RECLAMATION

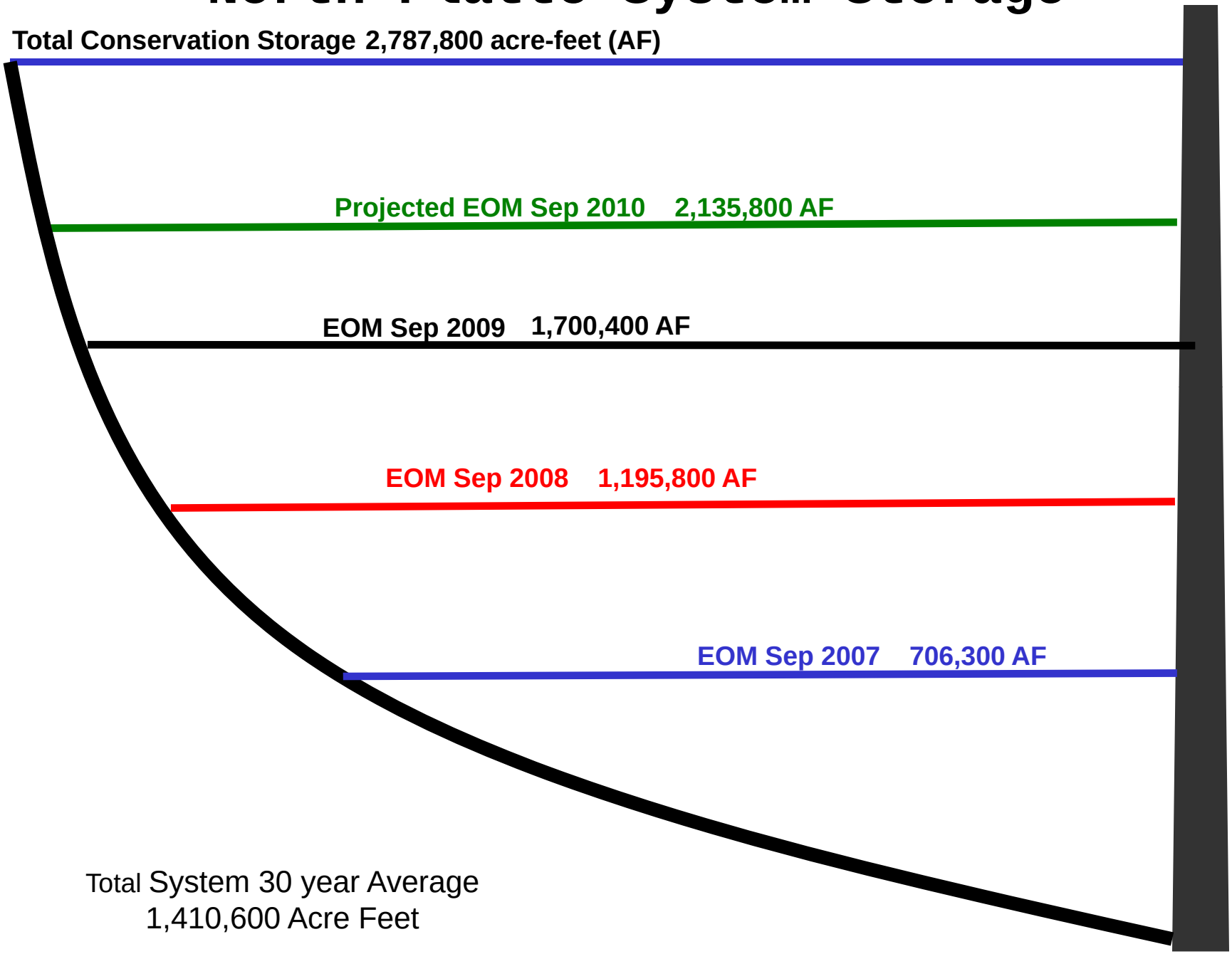
Managing Water in the West

Climate Issues Committee Report

John H. Lawson
Wyoming Area Office
U.S. Department of the Interior
Bureau of Reclamation

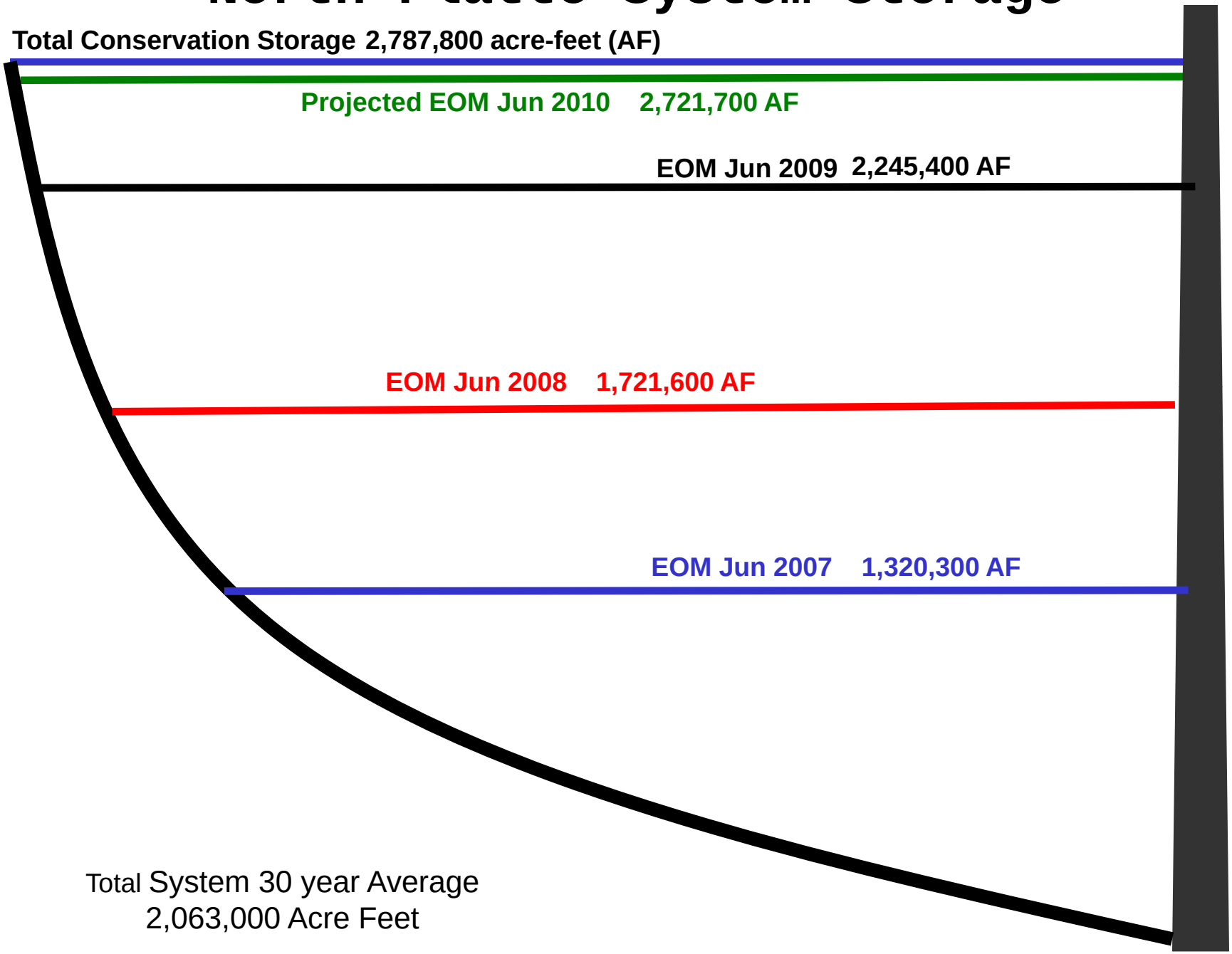
Climate Issues Committee Meeting
May 20, 2010

North Platte System Storage



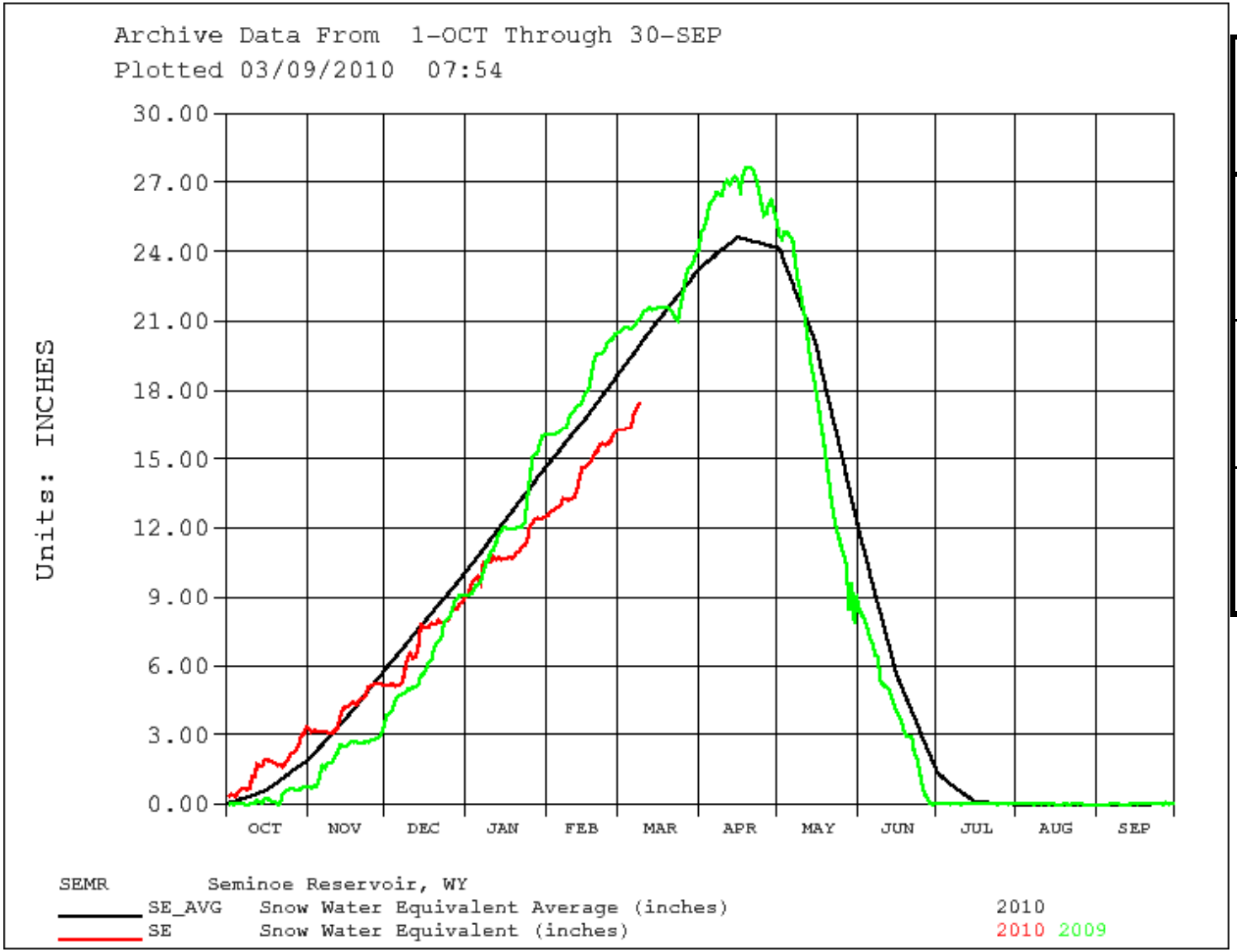
Total System 30 year Average
1,410,600 Acre Feet

