

# RECLAMATION

*Managing Water in the West*

## Idaho Water supply Committee Meeting

February 14, 2011

By Art Hill

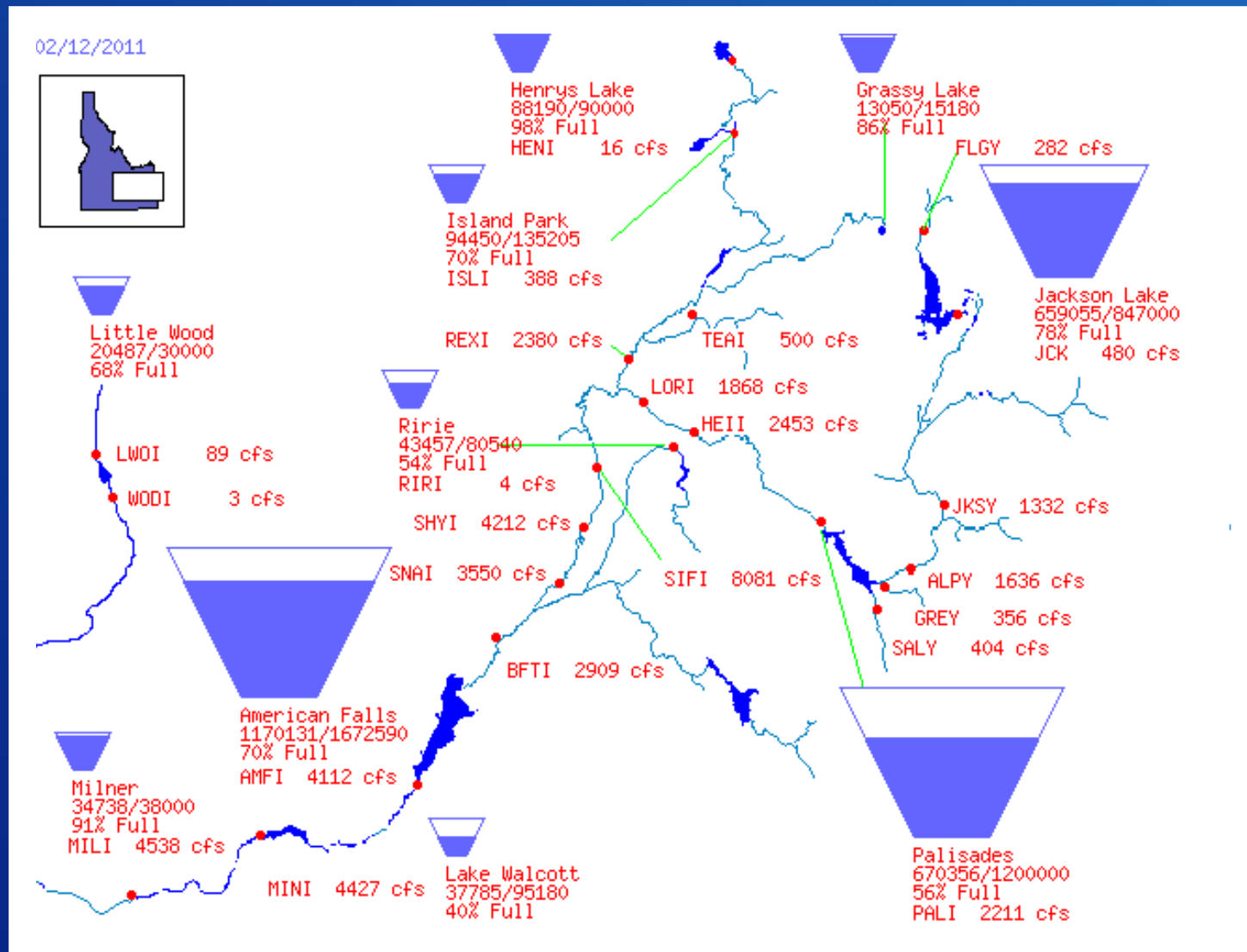
Hydraulic Engineer



U.S. Department of the Interior  
Bureau of Reclamation

## Major Storage Reservoirs in the Upper Snake River Basin

**Upper Snake River system (Jackson Lake, Palisades, Grassy Lake, Island Park, Ririe, American Falls, Lake Walcott) is at 66% of capacity (2,688,287 AF). Total space available: 1,357,408 AF with a Total storage capacity: 4,045,695 AF**

