaf	12.5	9.7	8.6	7.8	6.8	8.4	17.0	68.8	123.7	65.0	29.1	16.2	373.6
Depletion	kaf	5.1	0.1	0.4	1.4	0.8	1.3	5.9	36.3	23.3	16.4	7.4	3.4	101.8
Depleted Inflow	kaf	7.4	9.6	8.2	6.4	6.0	7.1	11.1	32.5	100.4	48.6	21.7	12.8	271.8
Turbine Release	kaf	33.8	12.0	11.5	12.3	11.1	12.3	10.5	6.1	33.7	45.7	39.9	41.7	270.6
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
Total River Release	kaf	33.8	12.0	11.5	12.3	11.1	12.3	10.5	6.1	33.7	45.7	39.9	41.7	270.6
Min Release	cfs	550	201	187	200	200	200	176	100	100	550	649	700	
Total River Release	cfs	550	202	187	200	200	200	176	99	566	743	649	701	
Evaporation	kaf	0.3	0.1	0.0	0.0	0.0	0.2	0.2	0.4	0.8	0.9	0.6	0.5	4.0
End-Month Targets	kaf							75.0	90.0	150.0	152.0			
End-Month Content	kaf	79.9	77.4	74.1	68.2	63.1	57.7	58.1	84.1	150.0	152.0	133.2	103.8	
End-Month Elevation	ft	7907.04	7905.13	7902.56	7897.73	7893.29	7888.26	7888.64	7910.14	7948.20	7949.15	7939.85	7923.34	
Willow Crk Reservoir		Initial Cont Elev 8124.12 ft				Maximum Cont Elev 8128.83 ft				Minimum Cont Elev 8104.78 ft				Total
2010		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Native Inflow	kaf	1.1	0.9	0.8	0.8	0.7	1.0	3.6	22.7	17.6	6.0	1.4	1.0	57.6
Min Release	kaf	0.4	0.8	0.4	0.4	0.4	0.4	0.4	1.5	2.6	2.2	0.5	0.4	10.4
Spill/Bypass	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
Total River Release	kaf	0.4	0.8	0.4	0.4	0.4	0.4	0.4	1.5	2.6	2.2	0.5	0.4	10.4
Pumped to Granby	kaf	1.2	1.2	0.0	0.0	0.0	2.5	2.4	19.3	13.9	4.7	0.7	0.6	46.5
Evaporation	kaf	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.6
End-Month Targets	kaf		7.2					7.2	9.0	10.0	9.0		9.0	
End-Month Content	kaf	8.3	7.2	7.6	8.0	8.3	6.4	7.2	9.0	10.0	9.0	9.1	9.0	
End-Month Elevation	ft	8121.73	8116.90	8118.74	8120.48	8121.73	8112.89	8116.90	8124.50	8128.14	8124.50	8124.88	8124.50	

