RECLAMATION

Managing Water in the West

McPhee Reservoir Operations

U.S. Department of the Interior
Bureau of Reclamation

McPhee Dam and Reservoir

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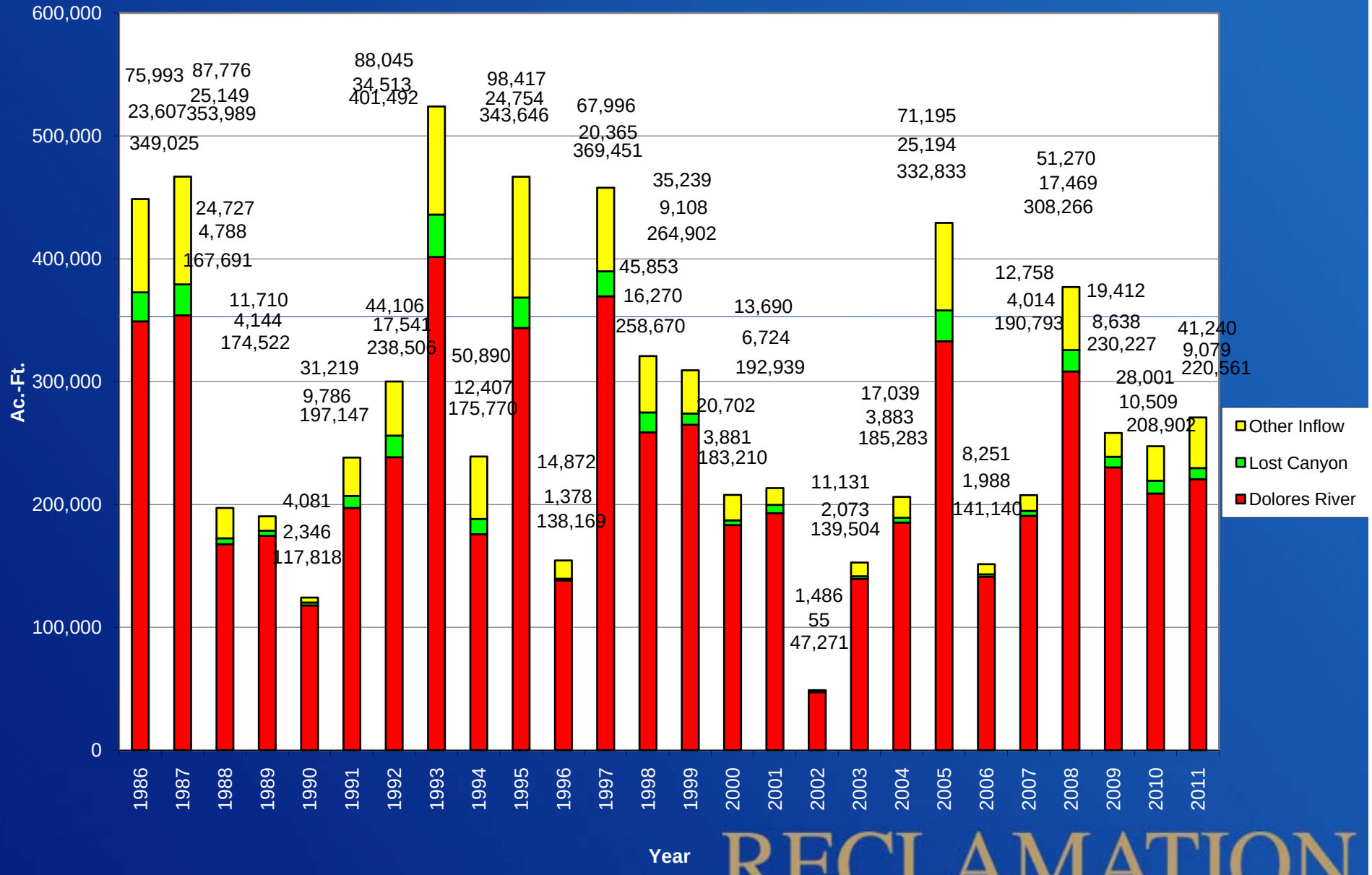
Apr-Jul McPhee Reservoir Inflow (1986-2011) Avg. 277,250 Ac. Ft.