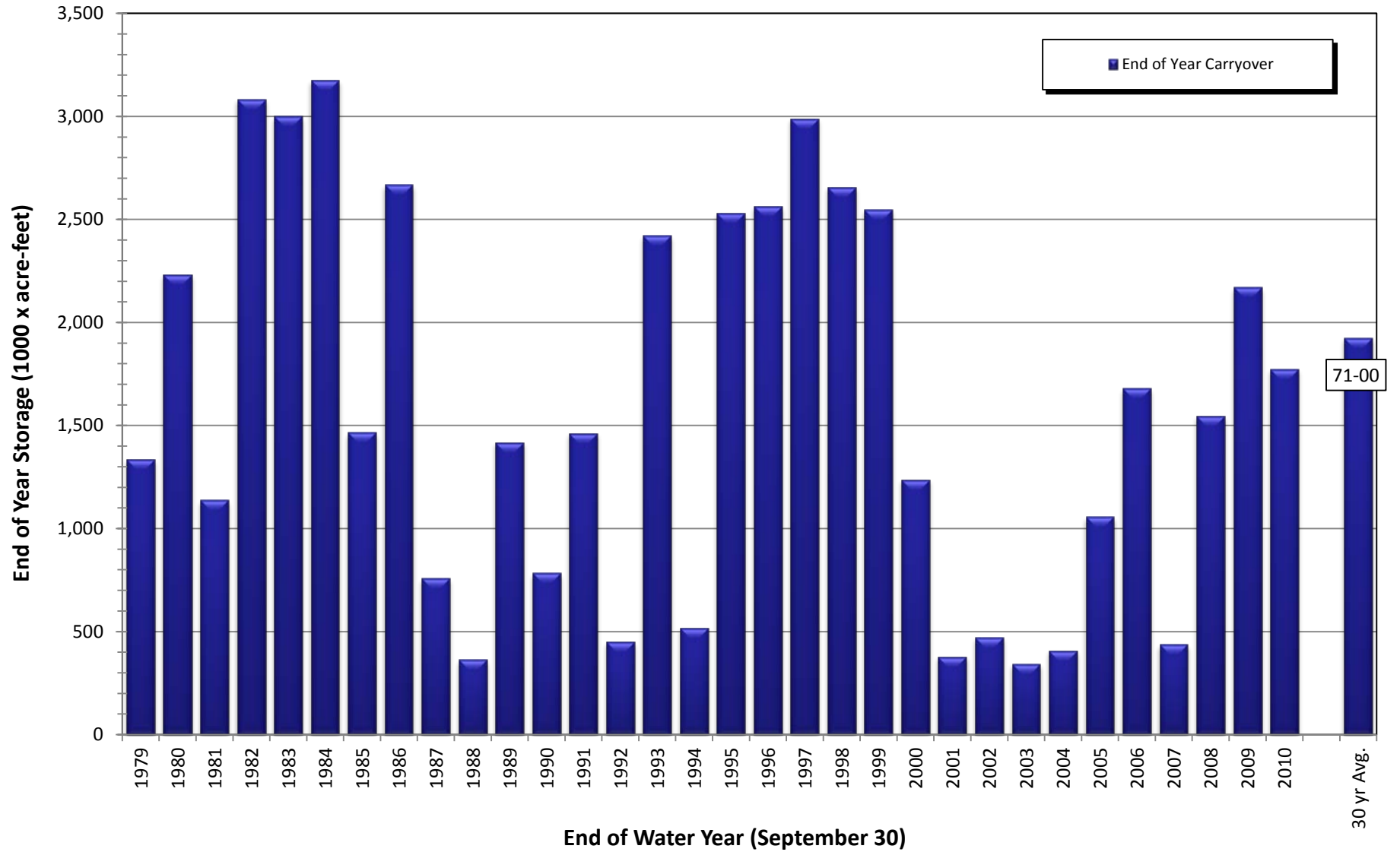


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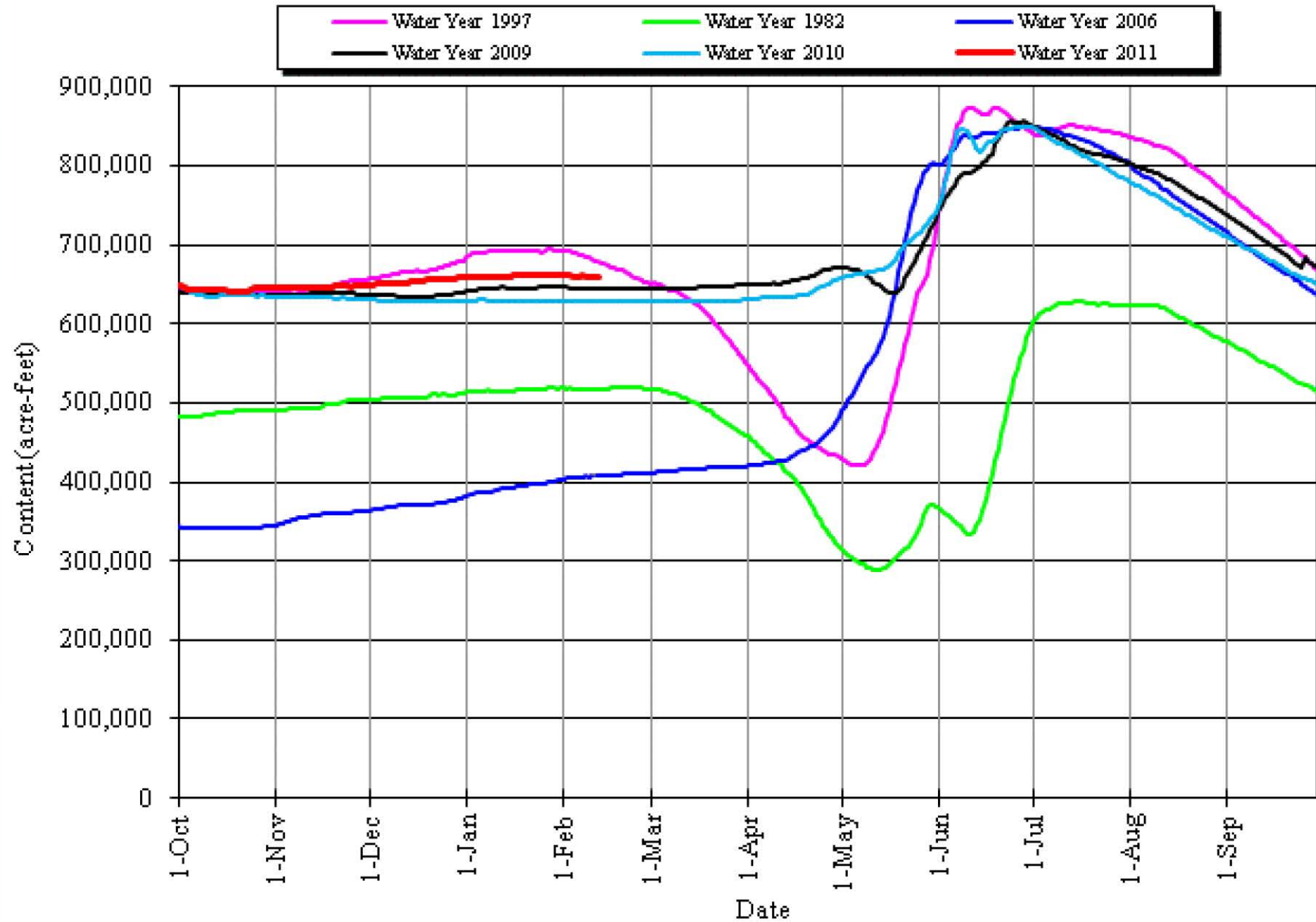
# Upper Snake River Carryover Storage

Jackson Lake, Palisades, Ririe, Grassy Lake, Island Park, American Falls, and Lake Walcott