Lake Granby		Initial Cont Elev 474.8 kaf 8270.81 ft				Maximum Cont Elev 536.1 kaf 8279.50 ft				Minimum Cont Elev 76.5 kaf 8186.91 ft				Total
2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
Native inflow	kaf	2.1	1.3	1.4	1.4	1.2	1.5	4.8	23.4	35.8	17.6	5.3	2.3	98.1
Rels frm Shadow Mtn	kaf	2.2	2.7	2.8	1.2	1.1	1.2	1.2	6.2	51.0	11.4	2.5	2.1	85.6
Pump frm Windy Gap	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
Pump frm Willow Crk	kaf	1.2	1.2	0.0	0.0	0.0	2.5	2.4	19.3	13.9	4.7	0.7	0.6	46.5
Total Inflow	kaf	5.5	5.2	4.2	2.6	2.3	5.2	8.4	48.9	100.7	33.7	8.5	5.0	230.2
Min River Release	kaf	1.4	1.2	1.2	1.2	1.1	1.2	1.2	4.6	4.7	3.3	2.5	1.0	24.6
Spill/Bypass	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
Total River Release	kaf	1.4	1.2	1.2	1.2	1.1	1.2	1.2	4.6	4.7	3.3	2.5	1.0	24.6
Pumped to Shadow Mtn	kaf	26.9	0.9	17.7	26.1	23.6	26.6	20.2	0.0	0.0	0.0	12.4	12.6	167.0
Evaporation	kaf	1.5	0.7	0.2	0.0	0.0	0.9	1.4	2.2	2.9	2.8	2.2	2.0	16.8
Seepage loss	kaf	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.4	4.1
End-Month Content	kaf	450.2	452.3	437.1	412.1	389.4	365.6	350.9	392.7	485.4	512.6	503.5	492.5	
End-Month Elevation	ft	8267.18	8267.49	8265.20	8261.33	8257.71	8253.80	8251.33	8258.24	8272.34	8276.21	8274.93	8273.36	
Shadow Mtn		Initial Cont Elev 17.7 kaf 8366.62 ft				Maximum Cont Elev 18.4 kaf 8367.00 ft				Minimum Cont Elev 16.6 kaf 8366.02 ft				Total
2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
Native inflow	kaf	3.2	2.0	2.1	2.1	1.9	2.2	7.2	35.0	53.8	26.4	8.0	3.5	147.4
Pumped from Granby	kaf	26.9	0.9	17.7	26.1	23.6	26.6	20.2	0.0	0.0	0.0	12.4	12.6	167.0
Total Inflow	kaf	30.1	2.9	19.8	28.2	25.5	28.8	27.4	35.0	53.8	26.4	20.4	16.1	314.4
Min River Release	kaf	2.2	2.7	2.8	1.2	1.1	1.2	1.2	1.2	3.0	3.1	2.5	2.1	24.3
Spill/Bypass	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	48.0	8.3	0.0	0.0	61.3
Total River Release	kaf	2.2	2.7	2.8	1.2	1.1	1.2	1.2	6.2	51.0	11.4	2.5	2.1	85.6
Adams Tunnel Flow	kaf	27.5	0.0	16.9	27.0	24.4	27.3	25.8	28.1	2.0	14.3	17.3	13.5	224.1
Evaporation	kaf	0.4	0.2	0.1	0.0	0.0	0.3	0.4	0.7	0.8	0.7	0.6	0.5	4.7
End-Month Content	kaf	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	
End-Month Elevation	ft	8366.62	8366.62	8366.62	8366.62	8366.62	8366.62	8366.62	8366.62	8366.62	8366.62	8366.62	8366.62	
Adams Tunnel	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Max Tunnel Capacity	kaf	33.8	0.0	16.9	33.8	30.5	33.8	32.7	33.8	32.7	33.8	17.9	32.7	332.4
Actual delivery	kaf	27.5	0.0	16.9	27.0	24.4	27.3	25.8	28.1	2.0	14.3	17.3	13.5	224.1
% max delivery	%	81	0	100	80	80	81	79	83	6	42	97	41	
Big T @ Lake Estes	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Big Thompson inflow	kaf	2.6	1.8	1.2	1.0	0.7	1.0	3.3	15.1	32.2	16.1	6.9	3.8	85.7
Min river release	kaf	3.1	1.5	1.5	1.5	1.4	1.5	2.2	6.9	7.4	7.7	6.9	3.7	45.3
Act river release	kaf	2.6	1.5	1.2	1.0	0.7	1.0	2.2	9.4	7.4	7.7	6.9	3.7	45.3