North Platte System Storage



Total System 30 year Average
2,063,000 Acre Feet

Basin above Seminoe Reservoir
Snow Water Equivalent March 1



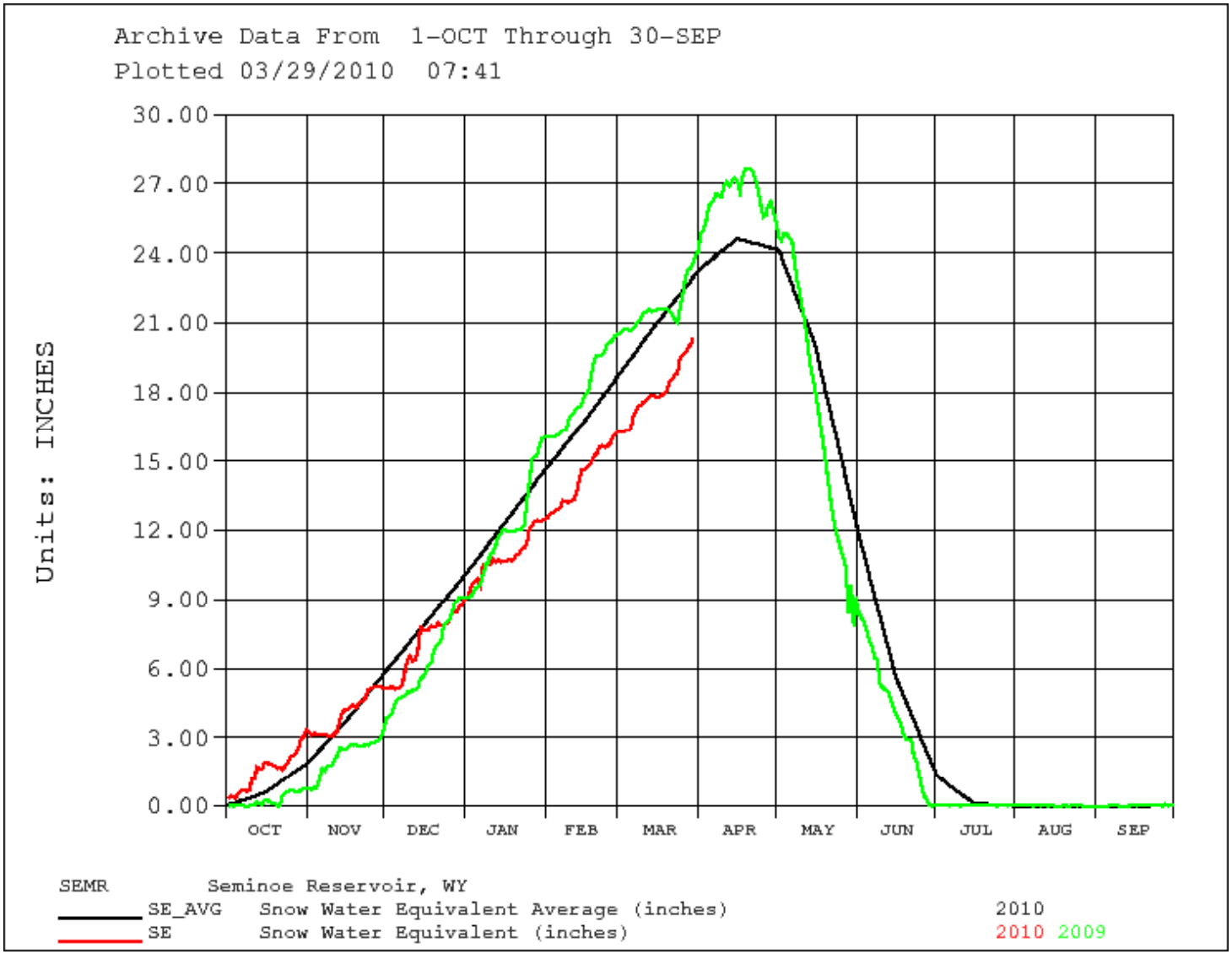
Water Year	April-July Inflow (acre-feet)
2009	963,600
2010	590,000 Forecasted
Average 705,500	

Seminoe - Pathfinder Reservoir Operation
March 1, 2010

Values in acre-feet	February	Projected June
Seminoe Content EOM	676,800	898,800
Pathfinder Content EOM	735,900	659,900
Total	1,412,700	1,558,700

Seminoe April- July inflow
Expected 590,000 AF Maximum 990,000 AF

Basin above Seminoe Reservoir
Snow Water Equivalent April 1



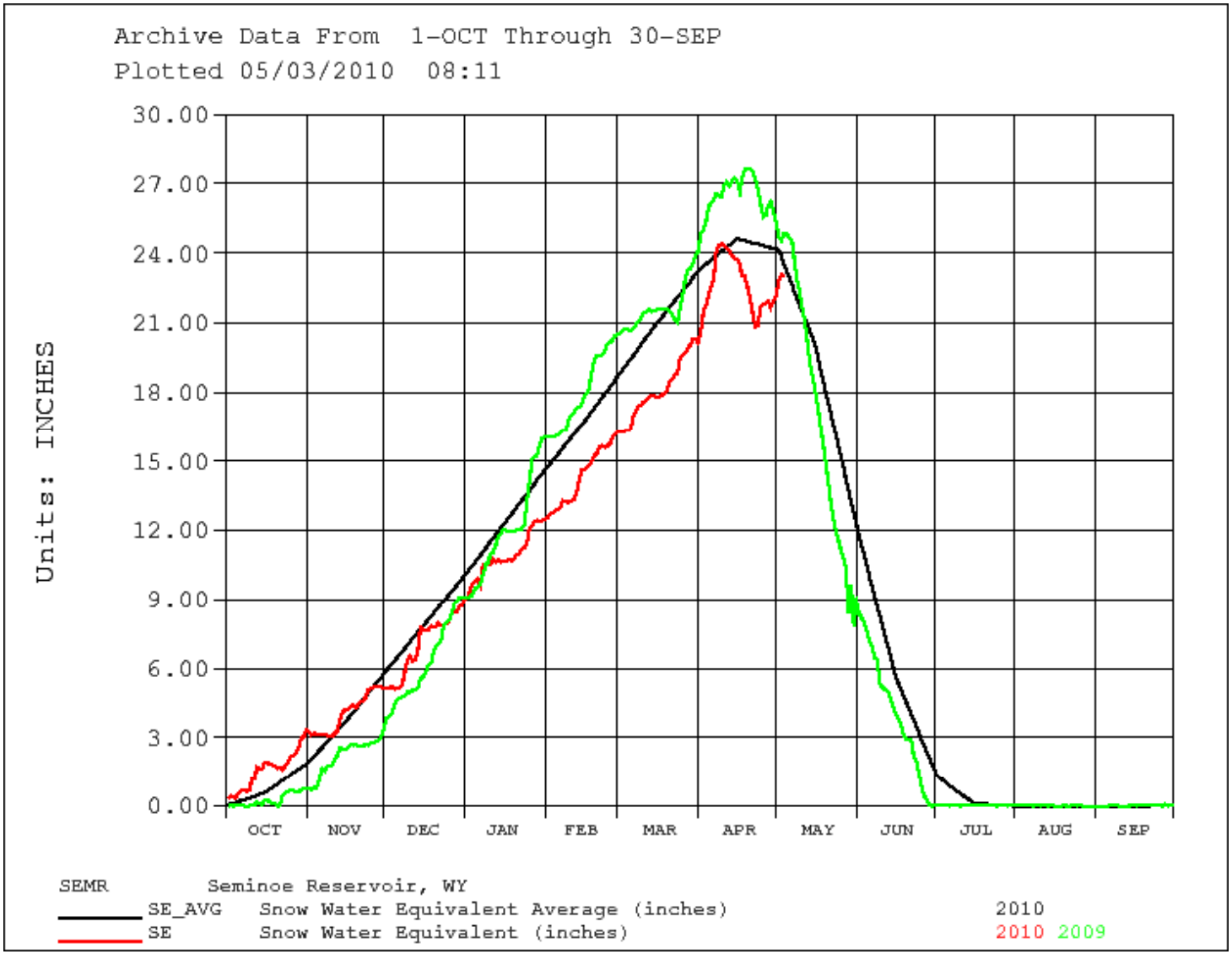
Water Year	April-July Inflow (acre-feet)
2009	963,600
2010	650,000 Forecasted
Average 705,500	

Seminoe - Pathfinder Reservoir Operation
April 1, 2010

Values in acre-feet	March	Projected June
Seminoe Content EOM	689,800	805,000
Pathfinder Content EOM	736,400	859,900
Total	1,426,200	1,664,900

Seminoe April- July inflow
Expected 650,000 AF Maximum 950,000 AF

Basin above Seminoe Reservoir
Snow Water Equivalent May 1



Water Year	April-July Inflow (acre-feet)
2009	963,600
2010	800,000 Forecasted
Average 705,500	