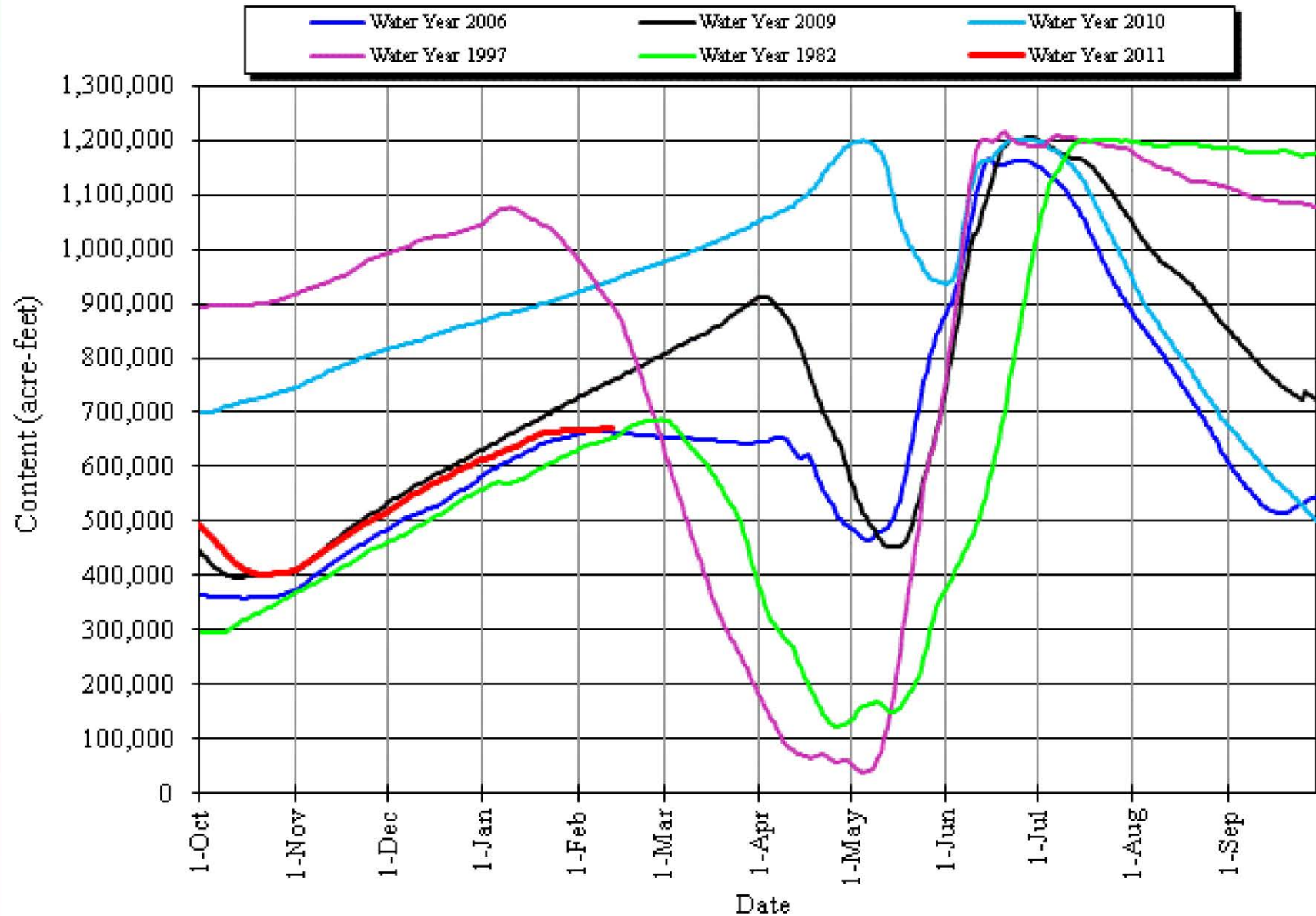
## Jackson Lake



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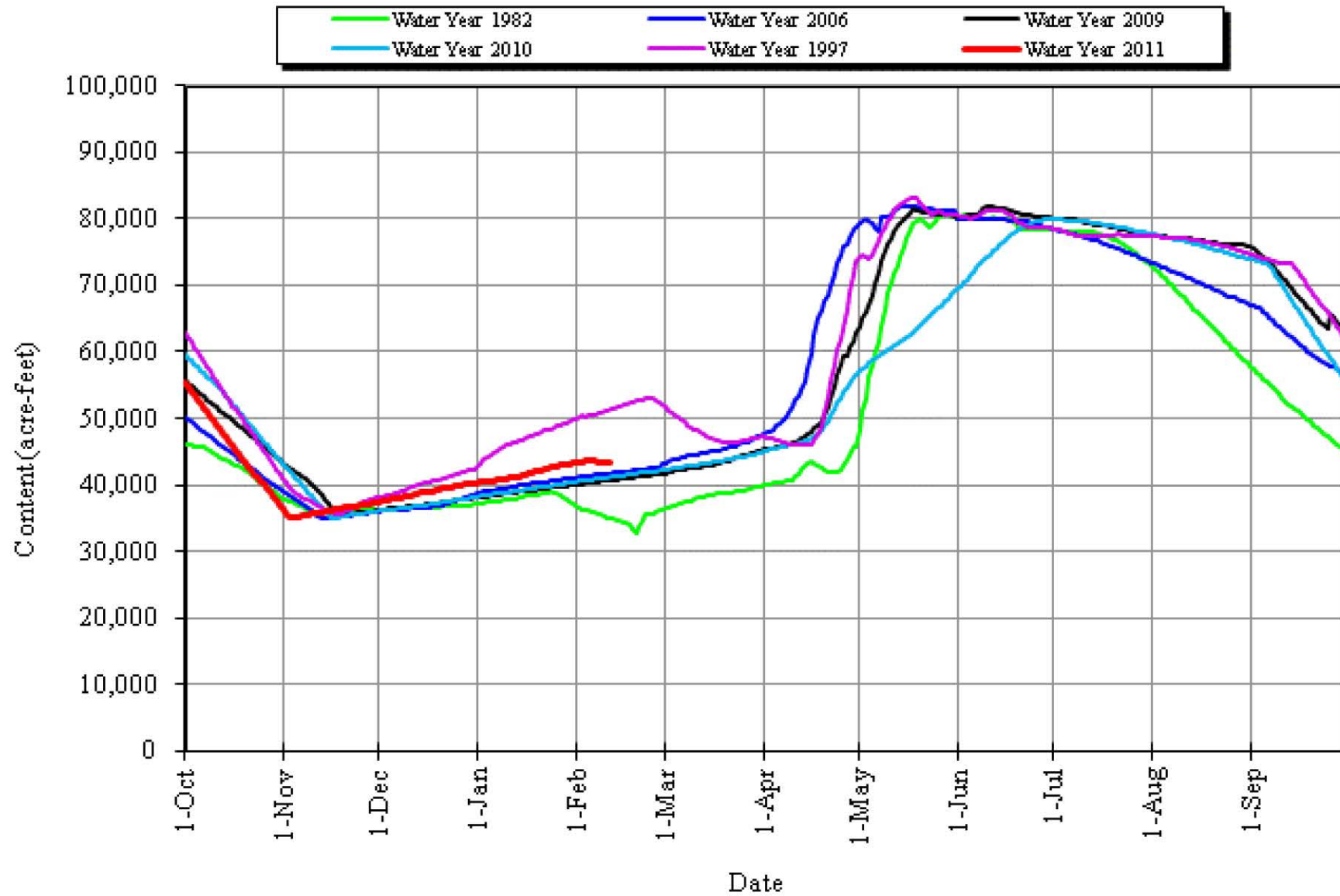
## Palisades Reservoir



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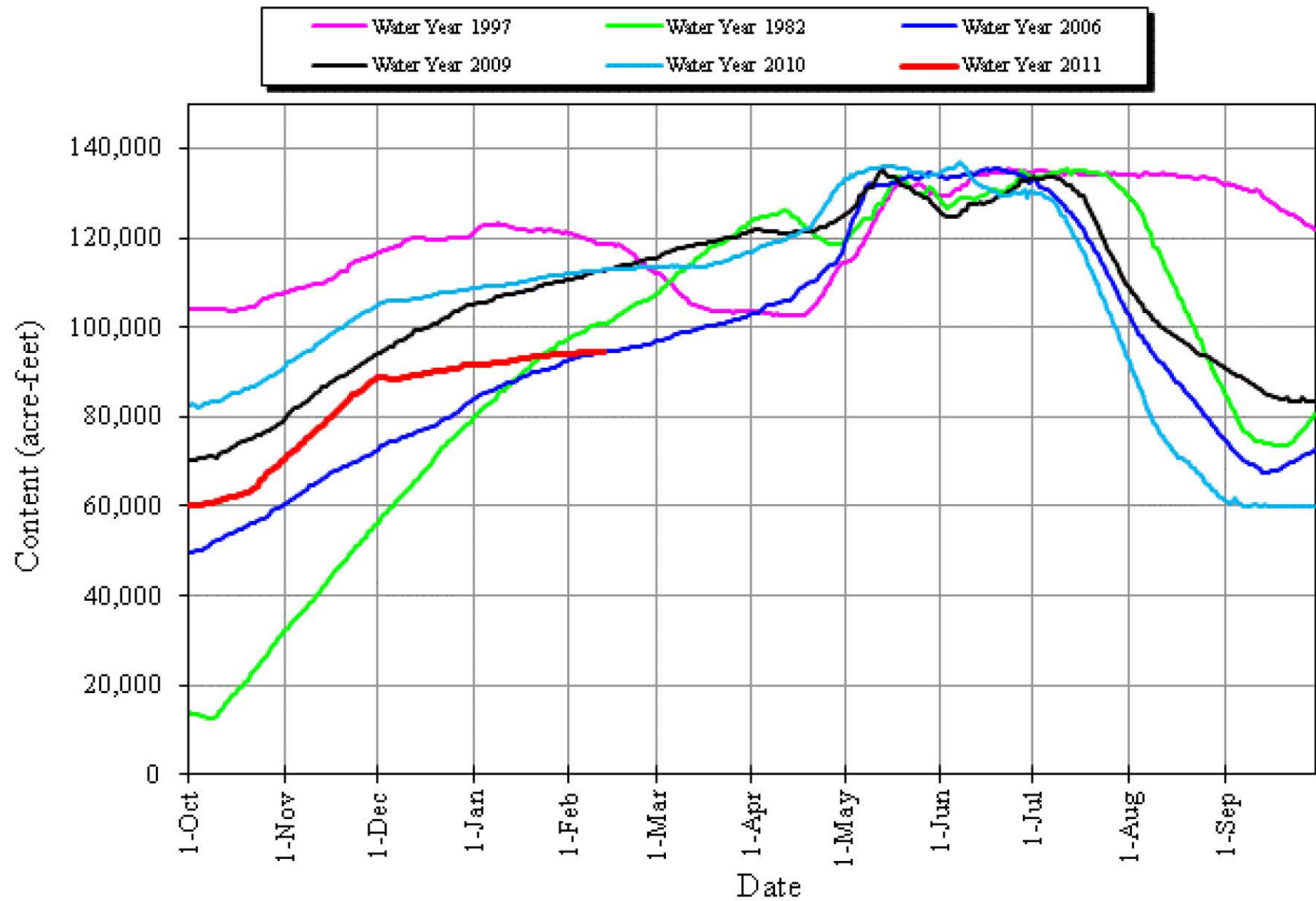
## Ririe Reservoir