Skim water available	kaf	0.0	0.3	0.0	0.0	0.0	0.0	1.1	8.2	24.8	8.4	0.0	0.1	42.9	
Skim water diverted	kaf	0.0	0.3	0.0	0.0	0.0	0.0	1.1	5.7	24.8	8.4	0.0	0.1	40.4	
% skim diverted	%		100					100	70	100	100		100		
Irrigation demand	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	
Irrigation delivery	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	
Total river release	kaf	2.6	1.5	1.2	1.0	0.7	1.0	2.2	9.4	7.4	7.8	7.0	3.8	45.6	
Olympus Tunnel	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
Max Tunnel Capacity	kaf	30.4	3.3	30.4	33.8	30.5	33.8	32.7	33.8	32.7	33.8	33.8	32.7	361.7	
Actual delivery	kaf	27.5	0.3	16.9	27.0	24.4	27.3	26.9	33.8	26.8	22.6	17.2	13.5	264.2	
% max delivery	%	90	9	56	80	80	81	82	100	82	67	51	41		
Seepage and Evap	kaf	0.2	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	1.5	
Inflow to Flatiron	kaf	27.3	0.3	16.7	26.9	24.3	27.2	26.8	33.7	26.7	22.5	17.0	13.3	262.7	
Carter Lake			Initial Cont		65.3 kaf		Maximum Cont		112.2 kaf		Minimum Cont		11.2 kaf		
			Elev		5714.34 ft		Elev		5758.98 ft		Elev		5639.99 ft		
	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
Pump from Flatiron	kaf	18.0	0.0	11.6	18.2	14.8	0.0	9.3	5.1	0.0	5.4	0.0	0.0	82.4	
Release to Flatiron	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	
Evaporation loss	kaf	0.2	0.1	0.0	0.0	0.0	0.2	0.3	0.4	0.5	0.4	0.3	0.3	2.7	
Seepage loss	kaf	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	1.7	
End-Month Targets	kaf	74.0	72.0	85.0	99.0	112.0	109.0	112.0	107.0	98.0	90.0	70.0	49.0		
End-Month Content	kaf	74.0	72.0	81.8	98.2	111.4	109.2	112.0	107.0	98.8	90.0	72.0	57.6		
End-Month Elevation	ft	5723.28	5721.26	5730.98	5746.45	5758.27	5756.34	5758.80	5754.39	5747.00	5738.84	5721.26	5706.06		
Irrigation demand	kaf	6.3	0.0	0.0	0.0	0.0	0.0	3.5	5.2	2.7	8.3	12.0	9.3	47.3	
Metered delivery	kaf	2.2	1.4	1.3	1.3	1.1	1.4	2.1	2.7	2.9	3.5	4.0	3.4	27.3	
Windy Gap demand	kaf	0.5	0.4	0.4	0.4	0.4	0.4	0.4	1.6	1.9	1.8	1.6	1.3	11.1	
Total demand	kaf	9.0	1.8	1.7	1.7	1.5	1.8	6.0	9.5	7.5	13.6	17.6	14.0	85.7	
Total delivery	kaf	9.0	1.8	1.7	1.7	1.5	1.8	6.0	9.5	7.5	13.6	17.6	14.0	85.7	
% required delivery	%	100	100	100	100	100	100	100	100	100	100	100	100		
Shortage	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	
Hansen Canal	930	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Minimum flow	kaf	1.5	0.0	1.5	4.6	4.2	4.6	1.5	1.5	1.5	1.5	1.5	1.5	25.4	
Maximum flow	kaf	57.2	55.3	57.2	57.2	51.6	57.2	27.7	57.2	55.3	57.2	57.2	55.3	645.6	
Actual flow	kaf	9.3	0.3	5.1	8.7	9.5	27.2	17.5	28.6	26.7	17.1	17.0	13.3	180.3	
Dille Tunnel	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total	
Big T @ Canyon Mouth	kaf	4.0	2.3	1.5	1.4	1.3	1.8	5.6	21.6	35.2	19.0	9.8	4.4	107.9	
Less Estes Skim	kaf	0.0	0.3	0.0	0.0	0.0	0.0	1.1	5.7	24.8	8.4	0.0	0.1	40.4	

Big T irr (Estes)	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3
Handy Ditch release	kaf	1.2	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.8	2.9	1.7	11.2
Water available	kaf	2.8	2.0	1.5	1.4	1.3	1.8	3.3	14.7	9.2	8.9	7.0	2.7	56.6
Water diverted	kaf	2.8	0.0	0.0	0.0	0.0	0.0	3.3	14.7	0.0	8.9	7.0	2.7	39.4
% diverted	%	100						100	100		100	100	100	

Trifurcation Works	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Rels from Flatiron	kaf	9.3	0.3	5.1	8.7	9.5	27.2	17.5	28.6	26.7	17.1	17.0	13.3	180.3
Rels to 550 Canal	kaf	6.9	0.0	5.1	8.7	9.5	27.2	16.4	22.4	1.9	7.3	8.1	3.3	116.8
Big T irrigation	kaf	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.4	8.9	9.9	23.1
Dille Tunnel	kaf	2.8	0.0	0.0	0.0	0.0	0.0	3.3	14.7	0.0	8.9	7.0	2.7	39.4
Tot rels to river	kaf	5.2	0.3	0.0	0.0	0.0	0.0	4.4	20.9	24.8	18.7	15.9	12.7	102.9
Irrigation demand	kaf	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.1	8.6	9.6	22.2
Big T irr (Estes)	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3
Windy Gap demand	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.9
Total requirement	kaf	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.5	9.0	10.0	23.4
Total delivery	kaf	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.5	9.0	10.0	23.4
% required delivery	%	100	0	0	0	0	0	0	100	0	100	100	100	
Shortage	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

