WESTERN DIVISION SYSTEM
RESOURCES DIVISION
LOVELAND, COLORADO

APRIL 1, 2012
WATER SUPPLY AND UTILIZATION REPORT
WESTERN DIVISION SYSTEM
PICK-SLOAN MISSOURI BASIN PROGRAM

PRECIPITATION BELOW AVERAGE
TEMPERATURES ABOVE AVERAGE

Precipitation was below average over the Colorado-Big Thompson Project (Project) during March. The Poudre watershed was the lowest at 2 percent of average. The Willow Creek and Lake Granby watersheds were the highest at 34 percent of average. Fort Collins had the driest March on record with zero inches of rain.

Temperatures over the Project were above average for March. Fort Collins had the warmest March on record.

PRECIPITATION

Watershed	March Precipitation			October-March Precipitation		
	2012 (Inches)	Avg1/ (Inches)	% of Avg	WY2012 (Inches)	Avg1/ (Inches)	% of Avg
Green Mtn.	.31E	1.64	19E	9.31E	7.93	117E
Willow Crk.	.42	1.22	34	4.78	7.43	64
L. Granby	.42	1.22	34	4.78	7.43	64
L. Estes	.04E	1.43	3E	5.79E	5.97	97E
St. Vrain	.04E	1.43	3E	5.79E	5.97	97E
Poudre	.02	1.18	2	4.55	4.22	108

1/ 30 year average, 1971-2000
E estimated

INFLOWS ABOVE AVERAGE

Inflows were above average over the Project during March. The inflow to Green Mountain was the lowest at 132 percent of average. The inflow to Willow Creek Reservoir was the highest at 200 percent of average. Water year to date (October-March) inflows have been 128 percent of average.

RESERVOIR INFLOW

Reservoir	March Inflow			October-March Inflow		
	2012 (KAF)	Avg 1/ (KAF)	% of Avg	WY 2012 (KAF)	Avg 1/ (KAF)	% of Avg
Green Mtn.*	12.3	9.3	132	72.1	57.3	126
Willow Crk.	2.2	1.1	200	8.7	6.0	145
L. Granby	7.5	3.9	192	32.1	24.0	134
L. Estes 2/	1.6	1.1	145	9.5	8.5	112

*Total runoff of the watershed above Green Mountain does not include depletions by Denver and Colorado Springs.
1/ 30 year average, 1971-2000
2/ Lake Estes Computed Inflow

TRANSMOUNTAIN DIVERSIONS ABOVE AVERAGE

Transmountain diversions through Adams Tunnel during March were 142 percent of average. During March, 27,500 acre-feet of water was brought through the tunnel. Water year to date (October-March) diversions have been 82 percent of average.

TRANSMOUNTAIN DIVERSION

Adams Tun.	March			October-March		
	2012 (KAF)	Avg 1/ (KAF)	% of Avg.	WY 2012 (KAF)	Avg 1/ (KAF)	% of Avg
	27.5	19.4	142	99.6	121.5	82

1/ 30 year average, 1971-2000

RESERVOIR STORAGE VARIED

The Lake Granby storage of 412,400 acre-feet on March 31 was 79,500 acre-feet above average and 18,400 acre-feet higher than 1 year ago on this date. Terminal reservoir storage in Carter Lake and Horsetooth Reservoir was 75 and 115 percent of average, respectively.

Colorado-Big Thompson Project storage water in Lake Granby, Carter Lake, and Horsetooth was 634,800 acre-feet on March 31 which was 72,000 acre-feet above average and 78 percent of the total available storage capacity.