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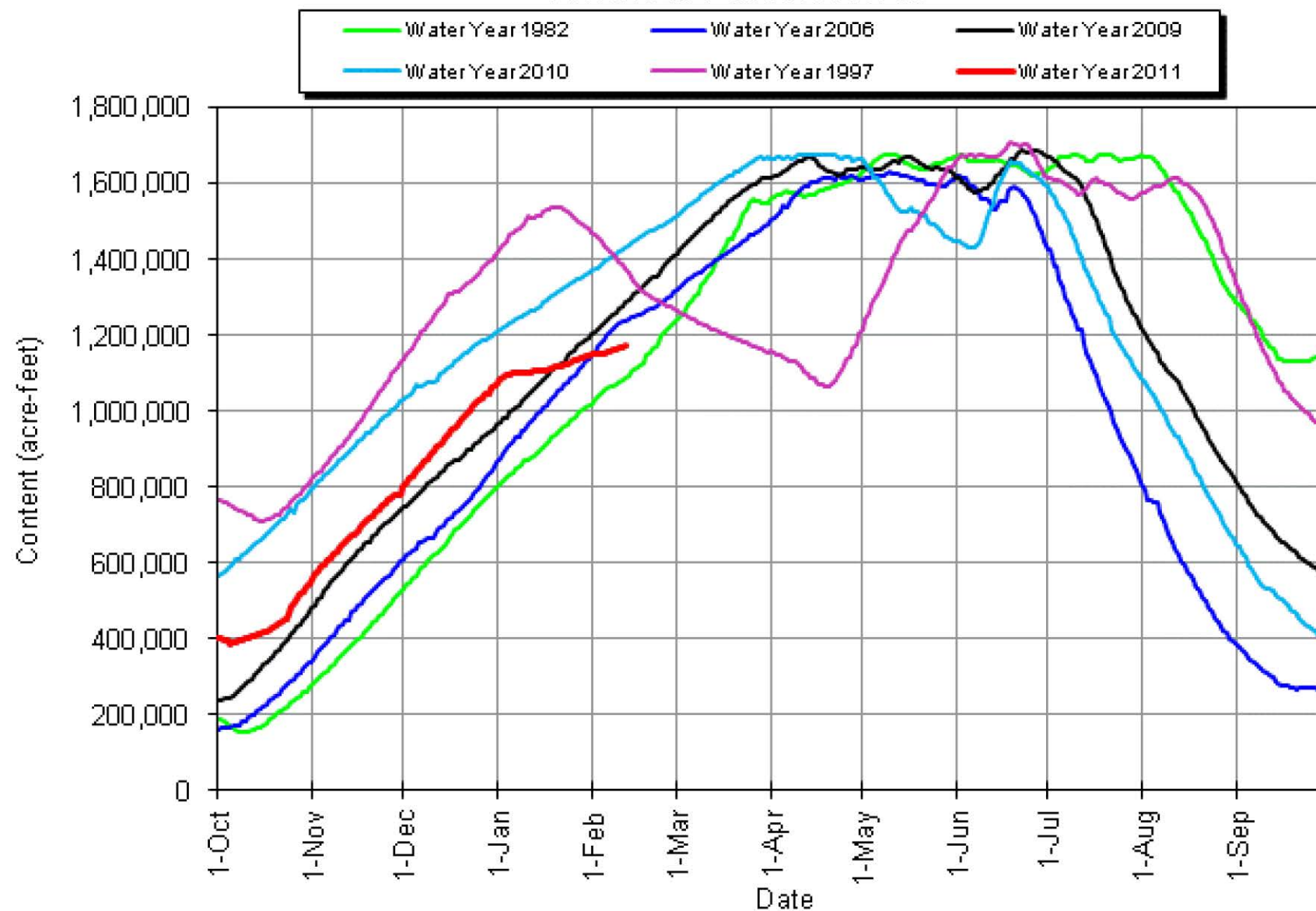
## Island Park Reservoir



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## American Falls Reservoir

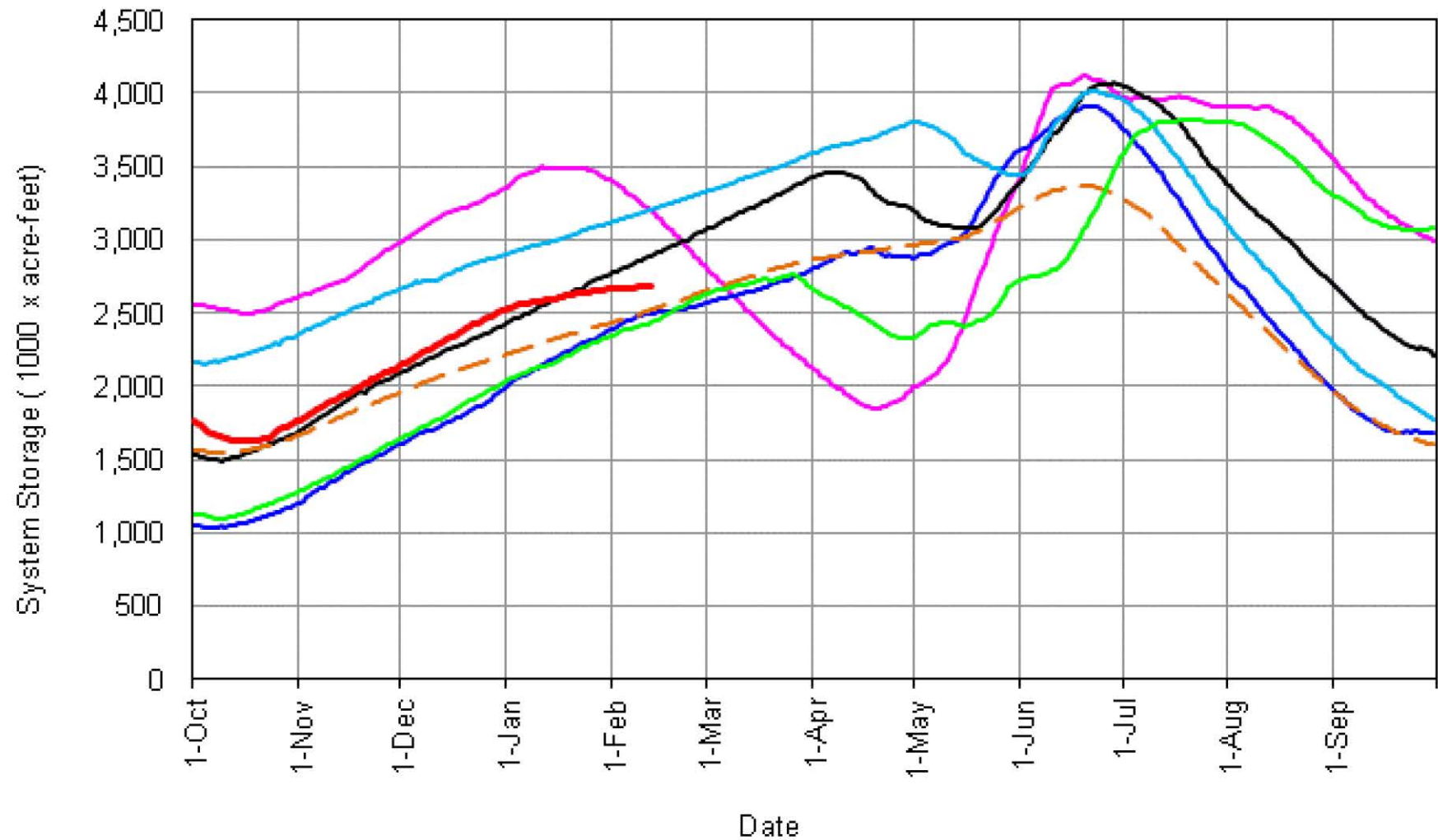


# RECLAMATION



**Jackson + Palisades + Ririe + Grassy Lake + Island Park + American Falls + Lake Walcott**

Water Year 1997      Water Year 2006      Water Year 2009      30 Yr Avg (81-10)  
Water Year 2010      Water Year 1982      Water Year 2011