Hansen Canal 550	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Inflow from Flatiron	kaf	6.9	0.0	5.1	8.7	9.5	27.2	16.4	22.4	1.9	7.3	8.1	3.3	116.8
Maximum flow	kaf	32.0	30.9	32.0	32.0	28.9	32.0	16.4	32.0	30.9	32.0	32.0	15.4	346.5
Seepage loss	kaf	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.2
Irrigation demand	kaf	1.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	0.2	0.5	0.4	1.6	5.4
Irrigation delivery	kaf	1.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	0.2	0.5	0.4	1.6	5.4
Minimum flow	kaf	1.5	0.0	4.6	4.6	4.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	25.4
Rels to Horsetooth	kaf	5.7	0.0	4.9	8.5	9.3	27.0	15.8	20.9	1.5	6.6	7.5	1.5	109.2

Horsetooth Reservoir	2010	Initial Cont Elev			85.3 kaf			Maximum Cont Elev			156.7 kaf			Minimum Cont Elev			5.0 kaf		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total					
					5389.33 ft									5297.06 ft					
Inflow	kaf	5.7	0.0	4.9	8.5	9.3	27.0	15.8	20.9	1.5	6.6	7.5	1.5	109.2					
Total irr delivery	kaf	11.6	1.4	1.3	1.2	1.2	1.7	2.2	9.0	5.3	20.8	28.9	14.7	99.3					
Evaporation loss	kaf	0.3	0.1	0.0	0.0	0.0	0.2	0.4	0.7	0.9	0.7	0.5	0.4	4.2					
Seepage loss	kaf	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	1.7					
End-Month Targets	kaf	79.0	77.4	81.0	88.0	96.0	121.0	145.0	145.0	140.0	125.0	103.0	79.0						
End-Month Content	kaf	79.0	77.4	80.9	88.0	96.0	121.0	134.0	145.0	140.1	125.0	103.0	89.3						
End-Month Elevation	ft	5385.01	5383.89	5386.33	5391.13	5396.31	5411.23	5418.37	5424.12	5421.59	5413.47	5400.67	5391.99						
Irrigation demand	kaf	9.2	0.0	0.0	0.0	0.0	0.0	0.0	5.7	1.5	15.3	24.1	10.4	66.2					
Metered delivery	kaf	2.0	1.0	0.9	0.8	0.8	1.3	1.8	2.9	3.4	4.2	3.5	3.0	25.6					

Windy Gap demand	kaf	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.3	1.3	7.5
Total demand	kaf	11.6	1.4	1.3	1.2	1.2	1.7	2.2	9.0	5.3	20.8	28.9	14.7	99.3
Total irr delivery	kaf	11.6	1.4	1.3	1.2	1.2	1.7	2.2	9.0	5.3	20.8	28.9	14.7	99.3
% required delivery	%	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage	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
Total CBT Delivery	kaf	23.1	2.4	2.2	2.1	1.9	2.7	7.8	18.3	10.7	33.0	52.7	37.4	194.3
Windy Gap Ownership 2010		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Accrual	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
Total release	kaf	0.9	0.8	0.8	0.8	0.8	0.8	0.8	2.0	2.3	3.4	3.2	2.9	19.5
Spill	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 Ownership	kaf	55.0	54.2	53.4	52.6	51.8	51.0	50.2	48.2	45.9	42.5	39.3	36.4	

