

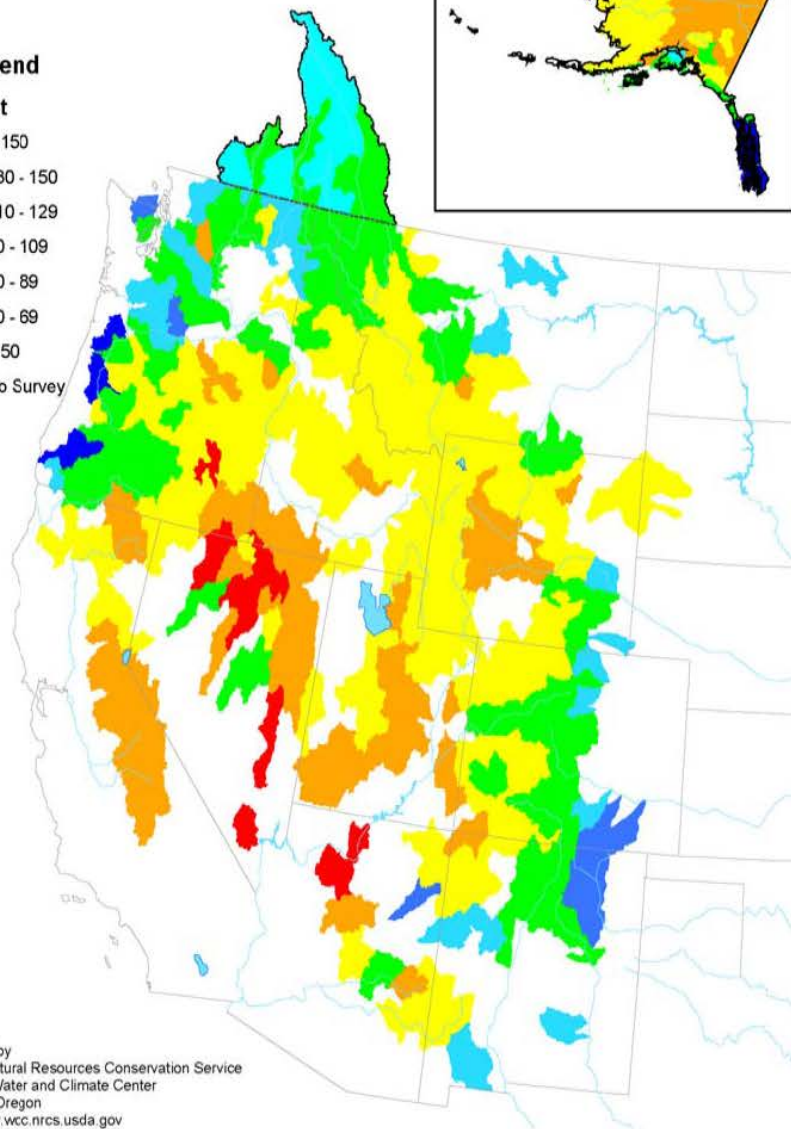
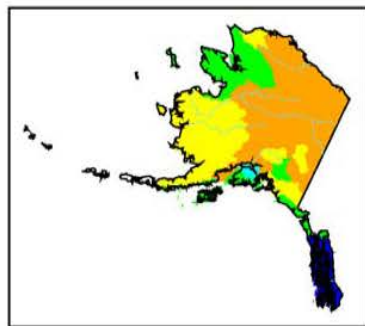
Idaho Water Supply Outlook Report MARCH 1, 2007

Ron Abramovich
Water Supply Specialist
USDA NRCS
Snow Survey
Boise, Idaho



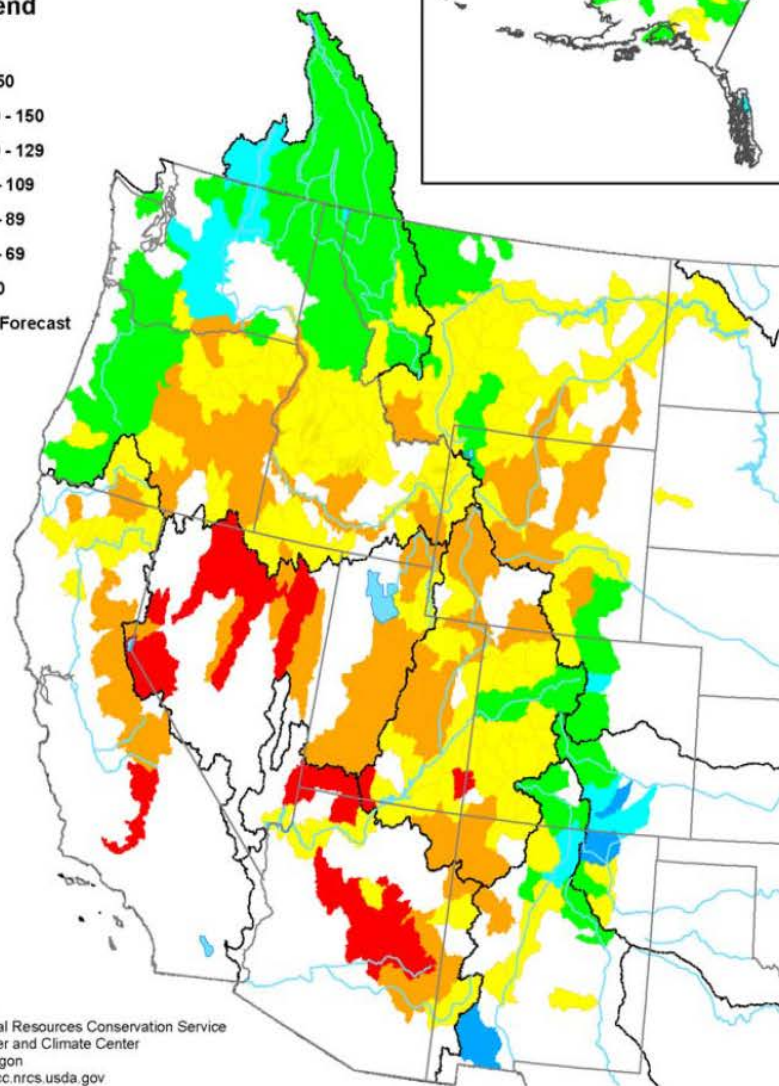
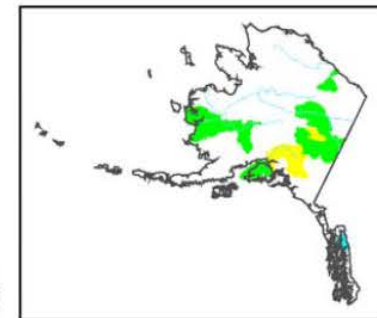
NRCS hydrologist, Jeff Anderson, uses large weight on a rope to knock a snow plug into propylene glycol antifreeze solution inside the SNOTEL precipitation gage at Mores Creek Summit, Idaho, February 28, 2007.

Mountain Snowpack as of March 1, 2007



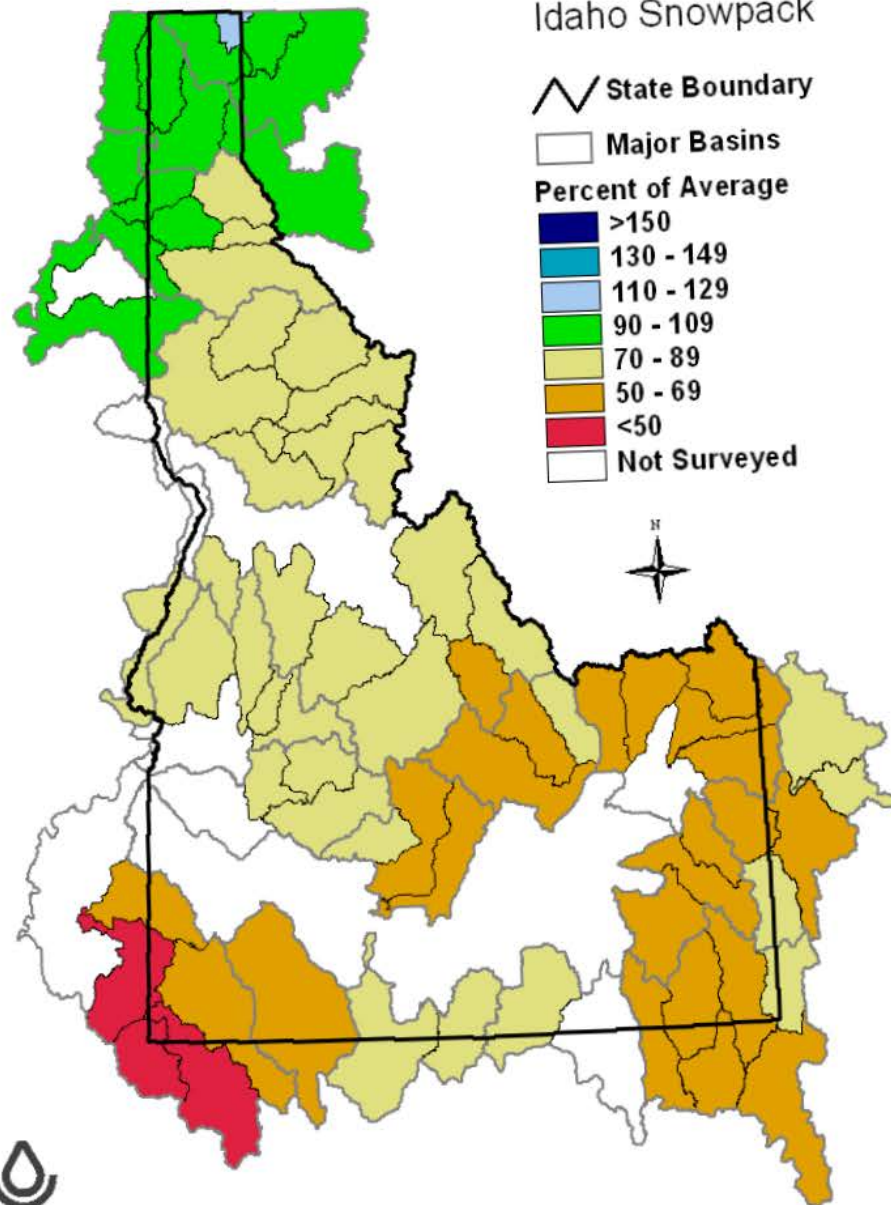
Prepared by
USDA, Natural Resources Conservation Service
National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Spring and Summer Streamflow Forecasts as of March 1, 2007

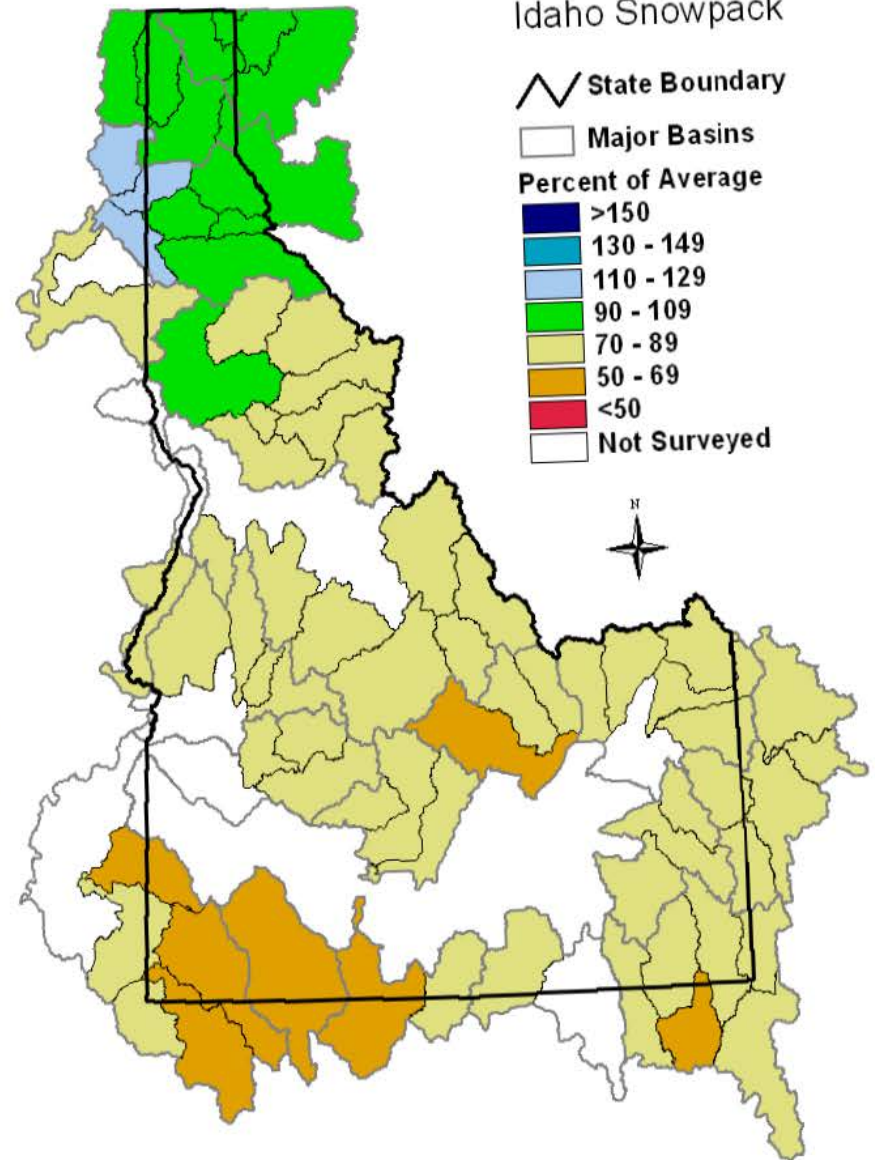


Prepared by
USDA, Natural Resources Conservation Service
National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

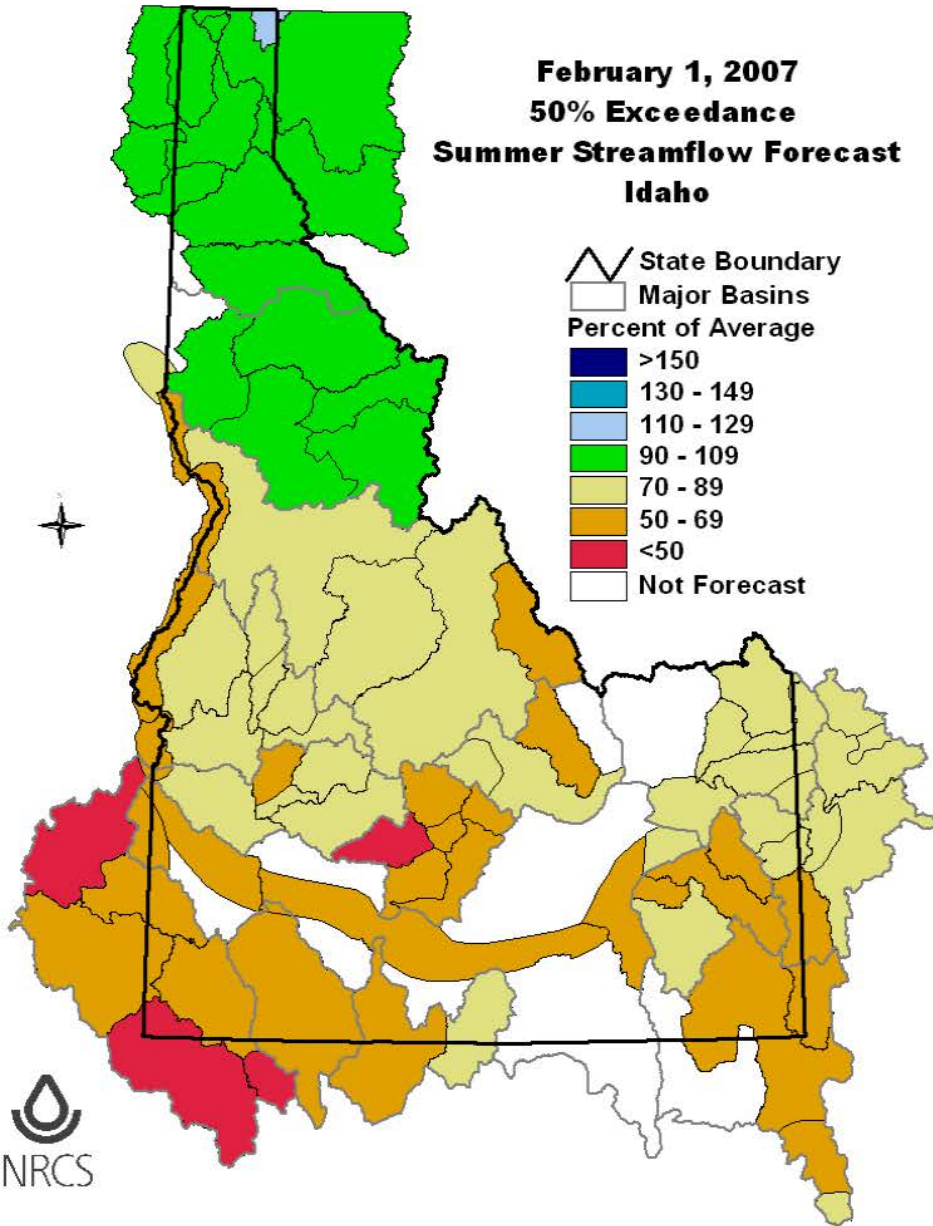
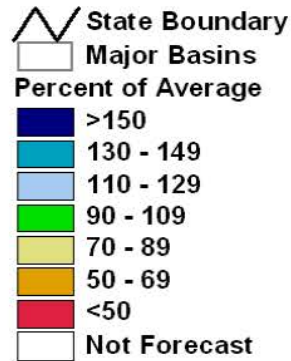
February 1, 2007
Idaho Snowpack



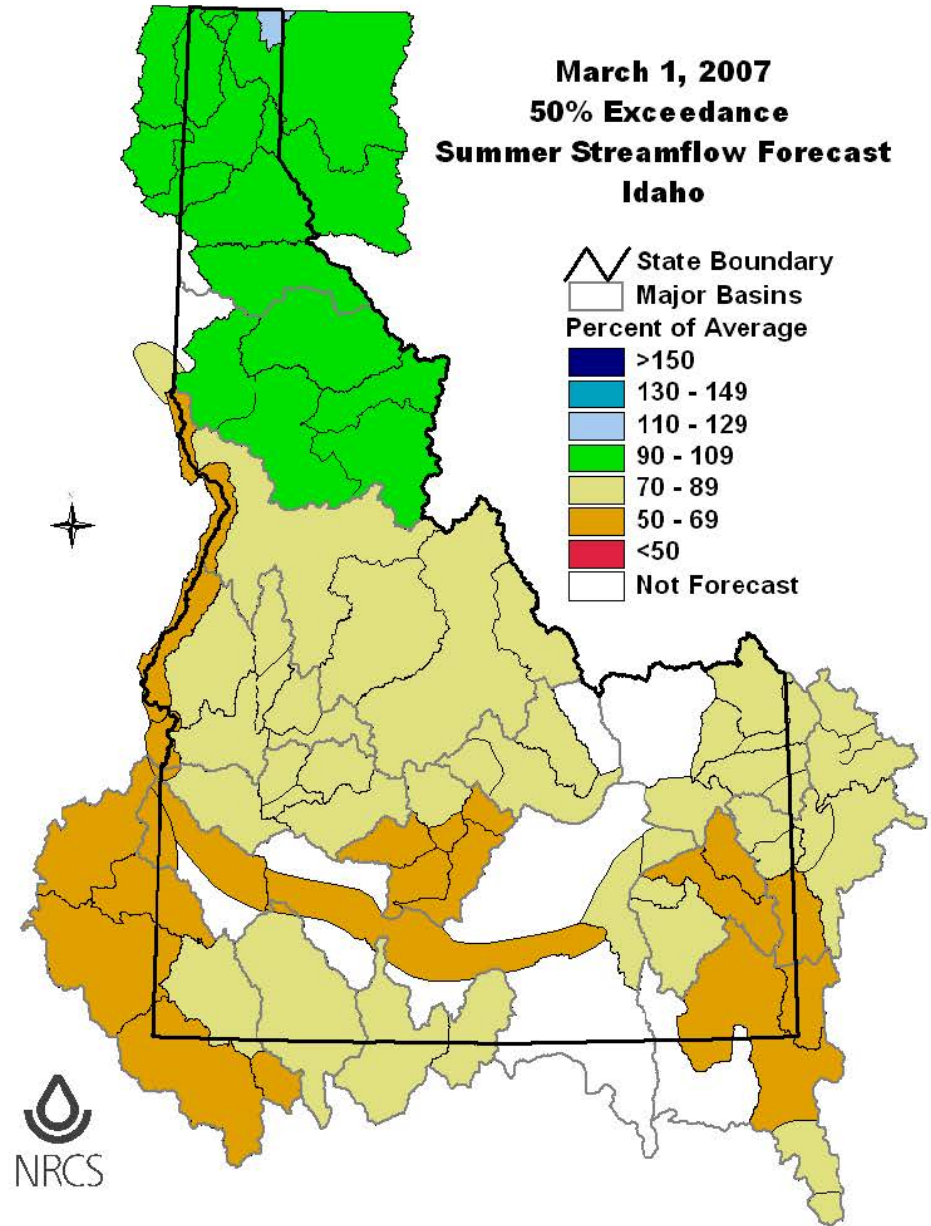
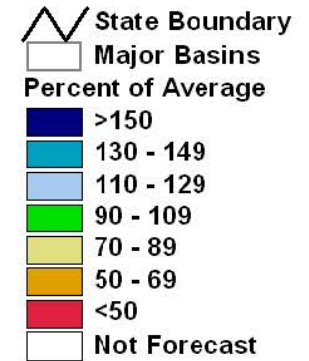
March 1, 2007
Idaho Snowpack



February 1, 2007
50% Exceedance
Summer Streamflow Forecast
Idaho



March 1, 2007
50% Exceedance
Summer Streamflow Forecast
Idaho



SNOTEL Snowpack Summary Report <i>for March 13, 2007</i>			
Region or Basin	March 13, 2007 SWE as % of Average	Change in % Points From February 14	March 13, 2007 SWE as % of Seasonal Peak
IDAHO PANHANDLE REGION	86	+3	78
CLEARWATER BASIN	84	+4	76
SALMON BASIN	78	+3	68
WEISER BASIN	78	+4	72
PAYETTE BASIN	79	+5	71
BOISE BASIN	71	+2	63
BIG WOOD BASIN	70	+3	62
LITTLE WOOD BASIN	63	+2	57
BIG LOST BASIN	65	+6	55
LITTLE LOST, BIRCH BASINS	75	+2	61
MEDICINE LODGE, BEAVER, CAMAS BASINS	77	+5	66
HENRYS FORK, TETON BASINS	79	+6	69
SNAKE BASIN ABOVE PALISADES	74	+2	64
WILLOW, BLACKFOOT, PORTNEUF BASINS	70	+4	65
OAKLEY BASIN	87	+10	80
SALMON FALLS BASIN	78	+11	71
BRUNEAU BASIN	75	+12	69
OWYHEE BASIN	58	+9	53
BEAR RIVER BASIN	71	+8	62

SWE = Snow Water Equivalent

SNOTEL Precipitation Summary Report

for February 2007 and March 1-13, 2007

Region or Basin	<u>February</u> Precipitation % of Average	<u>March 1 -13</u> Precipitation as % of Monthly Total
PANHANDLE REGION	93	38
CLEARWATER BASIN	97	32
SALMON BASIN	99	18
WEISER BASIN	104	15
PAYETTE BASIN	100	15
BOISE BASIN	85	26
BIG WOOD BASIN	83	20
LITTLE WOOD BASIN	78	13
BIG LOST BASIN	87	12
LITTLE LOST, BIRCH BASINS	111	15
MEDICINE LODGE, BEAVER, CAMAS BASINS	111	19
HENRYS FORK, TETON BASINS	113	22
SNAKE BASIN ABOVE PALISADES	97	21
WILLOW, BLACKFOOT, PORTNEUF BASINS	103	23
OAKLEY BASIN	106	44
SALMON FALLS BASIN	107	38
BRUNEAU BASIN	116	30
OWYHEE BASIN	108	34
BEAR RIVER BASIN	107	31

IDAHO RESERVOIR STORAGE

Usable Contents

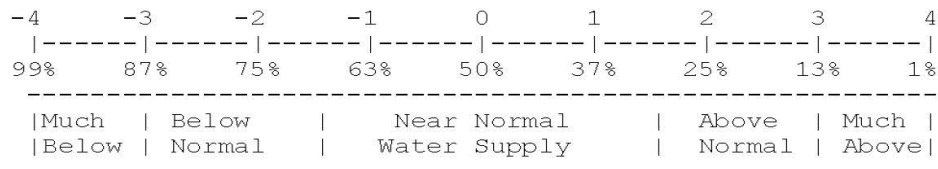
Reservoir (s)	Percent of Capacity February 28, 2007	Percent of Average February 28, 2007
Bear Lake	39	60
Salmon Falls	43	130
Blackfoot	50	77
Coeur d' Alene	53	88
Oakley	57	137
Magic	65	139
Boise (3)	68	115
Mackay	70	101
Dworshak	72	110
Payette (2)	72	116
Owyhee	74	109
Palisades & Jackson (2)	75	111
American Falls	85	111
Little Wood	92	156

Idaho Surface Water Supply Index (SWSI)