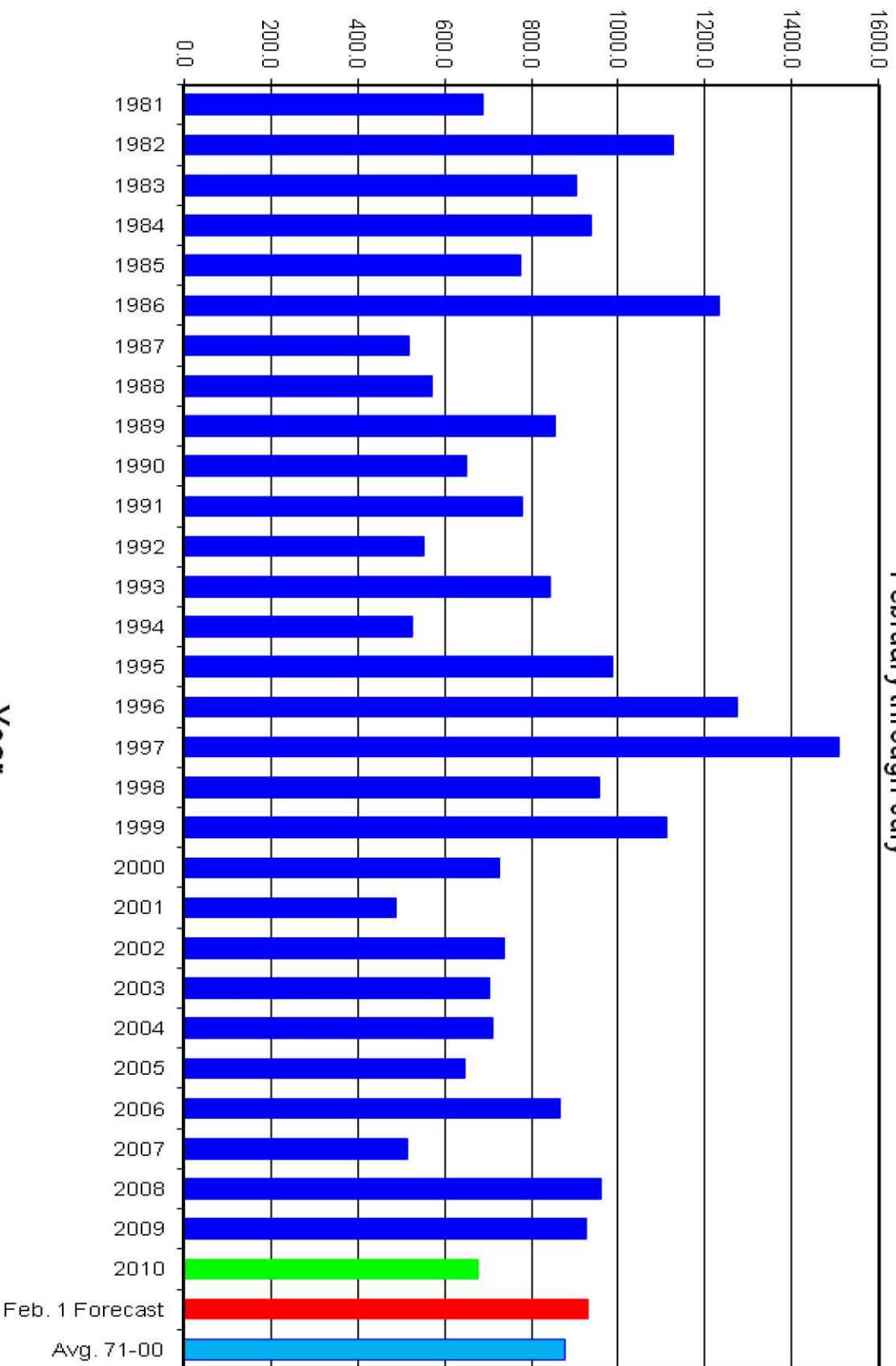


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# Unregulated Flow at Jackson February through July

Year

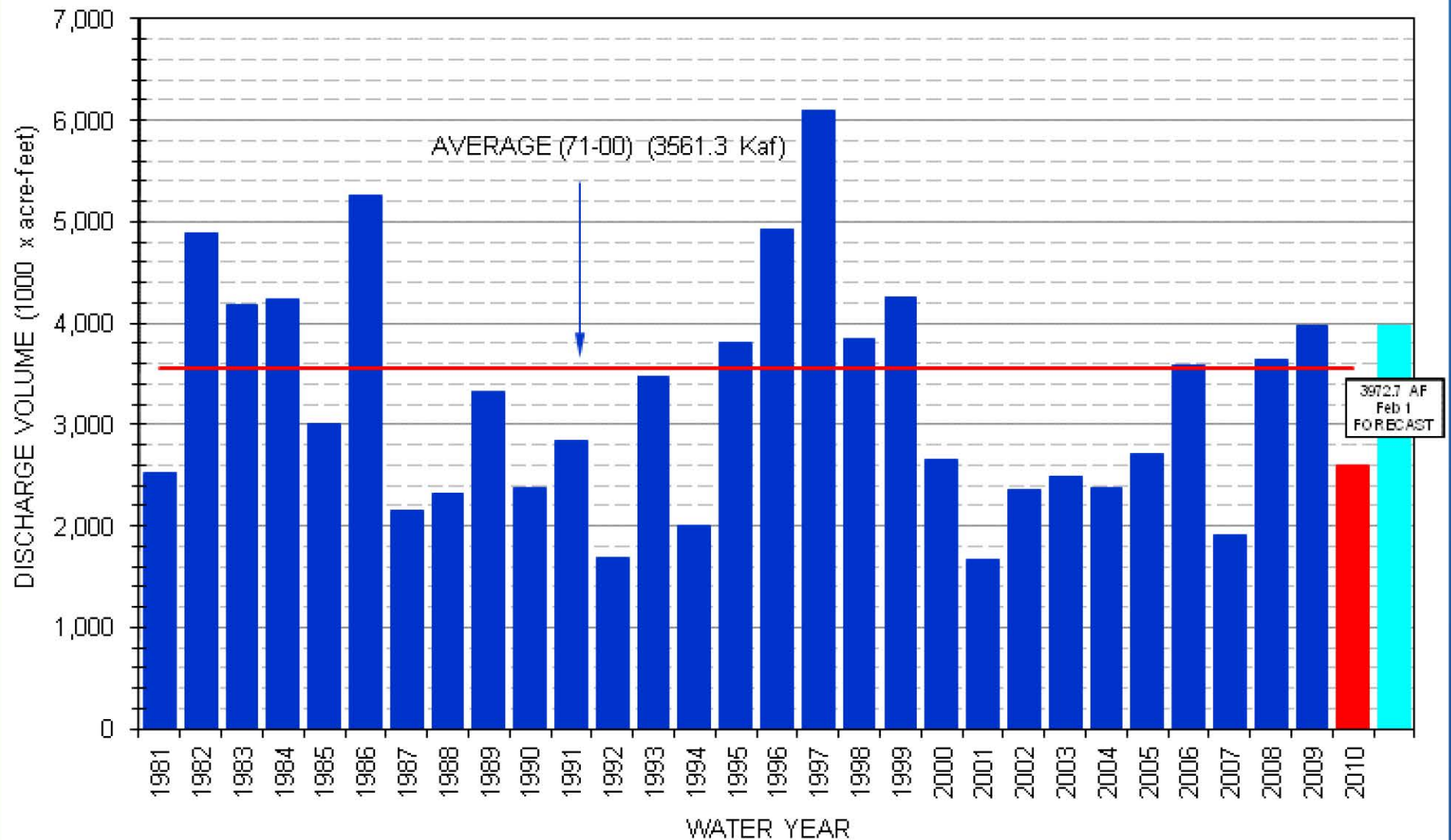
Accumulated Flow (1000 x acre-feet)



## HEISE UNREGULATED APRIL - JULY VOLUME

WATER YEAR 2009 WAS 111.7% OF AVERAGE

WATER YEAR 2010 WAS 73.0% OF AVERAGE



# RECLAMATION

## Idaho SNOTEL Snow/Precipitation Update Report

Based on Mountain Data from NRCS SNOTEL Sites

\*\*Provisional data, subject to revision\*\*

Data based on the first reading of the day (typically 00:00) for Sunday, February 13, 2011