RESERVOIR STORAGE

	Total Storage on March 31						
Reservoir	2012 (KAF)	2012 (%of Avg)	2011 (KAF)	2010 (KAF)	2009 (KAF)	1971-00 Avg(KAF)	Total Storage Cap.(KAF)
Green Mtn	79.7	120	66.0	77.4	63.3	66.5	153.6
L. Granby	412.4	124	394.0	351.7	283.3	332.9	539.8
Horsetooth	144.5	115	112.0	115.1	108.3	125.9	156.7
Carter L.	77.9	75	91.9	107.8	102.2	104.0	112.2
Dillon	243.1	113	221.8	241.2	222.8	216.0	254.0
Williams Fork	82.4	172	79.5	74.8	79.6	47.8 1/	96.8
Project	Total Storage Water in Lake Granby, Carter Lake, and Horsetooth Reservoir on March 31						
CBT	634.8	113	597.9	574.6	493.8	562.8	808.7

1/ 20 year average, 1970-1989.

SNOWPACK WATER CONTENT WELL BELOW AVERAGE

Snowpack water content on April 1 was 55 percent of the 1971-2000 average throughout the Project watersheds. The Lake Granby watershed was the lowest at 39 percent of average. The highest snowpack water content on the Project was recorded for the Willow Creek watershed at 67 percent of average.

The snowpack update graph on the next page are readings from the Natural Resource Conservation Service automated SNOTEL sites (for snowpack telemetry). This system has replaced many of the manual measurements at the remote sites. The 1971-2000 average is being used.

Watershed	Apr 1 Snow-Water Content			Comparative Apr 1 Snow-Water Content			
	2012 (In.)	Avg. (In.)	% of Avg.	2011 (In.)	2010 (In.)	2009 (In.)	2008 (In.)
Green Mtn	8.2	14.8	55	20.8	10.2	16.5	18.2
Willow C	6.5	9.7	67	16.2	7.1	9.7	12.0
L. Granby	4.7	12.1	39	19.4	8.2	13.2	14.0
L. Estes	5.3	10.6	50	15.7	8.1	9.2	11.0
St. Vrain	5.8	9.7	60	11.5	7.6	7.0	9.9
Poudre	8.0	13.2	61	18.4	10.8	13.1	13.7

WATER SUPPLY OUTLOOK IS BELOW AVERAGE

Current April 1 water supply forecasts are below average over the Project watersheds. Forecasted April-July volumes range from 45 percent of average for the Willow Creek Reservoir watershed to 71 percent of average for the Poudre River at the Canyon Mouth watershed.

Apr 1 2012 Forecast of Apr-Jul Volume (KAF)									
	Chance of Exceeding					Comparative Apr-Jul Volume (KAF)			
Fore-Cast Point	**95% Reason-able Min 1/**	**75%**	**50% Most Probable**	**25 %**	**5% Reason-able Max 1/**	**2011**	**2010**	**Avg 2/**	**Most ProbAble % avg**
Green Mtn Res	116	142	161	179	206	478	248	276	58
Willow Crk Res	11	18	22	27	33	125	52	49	45
Lake Granby	78	99	114	129	151	416	212	199	57
Big Thompson River Above L.Estes	30	40	46	53	62	113	80	71	65
Big Thompson R. at Canyon Mouth	22	44	59	74	96	3/	107	93	63
St Vrain Crk at Lyons	30	47	59	71	89	3/	96	87	68
Poudre R. at Canyon Mouth	63	120	160	200	258	3/	288	226	71

1/ The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

2/ Historical average:

Green Mtn: 1928-2011, Willow C: 1920-2011, Granby: 1928-2011, BT above Estes: 1936-2011, BTR @Canyon: 1947-2010, ST Vrain: 1954-2010, Poudre: 1954-2010

3/ Not available at this time.

WESTERN DIVISION SYSTEM
GENERATION NEAR AVERAGE

System generation of 182,500,000 kilowatt-hours of energy produced during March was 95 percent of average. Total system generation for the water year (October-March) was 919,400,000 kilowatt-hours which was 84 percent of average.