PUMPING AND GENERATION OPERATIONS

Green Mtn Gen	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Max Generation	gwh	18.600	18.000	9.300	9.300	8.322	8.876	16.868	18.600	18.000	18.600	18.600	18.000	181.066
Generation	gwh	6.150	2.061	1.951	2.046	1.802	1.950	1.646	1.014	6.589	9.638	8.273	8.184	51.304
% Max Generation	%	33	11	21	22	22	22	10	5	37	52	44	45	
Ave kwh/af		182	172	170	166	162	159	157	166	196	211	207	196	
Willow Crk Pumping	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Maximum pumping	kaf	27.7	26.8	0.0	0.0	0.0	27.7	26.8	27.7	26.8	27.7	27.7	26.8	245.7
Actual pumping	kaf	1.2	1.2	0.0	0.0	0.0	2.5	2.4	19.3	13.9	4.7	0.7	0.6	46.5
Pump energy	gwh	0.256	0.256	0.000	0.000	0.000	0.533	0.511	4.111	2.961	1.001	0.149	0.128	9.906
% max pumping	%	4	4				9	9	70	52	17	3	2	
Average kwh/af		213	213				213	213	213	213	213	213	213	
Lake Granby Pumping	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Maximum pumping	kaf	36.9	35.7	36.9	36.9	33.3	36.9	35.7	36.9	35.7	36.9	36.9	35.7	434.4
Actual pumping	kaf	26.9	0.9	17.7	26.1	23.6	26.6	20.2	0.0	0.0	0.0	12.4	12.6	167.0
Pump energy	gwh	3.874	0.130	2.567	3.811	3.469	3.963	3.030	0.000	0.000	0.000	1.748	1.789	24.381
% max pumping	%	73	3	48	71	71	72	57				34	35	
Average kwh/af		144	144	145	146	147	149	150				141	142	
Marys Lake Gen	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Adams Tunnel Flow	kaf	27.5	0.0	16.9	27.0	24.4	27.3	25.8	28.1	2.0	14.3	17.3	13.5	
Max generation	gwh	5.380	0.000	5.380	6.060	5.400	6.060	5.840	6.060	5.840	6.060	6.060	5.840	63.980
Generation	gwh	4.900	0.000	2.980	4.800	4.380	4.860	4.580	5.020	0.300	2.530	3.060	2.400	39.810
% Max Generation	%	91		55	79	81	80	78	83	5	42	50	41	
Ave kwh/af		178		176	178	180	178	178	179	150	177	177	178	

Lake Estes Gen	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Adams Tunnel Flow	kaf	27.5	0.0	16.9	27.0	24.4	27.3	25.8	28.1	2.0	14.3	17.3	13.5	
Max generation	gwh	14.920	14.450	14.920	11.940	10.060	10.450	9.660	9.980	10.060	14.920	14.920	14.450	150.730
Generation	gwh	12.100	0.000	7.760	11.900	10.060	10.450	9.660	9.980	0.800	6.650	7.920	6.250	93.530
% Max Generation	%	81		52	100	100	100	100	100	8	45	53	43	
Ave kwh/af		440		459	441	439	441	441	440	400	465	458	463	
Pole Hill Gen	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Olympus Tunnel flow	kaf	27.5	0.3	16.9	27.0	24.4	27.3	26.9	33.8	26.8	22.6	17.2	13.5	264.2
Max generation	gwh	22.720	0.000	22.720	25.260	22.800	25.260	24.460	25.260	24.460	25.260	25.260	24.460	267.920
Generation	gwh	10.200	0.000	4.640	10.200	9.240	10.200	9.880	10.200	9.880	10.200	10.200	9.880	104.720
% Max Generation	%	45		20	40	41	40	40	40	40	40	40	40	
Ave kwh/af		371		275	378	379	374	367	302	369	451	593	732	
Flatiron 1&2 Gen	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Inflow to Flatiron	kaf	27.3	0.3	16.7	26.9	24.3	27.2	26.8	33.7	26.7	22.5	17.0	13.3	262.7
Max generation	gwh	12.050	0.000	5.580	12.050	10.880	12.050	11.690	12.050	11.690	12.050	12.050	11.690	123.830
Generation	gwh	12.050	0.000	5.580	12.050	10.880	12.050	11.690	12.050	11.690	12.050	12.050	11.690	123.830
% Max Generation	%	100		100	100	100	100	100	100	100	100	100	100	
Ave kwh/af		893		821	893	892	893	892	893	892	893	893	892	
Flatiron 3 Pump/Gen	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Maximum pumping	kaf	20.8	19.8	19.9	18.2	14.8	15.8	15.3	15.9	16.1	17.7	19.3	20.8	214.4
Pump from Flatiron	kaf	18.0	0.0	11.6	18.2	14.8	0.0	9.3	5.1	0.0	5.4	0.0	0.0	82.4
Pump energy	gwh	5.508	0.000	3.712	6.315	5.654	0.000	3.683	2.004	0.000	1.928	0.000	0.000	28.804
% max pumping	%	87		58	100	100		61	32		31			
Average kwh/af		306		320	347	382		396	393		357			
Release to Flatiron	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
Maximum generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Actual generation	gwh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
% max generation	%													
Average kwh/af														
Big Thompson Gen	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Total release	kaf	5.2	0.3	0.0	0.0	0.0	0.0	4.4	20.9	24.8	18.7	15.9	12.7	102.9
Turbine release	kaf	5.2	0.0	0.0	0.0	0.0	0.0	4.4	20.9	23.9	18.7	15.9	12.7	101.7
Wasteway release	kaf	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.2
Max generation	gwh	3.940	0.000	0.000	0.000	0.000	0.000	3.800	3.940	3.800	3.940	3.940	3.800	27.160
Generation	gwh	0.540	0.000	0.000	0.000	0.000	0.000	0.480	3.280	3.800	2.840	2.380	1.840	15.160
% Max Generation	%	14						13	83	100	72	60	48	
Ave kwh/af		104						109	157	159	152	150	145	