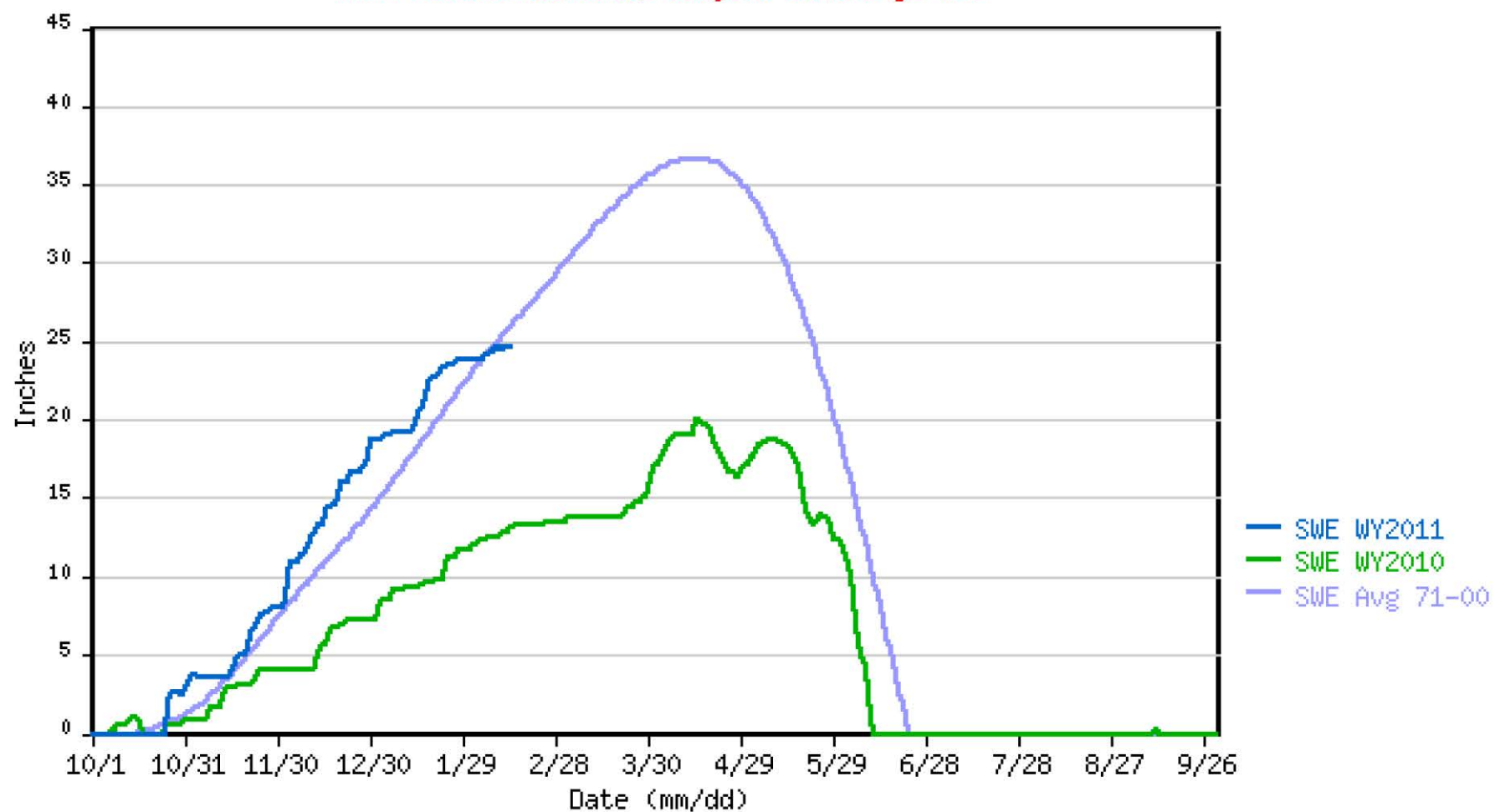
Basin	Elev	Snow Water Equivalent			Year-to-Date Precipitation		
Site Name	(ft)	Current (in)	Average (in)	Pct of Avg	Current (in)	Average (in)	Pct of Avg
HENRY'S FORK, TETON BASINS							
BLACK BEAR	8170	30.8	28.3	109	30.2	29	104
GRAND TARGHEE	9260	35.7	N/A	*	25.5	N/A	*
GRASSY LAKE	7265	25.5	25.8	99	28.4	27.5	103
ISLAND PARK	6290	13	12	108	15.9	13.9	114
LEWIS LAKE DIVIDE	7850	24.7	25.9	95	25.5	27.5	93
PHILLIPS BENCH	8200	21.9	20.8	105	23.2	21.6	107
PINE CREEK PASS	6720	14	12.4	113	19.6	15.5	126
WHITE ELEPHANT	7710	21.1	20.2	104	24.4	21.6	113
Basin-wide percent of		104			107		
SNAKE BASIN ABOVE PALISADES							
BASE CAMP	7030	14.6	14.2	103	17.6	16.4	107
BLIND BULL SUM	8650	21.7	20.3	107	15.5	16.9	92
COTTONWOOD CREEK	7670	19.4	15.8	123	26.2	20.4	128
EAST RIM DIVIDE	7930	11	9.6	115	9.5	8.9	107
GRANITE CREEK	6770	14.3	13.9	103	16.7	15.3	109
GRASSY LAKE	7265	25.5	25.8	99	28.4	27.5	103
GROS VENTRE SUMMIT	8750	11.3	10.2	111	11	9.5	116
GUNSIGHT PASS	9820	12.6	N/A	*	12.8	N/A	*
LEWIS LAKE DIVIDE	7850	24.7	25.9	95	25.5	27.5	93
LOOMIS PARK	8240	13.8	12.5	110	14.9	13	115
PHILLIPS BENCH	8200	21.9	20.8	105	23.2	21.6	107
SALT RIVER SUMMIT	7760	12.1	10.6	114	16.2	13.9	117
SNAKE RIVER STATION	6920	-M	14.3	*	-M	17.2	*
SPRING CREEK DIVIDE	9000	25.5	19.3	132	25.1	20	126
THUMB DIVIDE	7980	14.2	13.2	108	14.5	14	104
TOGWOTEE PASS	9580	21.6	18.5	117	23	18.4	125
TWO OCEAN PLATEAU	9240	24.1	20.8	116	20.1	20.4	99
WILLOW CREEK	8380	24.1	22.4	108	29.4	23.9	123
Basin-wide percent of		109			110		

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## LEWIS LAKE DIVIDE SNOTEL as of 02/13/2011

\*\*\* Provisional Data, Subject to Change \*\*\*

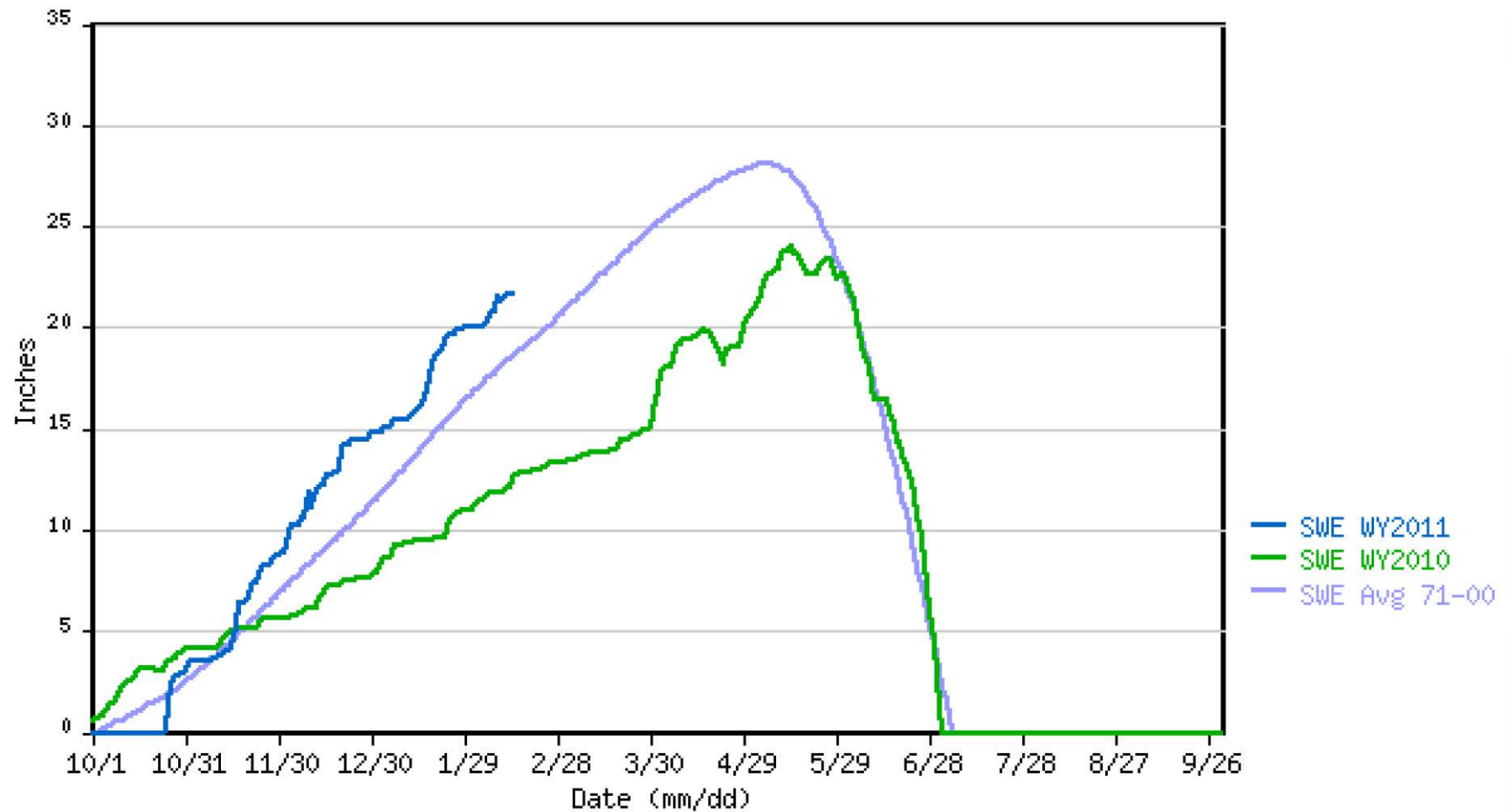


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TOGWOTEE PASS SNOTEL as of 02/13/2011