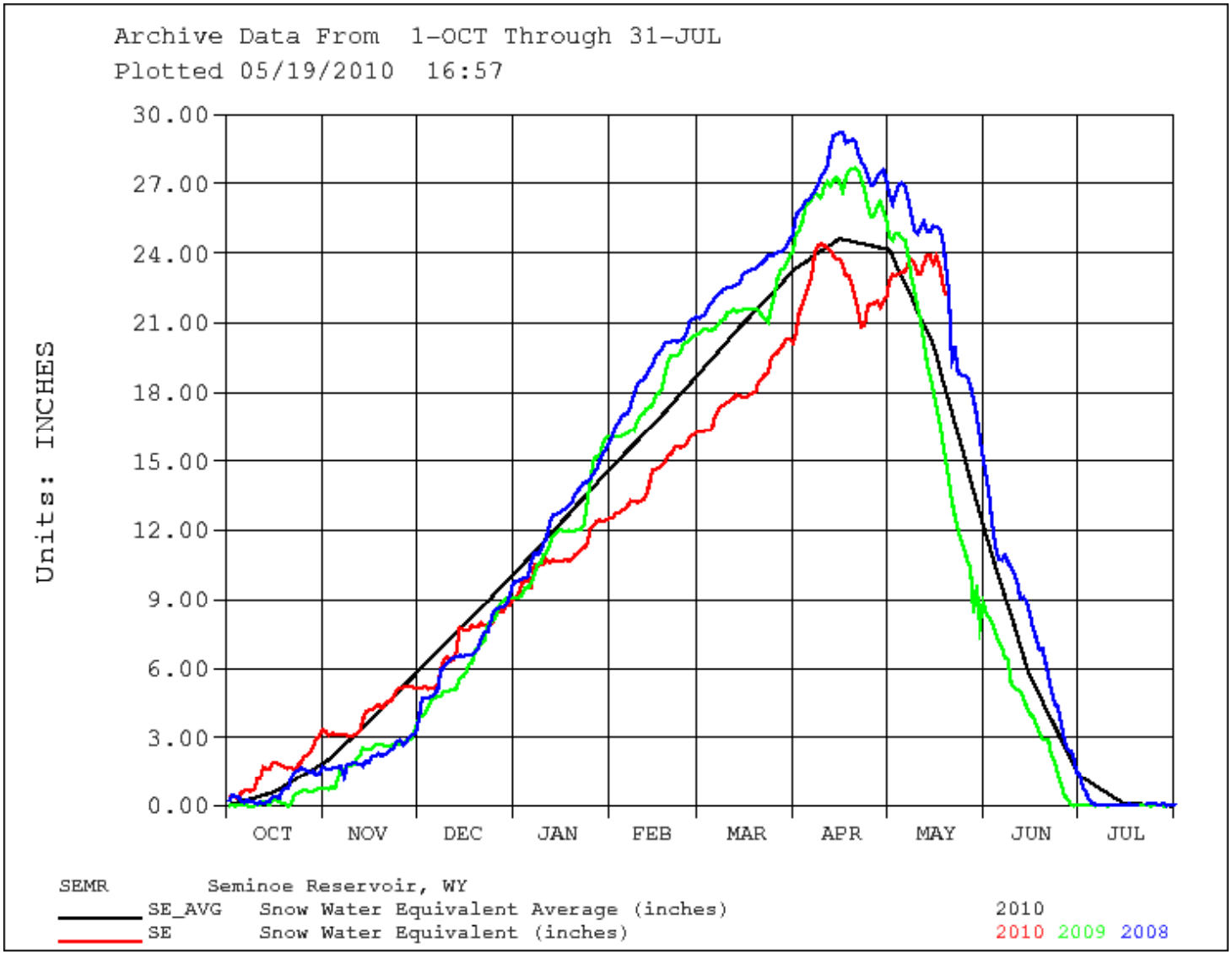
Seminoe - Pathfinder Reservoir Operation
May 1, 2010

Values in acre-feet	April	Projected June
Seminoe Content EOM	729,200	938,000
Pathfinder Content EOM	799,300	979,800
Total	1,528,500	1,917,800

Seminoe April- July inflow

Expected 800,000 AF Maximum 950,000 AF

Basin above Seminoe Reservoir Snow Water Equivalent May 18



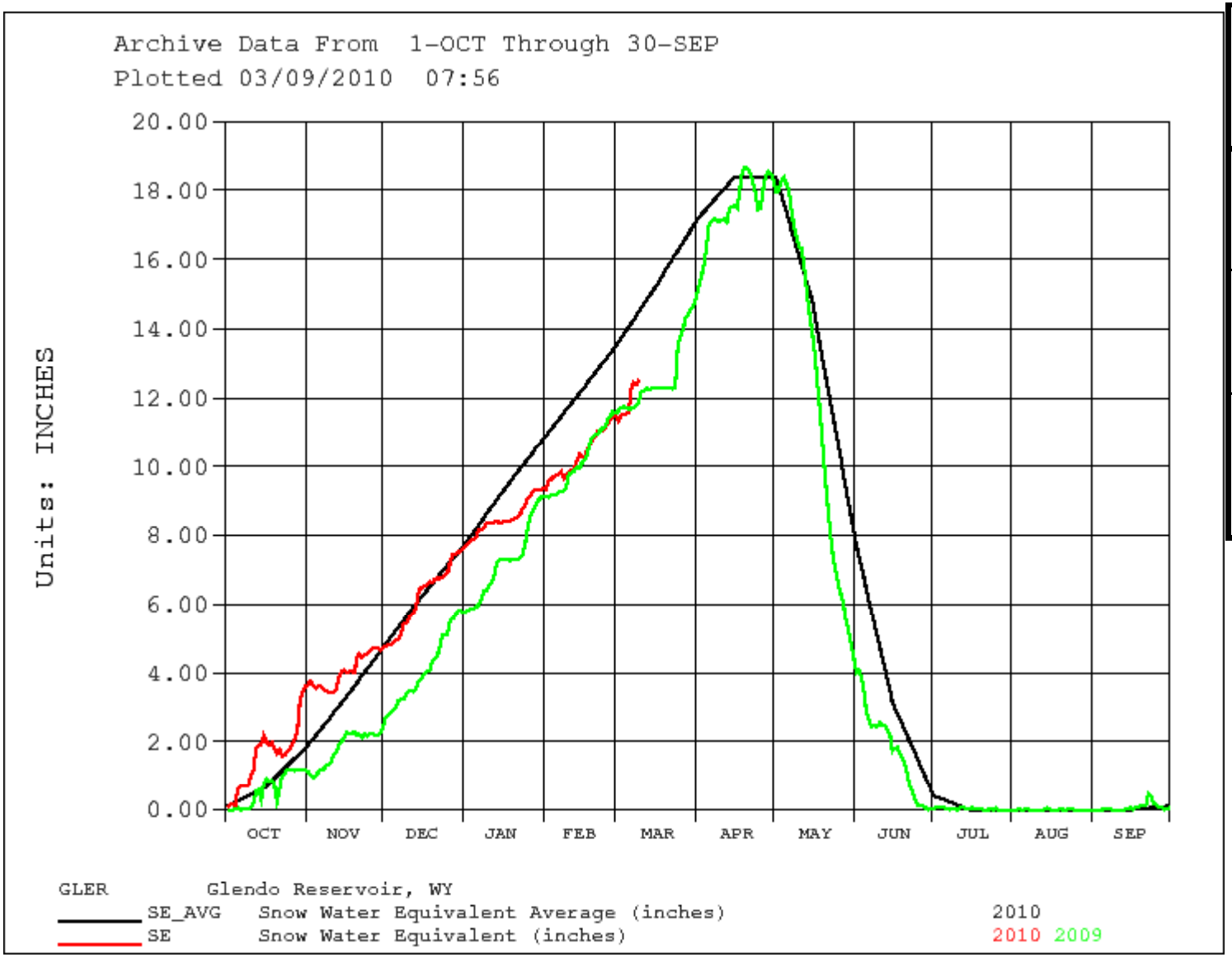
Water Year	April-July Inflow (acre-feet)
2008	955,900
2009	963,600
2010	970,000 Forecasted
Average	705,500

Seminoe - Pathfinder Reservoir Operation
May 18, 2010

Values in acre-feet	May 18	Projected June
Seminoe Content EOM	728,700	984,700
Pathfinder Content EOM	862,700	994,700
Total	1,591,400	1,979,400

Seminoe April- July inflow
Expected 970,000 AF

Alcova to Glendo Reach Snow Water Equivalent March 1



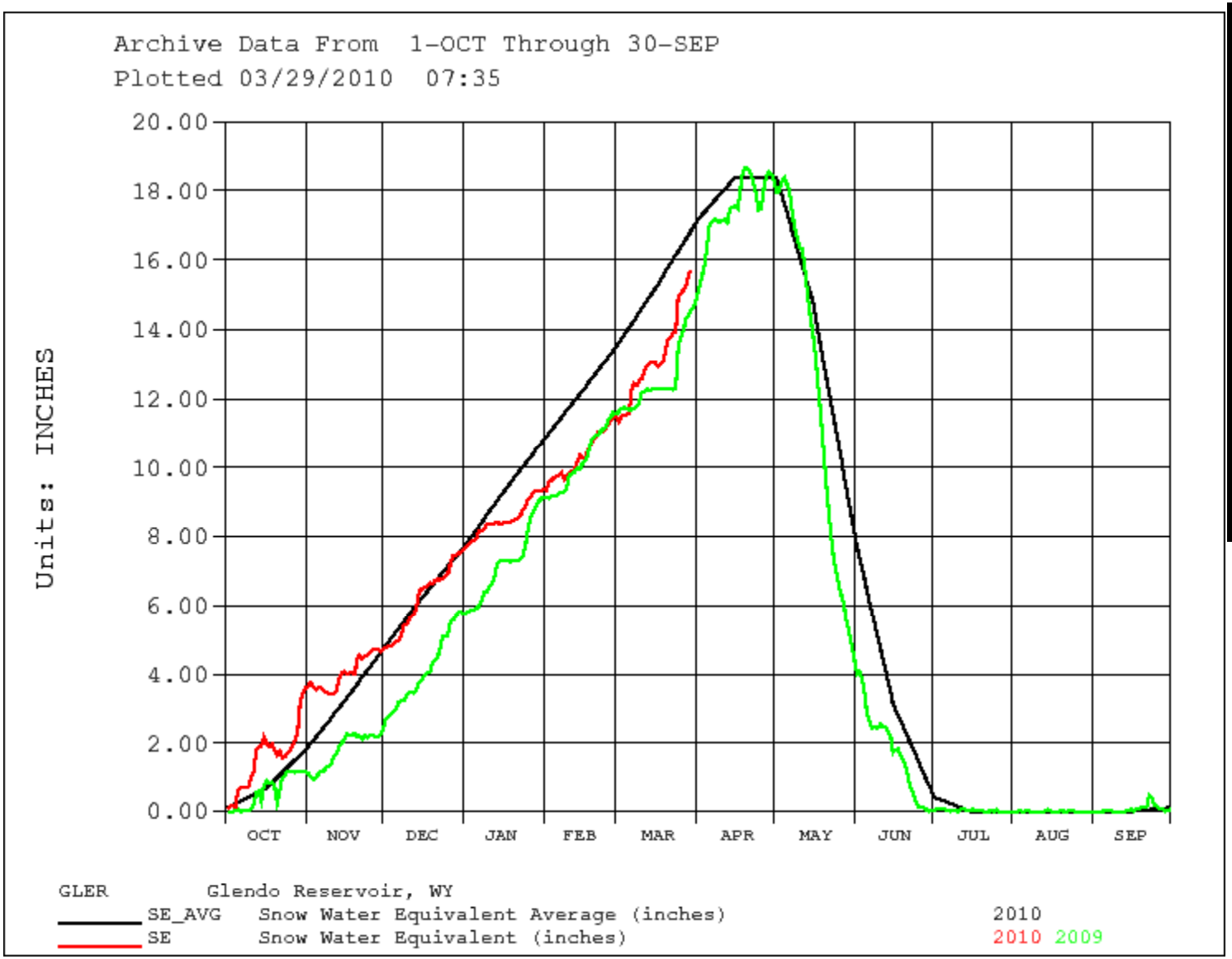
Water Year	April-July Inflow (acre-feet)
2009	160,700
2010	90,000 forecasted
Average 124,800	