PROJECT GENERATION AND PUMPING SUMMARY

Project Generation	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Base Generation:														
Big Thompson	gwh	0.540	0.000	0.000	0.000	0.000	0.000	0.480	3.280	3.800	2.840	2.380	1.840	15.160
Green Mtn	gwh	6.150	2.061	1.951	2.046	1.802	1.950	1.646	1.014	6.589	9.638	8.273	8.184	51.304
Flatiron 3	gwh	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	gwh	6.690	2.061	1.951	2.046	1.802	1.950	2.126	4.294	10.389	12.478	10.653	10.024	66.464
Load Following Generation:														
Marys Lake	gwh	4.900	0.000	2.980	4.800	4.380	4.860	4.580	5.020	0.300	2.530	3.060	2.400	39.810
Lake Estes	gwh	12.100	0.000	7.760	11.900	10.060	10.450	9.660	9.980	0.800	6.650	7.920	6.250	93.530
Pole Hill	gwh	10.200	0.000	4.640	10.200	9.240	10.200	9.880	10.200	9.880	10.200	10.200	9.880	104.720
Flatiron 1,2	gwh	12.050	0.000	5.580	12.050	10.880	12.050	11.690	12.050	11.690	12.050	12.050	11.690	123.830
Total	gwh	39.250	0.000	20.960	38.950	34.560	37.560	35.810	37.250	22.670	31.430	33.230	30.220	361.890
Total generation	gwh	45.940	2.061	22.911	40.996	36.362	39.510	37.936	41.544	33.059	43.908	43.883	40.244	428.354
Total max generation	gwh	77.610	32.450	57.900	64.610	57.462	62.696	72.318	75.890	73.850	80.830	80.830	78.240	814.686
Project Pump Energy 2010														
Granby	gwh	3.874	0.130	2.567	3.811	3.469	3.963	3.030	0.000	0.000	0.000	1.748	1.789	24.381
Willow Creek	gwh	0.256	0.256	0.000	0.000	0.000	0.533	0.511	4.111	2.961	1.001	0.149	0.128	9.906
Flatiron 3	gwh	5.508	0.000	3.712	6.315	5.654	0.000	3.683	2.004	0.000	1.928	0.000	0.000	28.804
Total pump energy	gwh	9.638	0.386	6.279	10.126	9.123	4.496	7.224	6.115	2.961	2.929	1.897	1.917	63.091
Total net generation	gwh	36.302	1.675	16.632	30.870	27.239	35.014	30.712	35.429	30.098	40.979	41.986	38.327	365.263
Release Flexibility 2010														
Adams Tunnel	Min kaf	27.5	0.0	16.9	27.0	24.4	27.3	25.8	28.1	2.0	14.3	17.3	13.5	
Adams Tunnel	Max kaf	27.5	0.0	16.9	27.0	24.4	27.3	25.8	28.1	2.0	14.3	17.3	13.5	
Marys Lake	Min gwh	4.900	0.000	2.980	4.800	4.380	4.860	4.580	5.020	0.300	2.530	3.060	2.400	
Marys Lake	Max gwh	4.900	0.000	2.980	4.800	4.380	4.860	4.580	5.020	0.300	2.530	3.060	2.400	
Lake Estes	Min gwh	12.100	0.000	7.760	11.900	10.060	10.450	9.660	9.980	0.800	6.650	7.920	6.250	
Lake Estes	Max gwh	12.100	0.000	7.760	11.900	10.060	10.450	9.660	9.980	0.800	6.650	7.920	6.250	
Olympus Tunnel	Min kaf	27.5	0.3	16.9	27.0	24.4	27.3	26.9	33.8	26.8	22.6	17.2	13.5	
Olympus Tunnel	Max kaf	27.5	0.3	16.9	27.0	24.4	27.3	26.9	33.8	26.8	22.6	17.2	13.5	
Pole Hill	Min gwh	20.550	0.000	12.910	20.200	18.280	20.410	20.120	25.260	20.040	16.920	13.160	10.200	
Pole Hill	Max gwh	20.550	0.000	12.910	20.200	18.280	20.410	20.120	25.260	20.040	16.920	13.160	10.200	