For January 1 and February 1 and March 1, 2007

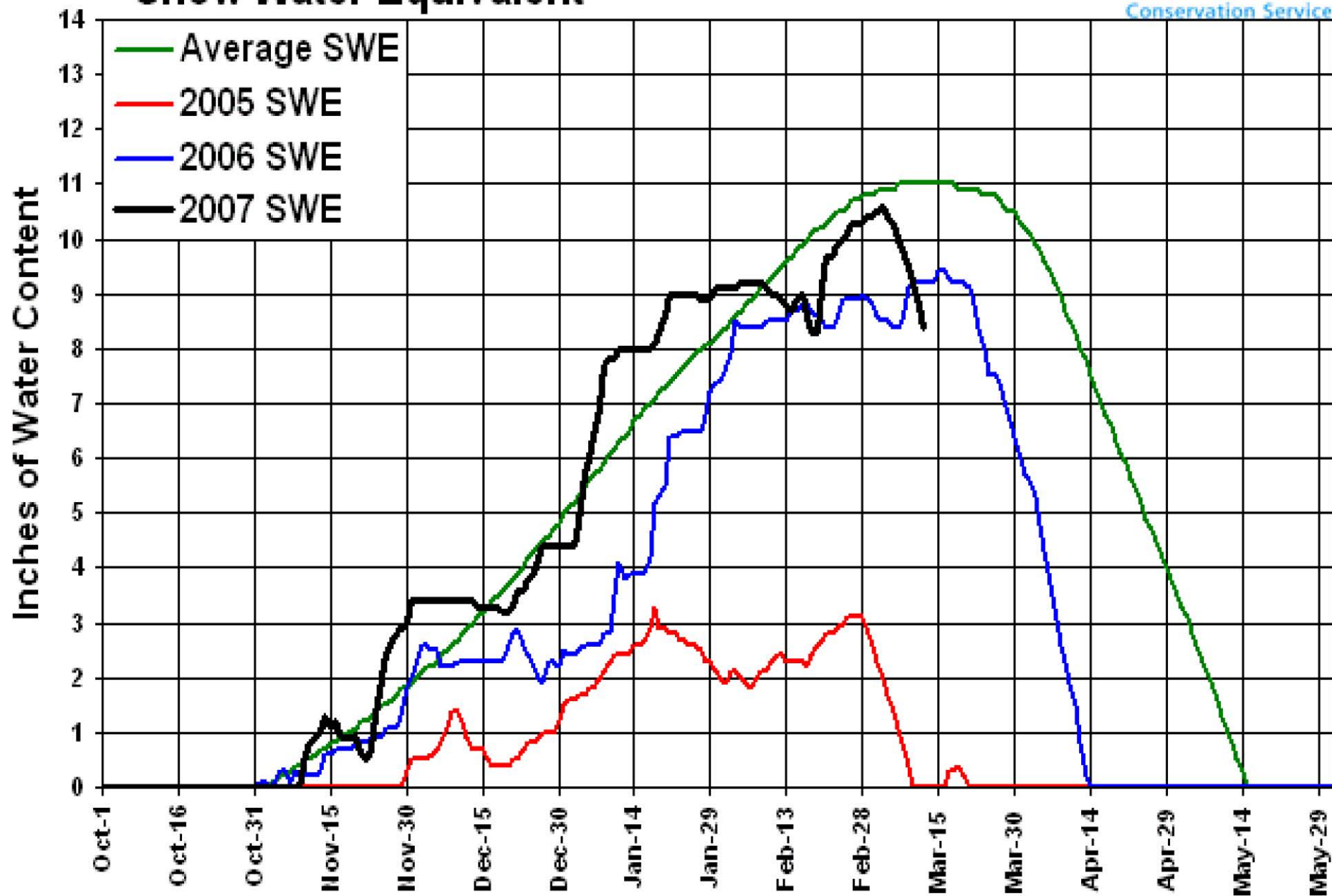
BASIN or/ REGION	January SWSI Value	February SWSI Value	Mach SWSI Value	Agricultural Surface Water Supply Shortage May Occur When SWSI is Less Than
PANHANDLE	-1.1	-0.5	-0.3	NA
CLEARWATER	-1.3	0.1	1.3	NA
SALMON	0.2	-0.5	-0.5	NA
WEISER	0.2	-1.4	-0.9	NA
PAYETTE	0.0	-0.9	-0.2	NA
BOISE	0.2	-0.5	0.2	-2.0
BIG WOOD	-0.2	-0.7	-0.2	-0.2
LITTLE WOOD	0.5	-0.7	0.0	-1.8
BIG LOST	0.0	-1.1	-0.5	-0.2
LITTLE LOST	0.5	-2.0	-0.5	-0.5
HENRYS FORK	-0.1	-1.3	-0.3	-3.3
SNAKE –Heise	0.0	-0.9	0.2	-1.8
OAKLEY	1.1	0.2	0.7	-1.0
SALMON FALLS	0.9	0.1	0.5	-1.5
BRUNEAU	-1.1	-1.1	-1.1	NA
BEAR RIVER	-1.7	-1.8	-2.1	-3.3

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION



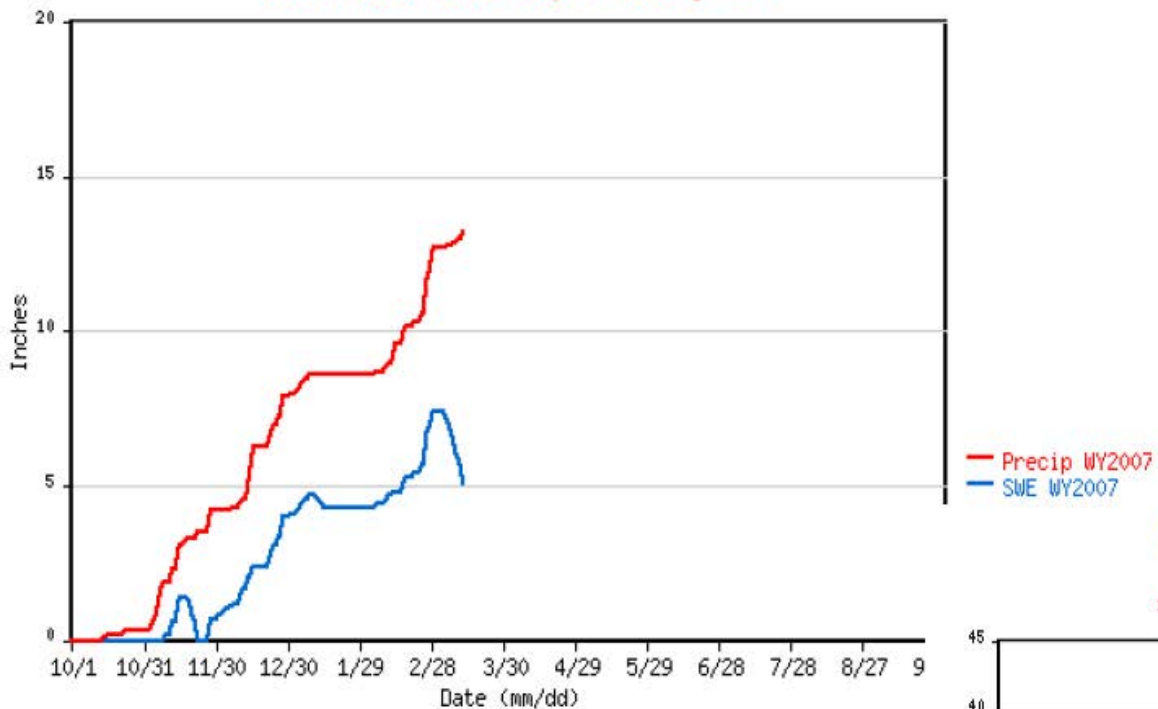
Sherwin SNOTEL El. 3200

Snow Water Equivalent



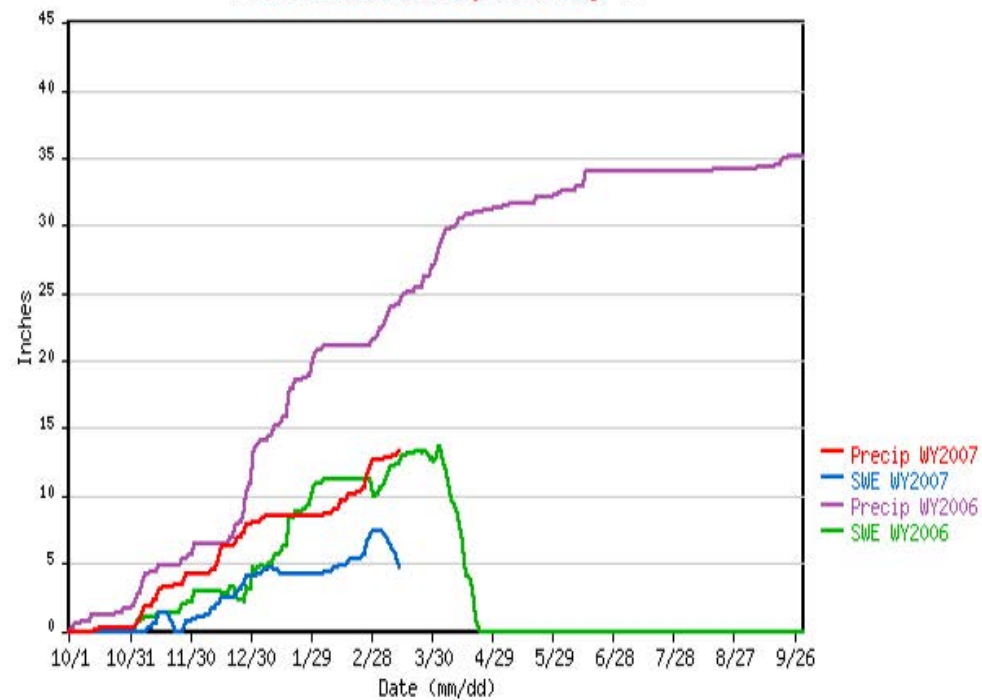
VAN WYCK SNOTEL for Water Year 2007

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



VAN WYCK SNOTEL as of 03/14/2007

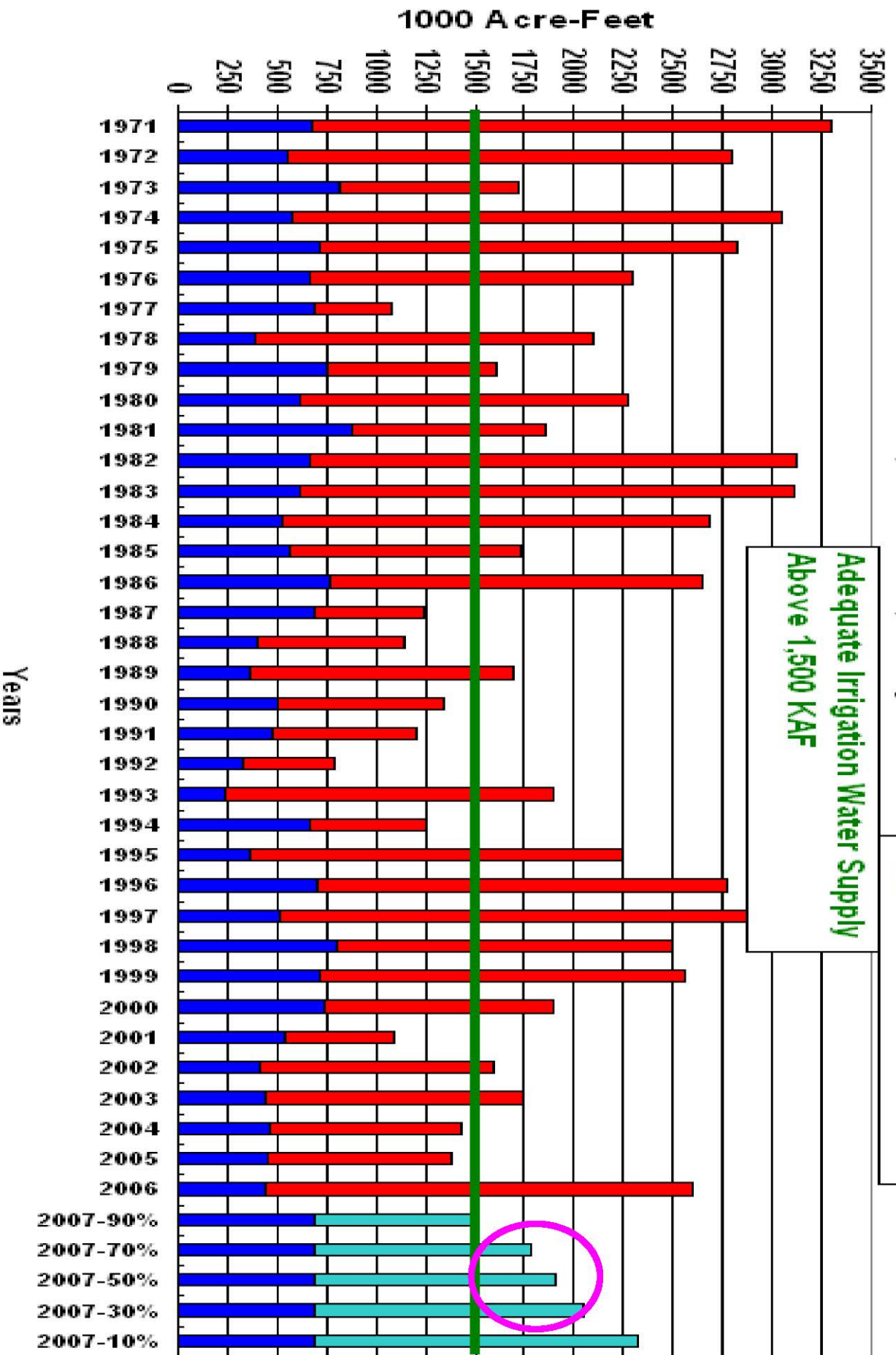
*** Provisional Data, Subject to Change ***



March 1 Boise Basin Surface Water Supply Index (SWSI)

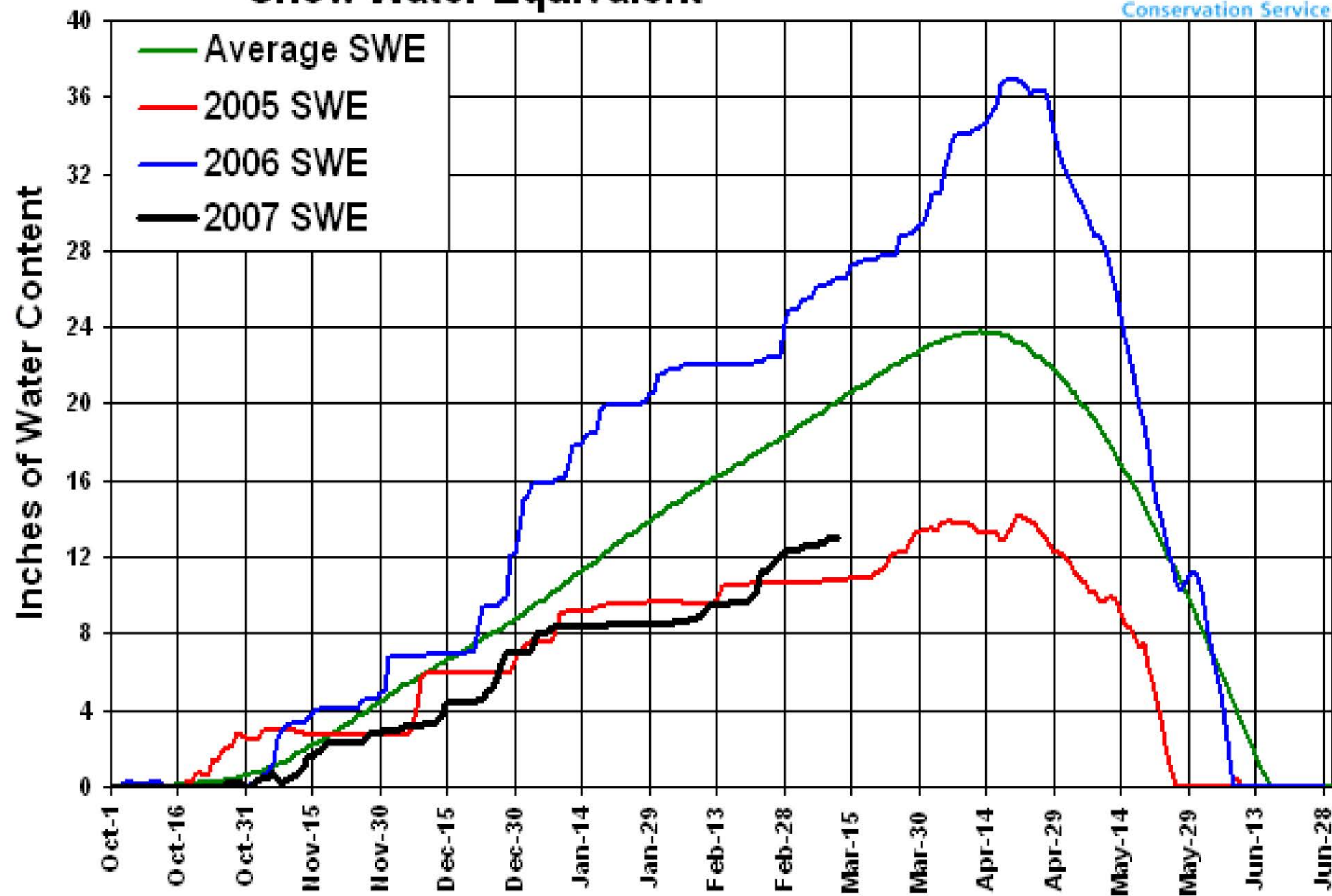
Boise River near Boise & Anderson, Arrowrock, Lucky Peak

■ Streamflow Apr-Sep
■ Reservoir 28-Feb



Lost - Wood Divide SNOTEL El. 7900

Snow Water Equivalent

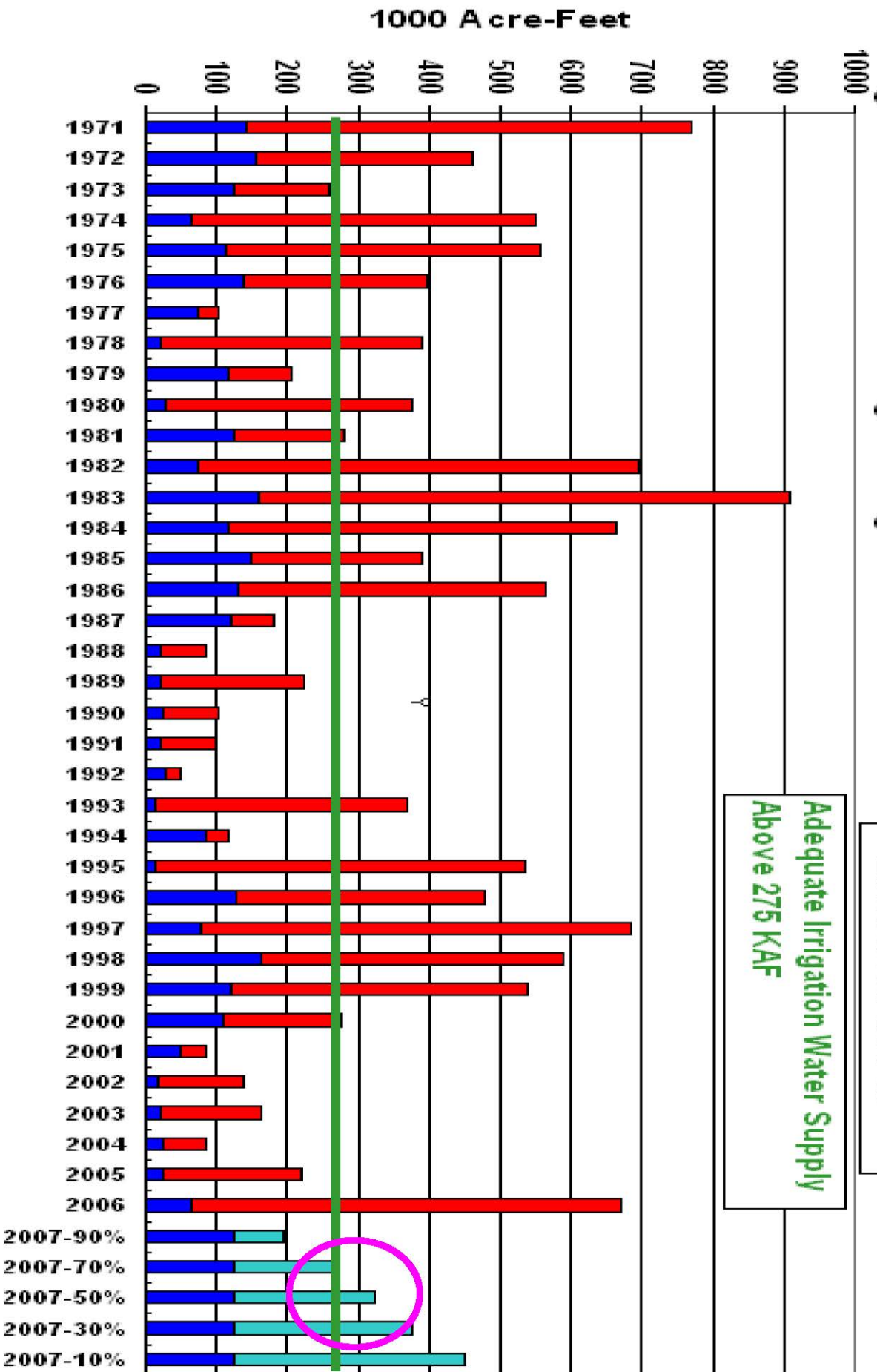


March 1 Big Wood Surface Water Supply Index (SWSI)

Big Wood River below Magic & Magic Reservoir

■ Streamflow Apr-Sep
■ Reservoir 28-Feb

Adequate Irrigation Water Supply
Above 275 KAF

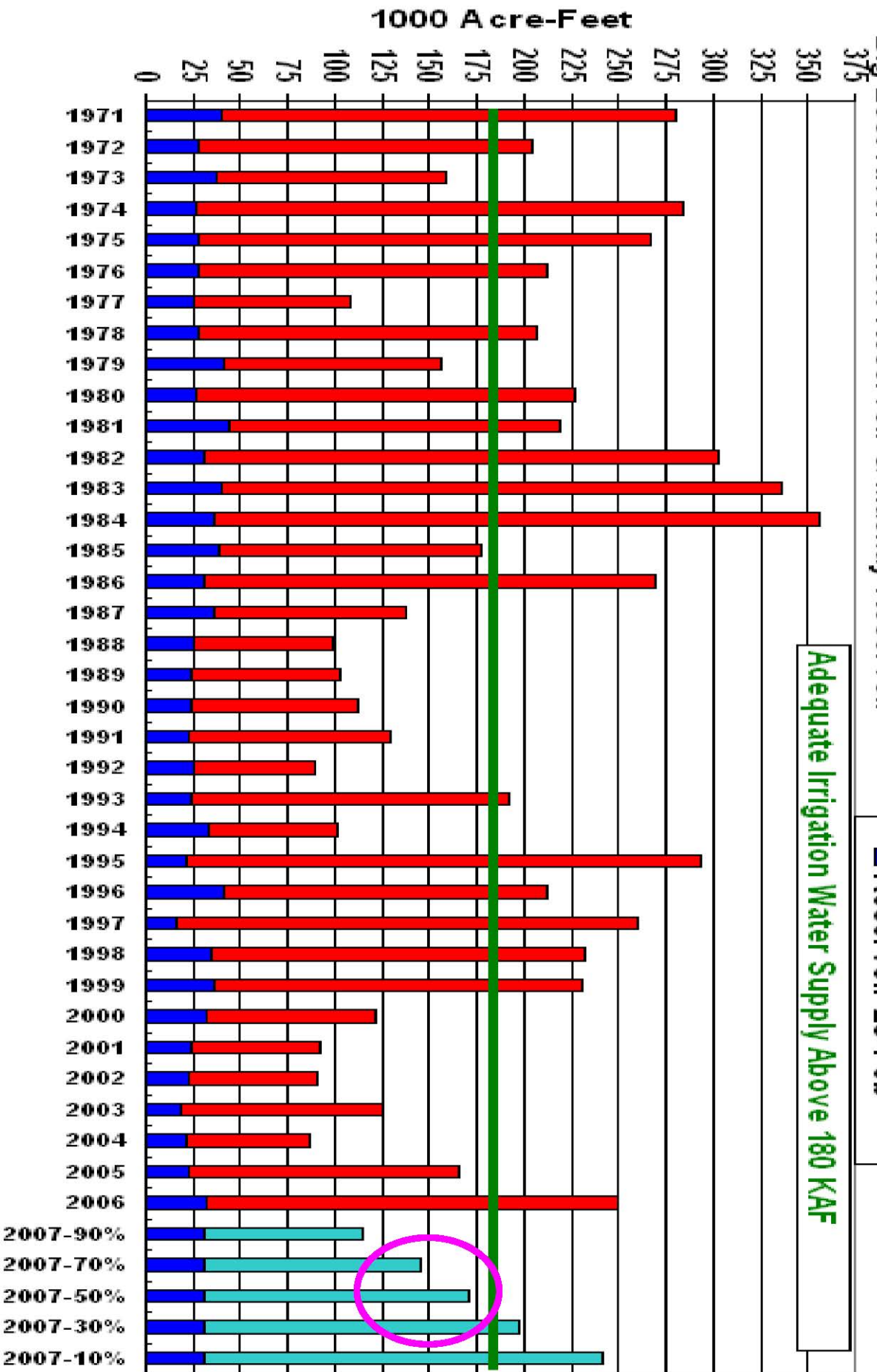


March 1 Big Lost Surface Water Supply Index (SWSI)