Glendo Reservoir Operation
March 1, 2010

Values in acre-feet	February	March	April	May	June
Glendo Content EOM	319,500	373,000	450,000	475,000	456,900
Guernsey Release			21,000	154,700	152,000

Alcova to Glendo April- July gain
Expected 90,000 AF Maximum 160,000 AF

Alcova to Glendo Reach Snow Water Equivalent April 1



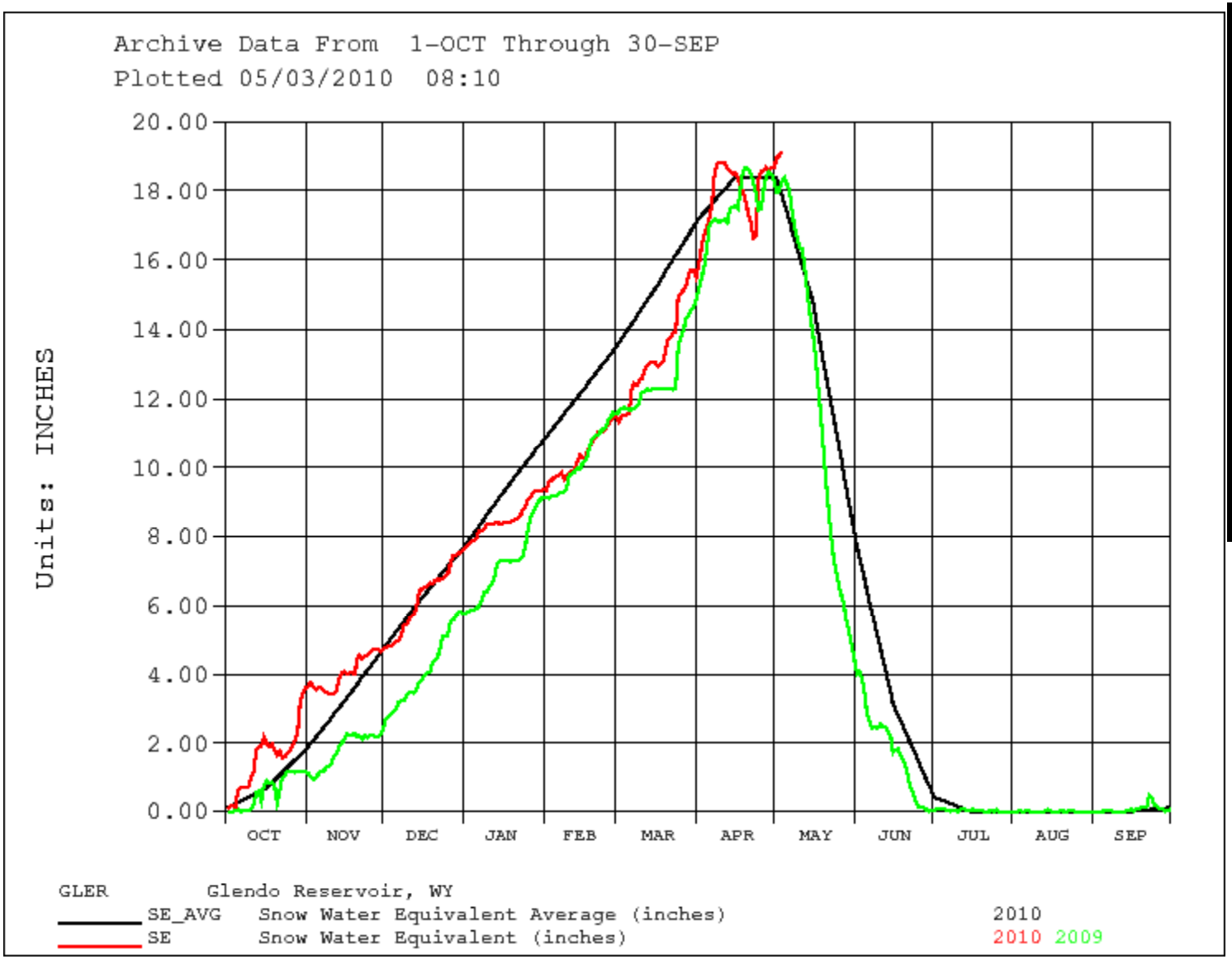
Water Year	April-July Inflow (acre-feet)
2009	160,700
2010	120,000 forecasted
Average 124,800	

Glendo Reservoir Operation
April 1, 2010

Values in acre-feet	March	April	May	June
Glendo Content EOM	373,600	458,000	480,000	504,000
Guernsey Release		21,000	154,700	100,000

Alcova to Glendo April- July gain
Expected 120,000 AF Maximum 200,000 AF

Alcova to Glendo Reach Snow Water Equivalent May 1



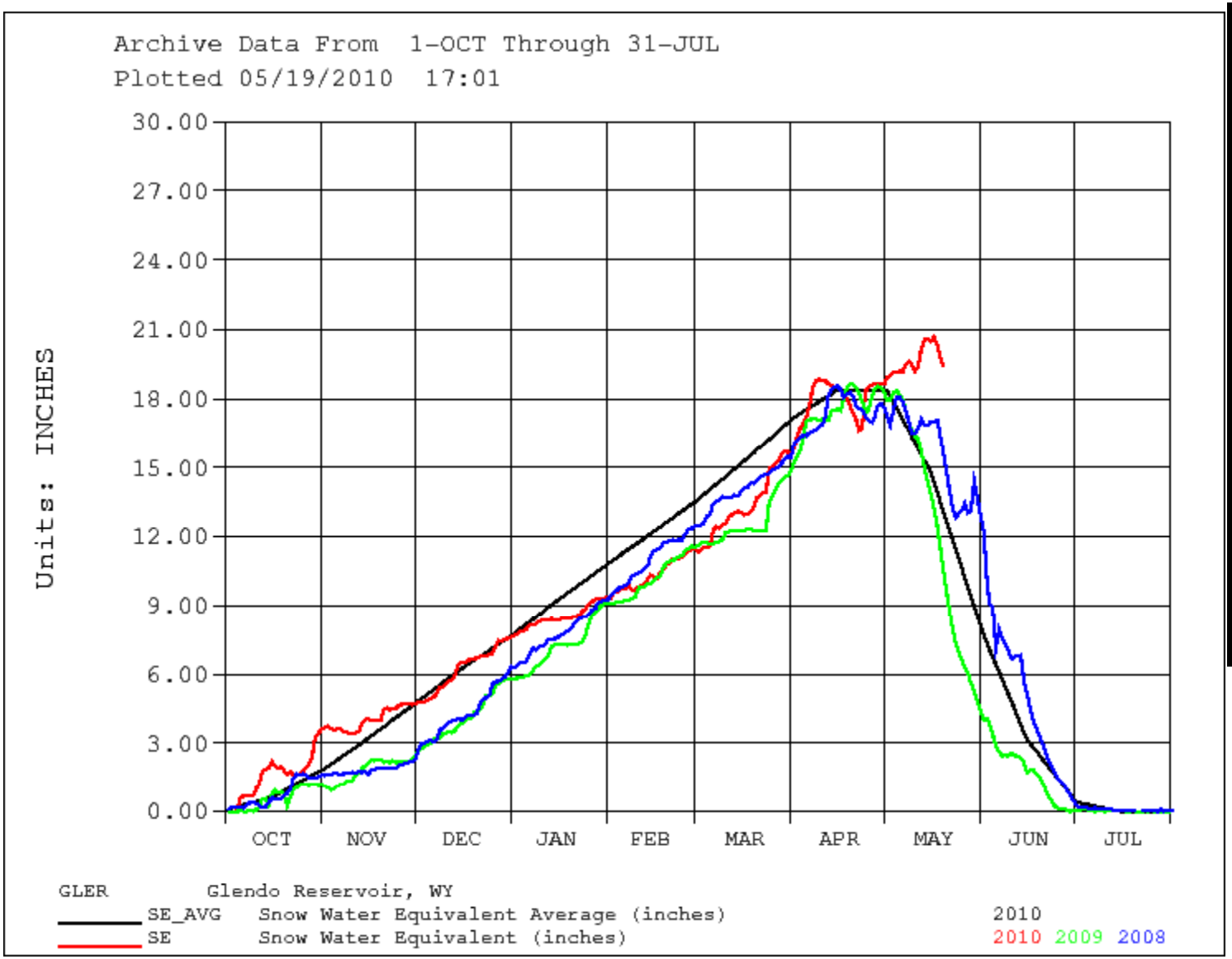
Water Year	April-July Inflow (acre-feet)
2009	160,700
2010	190,000 forecasted
Average 124,800	

Glendo Reservoir Operation
May 1, 2010

Values in acre-feet	April	May	June
Glendo Content EOM	484,800	482,000	483,000
Guernsey Release	27,900	147,800	100,000

Alcova to Glendo April- July gain
Expected 190,000 AF Maximum 220,000 AF

Alcova to Glendo Reach Snow Water Equivalent May 18



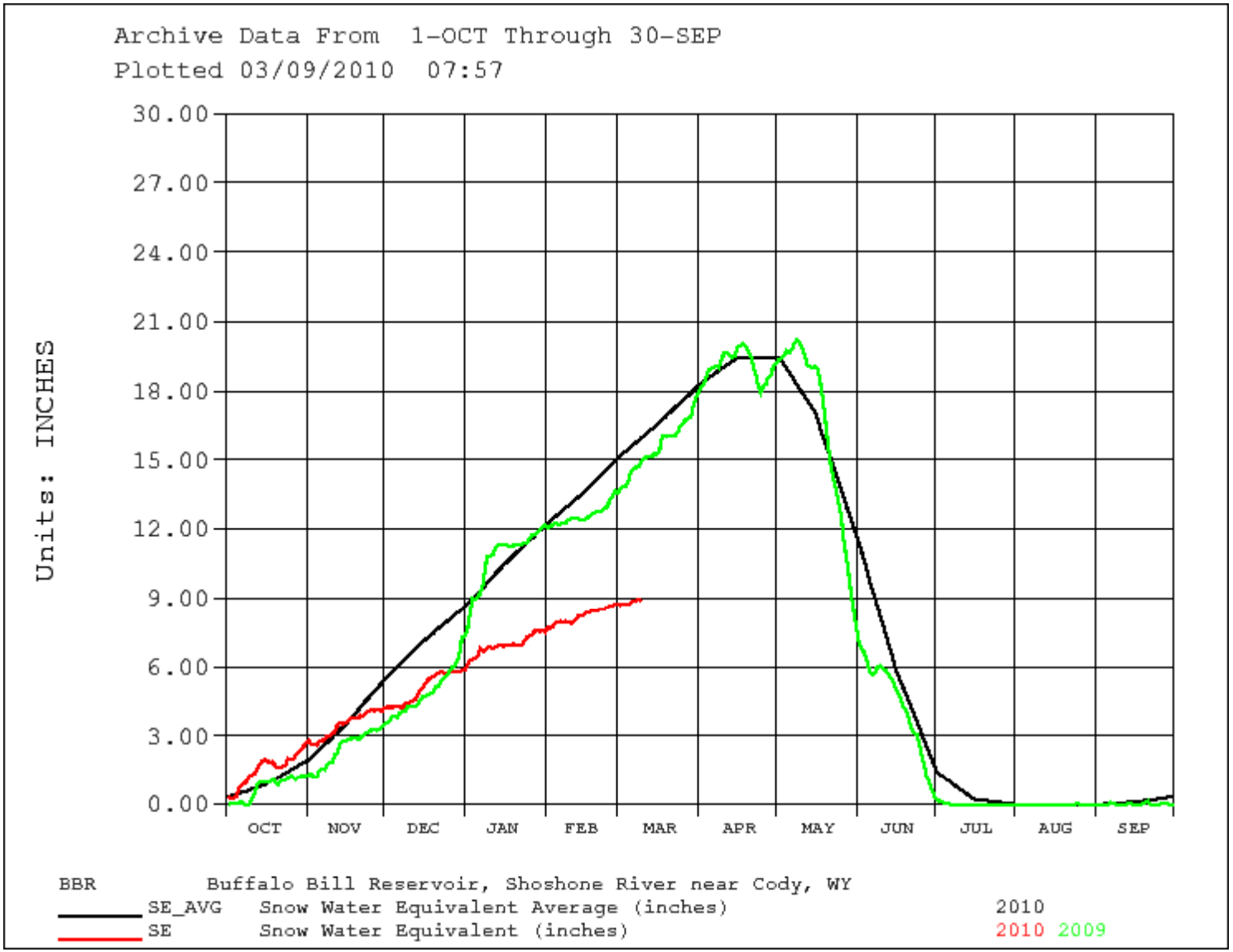
Water Year	April-July Inflow (acre-feet)
2008	209,300
2009	160,700
2010	200,000 forecasted
Average 124,800	