Flatiron 1&2	Min gwh	12.050	0.000	5.580	12.050	10.880	12.050	11.690	12.050	11.690	12.050	12.050	11.690
Flatiron 1&2	Max gwh	12.050	0.000	5.580	12.050	10.880	12.050	11.690	12.050	11.690	12.050	12.050	11.690
Load following	Min gwh	49.600	0.000	29.230	48.950	43.600	47.770	46.050	52.310	32.830	38.150	36.190	30.540
Load following	Max gwh	49.600	0.000	29.230	48.950	43.600	47.770	46.050	52.310	32.830	38.150	36.190	30.540
Total project	Min gwh	56.290	2.061	31.181	50.996	45.402	49.720	48.176	56.604	43.219	50.628	46.843	40.564
Total project	Max gwh	56.290	2.061	31.181	50.996	45.402	49.720	48.176	56.604	43.219	50.628	46.843	40.564

GENERATION CAPACITY AND DURATION

Project Generation	2010	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Base Generation:														
Green Mtn	mw	8.3	2.9	2.6	2.7	2.7	2.6	2.3	1.4	9.2	13.0	11.1	11.4	
Flatiron 3	mw													
Big Thompson	mw	0.7						0.7	4.4	5.3	3.8	3.2	2.6	
Total base load	mw	9.0	2.9	2.6	2.7	2.7	2.6	3.0	5.8	14.5	16.8	14.3	14.0	
Load Following Generation:														
Marys Lake														
Min Capacity	mw	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
Duration	hr/d	3.2	12.0	10.9	3.6	5.5	3.4	4.4	2.7	20.0	10.9	10.7	10.7	
Max Capacity	mw	8.1	0.0	8.1	8.1	8.1	8.1	8.1	8.1	2.7	6.8	8.1	6.2	
Duration	hr/d	19.8	12.0	12.1	19.4	17.5	19.6	18.6	20.3	4.0	12.1	12.3	12.4	
Lake Estes														
Min Capacity	mw	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
Duration	hr/d	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	20.0	12.0	12.0	12.0	12.0
Max Capacity	mw	34.2	0.0	20.8	33.6	30.4	34.0	32.1	35.0	7.0	17.1	21.2	16.0	
Duration	hr/d	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	4.0	12.0	12.0	12.0	
Pole Hill														
Min Capacity	mw	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	0.0	0.0	0.0	0.0	0.0
Duration	hr/d	3.9	12.0	11.6	4.2	6.1	4.0	4.3	12.0	4.3	7.4	11.4	12.0	
Max Capacity	mw	34.0	0.0	33.9	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	28.5	
Duration	hr/d	20.2	12.0	12.5	19.8	17.9	20.0	19.7	12.0	19.7	16.6	12.6	12.0	
Flatiron 1&2														
Min Capacity	mw	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
Duration	hr/d	12.0	12.0	11.4	12.0	12.0	12.0	12.0	8.7	12.0	12.0	11.2	12.0	
Max Capacity	mw	67.9	0.0	42.4	66.7	59.9	67.6	66.4	86.0	66.1	55.0	43.0	32.9	
Duration	hr/d	12.0	12.0	12.6	12.0	12.0	12.0	12.0	10.0	12.0	12.0	12.8	12.0	
Total Load Following														
Min Capacity	mw	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	0.0	0.0	0.0	0.0	0.0
Max Capacity	mw	144.2	0.0	105.2	142.4	132.4	143.7	140.6	163.1	109.8	112.9	106.3	83.6	
Total Project Capacity														
Min Capacity	mw	9.0	2.9	2.6	2.7	2.7	2.6	3.0	39.8	14.5	16.8	14.3	14.0	
Max Capacity	mw	153.2	2.9	107.8	145.1	135.1	146.3	143.6	168.9	124.3	129.7	120.6	97.6	