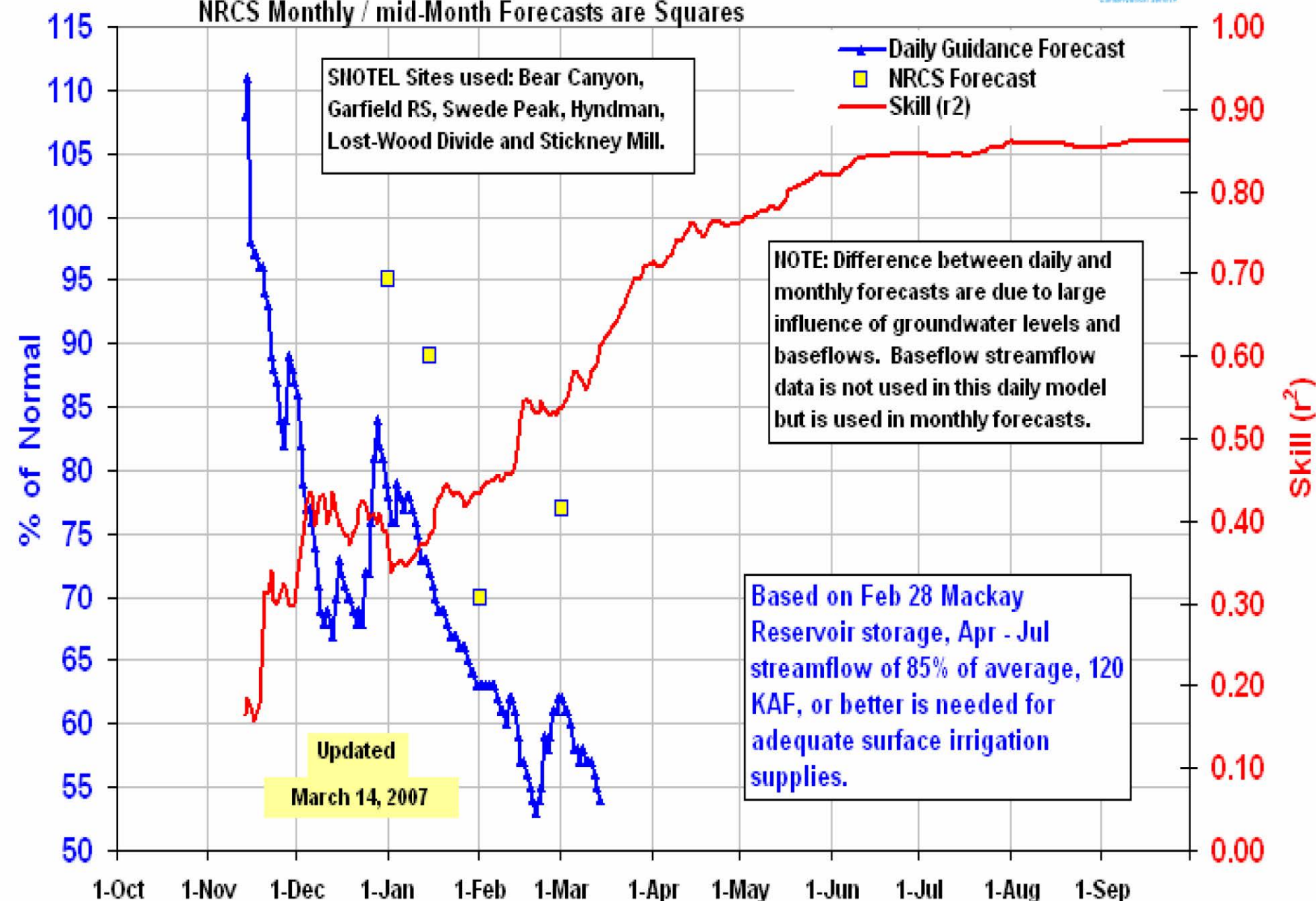
Big Lost River below Reservoir & Mackay Reservoir

■ Streamflow Apr-Sep
■ Reservoir 28-Feb

Adequate Irrigation Water Supply Above 180 KAF



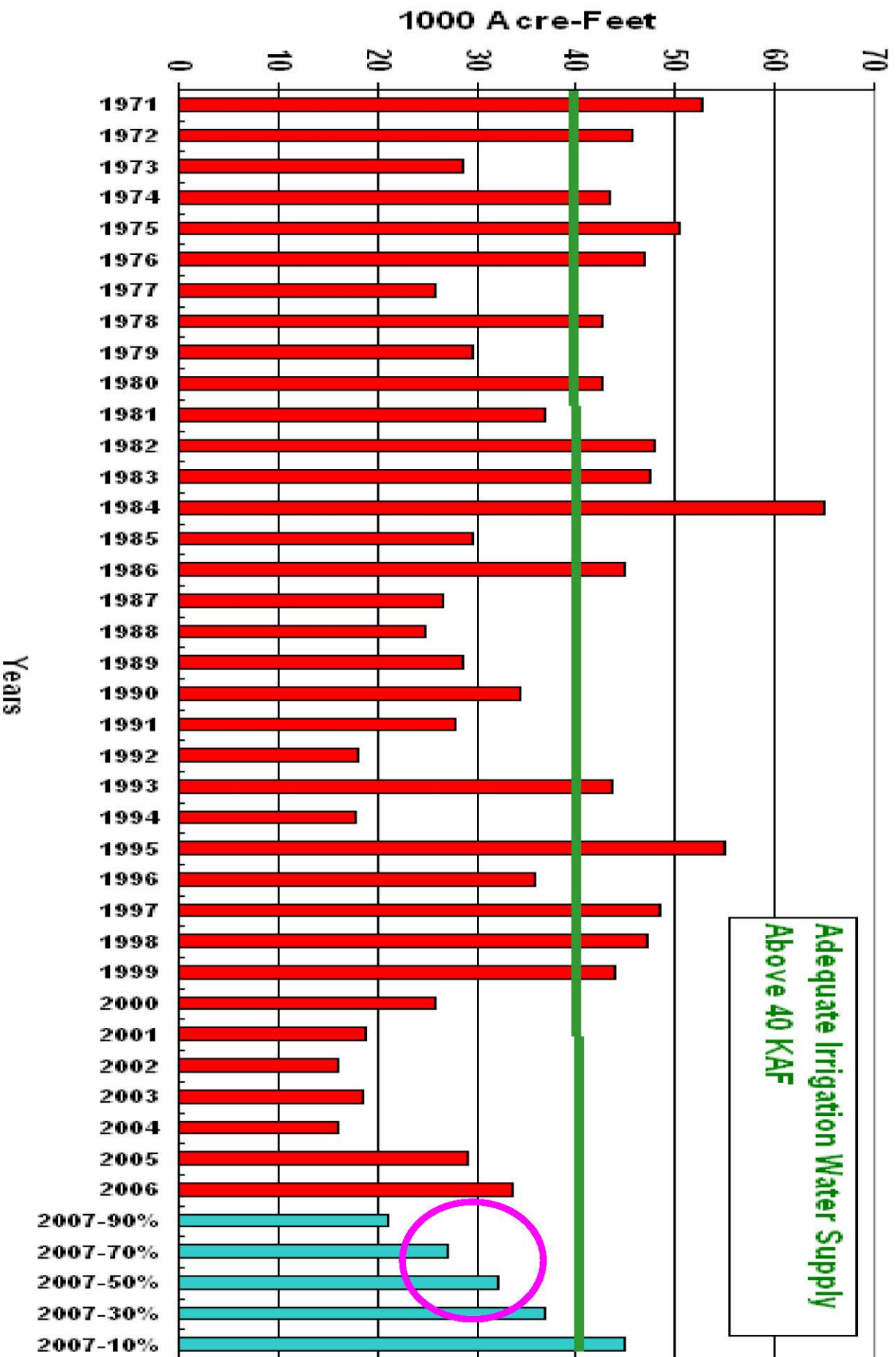
Big Lost River below Mackay Reservoir: Apr - Jul Volume, NRCS Monthly / mid-Month Forecasts are Squares



March 1 Surface Water Supply Index (SWSI)

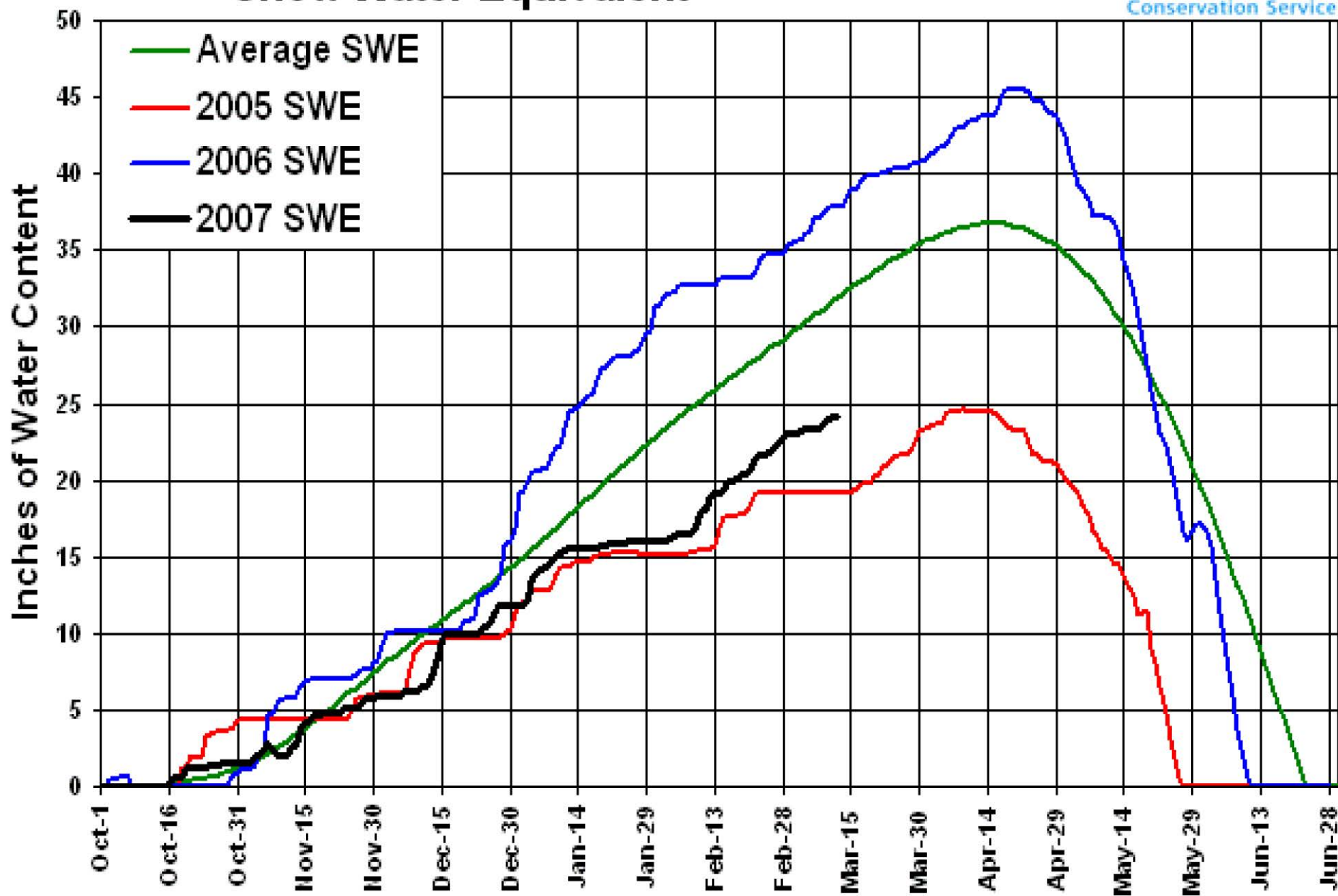
Little Lost River below Wet Creek

Streamflow Apr-Sep

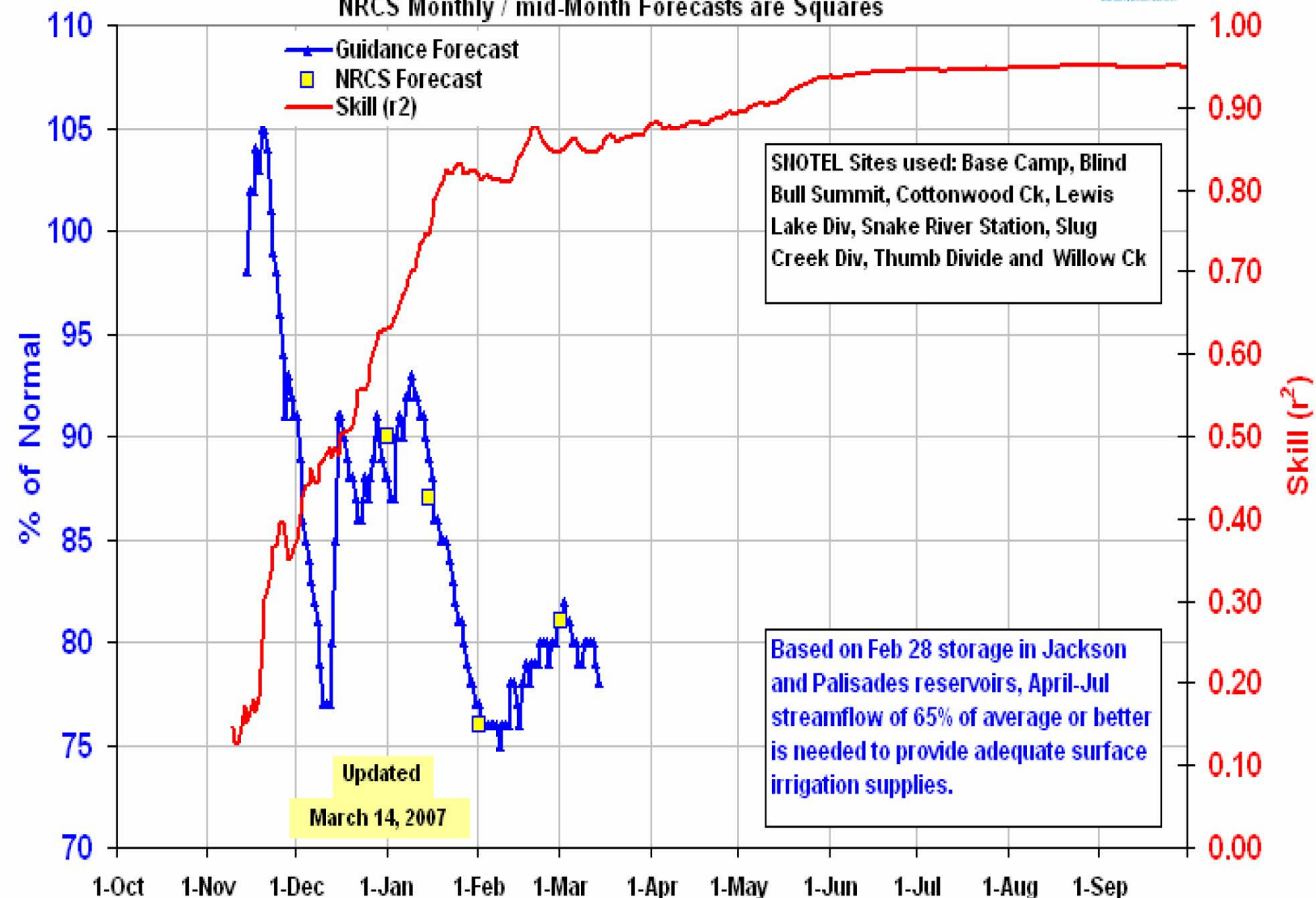


Lewis Lake Divide SNOTEL EI. 7850

Snow Water Equivalent



Snake River near Heise: Apr - Jul Volume,
NRCS Monthly / mid-Month Forecasts are Squares



March 1 Surface Water Supply Index (SWSI)

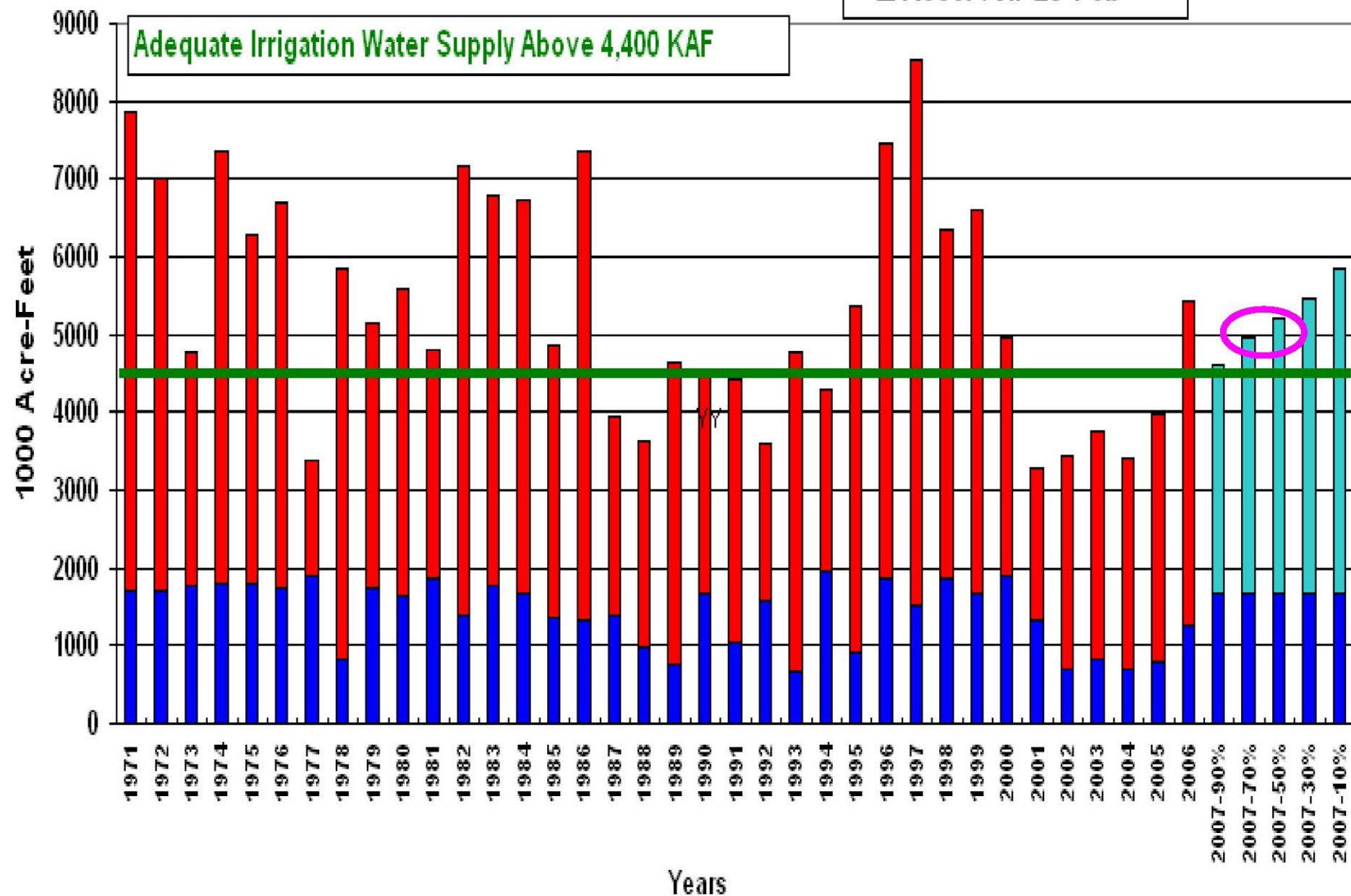
Snake River near Heise & Jackson and Palisades Reservoirs

Streamflow Apr-Sep

Reservoir 28-Feb

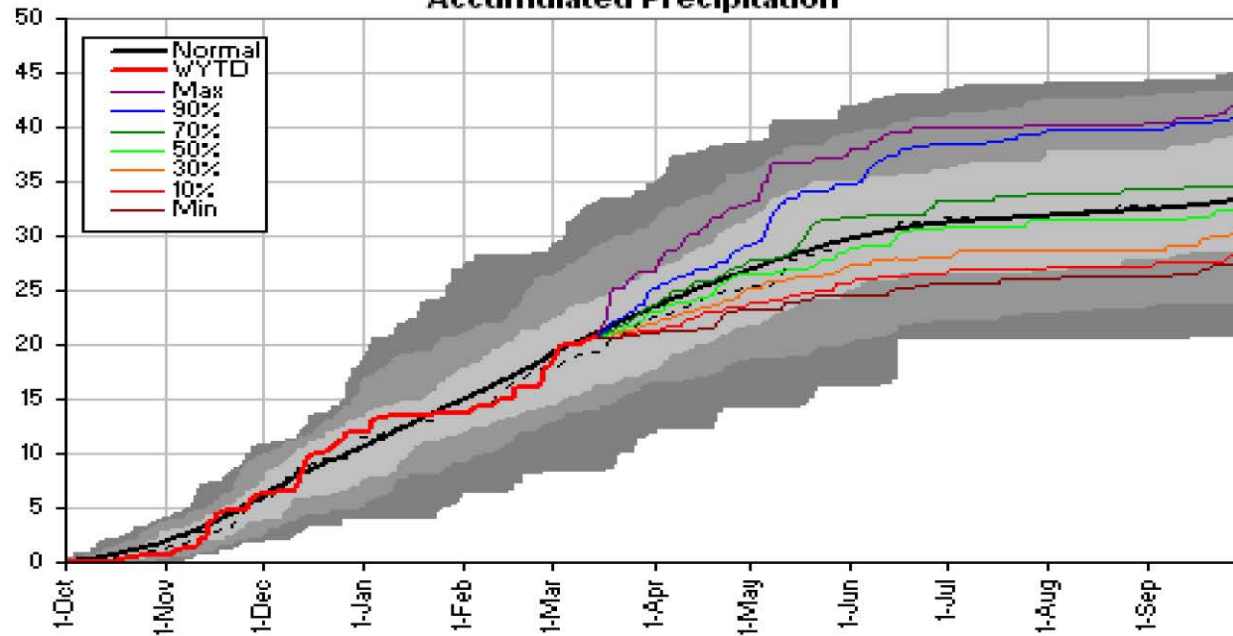


Adequate Irrigation Water Supply Above 4,400 KAF

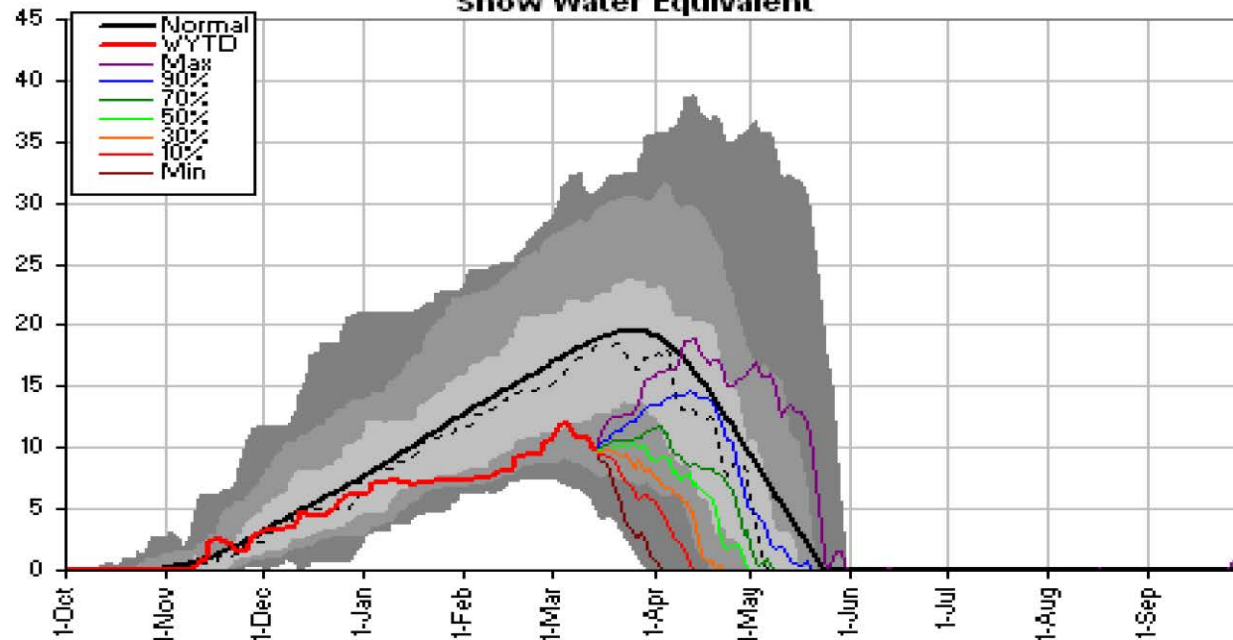


South Mtn. (16g01s)