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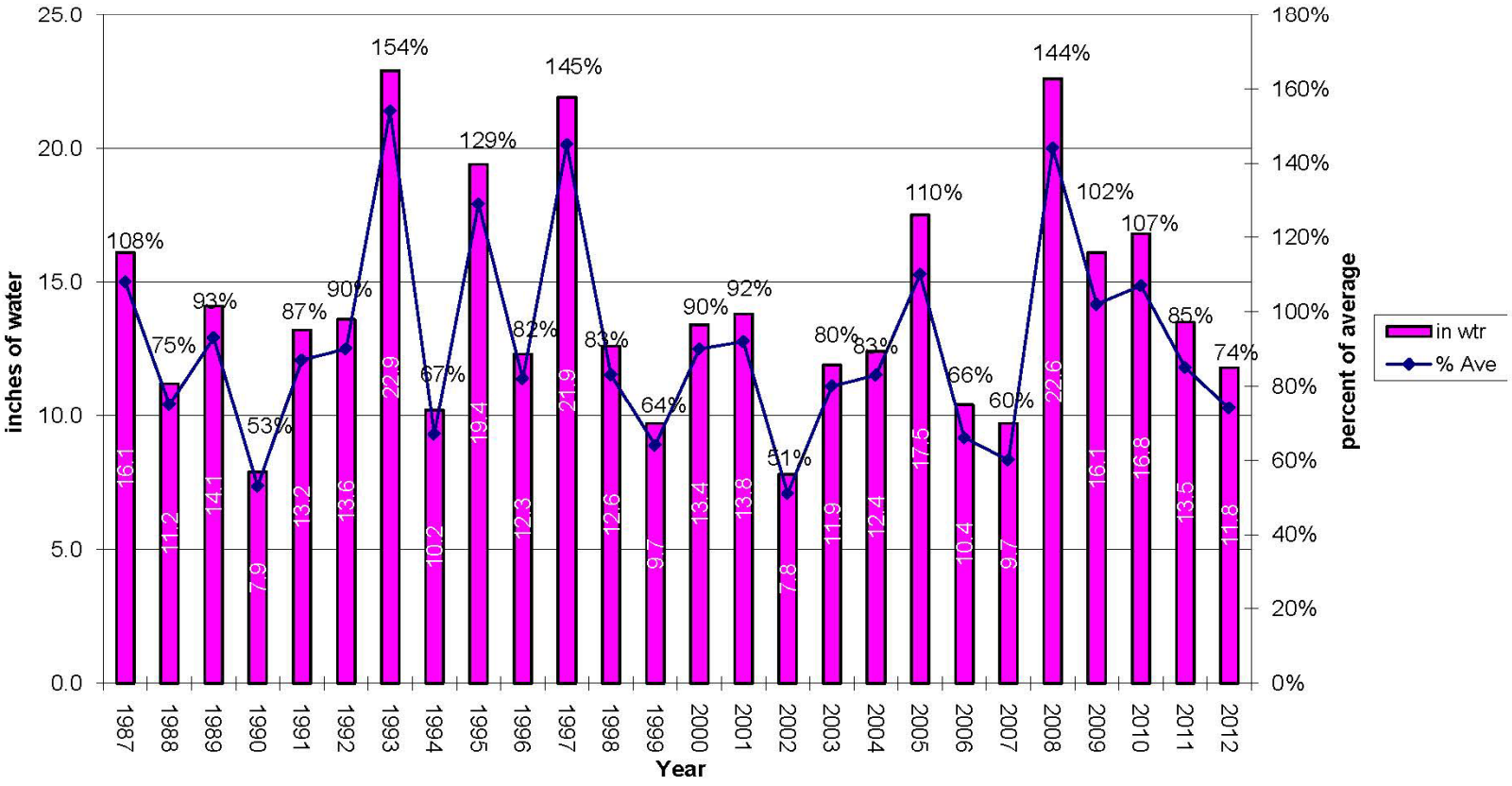
Mar 19th Snotel Averages