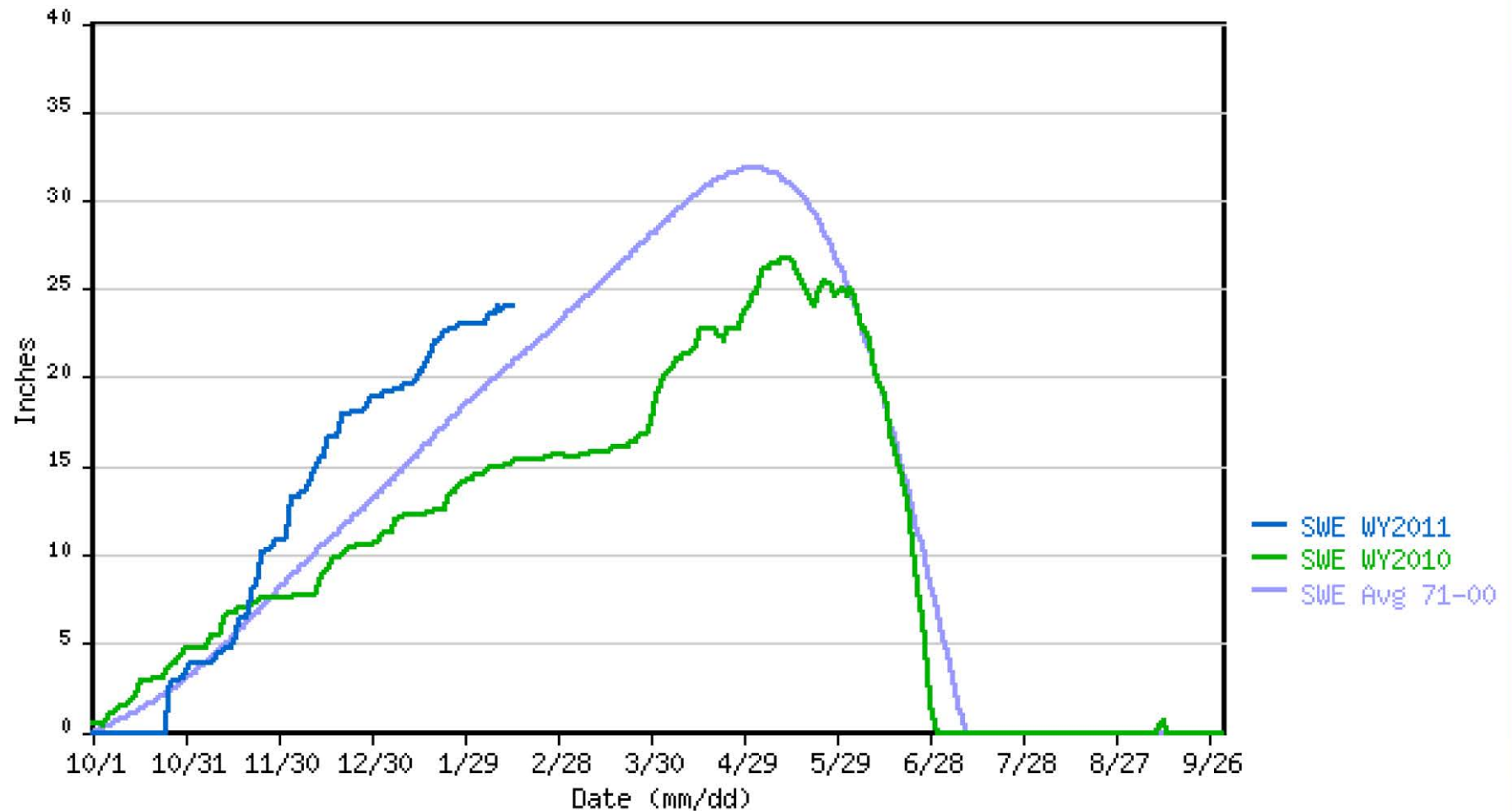
\*\*\* Provisional Data, Subject to Change \*\*\*



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## TWO OCEAN PLATEAU SNOTEL as of 02/13/2011

\*\*\* Provisional Data, Subject to Change \*\*\*



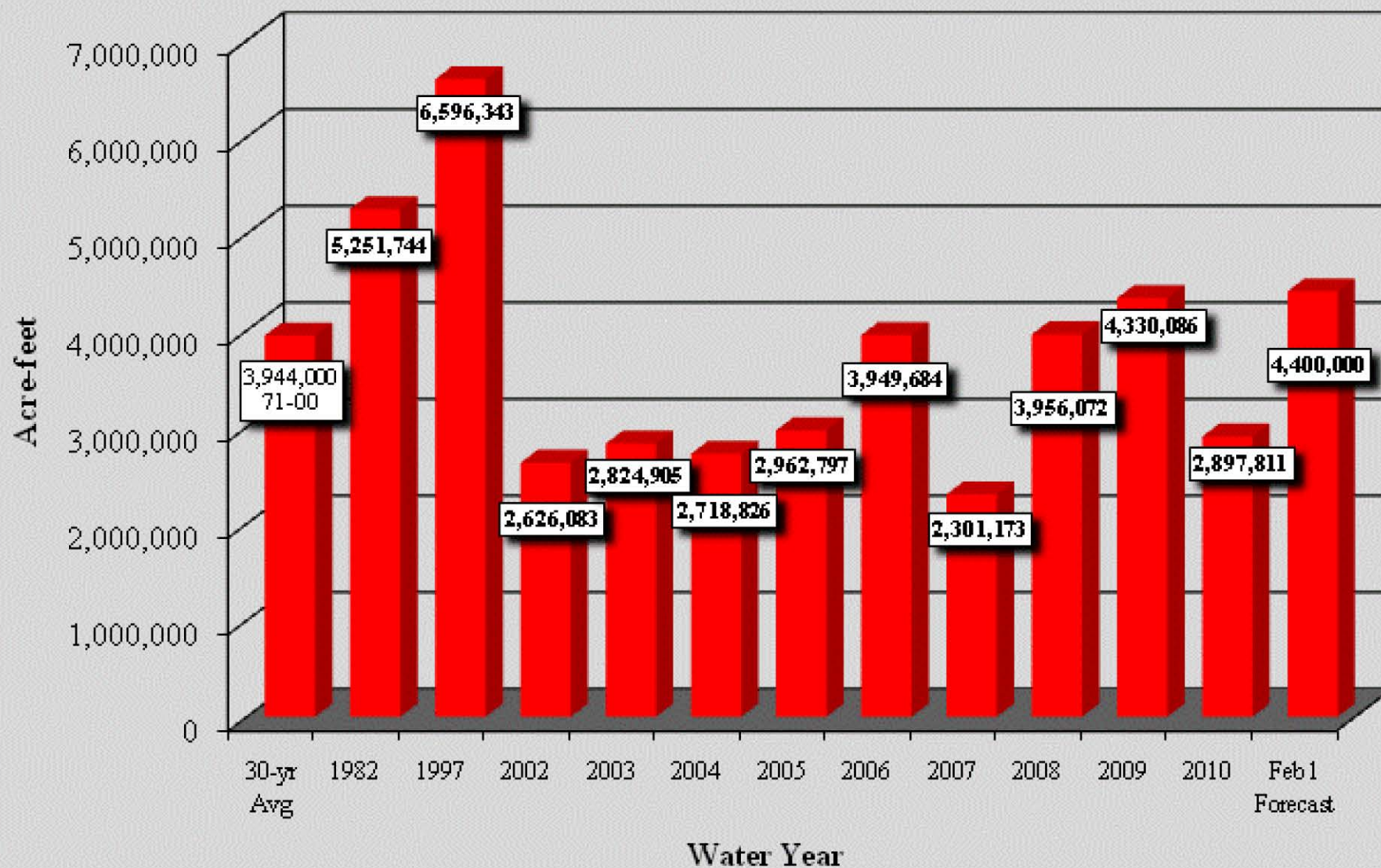
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Forecast  Points	February 1, 2011 Forecast of February - July Runoff			30 Yr. Feb - July Runoff Avg. <sup>2</sup>	Most Probable % of Avg.	Comparative Actual February - July Runoff			
	Reasonable Maximum <sup>1</sup>	Most Probable	Reasonable Minimum <sup>1</sup>			W. Yr. 2010	W. Yr. 2009	W. Yr. 2008	W. Yr. 2007
Snake River near Heise	5280	4400	3730	3944	112	2891	4331	3946	2301
Jackson Lake near Moran, WY	1028	929	831	878	106	708	961	995	545
Henry's Fork near Island Park, ID	286	248	219	296	<sup>3</sup> 84	219	279	253	243
Ririe Reservoir near Ririe, ID	104	94	<sup>5</sup> 69	92	103	44	69	48	31
Little Wood River near Carey, ID	104	92	<sup>5</sup> 74	101	<sup>4</sup> 92	53	72	60	45
Teton	533	482	431	466	104	402	479	488	290