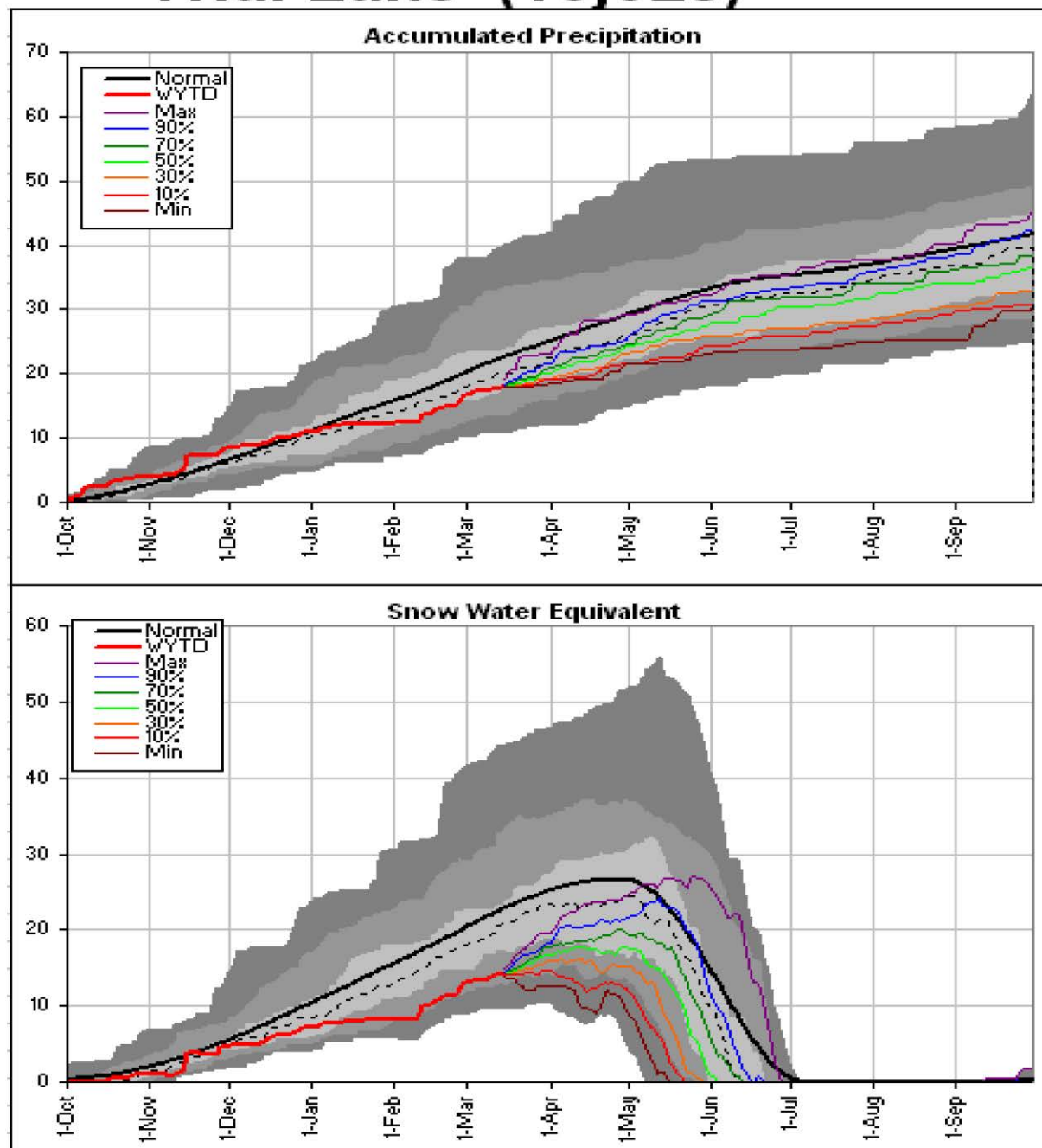
Accumulated Precipitation



Snow Water Equivalent



Trial Lake (10j52s)



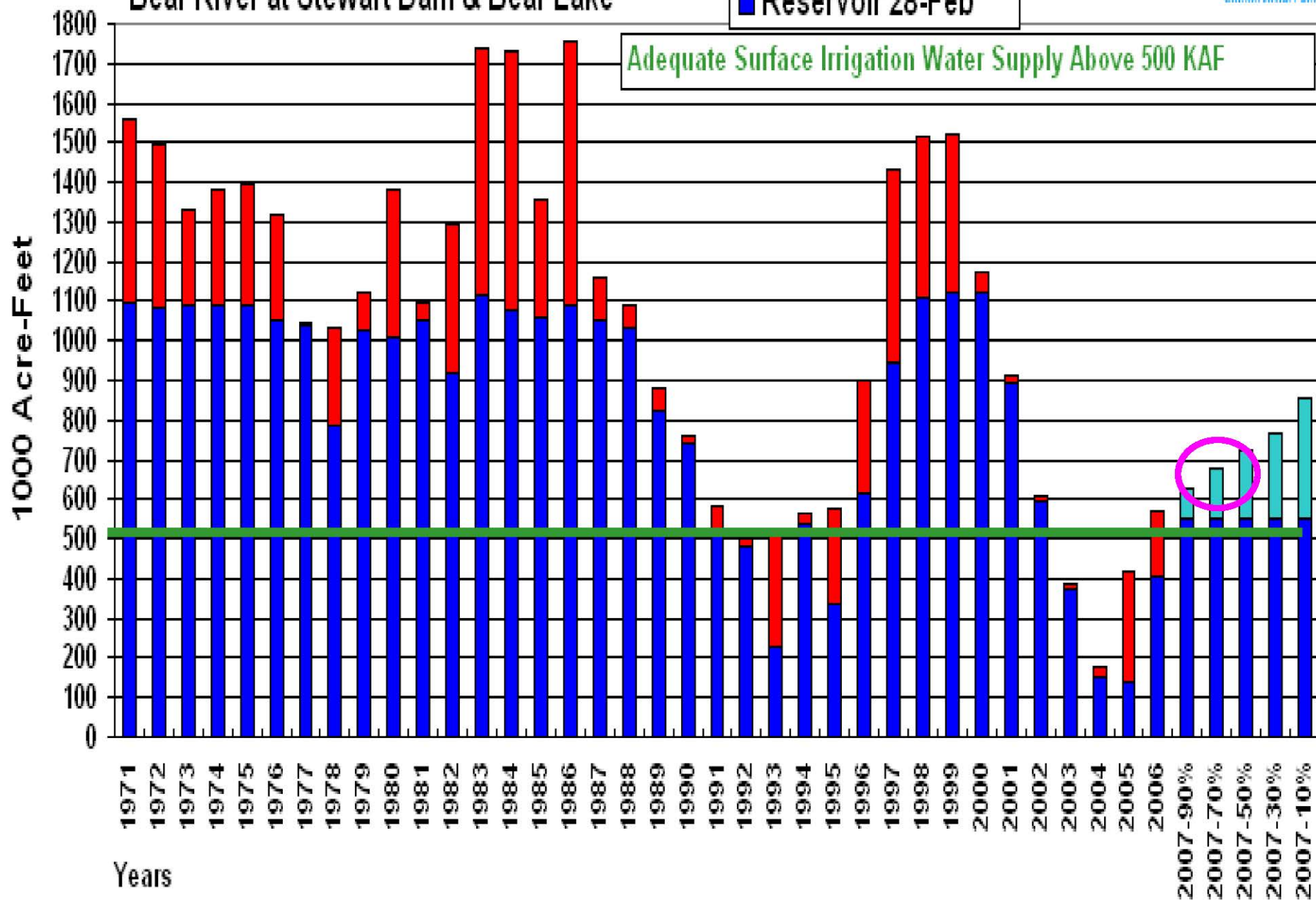
March 1 Bear River Surface Water Supply Index (SWSI)

Bear River at Stewart Dam & Bear Lake

Streamflow Apr-Sep

Reservoir 28-Feb

Adequate Surface Irrigation Water Supply Above 500 KAF



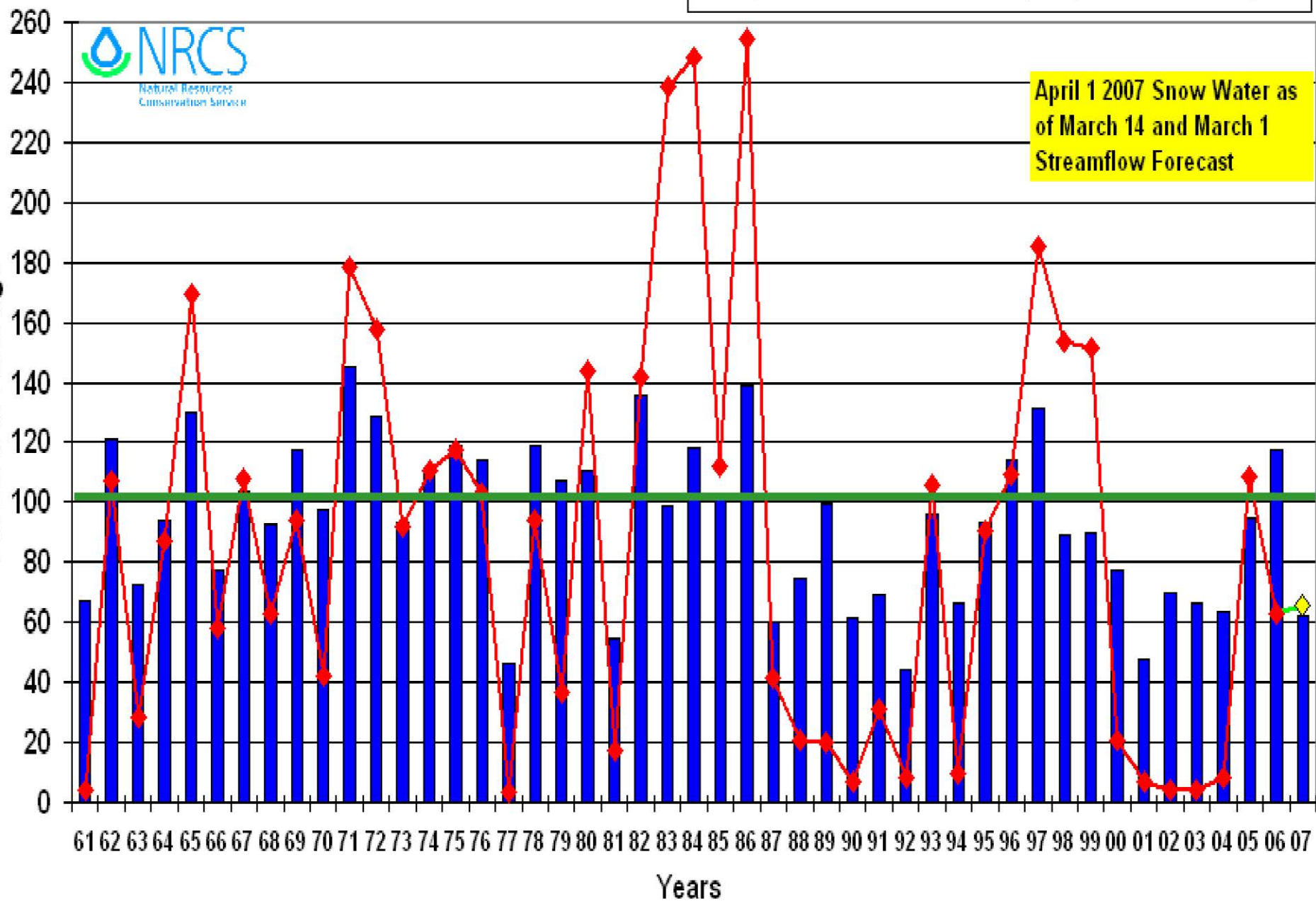
Bear River Basin above Preston 15 Snow Index for Years 1961 - 2007 and Bear River at Stewart Dam Apr-Sep Streamflow

■ April 1 Snow Water as % of Average
◆ Bear River at Stewart Dam Apr-Sep Flow as % of Average



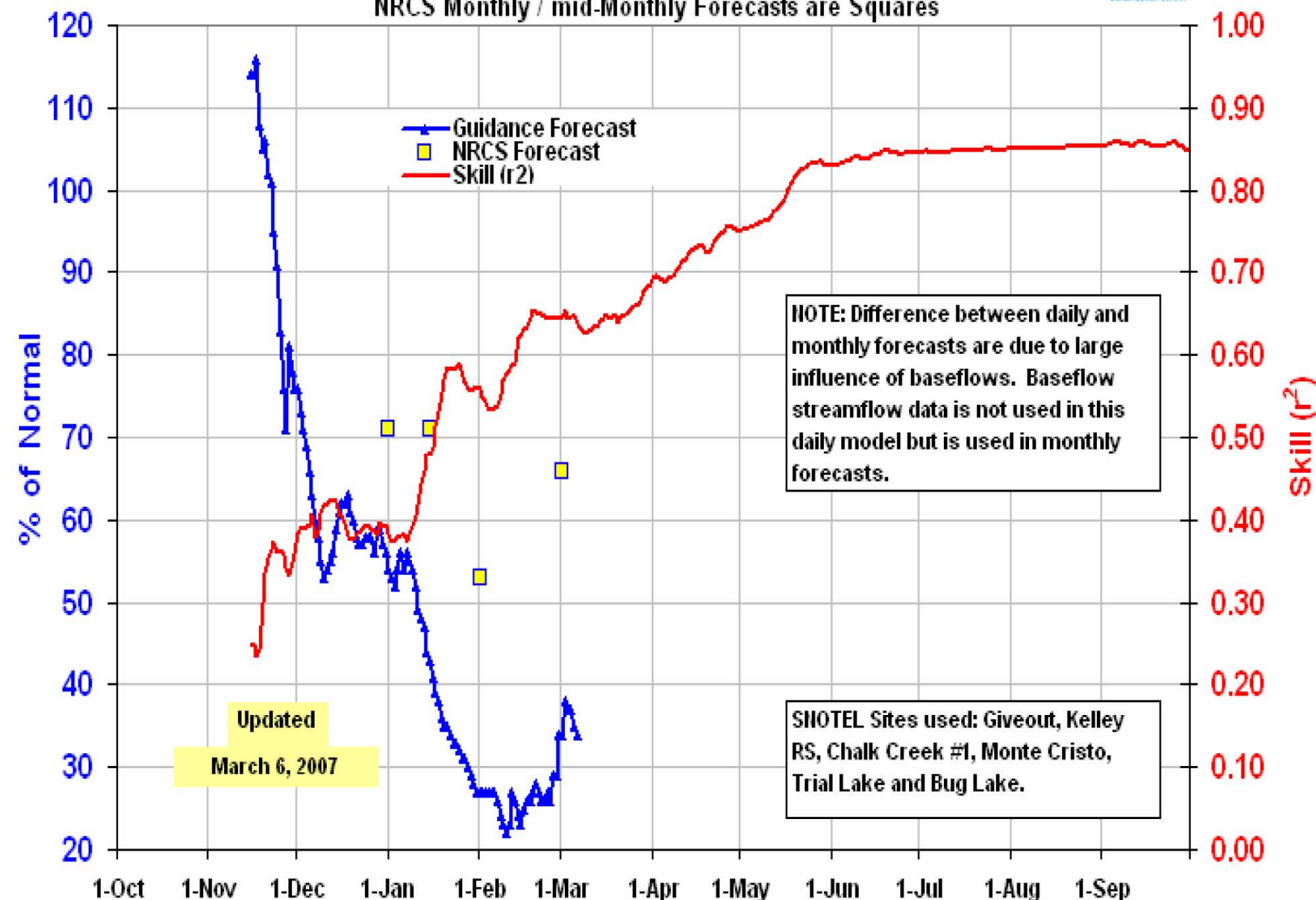
April 1 2007 Snow Water as
of March 14 and March 1
Streamflow Forecast

Percent of Average



Years

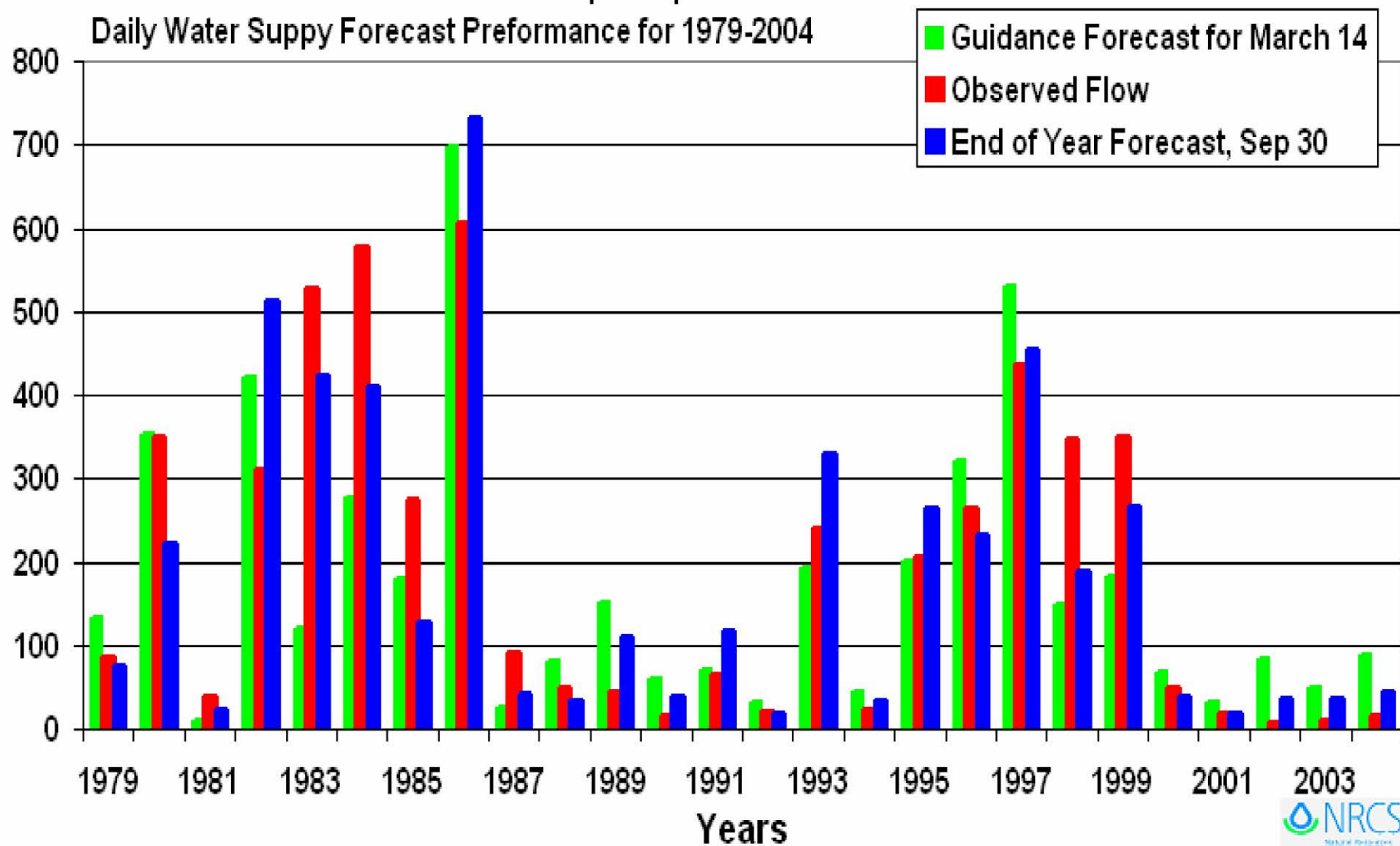
Bear River below Stewart Dam nr Montpelier: Apr - Jul Volume,
NRCS Monthly / mid-Monthly Forecasts are Squares



2006 Bear River Below Stewart Dam Near Montpelier Daily Streamflow Forecasts Using SNOTEL Data Official Forecasts (triangles) and Observed Flow (at end of season)



Bear River nr Stewart Dam Apr - Sep
Daily Water Supply Forecast Performance for 1979-2004



In February, we said "Let It Snow --- Here!"

And it did!

<http://www.boston.com> - Video - NECN

NECN Your Video



VIDEO

Storm wreaks havoc across the U.S.

Bush gives info on Iraq supporting

Storm wreaks havoc across the U.S.
The latest blast of winter is affecting communities from the Midwest to the Northeast. It's closing schools, icing over roads, grounding planes and cutting power. The storm may also freeze out Valentine's Day deliveries. ABC's Eric Horng has more.

00:20 / 01:28

NECN Extra: Bush presser on Iraq policy

BACK

<http://www.boston.com> - Video - NECN

NECN Your Video



VIDEO SEARCH

Storm wreaks havoc across the U.S.

Bush gives new info on Iraq supporting Iraq

Storm wreaks havoc across the U.S.
The latest blast of winter is affecting communities from the Midwest to the Northeast. It's closing schools, icing over roads, grounding planes and cutting power. The storm may also freeze out Valentine's Day deliveries. ABC's Eric Horng has more.

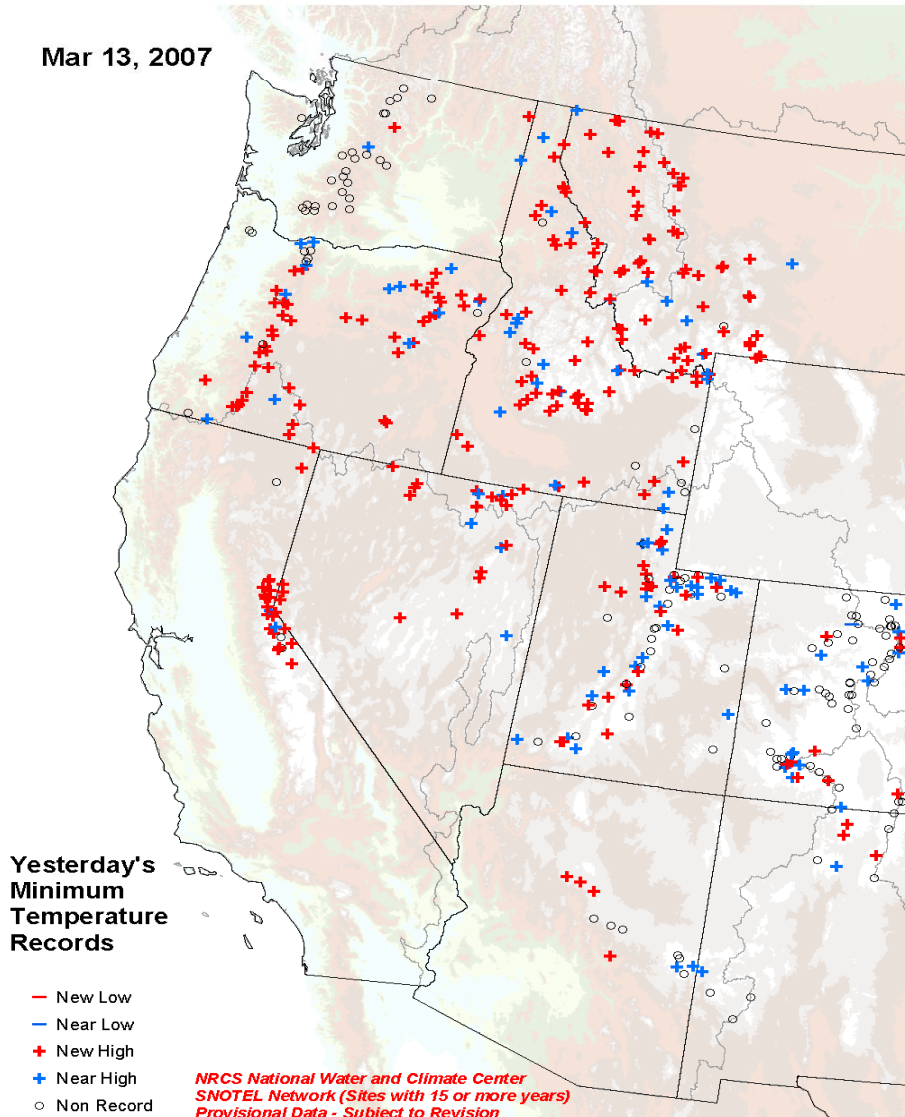
00:27 / 01:28

NECN Extra: Bush presser on Iraq policy

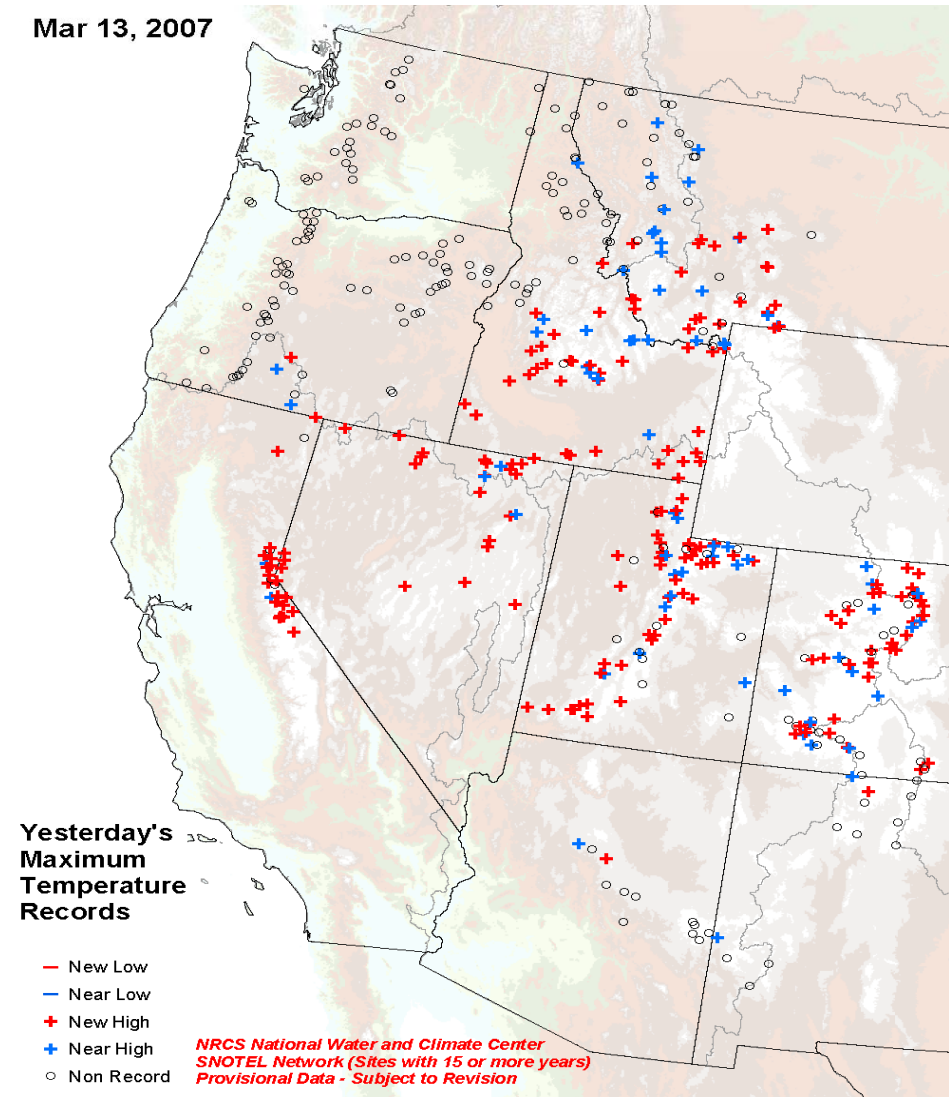
BACK Page

Now --- “Let it Cool Off --- Here”