Glendo Reservoir Operation
May 18, 2010

Values in acre-feet	May 18	June
Glendo Content EOM	492,700	527,100
Guernsey Release	180,000	150,000
Demand	100,000 -120,000 ?	25,000 - 50,000 ?

Alcova to Glendo April- July gain
Expected 217,700 AF

Basin above Buffalo Bill Reservoir Snow Water Equivalent March 1



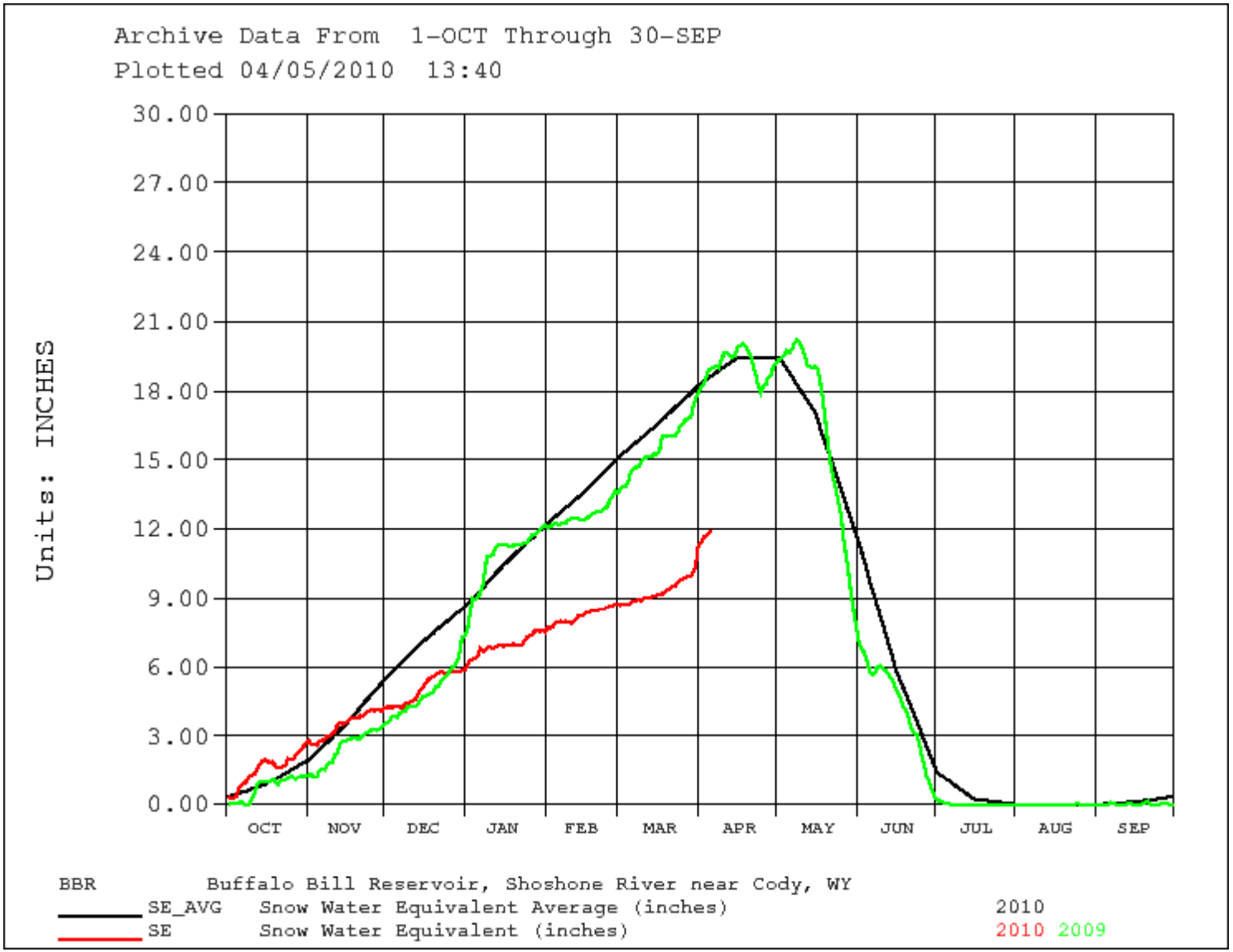
Water Year	April-July Inflow (acre-feet)
2009	954,200
2010	Forecast 450,000
Average = 659,700	

Buffalo Bill Reservoir Operation
March 1, 2010

Values in acre-feet	February	Projected June
Buffalo Bill Content EOM	428,900	567,700

Buffalo Bill April-July inflow
Expected 450,000 AF Maximum 550,000 AF

Basin above Buffalo Bill Reservoir Snow Water Equivalent April 1



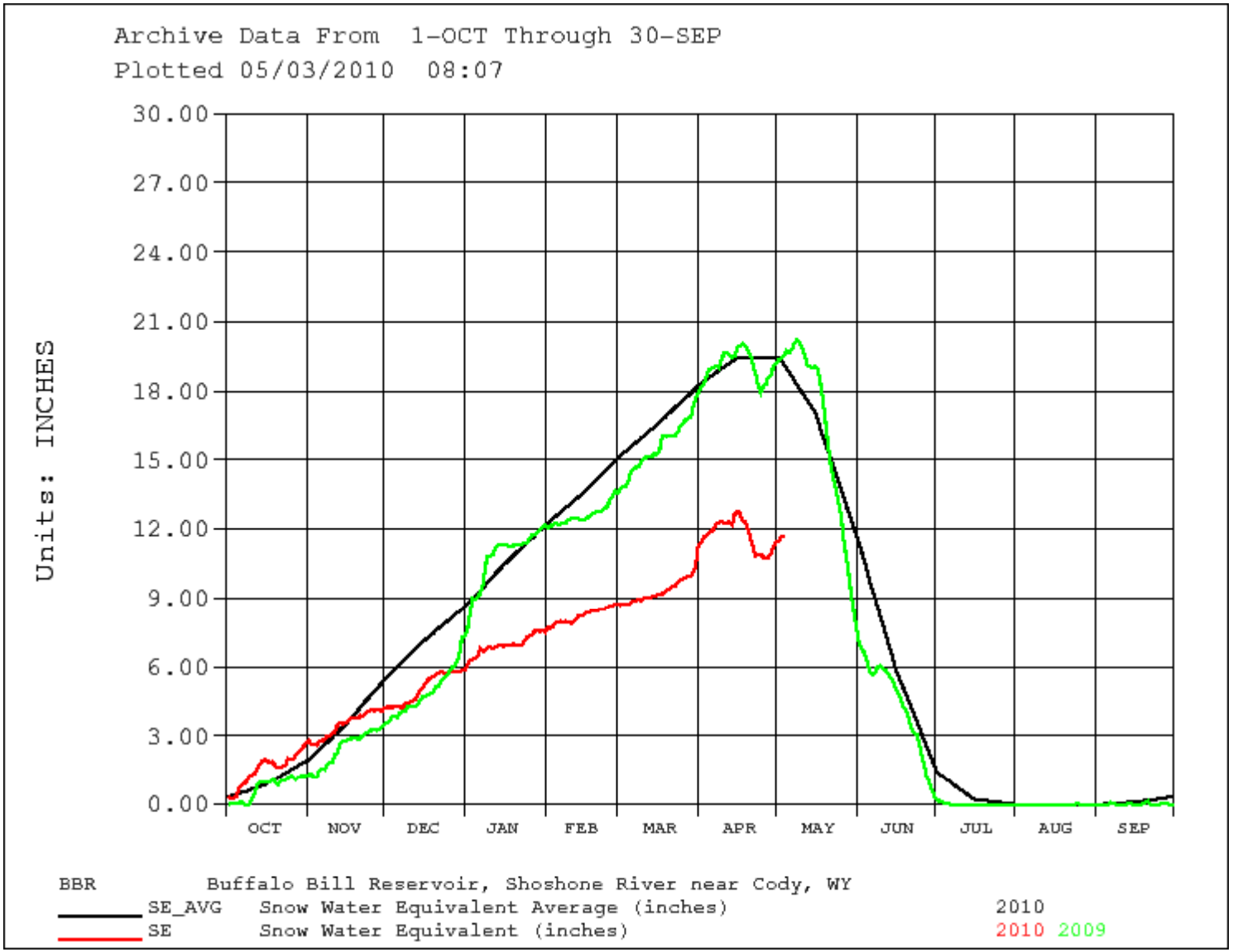
Water Year	April-July Inflow (acre-feet)
2009	954,200
2010	Forecast 450,000
Average = 659,700	

Buffalo Bill Reservoir Operation
April 1, 2010

Values in acre-feet	March	Projected June
Buffalo Bill Content EOM	425,900	567,000