WESTERN DIVISION SYSTEM
GROSS GENERATION

Powerplant	March Gross Generation			Accum. Gross Generation 1/		
	2012 (GWH)	Avg 2/ (GWH)	% of Avg.	WY 2012 (GWH)	Avg 2/ (GWH)	% of Avg
Green Mtn.	1.8	2.7	67	19.9	18.8	106
Marys Lake	4.9	3.3	148	17.2	20.8	83
Estes	12.0	8.7	138	47.7	54.4	88
Pole Hill	20.0	13.4	149	57.0	83.0	69
Flatiron 1&2	25.4	17.5	145	83.5	108.1	77
Big Thompson	0.0	0.0	-	1.2	.7	171
Seminoe	13.7	11.7	117	41.5	59.2	70
Kortes	13.7	12.9	106	43.4	64.7	67
Fremont C.	7.3	15.3	48	33.9	70.6	48
Alcova	3.1	6.8	46	15.2	34.9	44
Glendo	0.0	1.6	-	0.0	2.2	-
Guernsey	0.0	0.5	-	0.0	1.2	-
Boysen	0.7	4.7	15	0.7	28.9	2
Heart Mtn.	0.0	0.0 3/	-	1.7	.8 3/	212
Buffalo Bill	2.7	3.9 3/	69	15.4	14.4 3/	107
Shoshone	1.4	1.2 3/	117	6.5	8.3 3/	78
Spirit Mtn.	0.0	0.0 3/	-	1.7	.9 3/	189
Mt. Elbert	18.4	11.8 4/	156	125.4	66.1 4/	190
Yellowtail	57.4	76.3 5/	75	407.5	456.6 5/	89
Total	182.5	192.3	95	919.4	1094.6	84

1/ Oct-Mar
2/ 1976-2005 average
3/ 1995-2005 average
4/ 1990-1999 average
5/ 1971-1990 average; In general 1/2 of Yellowtail energy is dedicated to the Western Division System through marketing arrangement. The other 1/2 is marketed in Eastern Division System.

WESTERN DIVISION SYSTEM
PUMP ENERGY ABOVE AVERAGE

The pump energy required for the Western Division System was above average for March. Colorado-Big Thompson Project pumping was 171 percent of average for March. Mt. Elbert pumping was 197 percent of average. Water year to date (October-March) pumping for the Western Division System was 152 percent of average.

PUMP ENERGY

Pumping Plant	March Pump Energy			Oct-March Pump Energy		
	2012 (GWH)	Avg 1/ (GWH)	% of Avg	WY2012 (GWH)	Avg 1/ (GWH)	% of Avg
Willow Crk	0.5	0.1	500	0.5	0.5	100
Farr	3.9	3.4	115	15.3	20.5	75
Flatiron 3	6.4	2.8	229	12.1	19.0	64
Mt. Elbert	21.3	10.8 2/	197	141.6	71.4 2/	198
Total	32.1	17.1	188	169.5	111.4	152

1/ 1976-2005 average
2/ 1990-1999 average

APRIL 1, 2012
WATER SUPPLY AND UTILIZATION REPORT
FRYINGPAN-ARKANSAS PROJECT

PRECIPITATION WELL BELOW AVERAGE

Precipitation was below average over the Fryingpan-Arkansas Project (Project) during March. Precipitation at Pueblo Reservoir was the lowest at 3 percent of average. Precipitation at Ruedi Reservoir (Nast SNOTEL) was the highest at 19 percent of average.

PRECIPITATION

Stations	March Precipitation			October-March Precipitation		
	2012 (Inches)	Avg (Inches)	% of Avg	WY2012 (Inches)	Avg (Inches)	% of Avg
Ruedi *	.50	2.60 1/	19	8.10	12.53 1/	65
Turquoise	.23	1.40 2/	16	6.44	7.53 2/	86
Twin Lakes	.05	.72 3/	7	2.58	3.32 3/	78
Pueblo	.03	.92 4/	3	3.29	3.11 4/	106

* Used Nast SNOTEL site
1/ 1971-2000 average for Nast
2/ 1973-1999 average
3/ 1966-1999 average
4/ 1976-1999 average

INFLOWS ARE VARIED

Native inflows were varied over the Project during March. The inflow to Turquoise Lake was the lowest at 86 percent of average. The inflow to Ruedi Reservoir was the highest at 137 percent of average. Water year to date (October-March) inflows over the Fryingpan-Arkansas Project were 86 percent of average.