Mar 13, 2007



Mar 13, 2007



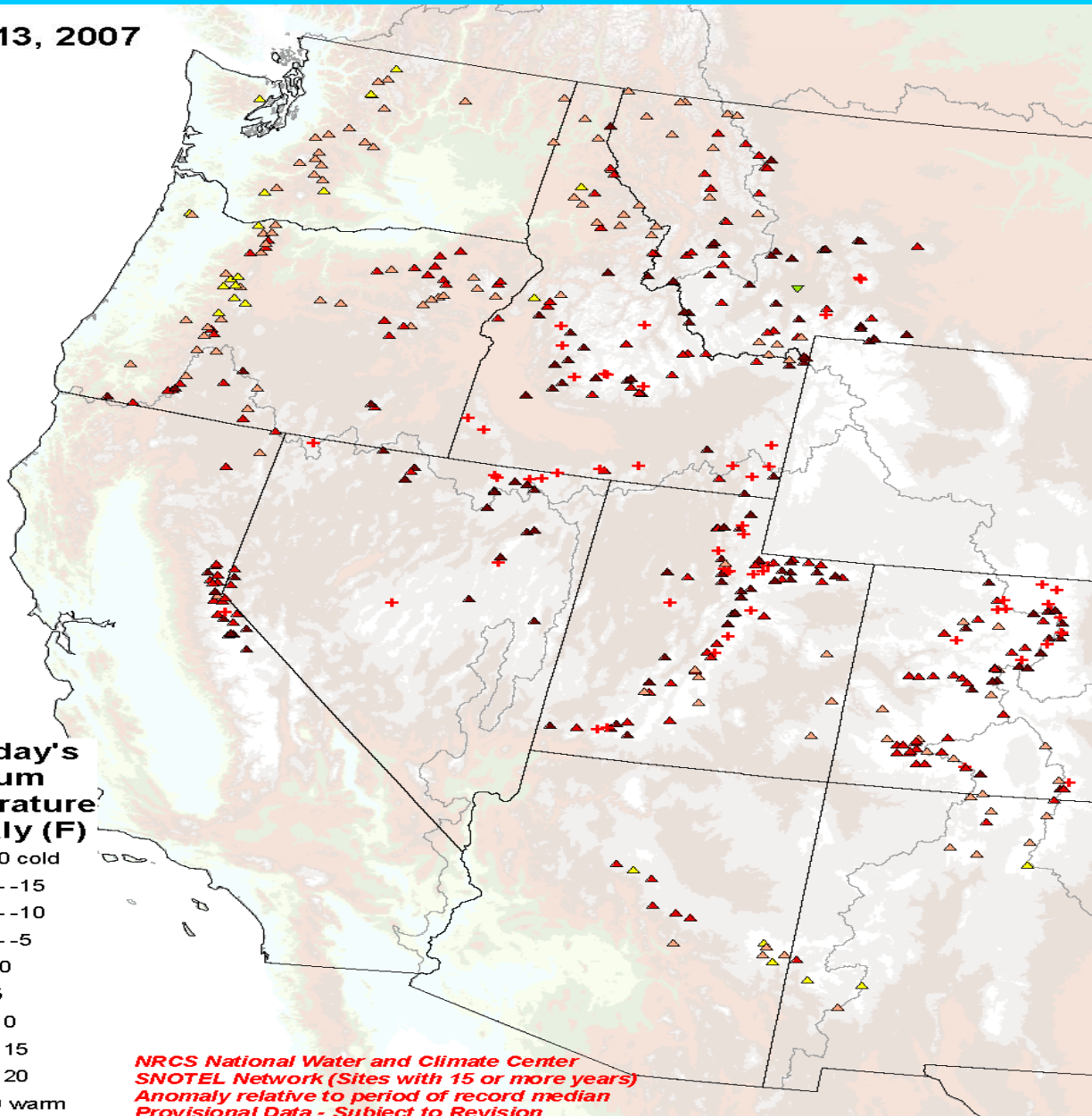
Now --- “Let it Cool Off --- Here”

Mar 13, 2007

Yesterday's
Maximum
Temperature
Anomaly (F)

- ✕ < -20 cold
- ▼ -20 -- -15
- ▼ -15 -- -10
- ▼ -10 -- -5
- ▼ -5 - 0
- ▲ 0 - 5
- ▲ 5 - 10
- ▲ 10 - 15
- ▲ 15 - 20
- + > 20 warm

NRCS National Water and Climate Center
SNOTEL Network (Sites with 15 or more years)
Anomaly relative to period of record median
Provisional Data - Subject to Revision





Idaho Water Supply Outlook and Spring Flood Potential

March 15th, 2006

Jay Breidenbach / NOAA National Weather Service

Idaho Panhandle Flooding

Developing La-Nina

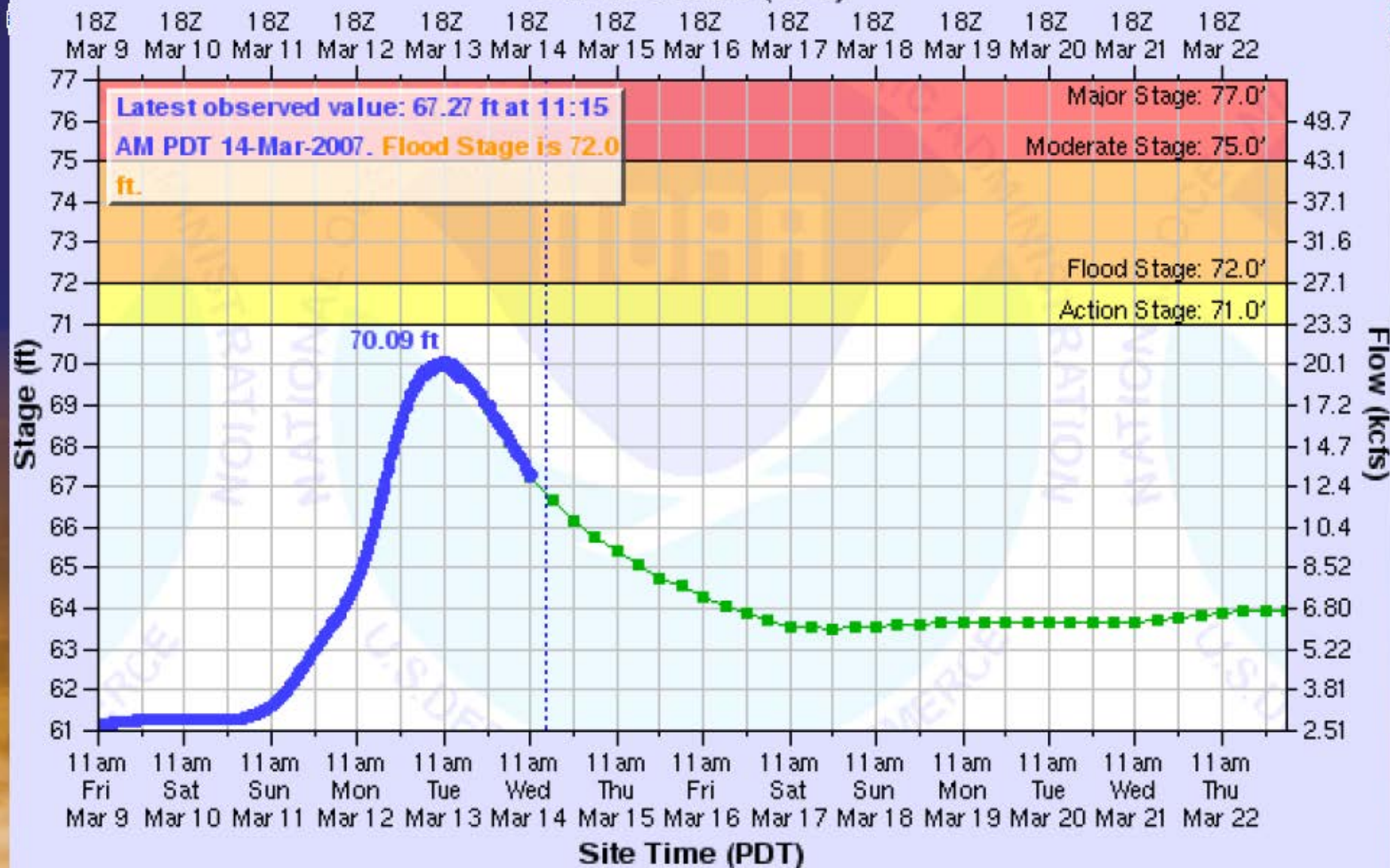
Three Month Climate Outlook

Water Supply Outlook

Spring Flood Potential

COEUR D'ALENE RIVER AT ENAVILLE

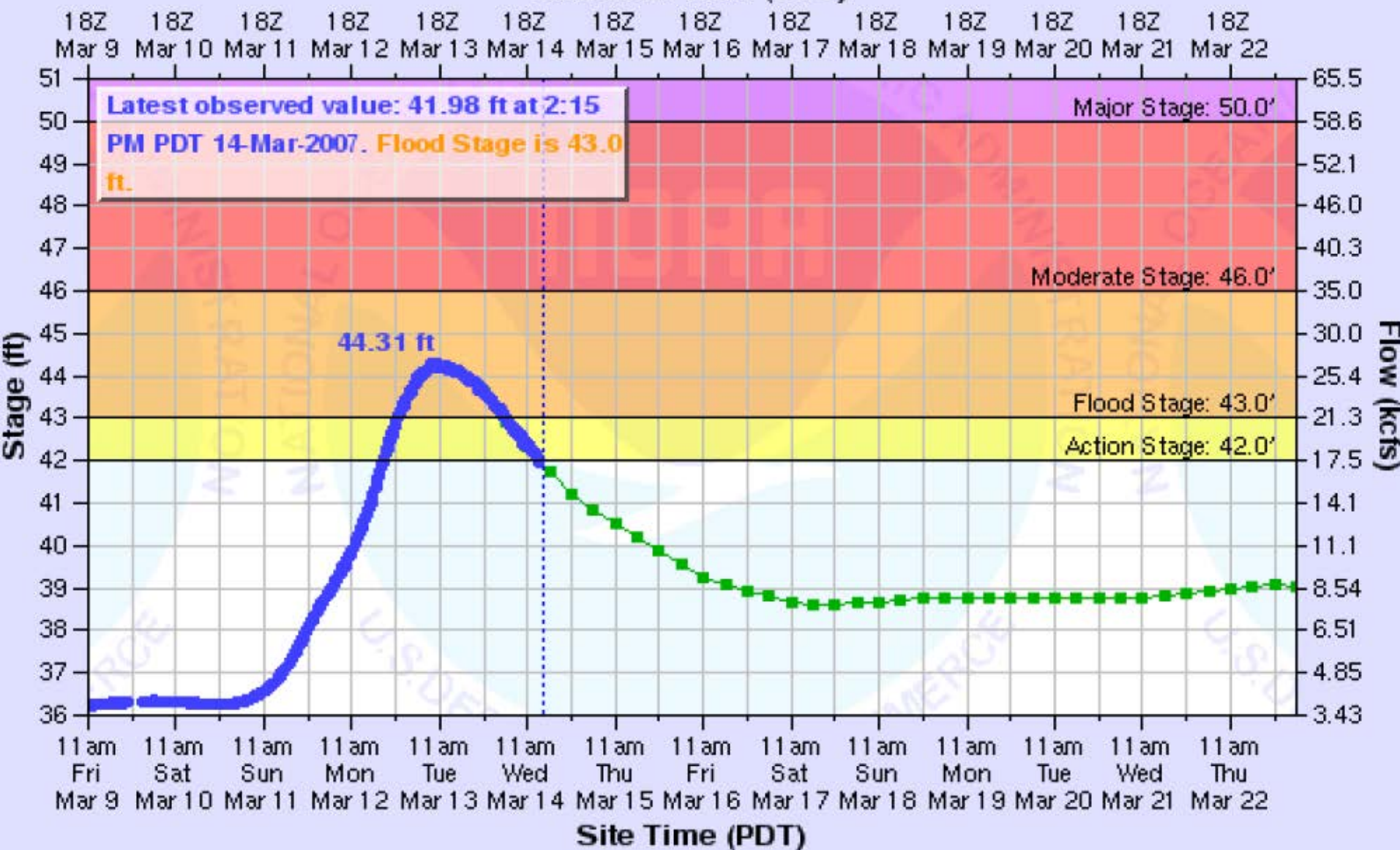
Universal Time (UTC)



Graph Created (3:31 pm Mar 14, 2007) - Observed - Forecast (issued 7:29pm Mar 13)

COEUR D'ALENE RIVER AT CATALDO

Universal Time (UTC)



.... Graph Created (3:31 pm Mar 14, 2007) —●— Observed —■— Forecast (issued 7:29pm Mar 13)









WELCOME   CAMPERS
ALL VEHICLES MUST
 STOP AT THE OFFICE
DRIVE SLOWLY   
WATCH FOR CHILDREN

WELCOME, WA-111
HOOK-UP

\$20.00

TENTING

\$15.00

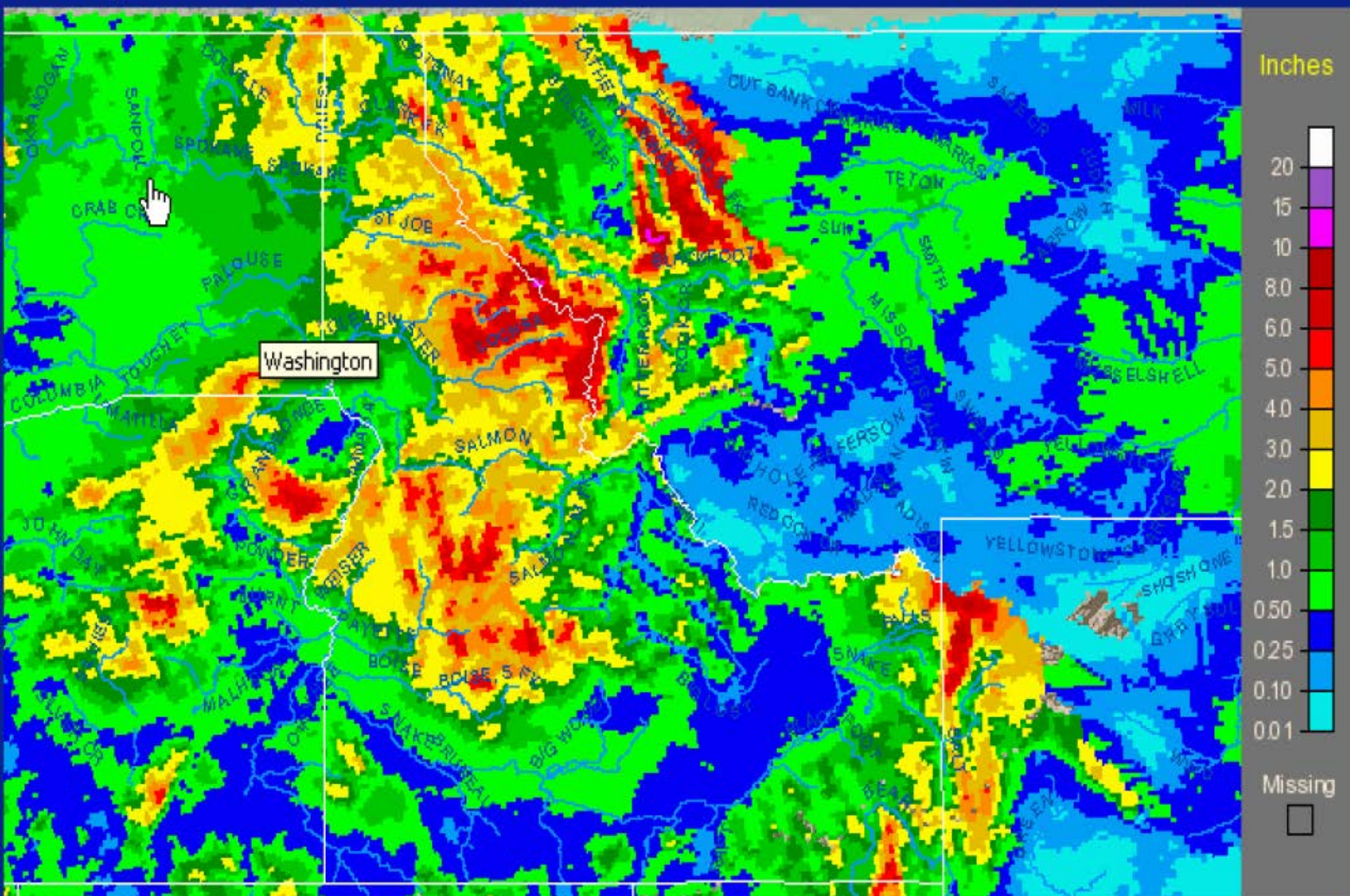
All Day
Picnic/Fishing

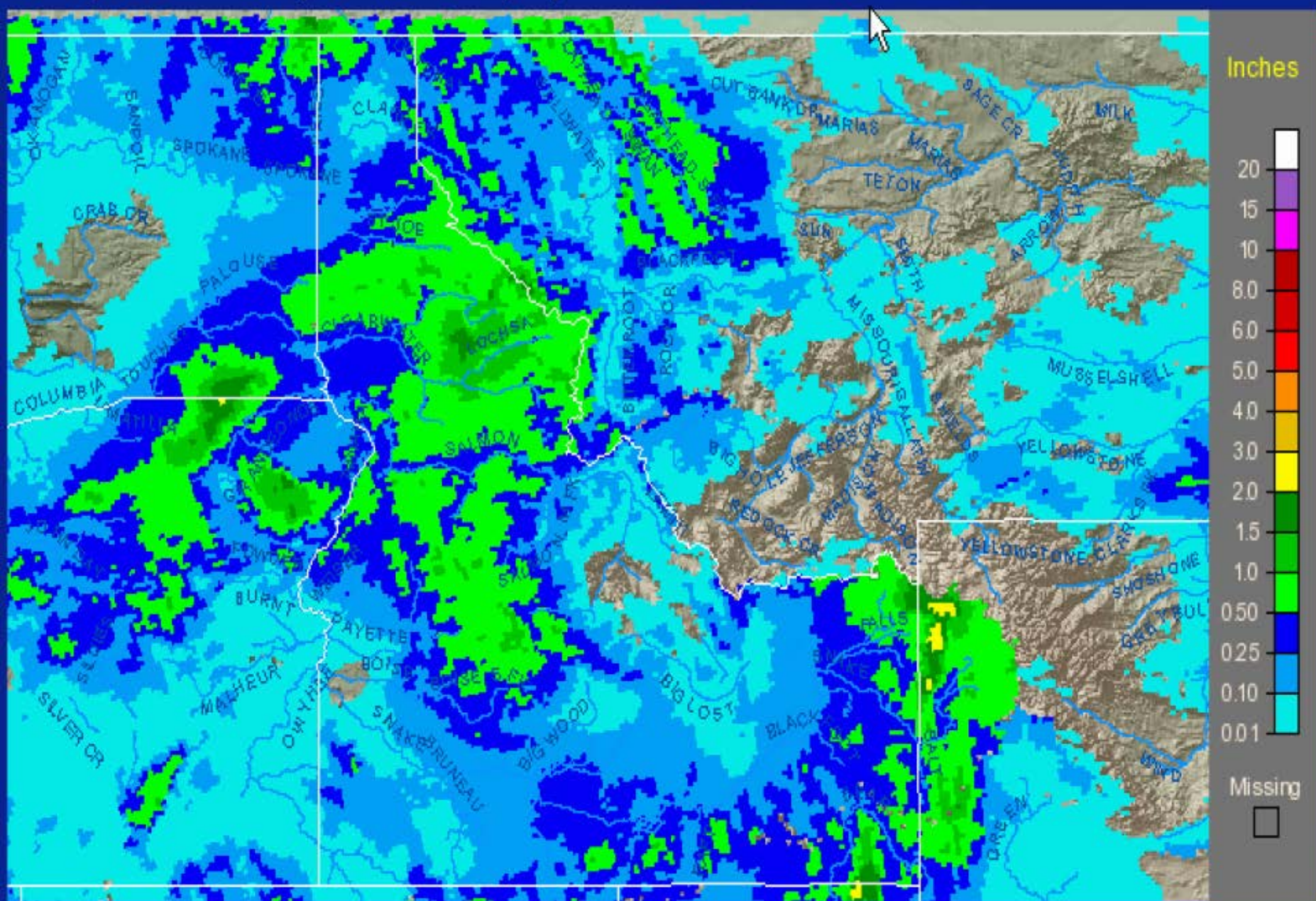
\$5.00

Idaho

February, 2007 Monthly Observed Precipitation

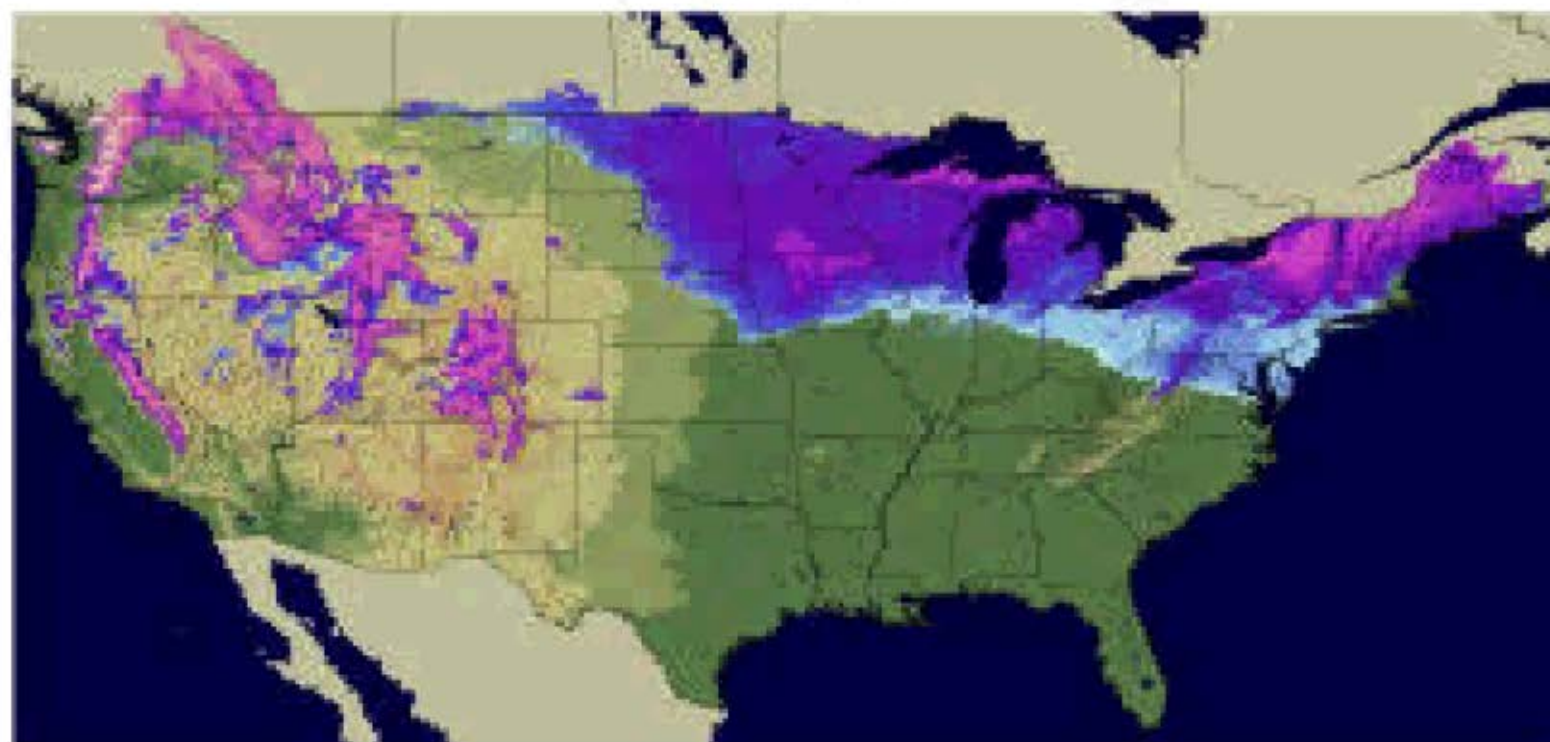
Click on the image to zoom in
Click on "States" to zoom out





OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Snow Water Equivalent 2007-03-08 00