United States Department of Agriculture | Natural Resources Conservation Service | Water and Climate Center Portland, Oregon

S N O W - P R E C I P I T A T I O N U P D A T E

Based on Mountain Data from NRCS SNOTEL Sites
As of MONDAY: MARCH 19 , 2012

BASIN Data Site Name	ELEV. (Ft)	SNOW WATER EQUIVALENT Current	Average	% Avg	TOTAL PRECIPITATION Current	Average	% Avg
COLORADO							
DOLORES RIVER BASIN							
EL DIENTE PEAK	10000	8.4	14.5	58	18.2	18.3	99
LIZARD HEAD PASS	10200	10.7	14.6	73	12.1	15.8	77
LONE CONE	9600	13.6	17.5	78	17.6	19.1	92
SCOTCH CREEK	9100	9.9	13.1	76	16.3	16.9	96
SHARKSTOOTH	10720	16.4	18.9	87	19.2	-M	*
Basin wide percent of average				74			

-M = Missing data
* = Data may not provide a valid measure of conditions.
Units = inches for the Current and Average Snow Water Equivalent and Total Precipitation values

If the Basin wide percent of average value is flagged as potentially invalid, care should be taken to evaluate if the value is representative of conditions in the basin.

The SNOW WATER EQUIVALENT Percent of Average represents the snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day.

The TOTAL PRECIPITATION Percent of Average represents the total precipitation (beginning October 1st) found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day.

CBRFC March 1, 2012 Forecast

National Weather Service, Colorado Basin River Forecast Center, SLC, Utah

March final Forecast March 02, 2012

:		Obs			feb	Forecast			Outlook	
:	nov	dec	jan	feb	%Avg	mar	apr	may	apr-jul	%Avg
GLDA3:Lake Powell	506	363	356	343	87%:	550/	800/	1730/	5300/:	74%
GBRW4:Fontenelle	46	35	32	30	108%:	47/	82/	156/	730/:	101%
GRNU1:Flaming Gorge	64	38	45	47	106%:	98/	145/	240/	945/:	96%
BMDC2:Blue Mesa	29	24	22	21	94%:	30/	64/	150/	450/:	67%
MPSC2:Morrow Point	30	25	23	22	88%:	33/	73/	166/	500/:	68%
CLSC2:Crystal	34	28	27	26	90%:	38/	84/	190/	555/:	66%
TPIC2:Taylor Park	5.2	4.1	3.8	3.9	103%:	3.8/	7/	23/	72/:	73%
VCRC2:Vallecito	8.6	5.3	4.7	4.3	91%:	6.5/	24/	70/	185/:	95%
NVRN5:Navajo	31	19.0	17.7	18.9	62%:	65/	145/	255/	650/:	88%
LEMC2:Lemon	1.49	1.00	0.78	0.70	92%:	1.3/	6/	21/	52/:	95%
MPHC2:McPhee	4.9	2.8	3.0	3.3	66%:	13/	55/	115/	240/:	81%
RBSC2:Ridgway	5.7	4.1	4.0	3.5	97%:	5.1/	9.5/	26/	90/:	89%