RESERVOIR INFLOW*

Reservoir	March Inflow			October-March Inflow		
	2012 (KAF)	Avg (KAF)	% of Avg	WY2012 (KAF)	Avg (KAF)	% of Avg
Ruedi	3.7	2.7 1/	137	19.5	17.3 1/	113
Turquoise	0.6	0.7 2/	86	2.6	2.7 2/	96
Twin Lakes	0.8	0.9 2/	89	7.7	8.1 2/	95
Pueblo	16.3	16.7 2/	98	106.9	130.3 2/	82

* Computed Native Inflow
1/ 1970-1989 average
2/ 1966-1986 average

RESERVOIR STORAGE VARIED

Reservoir storage is varied on the Fryingpan-Arkansas Project. Turquoise Lake is the lowest at 92 percent of average. Pueblo Reservoir is the highest at 119 percent of average. The total water in storage in the four reservoirs of 487,400 acre-feet at the end of March was 13,000 acre-feet higher than 1 year ago on this date.

RESERVOIR STORAGE

	Total Storage on March 31						
Reservoir	2012 (KAF)	2012 (%of Avg)	2011 (KAF)	2010 (KAF)	2009 (KAF)	Avg (KAF)	Total Storage Capacity (AF)
Ruedi	71.4	115	64.8	66.3	68.1	62.3 1/	102,373
Turquoise	66.6	92	47.5	61.5	60.3	72.4 2/	129,398
Twin Lakes	103.0	100	95.7	109.0	88.5	103.4 3/	141,000
Pueblo	246.4	119	266.4	266.3	252.1	206.8 1/	256,949 4/
Project	Total Storage Water in Turquoise, Twin Lakes, and Pueblo Reservoirs on March 31						
Fry-Ark	416.0	109	409.6	436.8	400.9	382.6	527,347

1/ 1982-2007 average
2/ 1989-2007 average
3/ 1987-2007 average
4/ Top of active conservation capacity

SNOWPACK WATER CONTENT BELOW AVERAGE

Snowpack water content on April 1 was below average on the Fryingpan-Arkansas Project watersheds. The Upper Arkansas River watershed was 42 percent of average. The Fryingpan River watershed was 48 percent of average.

SNOW-WATER ACCUMULATION

Watershed	Apr 1 Snow-Water Content			Comparative Apr 1 Snow-Water Content (Inches)			
	2012 (In.)	Avg 1/ (In.)	% of Avg	2011	2010	2009	2008
U.Arkans.	5.6	13.2	42	17.6	11.2	16.0	17.8
Fryingpan River	7.0	14.6	48	18.0	11.8	16.5	20.8

1/ 1971-2000 average

WATER SUPPLY OUTLOOK BELOW AVERAGE

The current April 1 water supply forecast for Ruedi is below average.

	April 1, 2012 Forecast of Apr-Jul Volume (KAF)						
	Chance of Exceeding						
Forecast Point	95% Reasonable Min 2/	75%	50% Most Probable	25%	5% Reasonable Max 2/	Avg 3/	Most Probable % Avg
Ruedi 1/	61	75	85	95	109	134.0	63

1/ Undepleted
2/ The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.
3/ 1969-2006 average

COOPERATORS

Many organizations and individuals furnish information for the Water Supply and Utilization Report. Their cooperation is gratefully appreciated, especially:

Natural Resource Conservation Service
http://www.wcc.nrcs.usda.gov/
Snow Survey Units
Denver, Colorado
http://www.co.nrcs.usda.gov/snosurvfs.htm
Casper, Wyoming
and
Portland, Oregon

Department of Commerce
NOAA, National Weather Service
Boulder, Colorado
http://www.crh.noaa.gov/den/
Cheyenne, Wyoming
Salt Lake City, Utah

Department of Energy
Western Area Power Administration
Rocky Mountain Region
Loveland, Colorado
http://www.wapa.gov/RM/RM.HTM

Colorado Climate Center
Colorado State University
Fort Collins, Colorado
http://ccc.atmos.colostate.edu/Access.html