Start

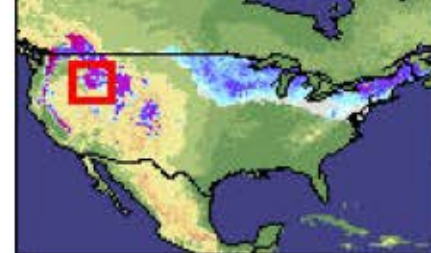
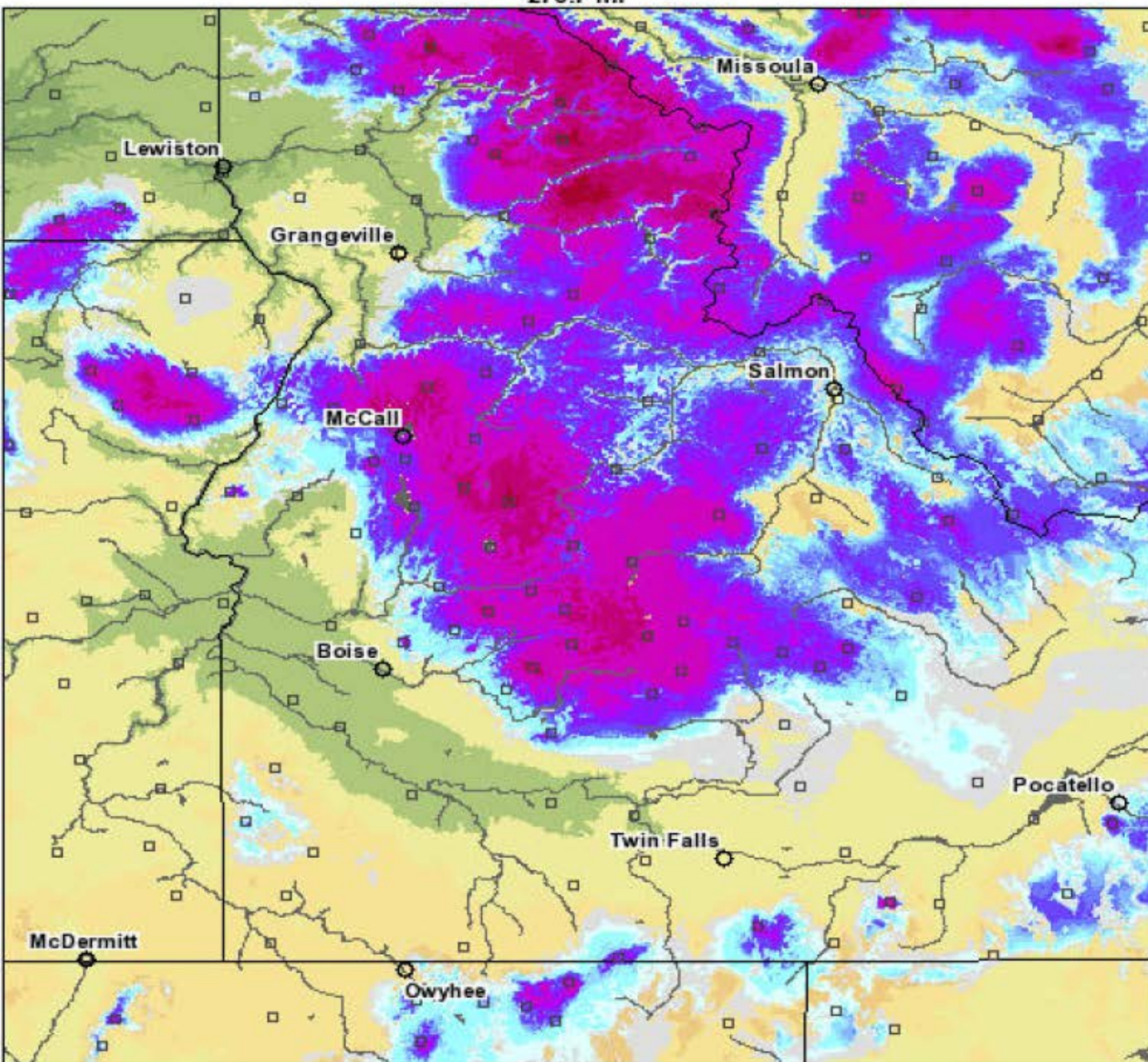
Speed in ms:

200

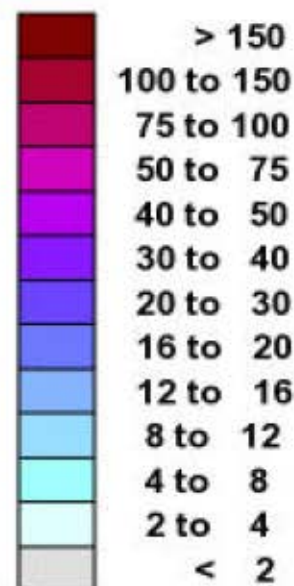
Mar 8th, 05Z

Modeled Snow Depth (Hourly) for 2007 March 8, 12:00 Z

275.7 mi



Inches of depth



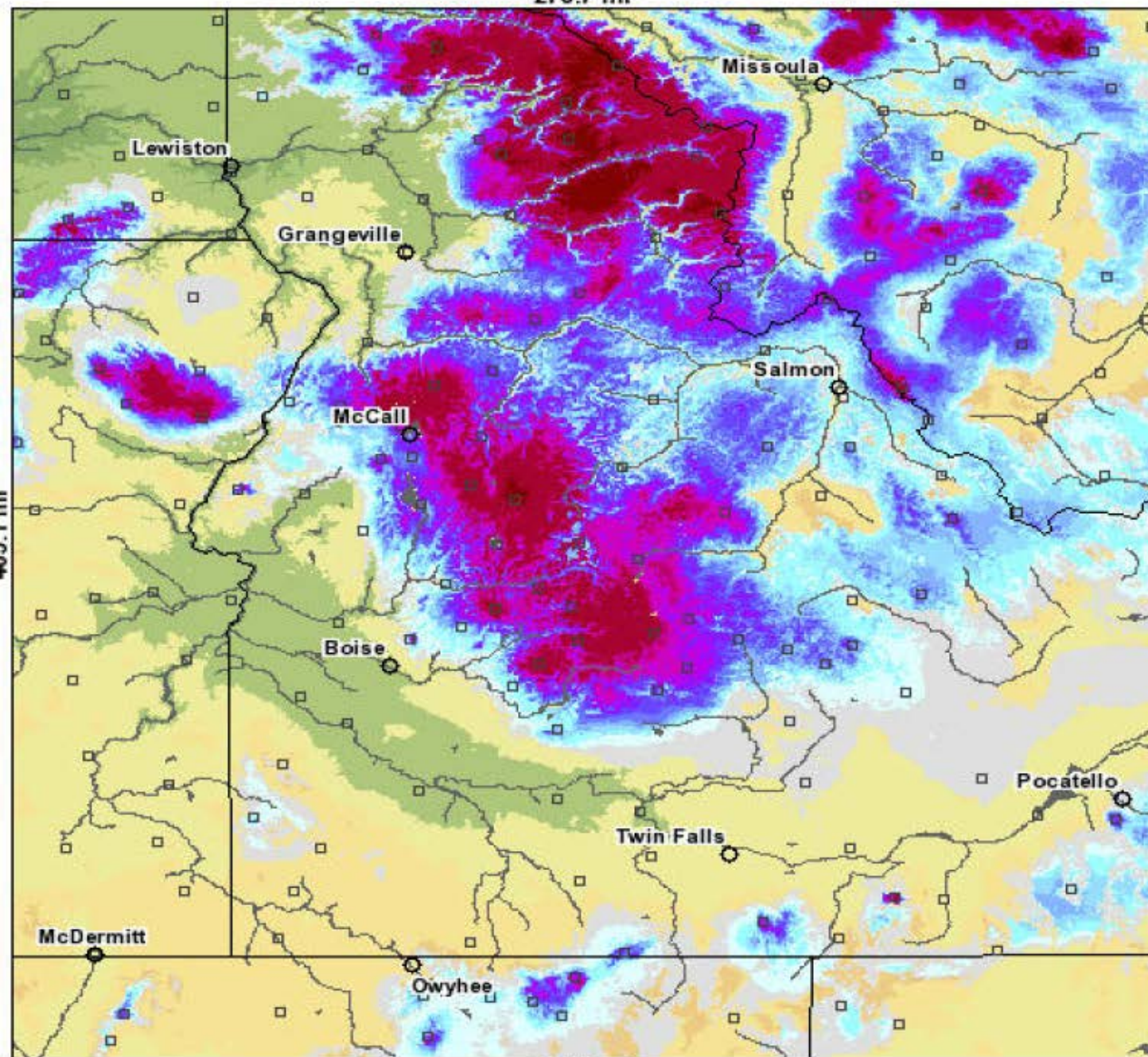
Not Estimated

Elevation in feet
(Not estimated)

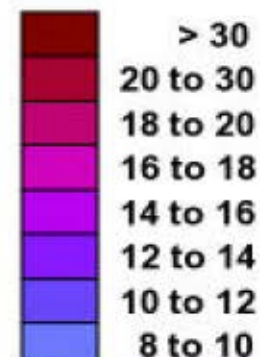


Modeled Snow Water Equivalent (Hourly) for 2007 March 8, 12:00 Z

275.7 mi



Inches of water equivalent



Legend for Modeled Snow Water



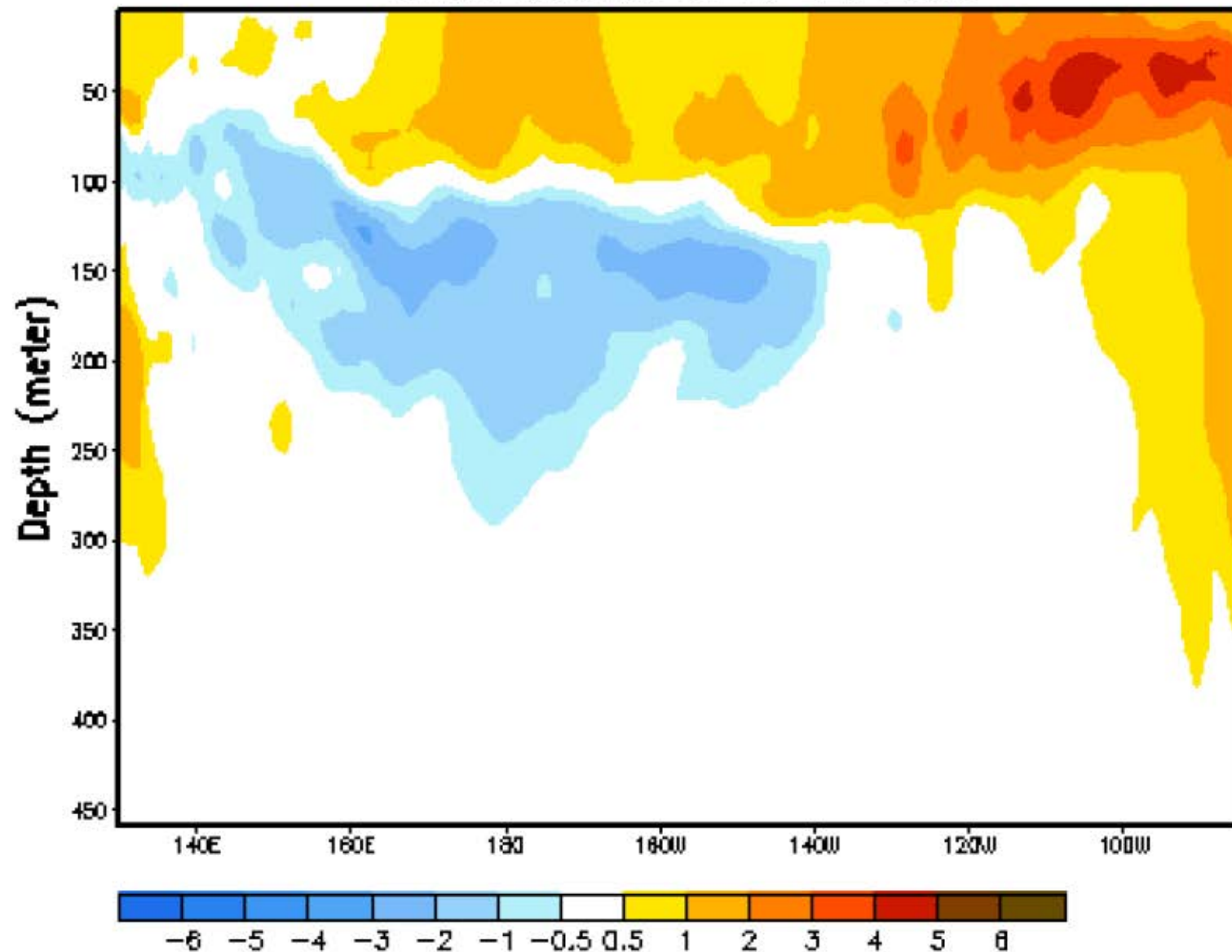
Not Estimated

Elevation in feet
(Not estimated)

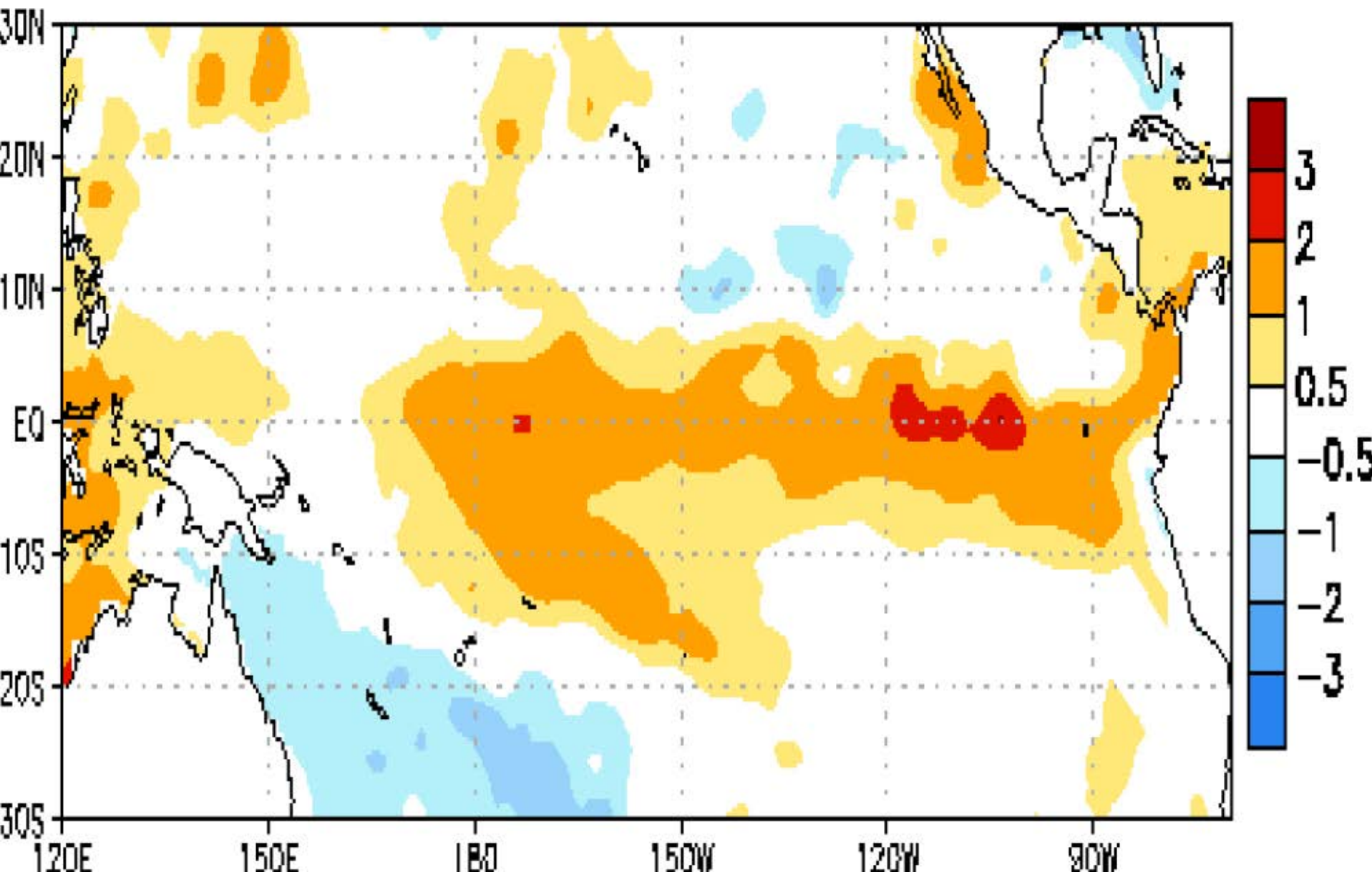


Equatorial Temperature Anomaly ($^{\circ}\text{C}$)

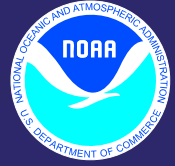
Pentad centered on 29 DEC 2006



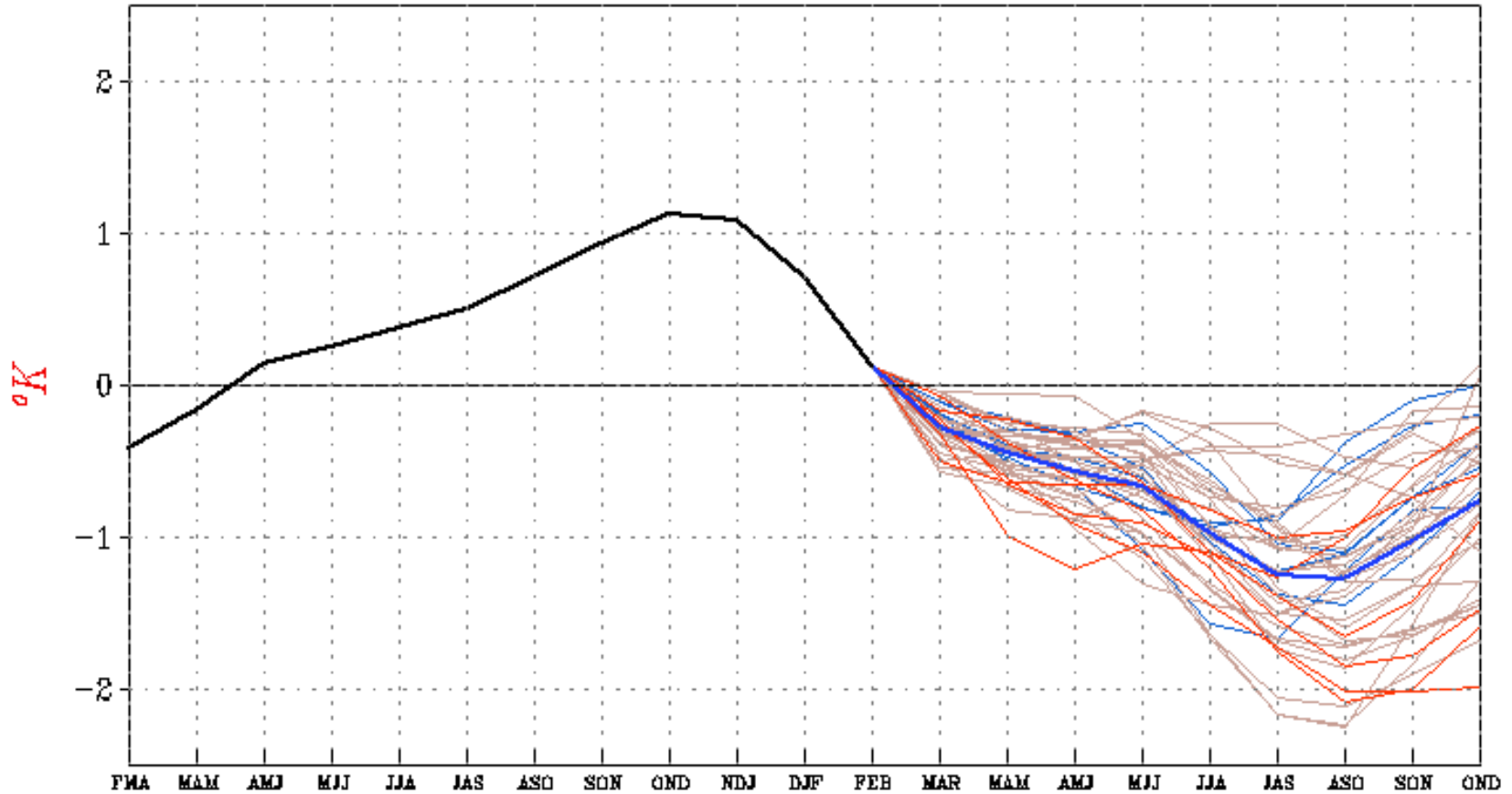
Week centered on 20 DEC 2006
SST Anomalies (°C)



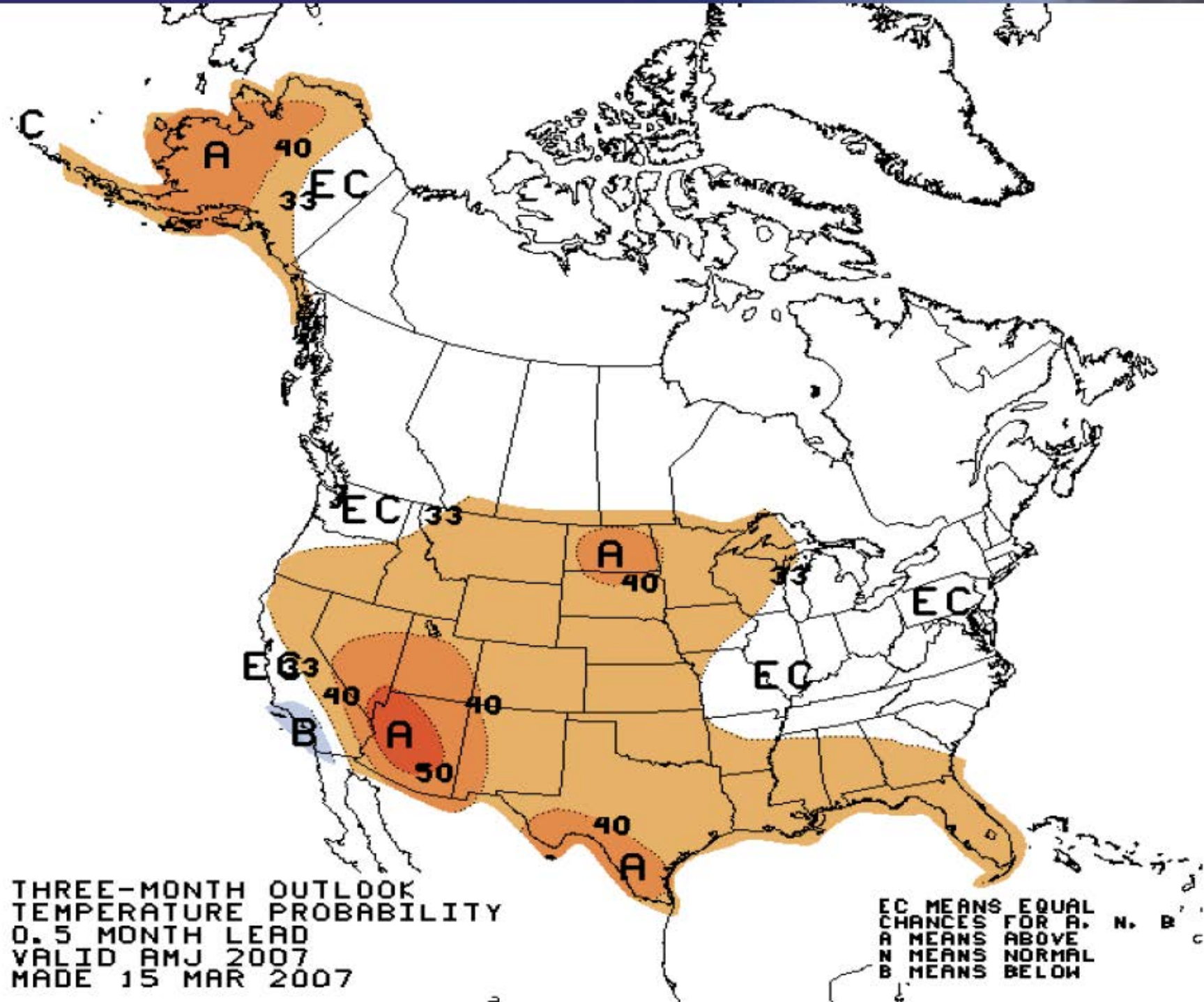
SST Outlook: NCEP CFS Forecast Issued 12 March 2007

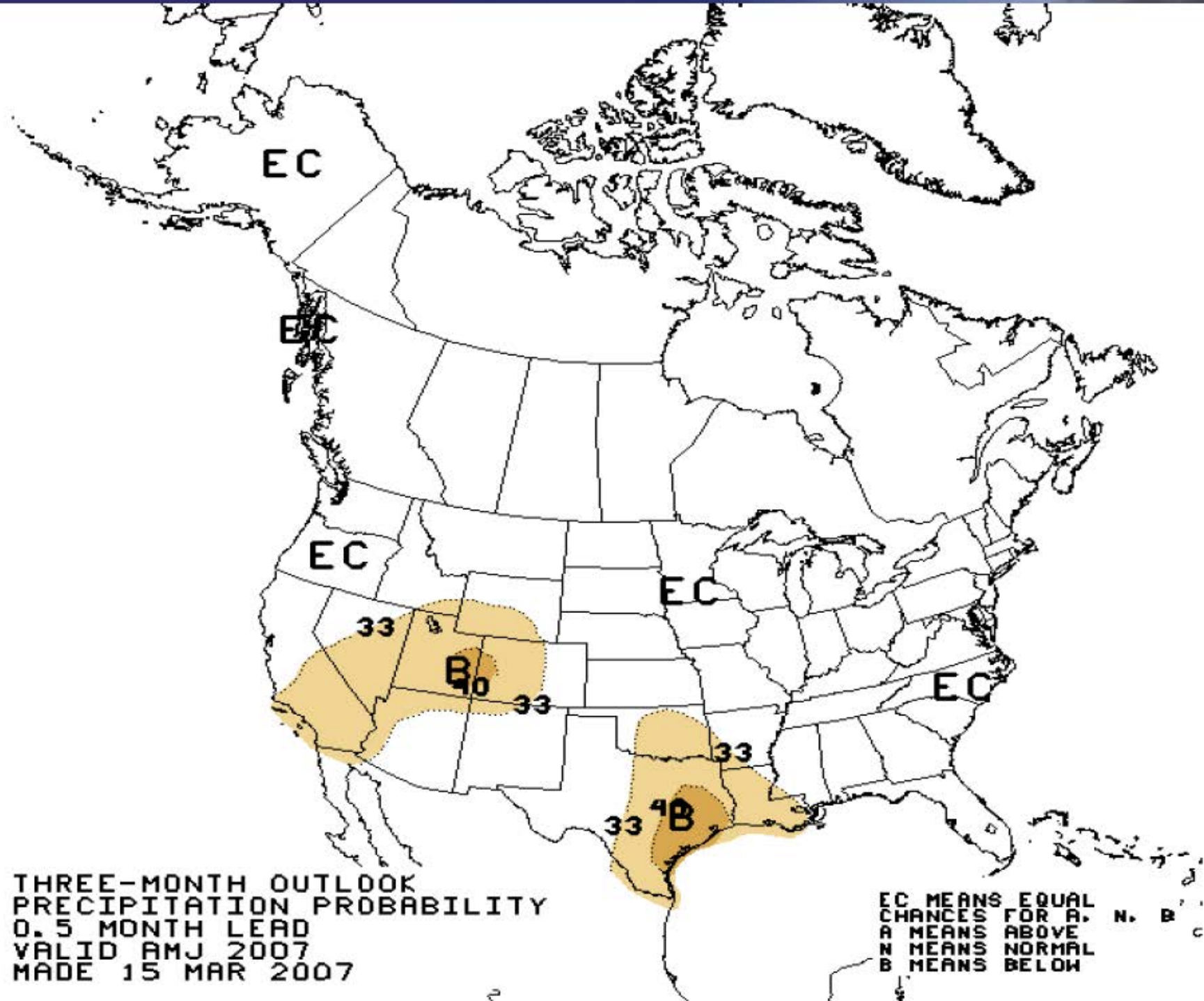


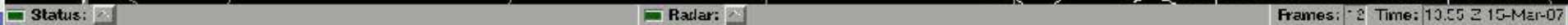
Forecast *Nino3.4* SST anomalies from CFS



The CFS ensemble mean (heavy blue line) indicates a rapid transition from neutral to La Niña conditions during the next 2-3 months.