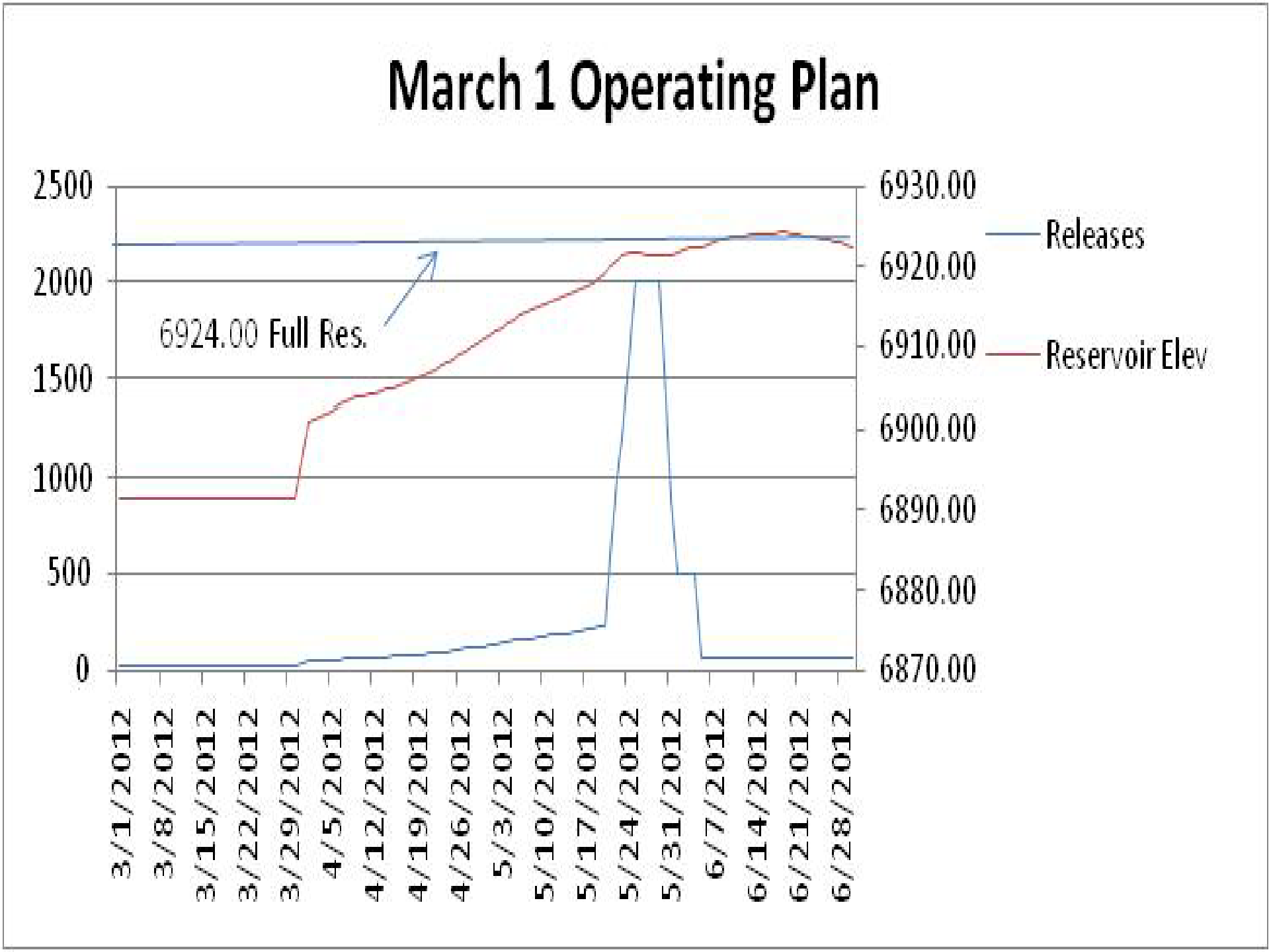
:

: JUNE-JULY MONTHLY FORECAST BREAKDOWN

:	jun	jul
:GLDA3:Lake Powell	2000	770
:GBRW4:Fontenelle	320	172
:GRNU1:Flaming Gorge	365	195
:BMDC2:Blue Mesa	172	64
:MPSC2:Morrow Point	190	71
:CLSC2:Crystal	208	73
:TPIC2:Taylor Park	30	12
:VCRC2:Vallecito	67	24
:NVRN5:Navajo	194	56
:MPHC2:McPhee	56	14
:DRGC2:Durango	136	54
:LEMC2:Lemon	19.5	5.5