Buffalo Bill April-July inflow
Expected 450,000 AF Maximum 550,000 AF

Basin above Buffalo Bill Reservoir Snow Water Equivalent May 1



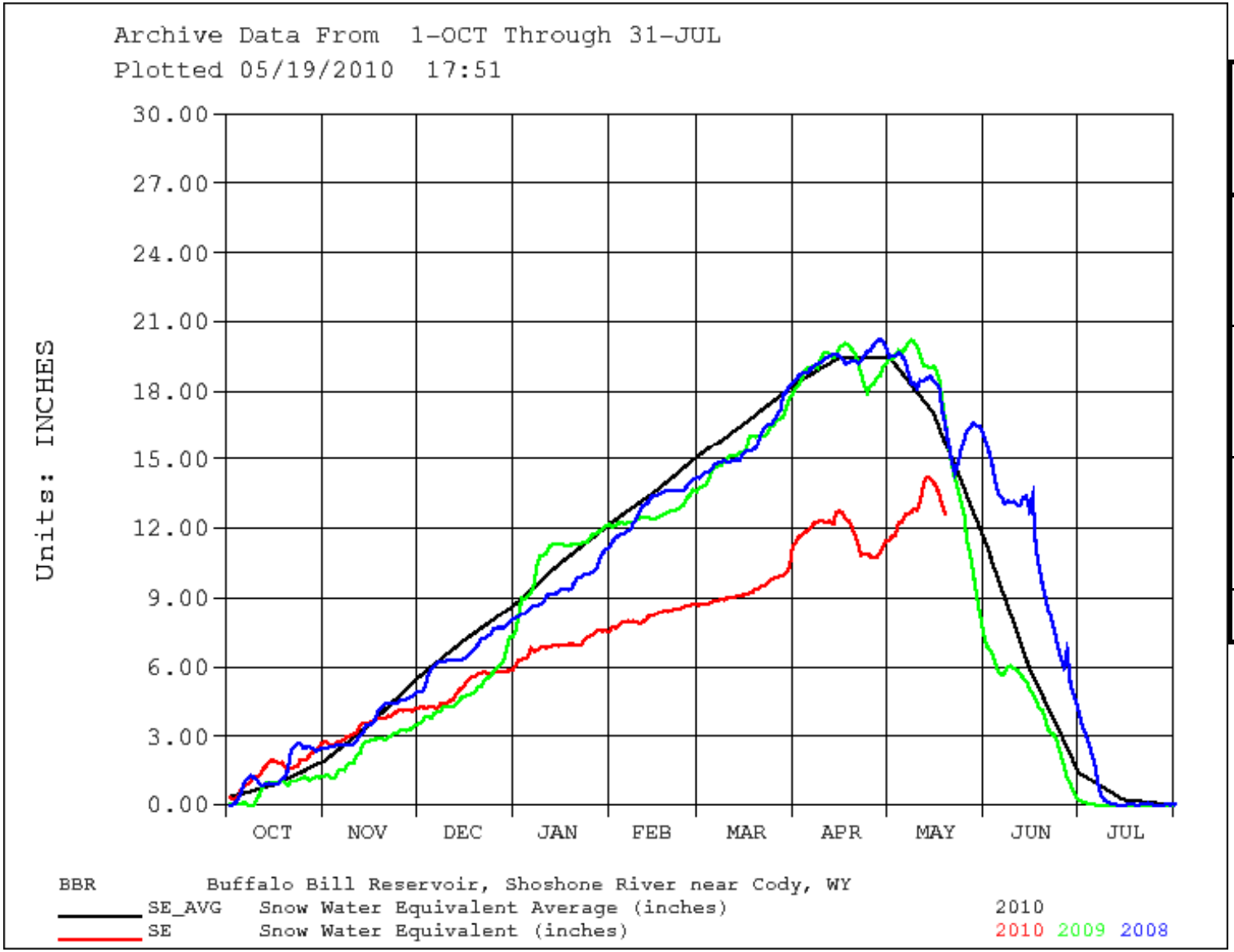
Water Year	April-July Inflow (acre-feet)
2009	954,200
2010	Forecast 450,000
Average = 659,700	

Buffalo Bill Reservoir Operation
May 1, 2010

Values in acre-feet	April	Projected June
Buffalo Bill Content EOM	413,500	550,600

Buffalo Bill April-July inflow
Expected 450,000 AF Maximum 500,000 AF

Basin above Buffalo Bill Reservoir Snow Water Equivalent May 18



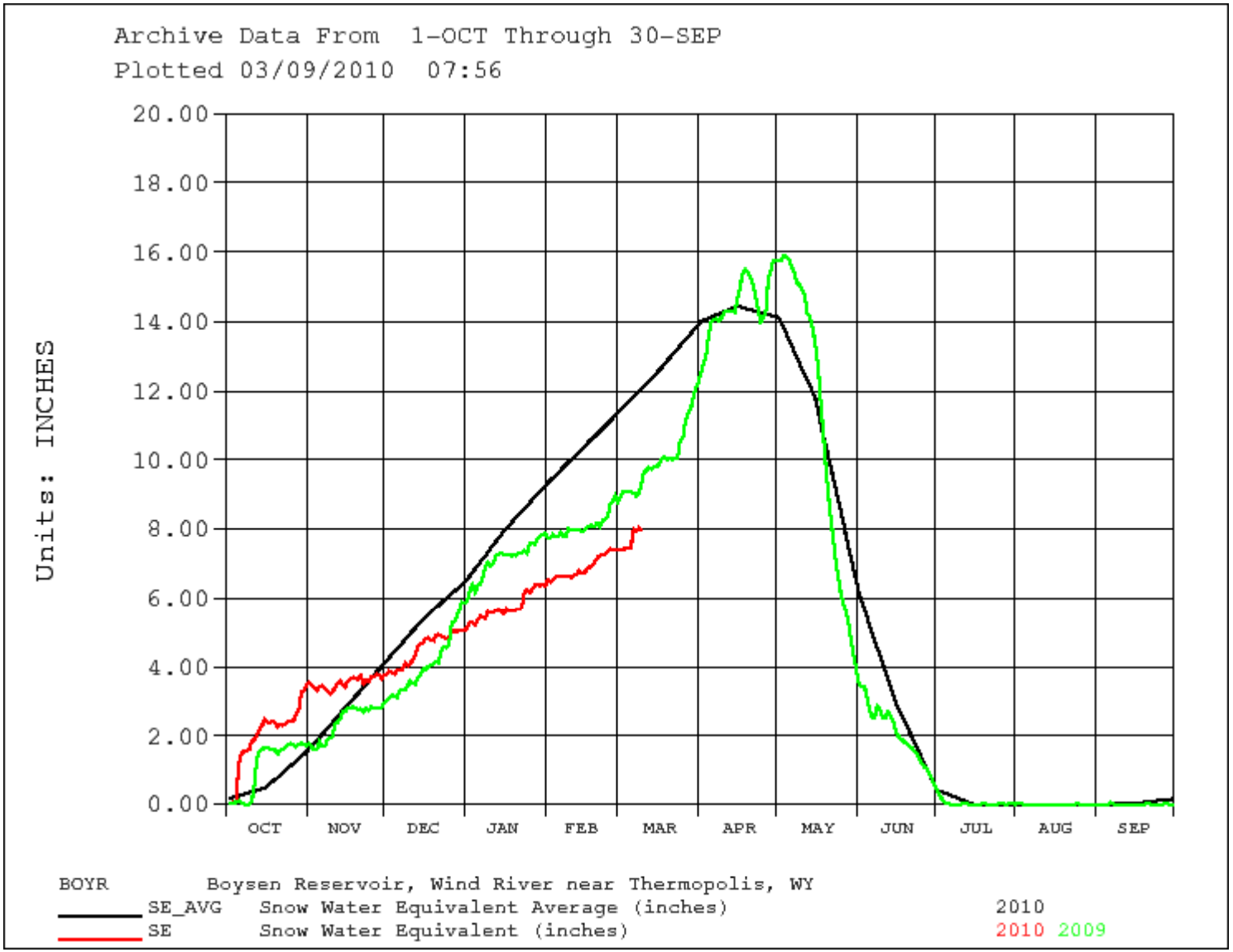
Water Year	April-July Inflow (acre-feet)
2008	955,300
2009	954,200
2010	450,000 forecast
Average = 659,700	

Buffalo Bill Reservoir Operation
May 18, 2010

Values in acre-feet	May 18	Projected June
Buffalo Bill Content EOM	378,700	550,600

Buffalo Bill April-July inflow
Expected 450,000 AF Maximum 500,000 AF

Basin above Boysen Reservoir
Snow Water Equivalent March 1



Water Year	April-July Inflow (acre-feet)
2009	803,000
2010	350,000 forecast
Average = 553,400	

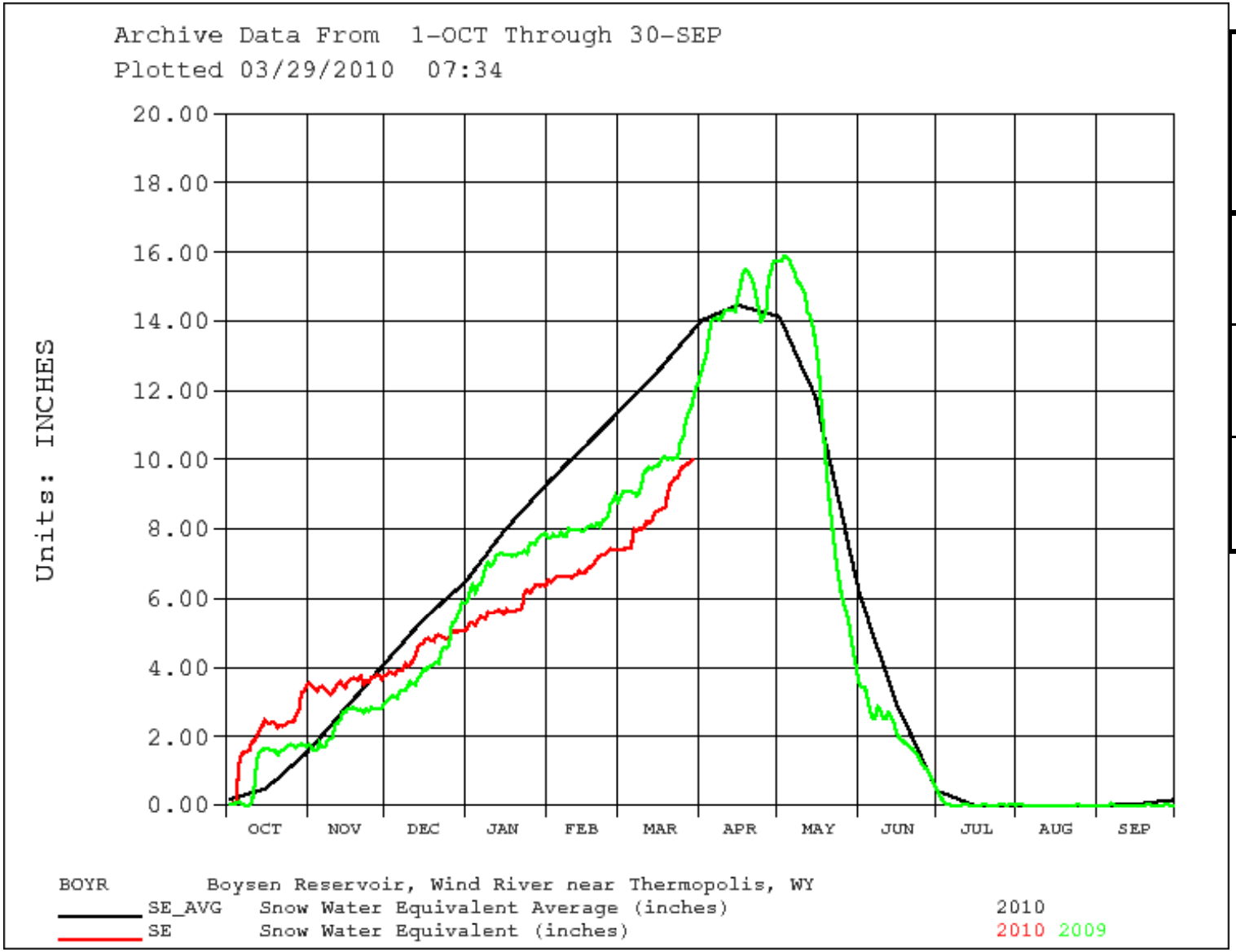
Boysen Reservoir Operation
March 1, 2010