Valid time seq

North American

Clear

K

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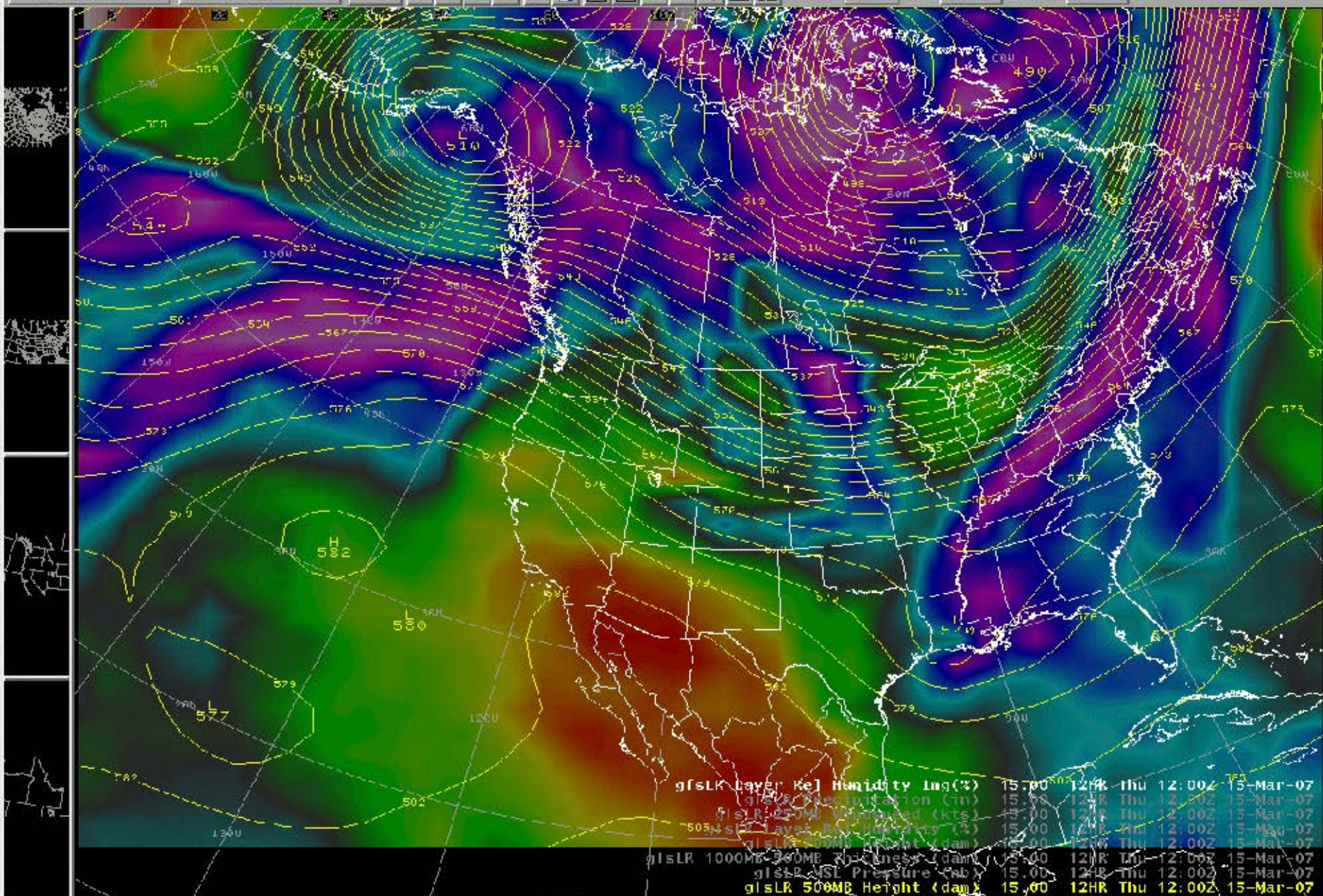
AR

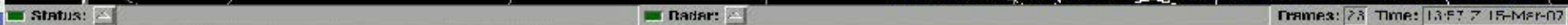
AS

Frames: 00

Mag: 1

Density: 1





Valid time seq

North American

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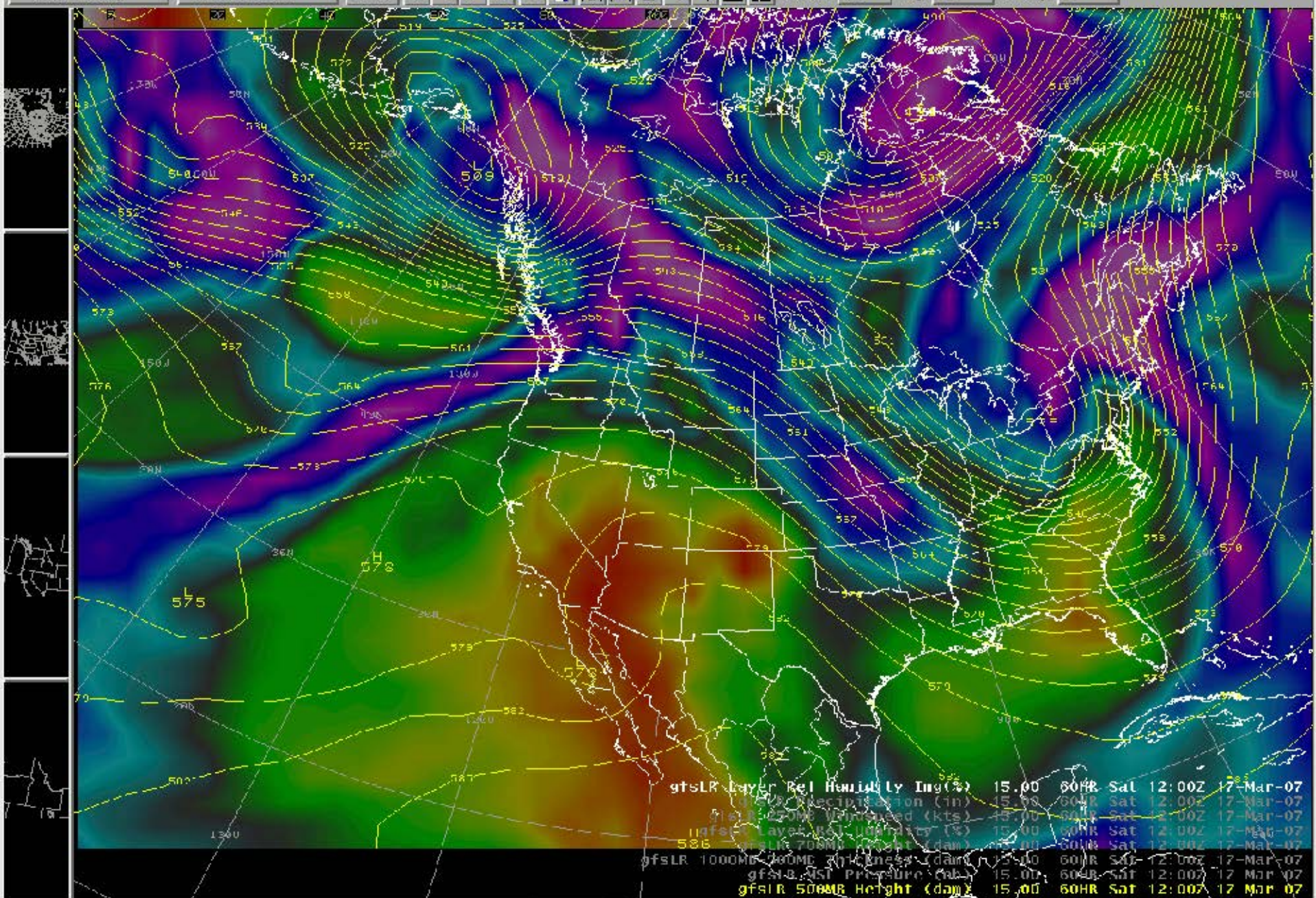
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Frames: 60

Mag: 1

Density: 1



Valid time seq

North American

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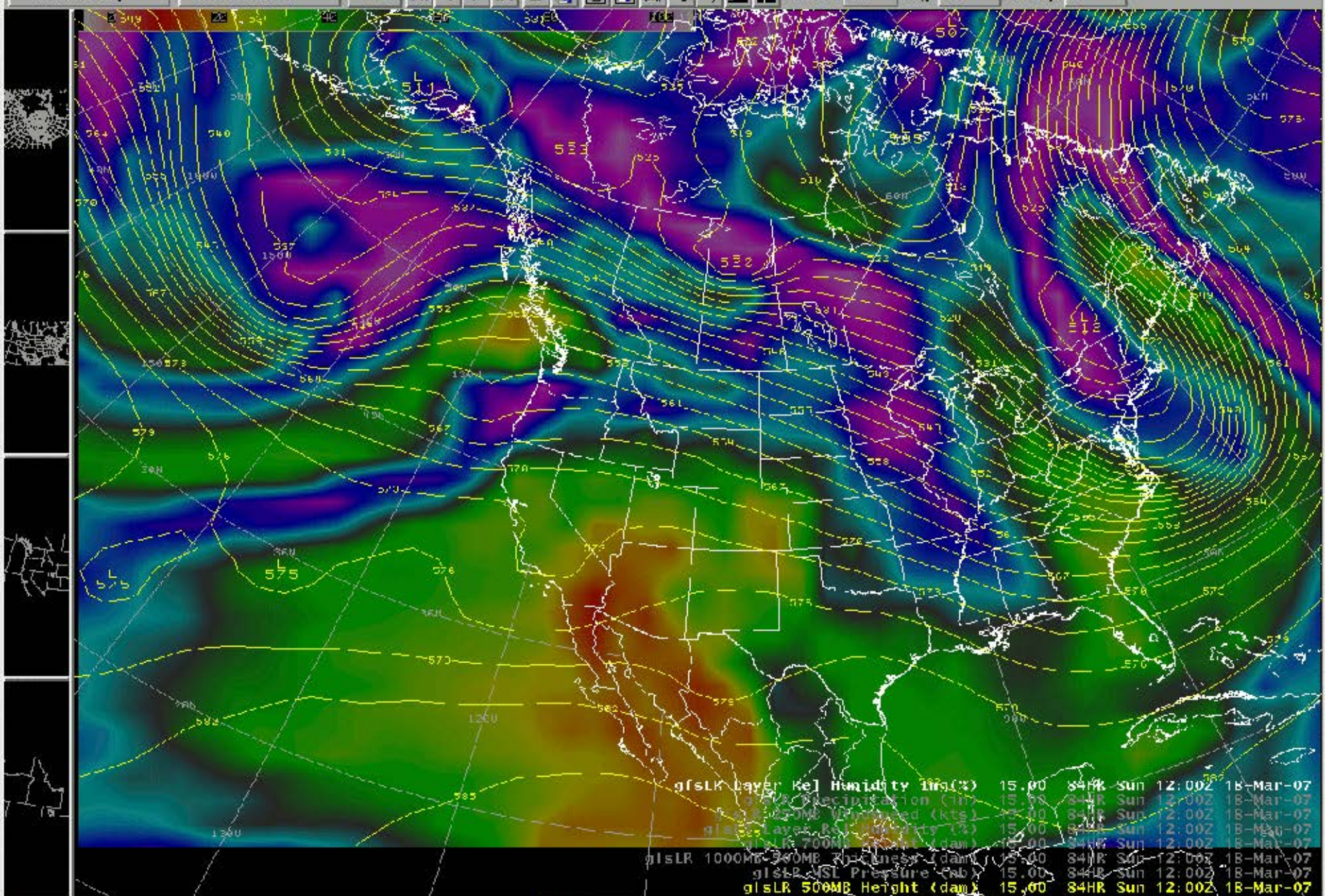
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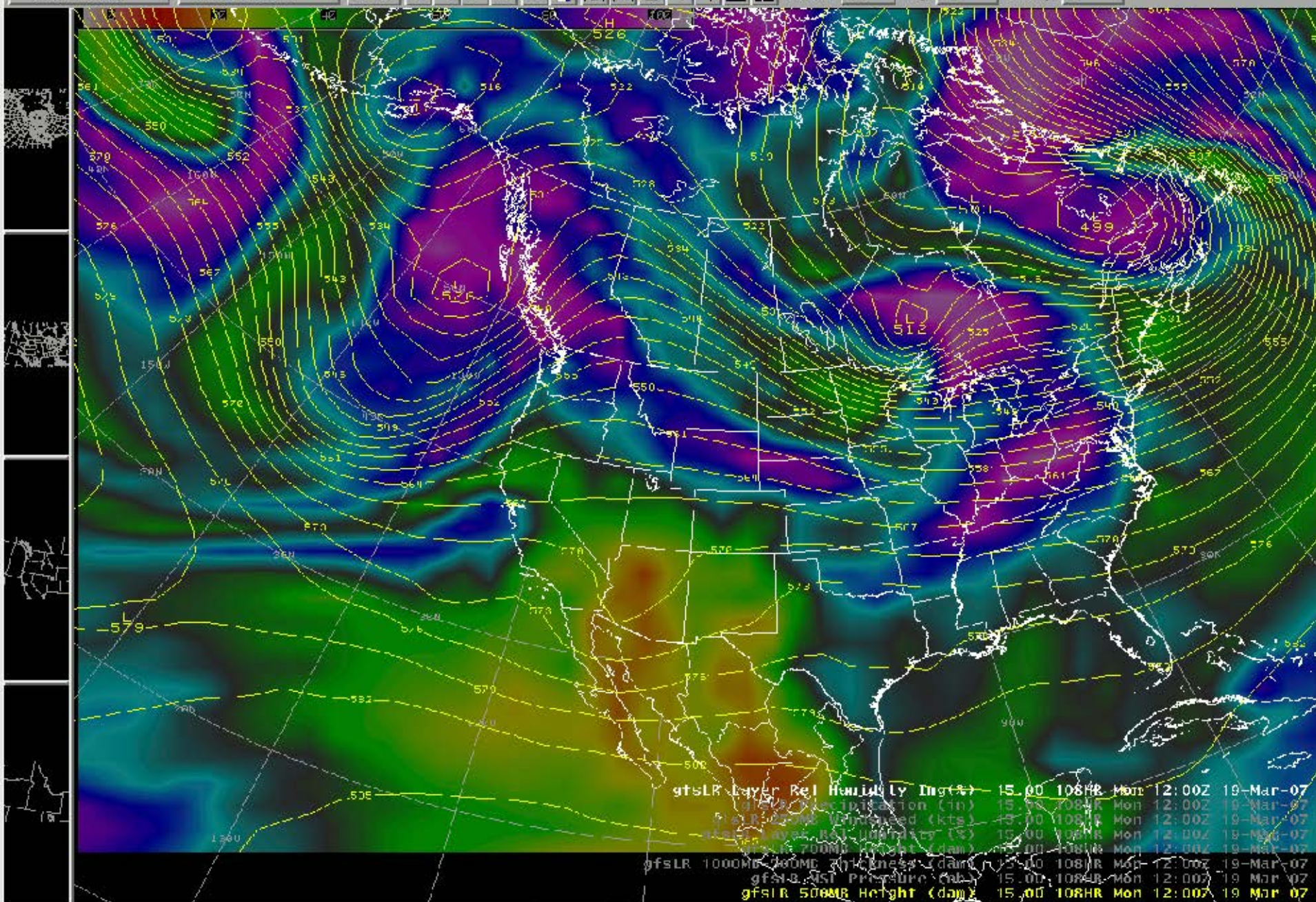
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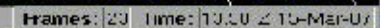
Map: 1

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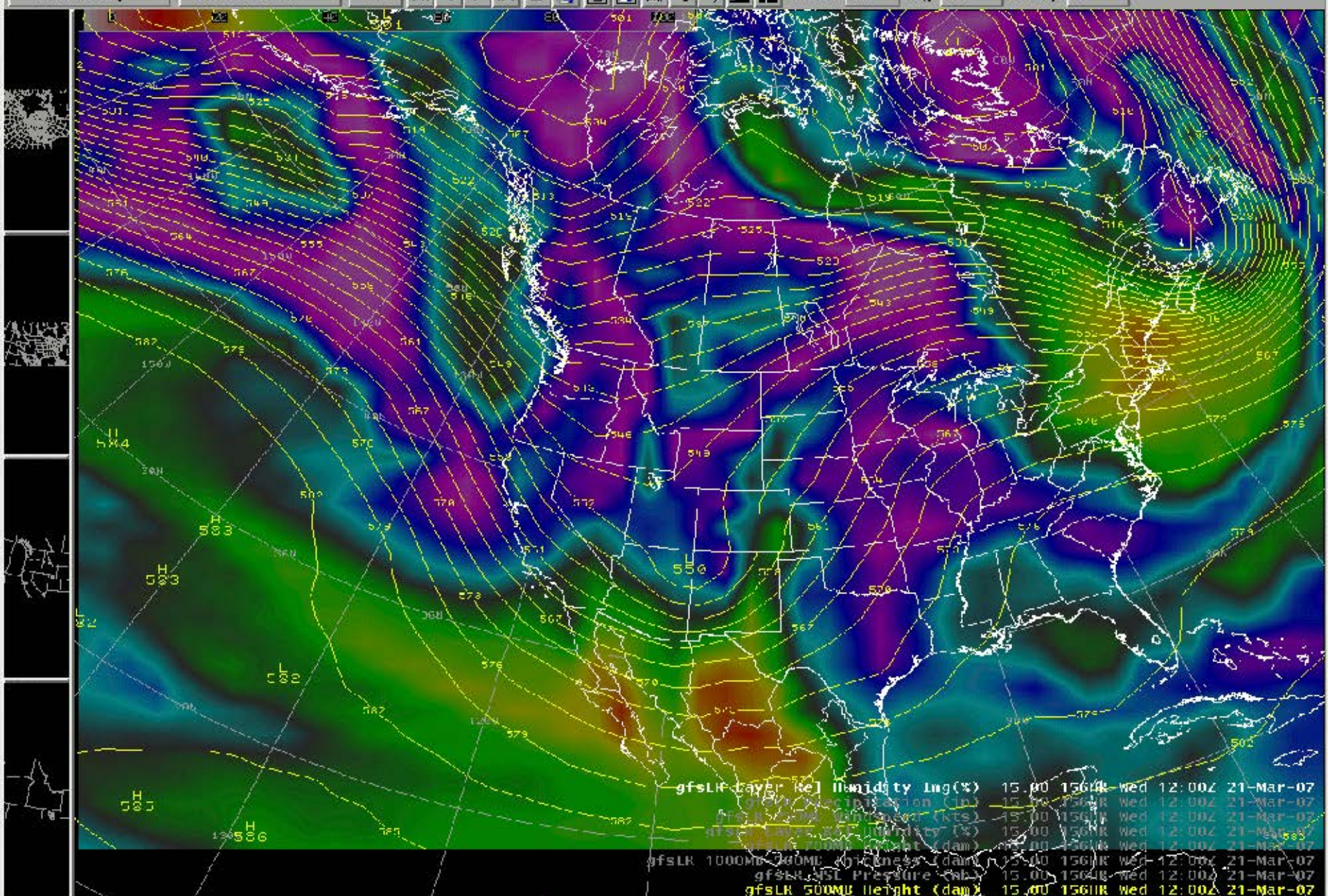
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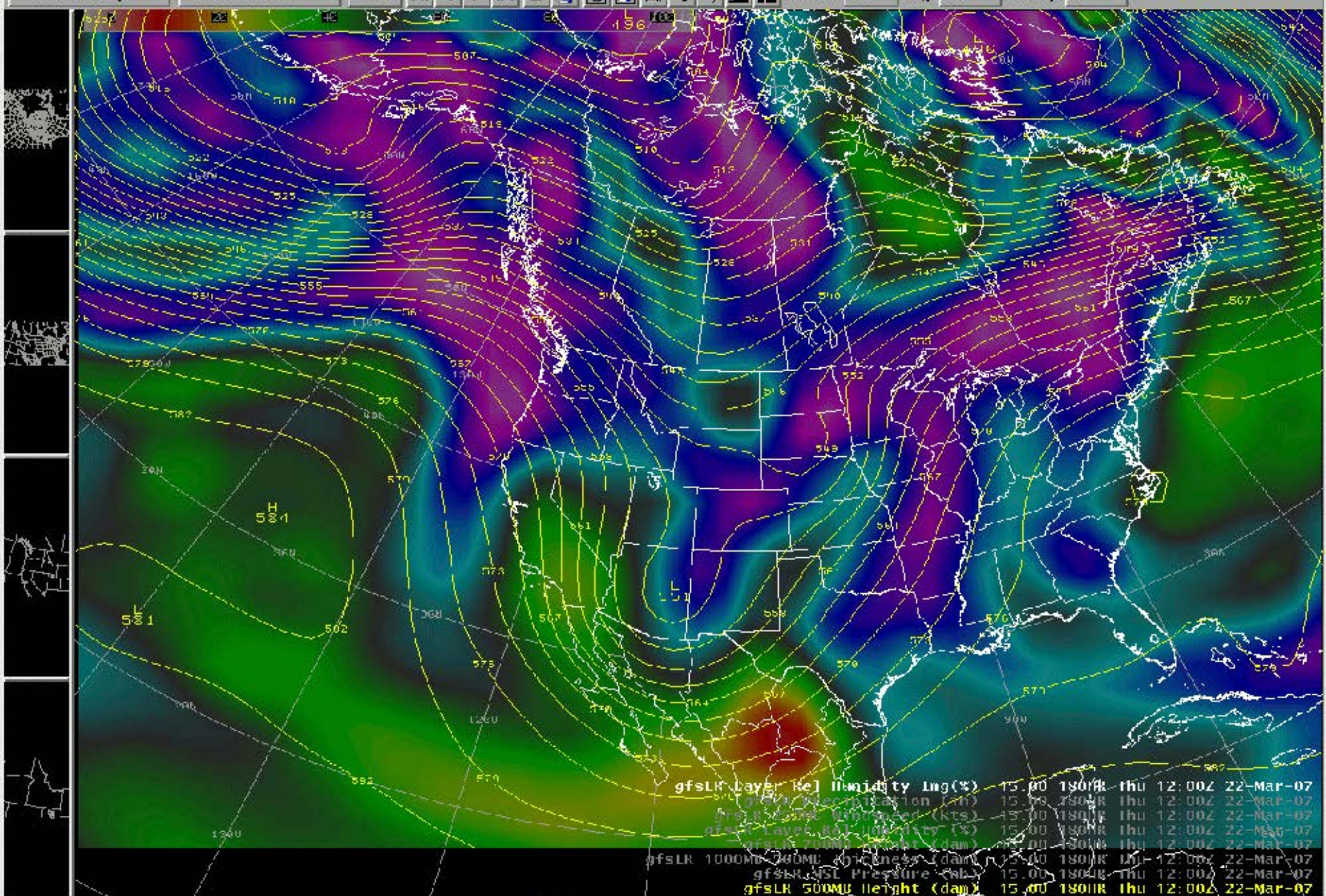
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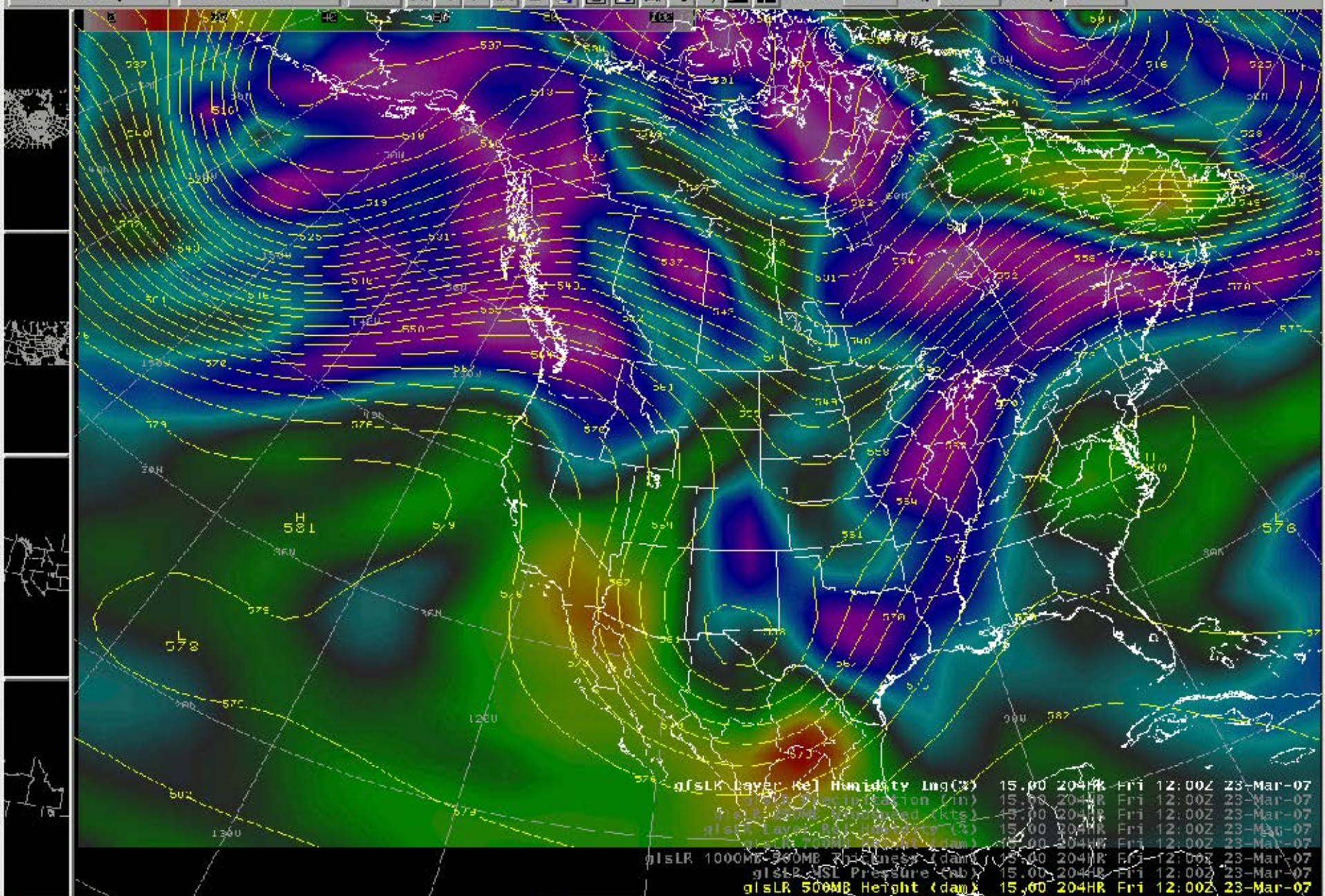
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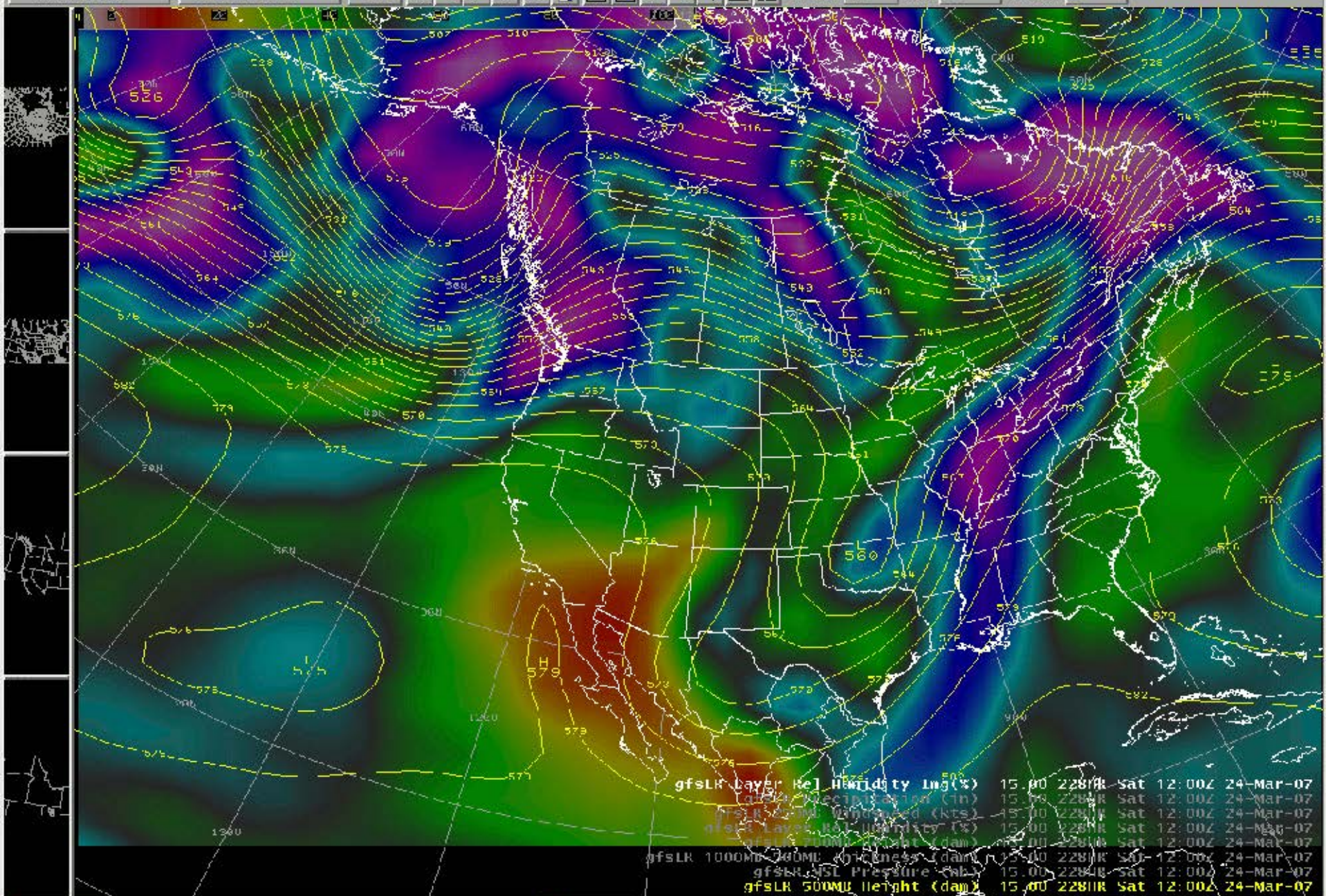
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NATIONAL WEATHER SERVICE Western Water Supply Forecasts