PRECIPITATION SUMMARY - % OF AVERAGE BY MONTH - WY 2012

RIVER BASIN:	OCT	NOV	DEC	JAN	FEB
DOLORES BASIN	100	75	85	90	120


March 1 Operating Plan
2500
2000
1500
1000
500
0
6930.00
6920.00
6910.00
6900.00
6890.00
6880.00
6870.00
6924.00 Full Res.
Releases
Reservoir Elev
3/1/2012
3/8/2012
3/15/2012
3/22/2012
3/29/2012
4/5/2012
4/12/2012
4/19/2012
4/26/2012
5/3/2012
5/10/2012
5/17/2012
5/24/2012
5/31/2012
6/7/2012
6/14/2012
6/21/2012
6/28/2012

McPhee Operations Highlights

- With the current forecast, McPhee will fill.
- Anticipated D/S release of 42,000 acre-feet.
- 10 days of boating at or above 900 cfs.
  - 2,000 cfs over Memorial weekend.
- Will provide early release of excess water to suppress temperature in order to prevent premature spawning conditions of native fishes.

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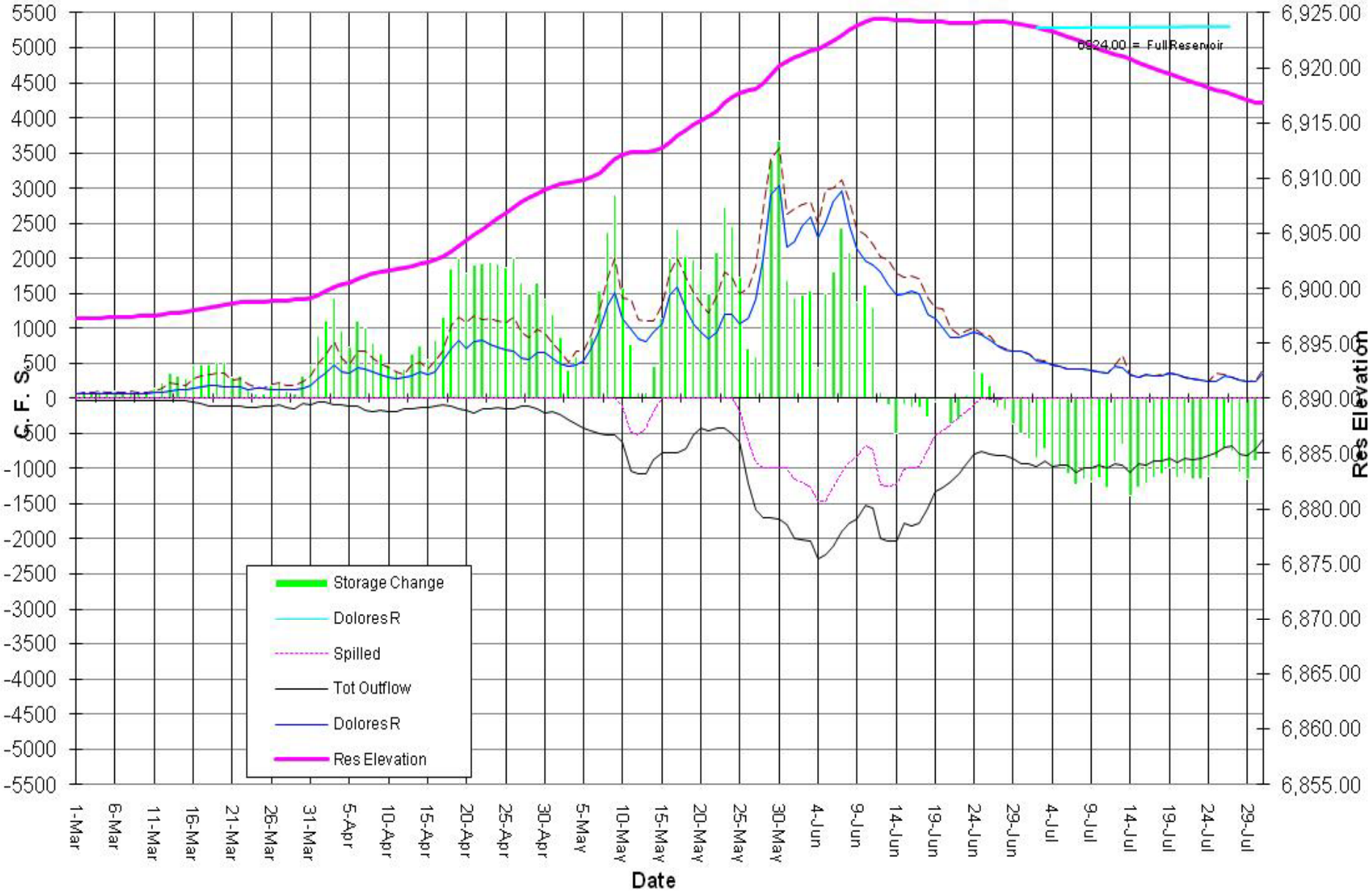
2011 Hydrograph (Mar-Jul)