Values in acre-feet	February	Projected June
Boysen Content EOM	590,700	682,600

Boysen April-July inflow

Expected 350,000 AF Maximum 500,000 AF

Basin above Boysen Reservoir
Snow Water Equivalent April 1



Water Year	April-July Inflow (acre-feet)
2009	803,000
2010	400,000 forecast
Average = 553,400	

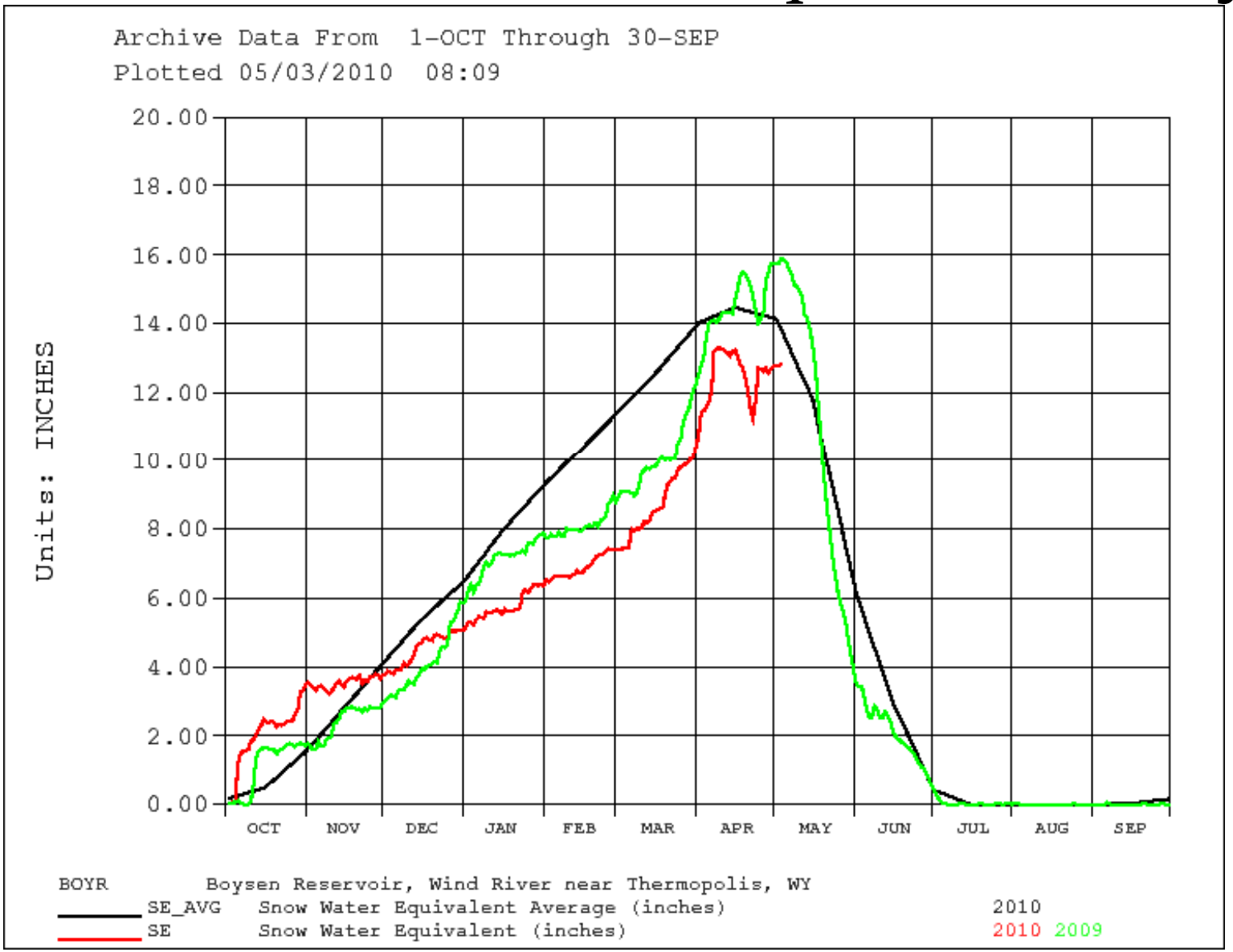
Boysen Reservoir Operation
April 1, 2010

Values in acre-feet	March	Projected June
Boysen Content EOM	594,800	719,100

Boysen April-July inflow

Expected 400,000 AF Maximum 550,000 AF

Basin above Boysen Reservoir Snow Water Equivalent May 1



Water Year	April-July Inflow (acre-feet)
2009	803,000
2010	570,000 forecast
Average = 553,400	