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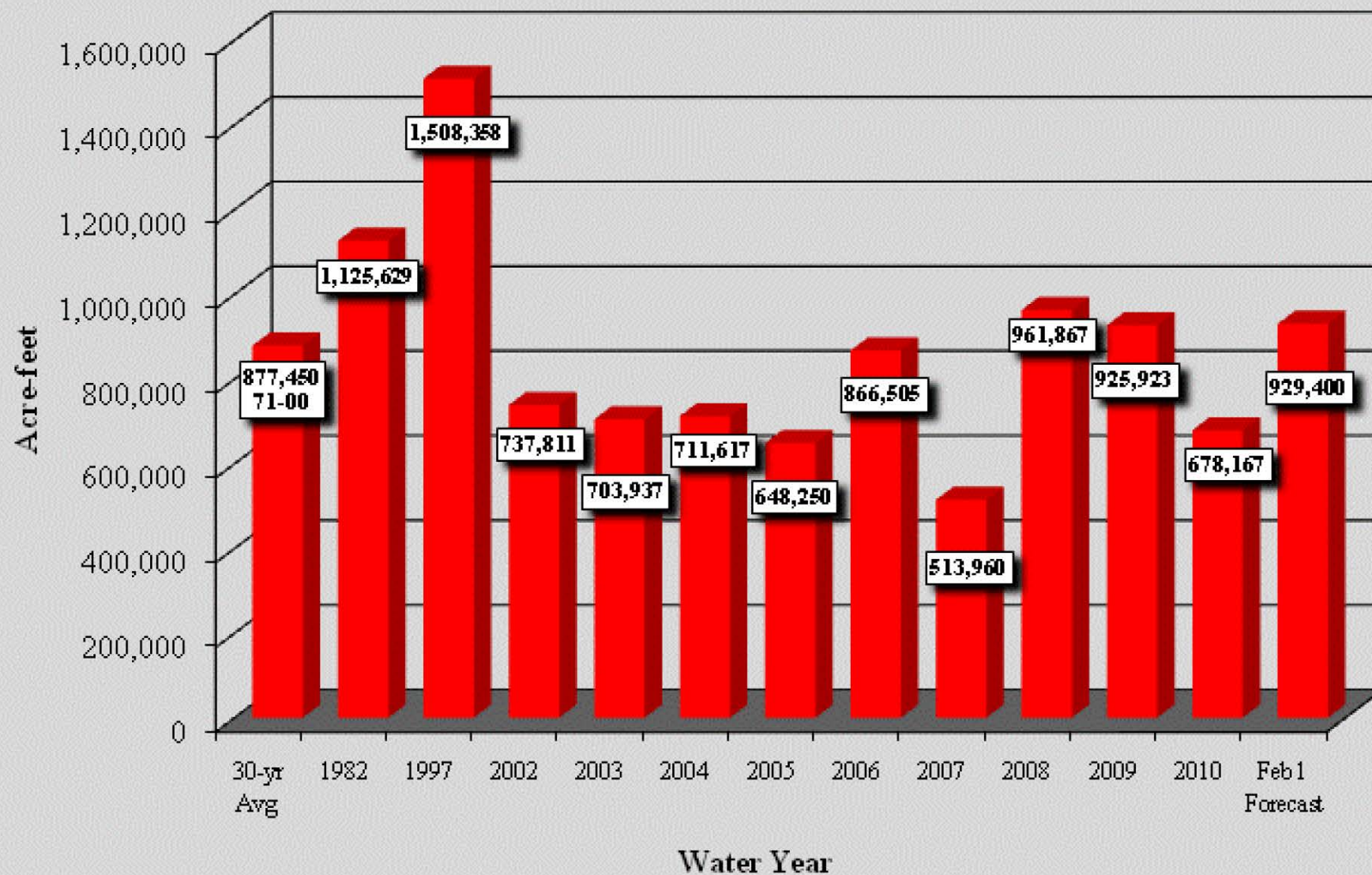


## February 1 Forecast for February-July Runoff - Heise



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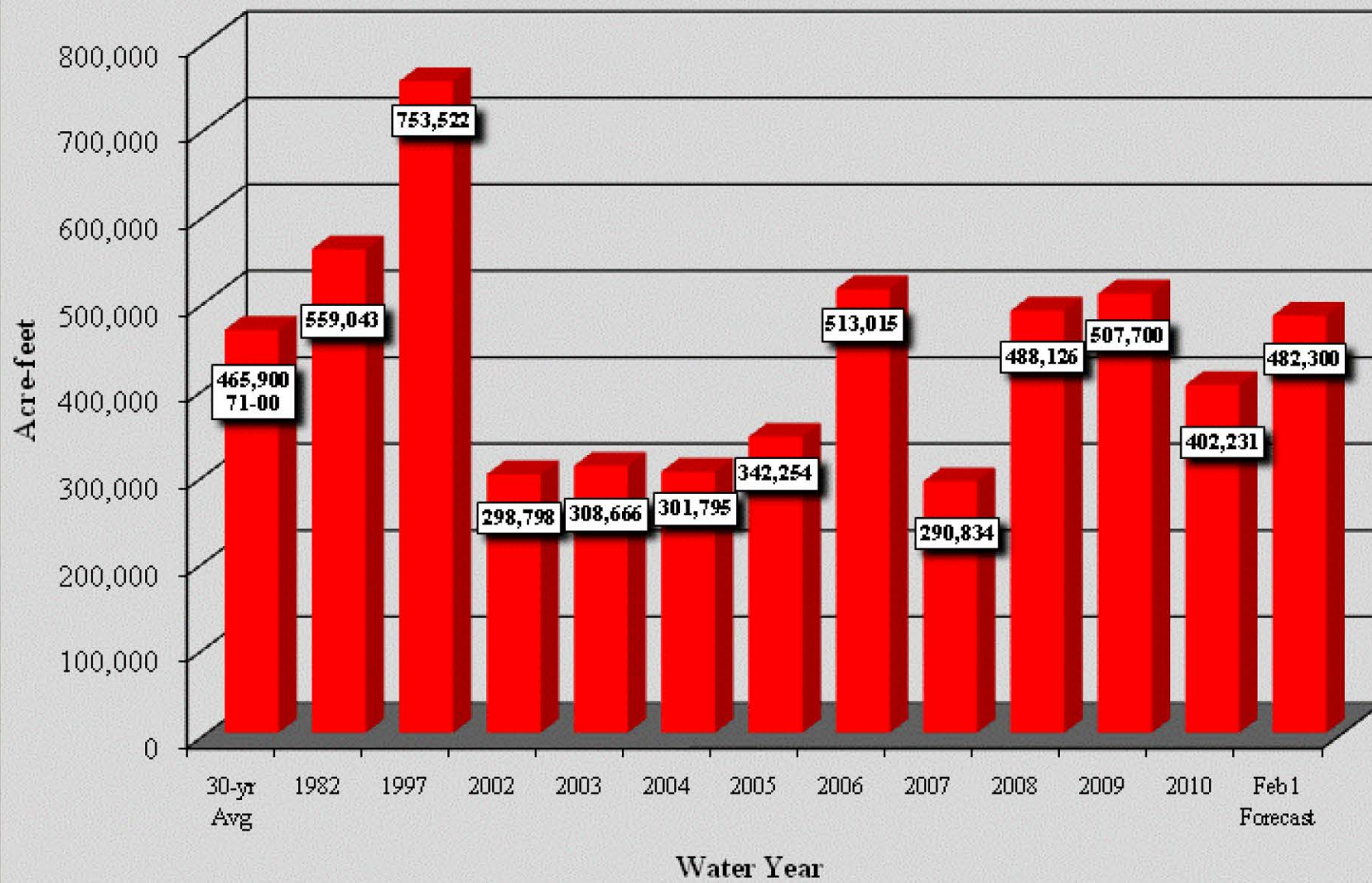
## February 1 Forecast for February-July Runoff - Jackson



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## February 1 Forecast for February-July Runoff - Teton



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**The End**

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