Dolores Project Operations

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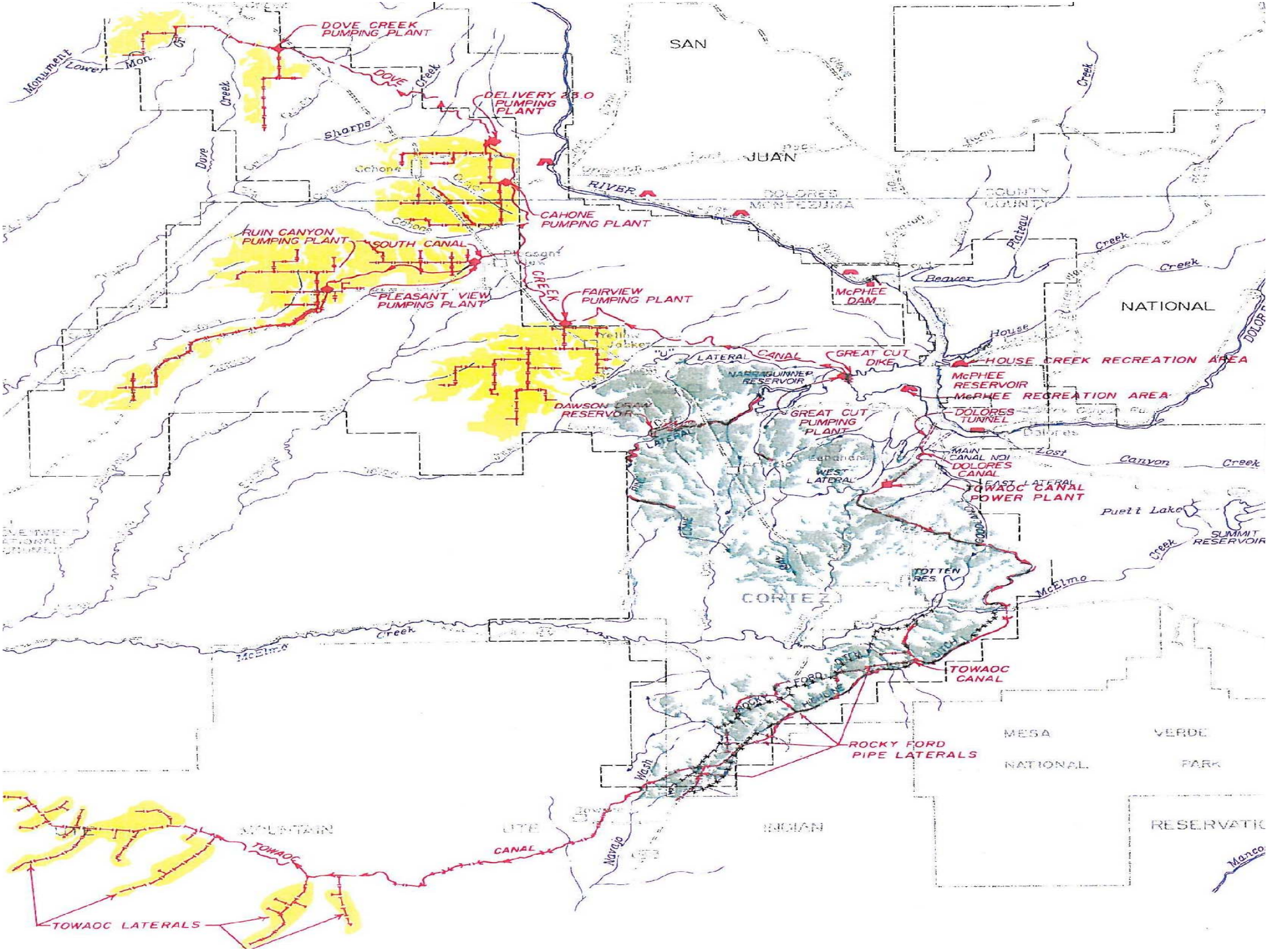
DOVE CREEK PUMPING PLANT
DELIVERY 23.0 PUMPING PLANT
CAHONE PUMPING PLANT
RUIN CANYON PUMPING PLANT
SOUTH CANAL
PLEASANT VIEW PUMPING PLANT
FAIRVIEW PUMPING PLANT
DAWSON DRAW RESERVOIR
GREAT CUT DIKE
GREAT CUT PUMPING PLANT
McPHEE DAM
HOUSE CREEK RECREATION AREA
McPHEE RESERVOIR
McPHEE RECREATION AREA
DOLORES TUNNEL
MAIN CANAL NO1
DOLORES CANAL
TOWAOC CANAL POWER PLANT
TOWAOC CANAL
ROCKY FORD PIPE LATERALS
TOWAOC LATERALS
SAN JUAN
NATIONAL
CORTEZ
MESA VERDE NATIONAL PARK
RESERVATIO
SUMMIT RESERVOIR
Puett Lake
McElmo Creek
Lost Canyon Creek
Beaver Creek
Dove Creek
Sharps Creek
Cahone Creek
Navajo Wash
Monument Lower Mon.
DOLORES COUNTY
MONTEZUMA COUNTY
RIVER
LATERAL
CANAL
WEST LATERAL
EAST LATERAL
TOTTEN RES.
ROCKY FORD DITCH
HIGHLINE
TOWAOC CANAL
MOUNTAIN UTE INDIAN

Features

- McPhee Dam and Great Cut Dike - Fill volume 6.5 million cubic yards
- McPhee Reservoir – Second largest in Colorado, 381,000 acre-feet of storage
- Dolores Tunnel Trans-basin diversion – 1.3 miles
- Canals – 80 miles
- Pumping Plants – 7 plants with combined pumping capacity of 827 cubic feet per second
- Pipe Lateral Systems – 102 miles
- Hydro Electric Powerplants – 2 plants, combined generation in 2011 was 22,500,000 kWhr

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Distribution of Water

- Municipal and Industrial – 8,700 acre-feet (AF)
- Irrigation -91,800 AF
  - Dove Creek Area (DWCD) – 55,200 AF
  - Ute Mountain Farm and Ranch – 22,900 AF
  - Montezuma Valley Irrigation Company (MVIC) Supplemental – 13,700 AF
- Fish and Wildlife – 33,398 AF
  - Fishery Pool/Downstream release 32,798 AF
  - San Juan Basin Fish and Wildlife development – 1,600 AF

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