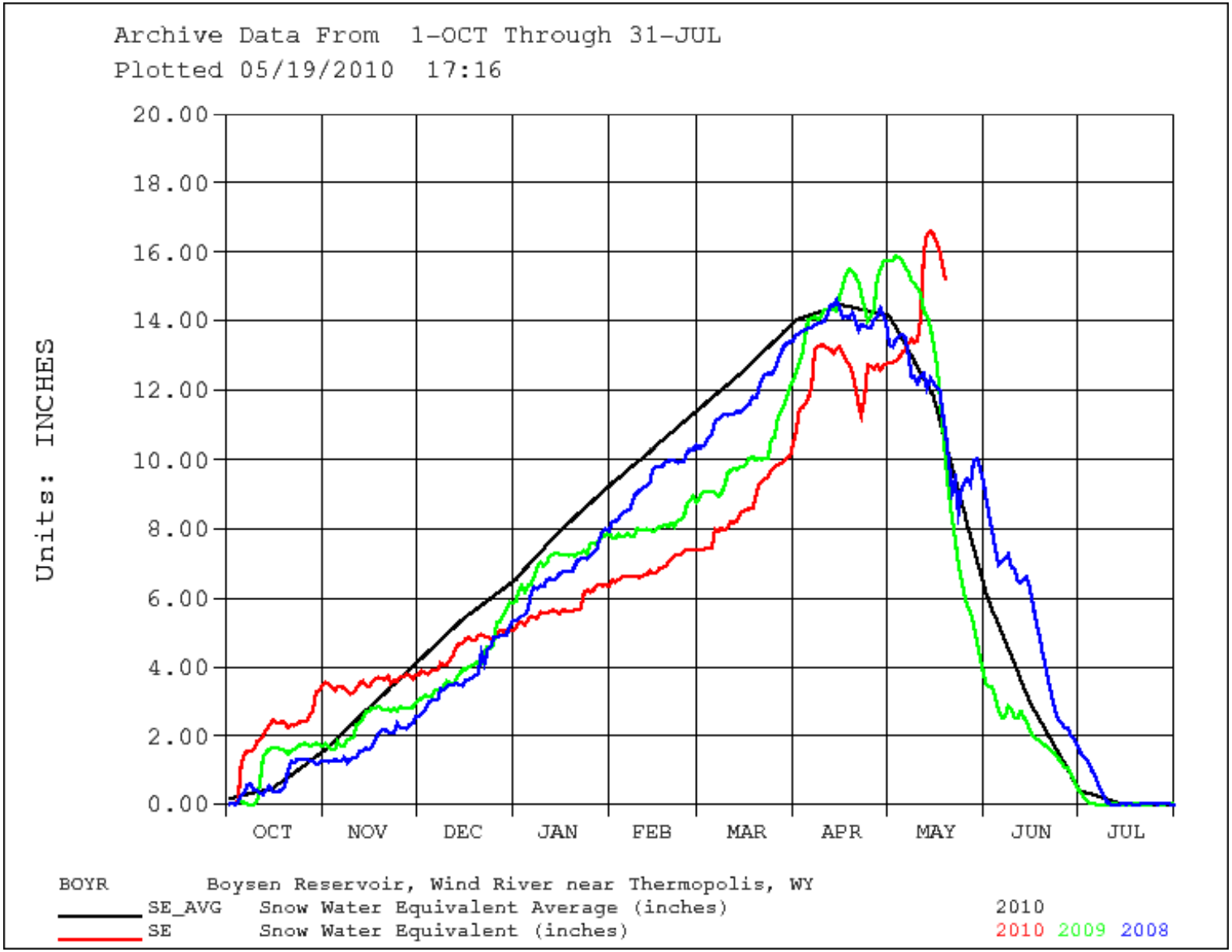
Boysen Reservoir Operation
May 1, 2010

Values in acre-feet	April	Projected June
Boysen Content EOM	615,900	731,800

Boysen April-July inflow

Expected 570,000 AF Maximum 720,000 AF

Basin above Boysen Reservoir
Snow Water Equivalent May 18



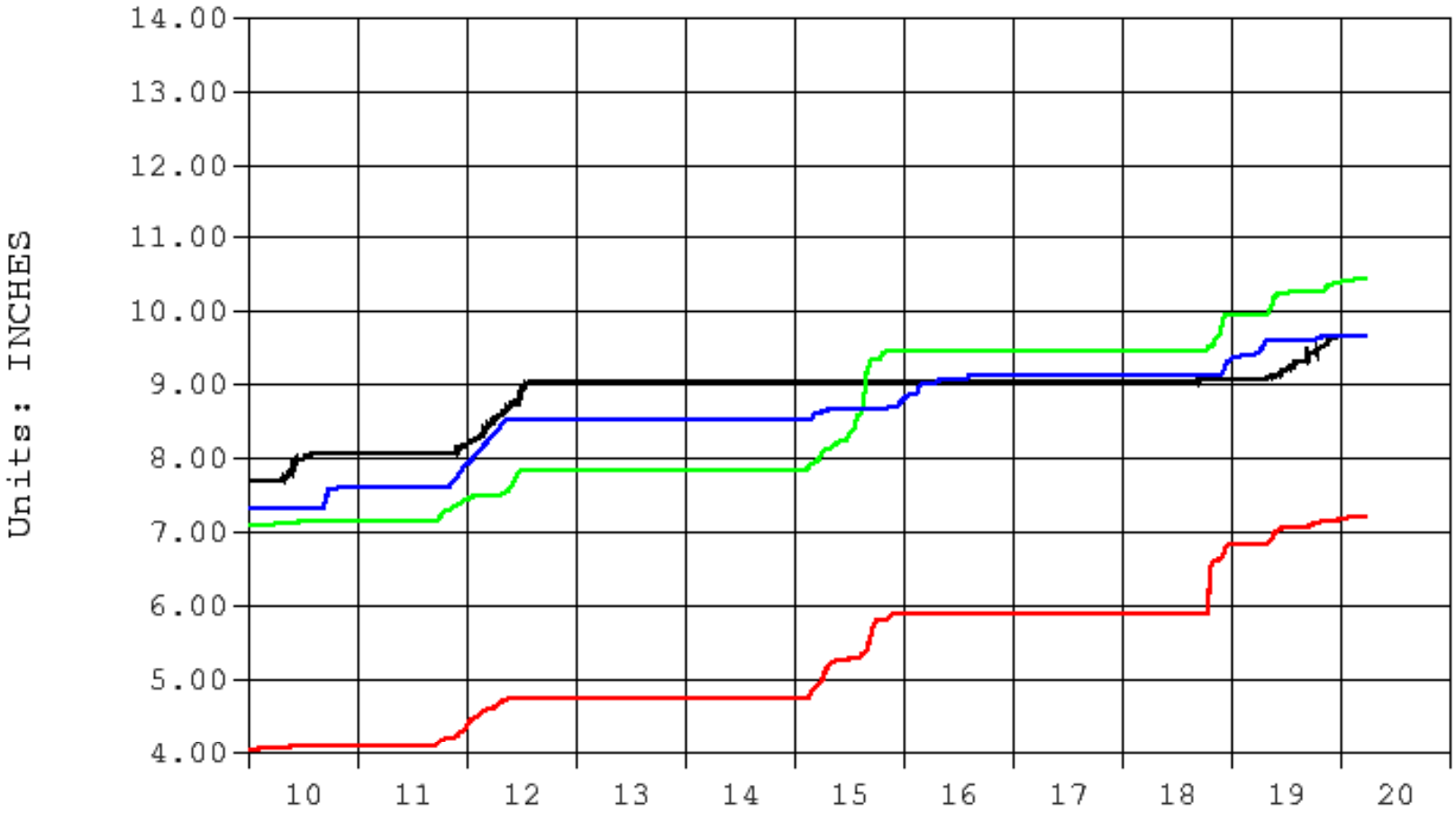
Water Year	April-July Inflow (acre-feet)
2008	522,100
2009	803,000
2010	770,000 forecast
Average = 553,400	

Boysen Reservoir Operation
May 18, 2010

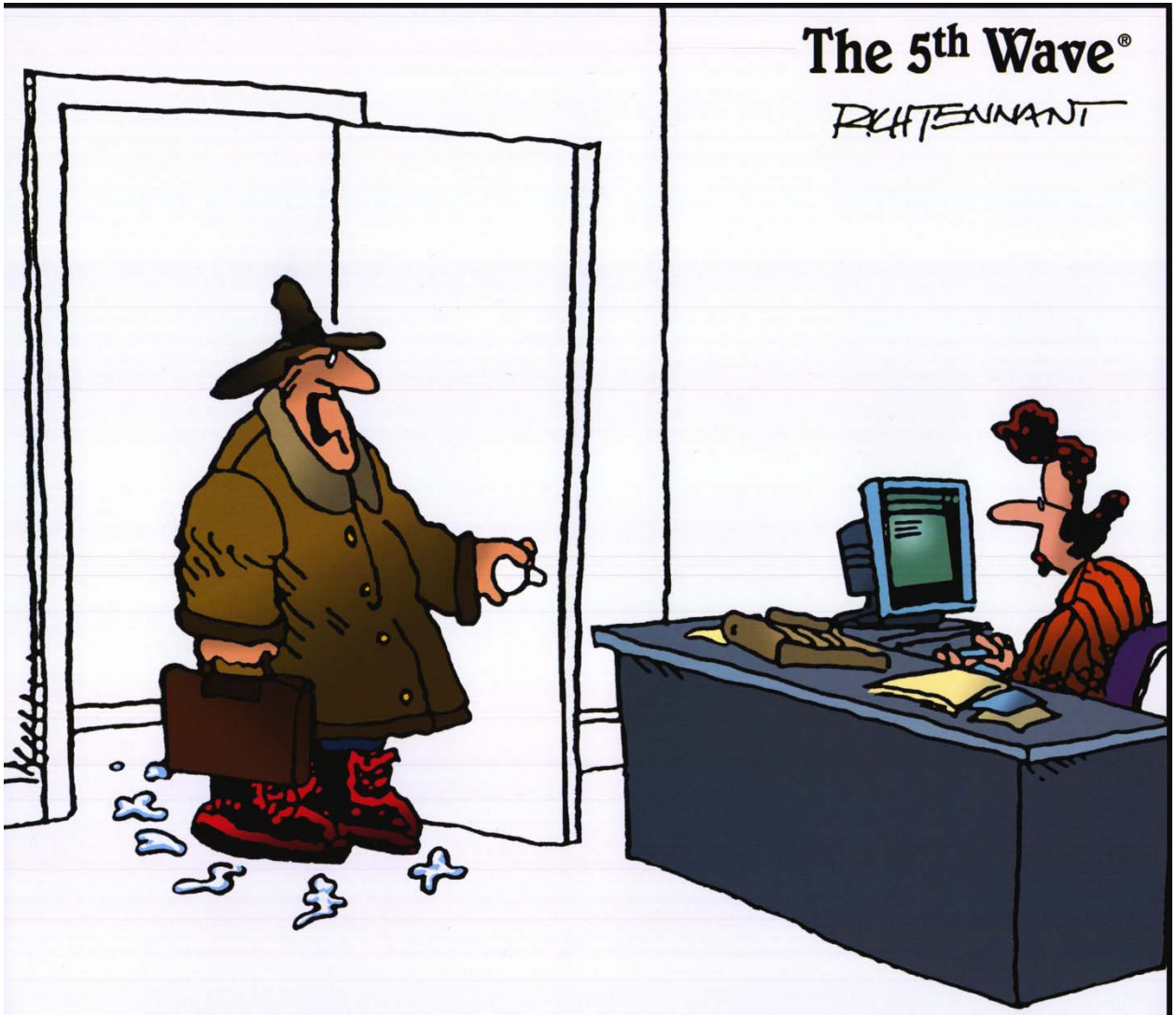
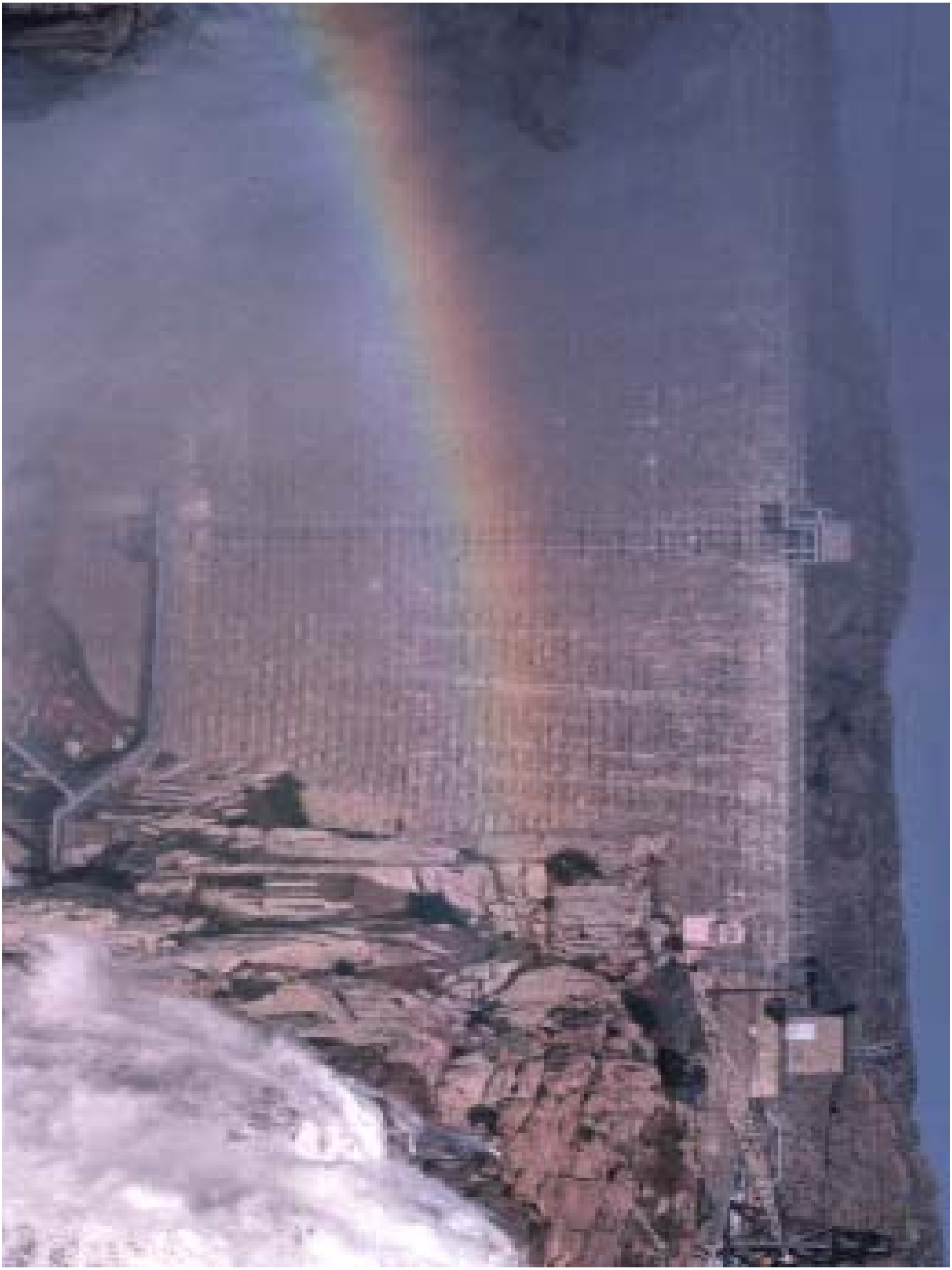
Values in acre-feet	May 18	Projected June
Boysen Content EOM	598,800	750,000

Boysen April-July inflow
Expected 770,000 AF

Dayfile Data From 10-MAY-2010 Through 20-MAY-2010
Plotted 05/20/2010 06:35



WSWY Weather Station Seminoe Dam, WY
PC Cumulative Precipitation (inches)
WGWY Weather Station Glendo Dam, WY
PC Cumulative Precipitation (inches)
GWWY Weather Station Guernsey Dam, WY
PC Cumulative Precipitation (inches)
WMNE Weather Station Minatare Dam, NE
PC Cumulative Precipitation (inches)



"Sorry I'm late, but I had to shovel about 8 inches of 'partly cloudy' out of my driveway this morning."