News

Organization

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Seasonal Runoff Volume Forecasts

Search zoom/search for points

Map Options

Map Home
Map Help
Print Map
Graph Help

Methodology

Introduction
Colorado Basin
California Nevada
Northwest

Additional Data

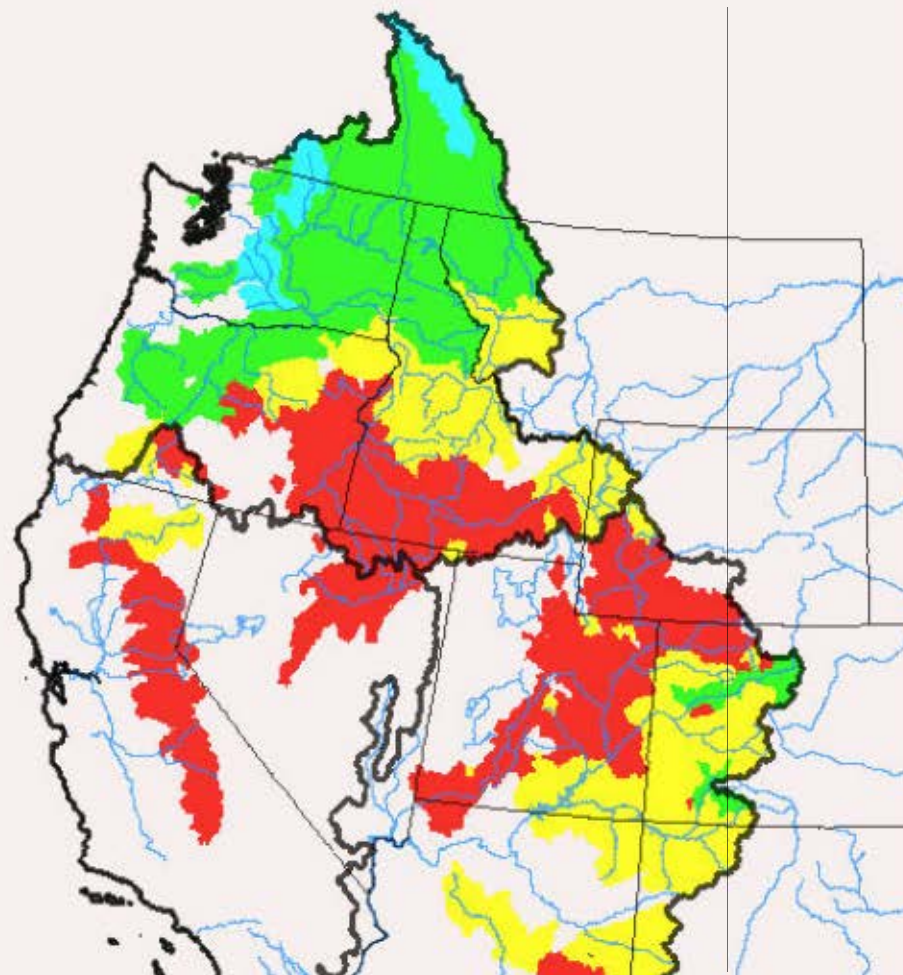
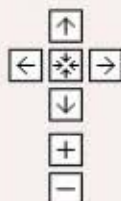
Colorado Basin
California Nevada
Northwest

River Forecast Centers

Colorado Basin
California Nevada
Northwest

Feedback

Survey
Email



Forecast Locations (%Average)

- ☐ No Data
- ☒ Much Below Average (<70%)
- ☒ Below Average (70-90%)
- ☒ Near Average (90-110%)
- ☒ Above Average (110-130%)
- ☒ Much Above Average (>130%)

Layers

- ☒ Basin Colors
- ☒ Rivers
- ☐ Streams
- ☐ Lakes
- ☒ States
- ☒ RFCs
- ☐ Basin Outlines



Spring Flood Potential

Southern and Central Idaho

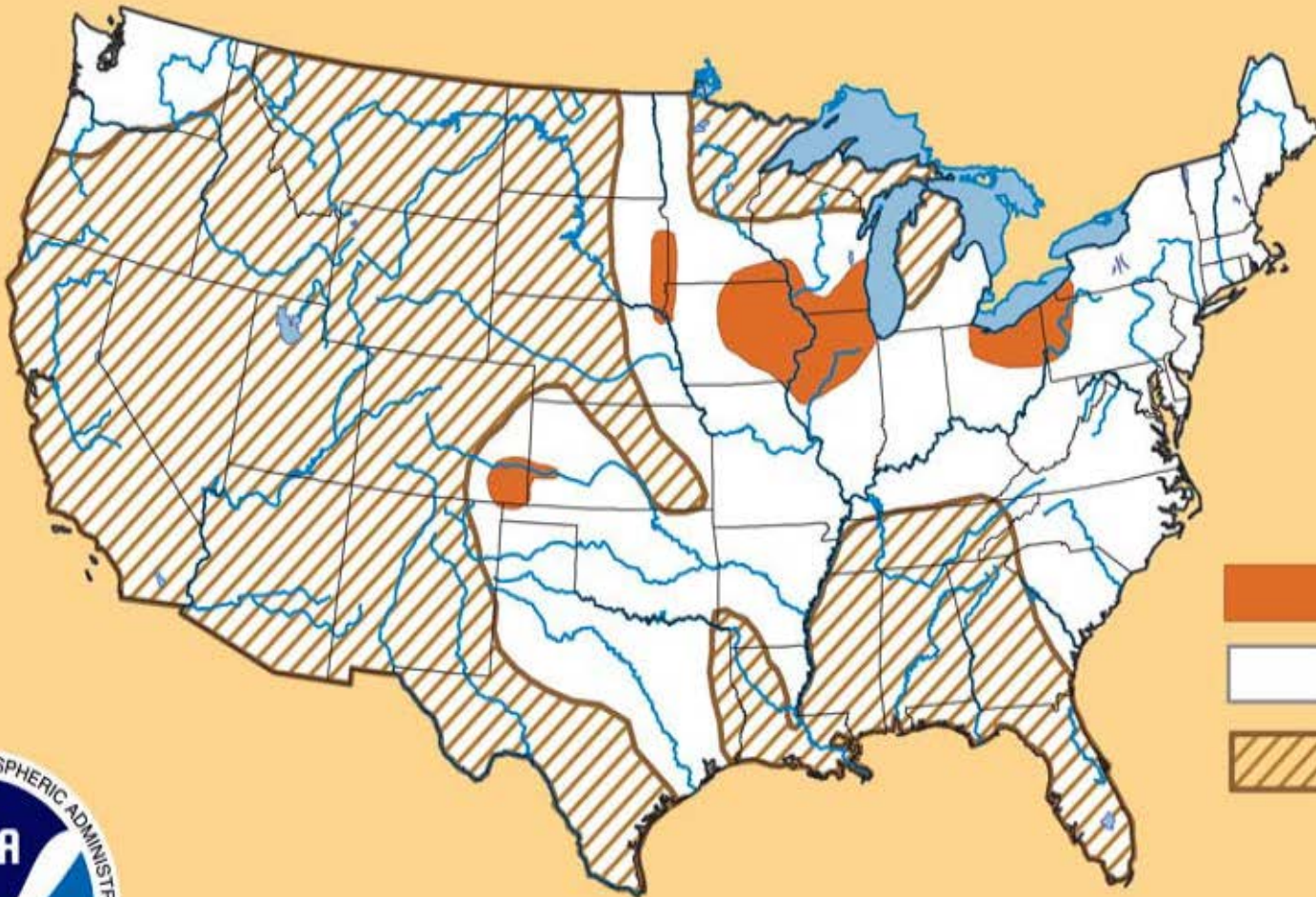
- Below average threat of Spring flooding related to snow melt including all streams and tributaries to the Snake, Clearwater, and Salmon River Basins.

Idaho Panhandle Region

- Average threat of Spring flooding on most streams
- Above average threat on Kootenai river in Boundary County.

Flood Risk

(as of March 9, 2007)



RECLAMATION

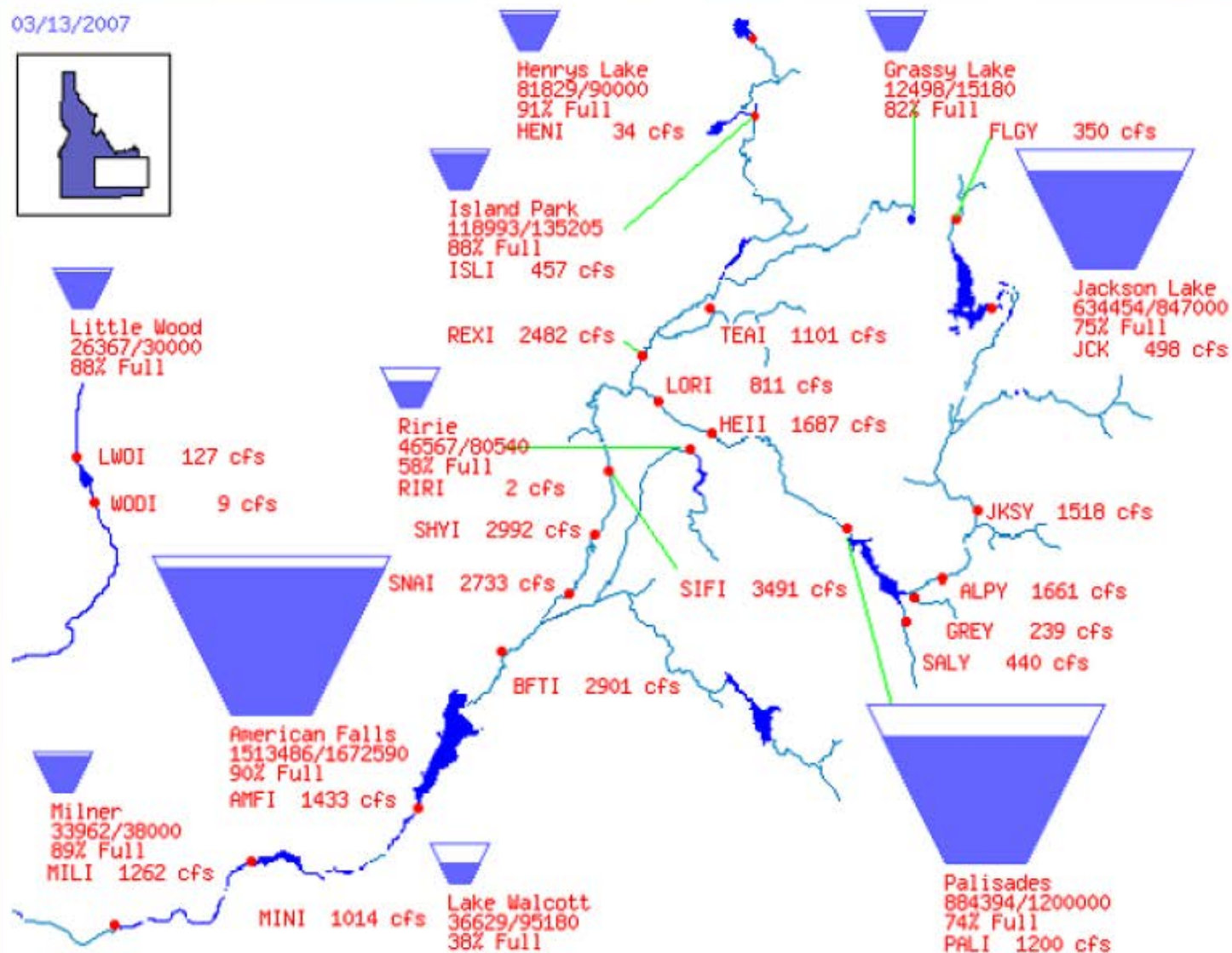
Managing Water in the West

Upper Snake River Water Supply Outlook 2007



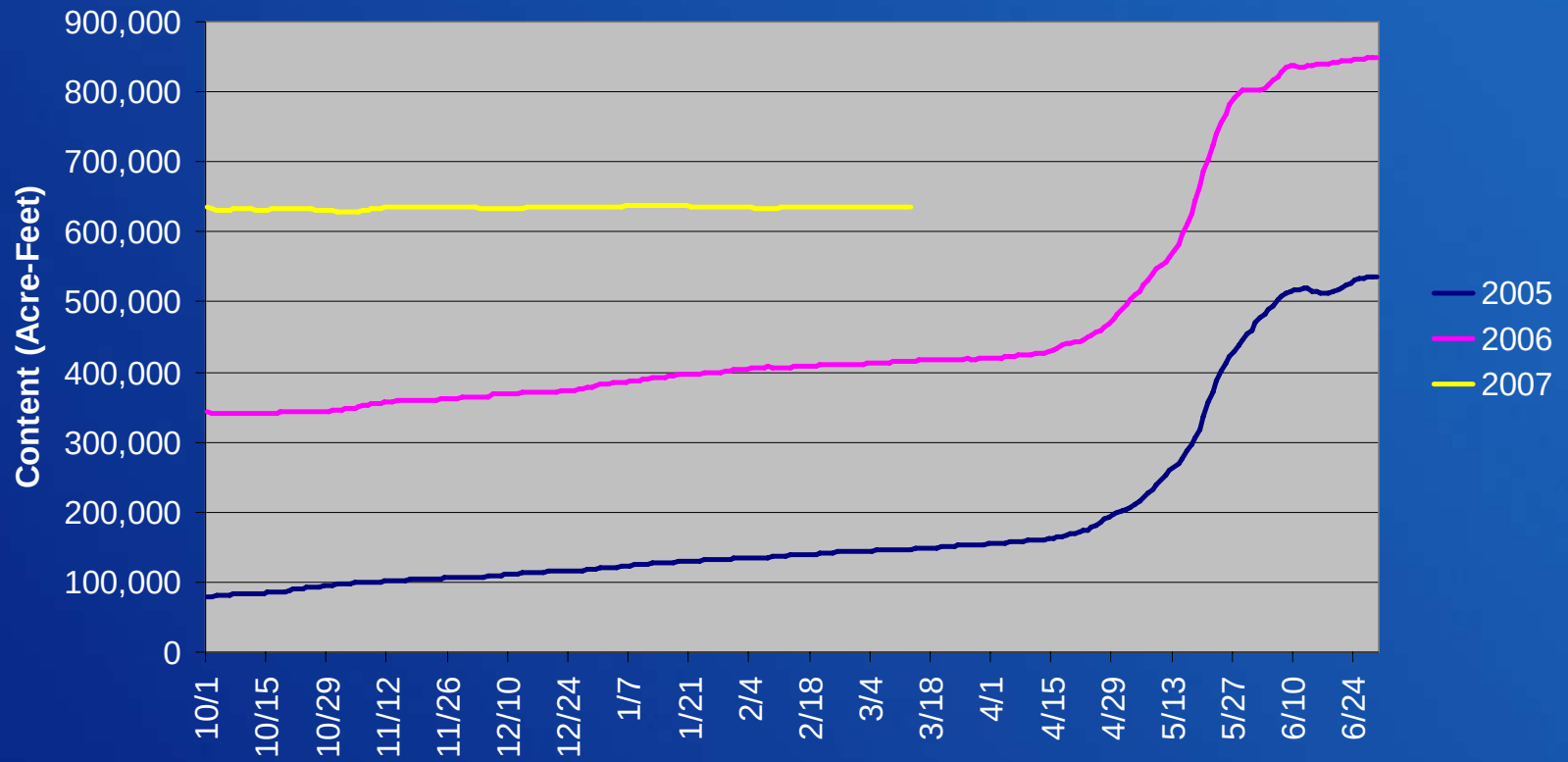
U.S. Department of the Interior
Bureau of Reclamation

03/13/2007



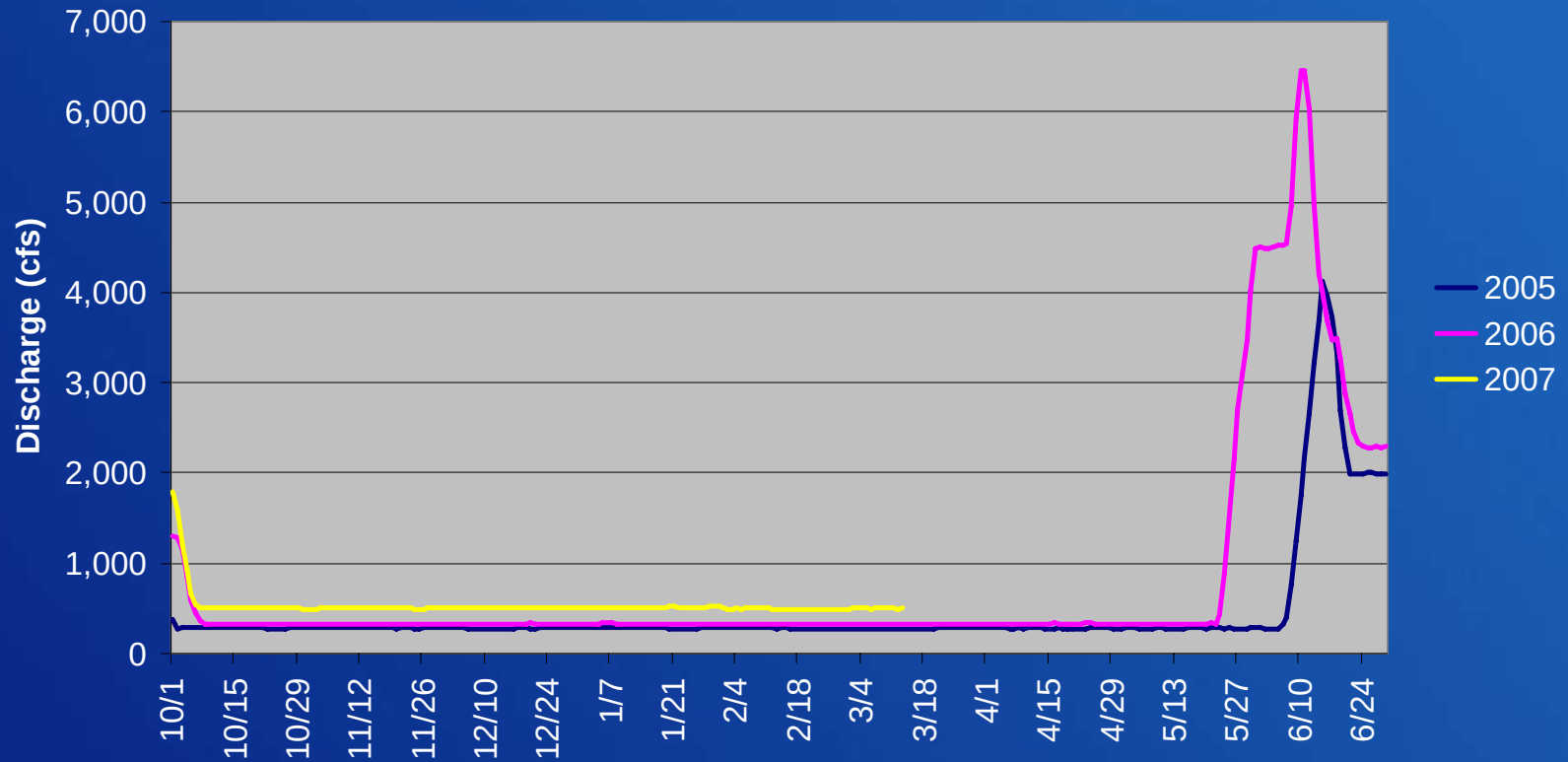
RECLAMATION

Jackson Lake



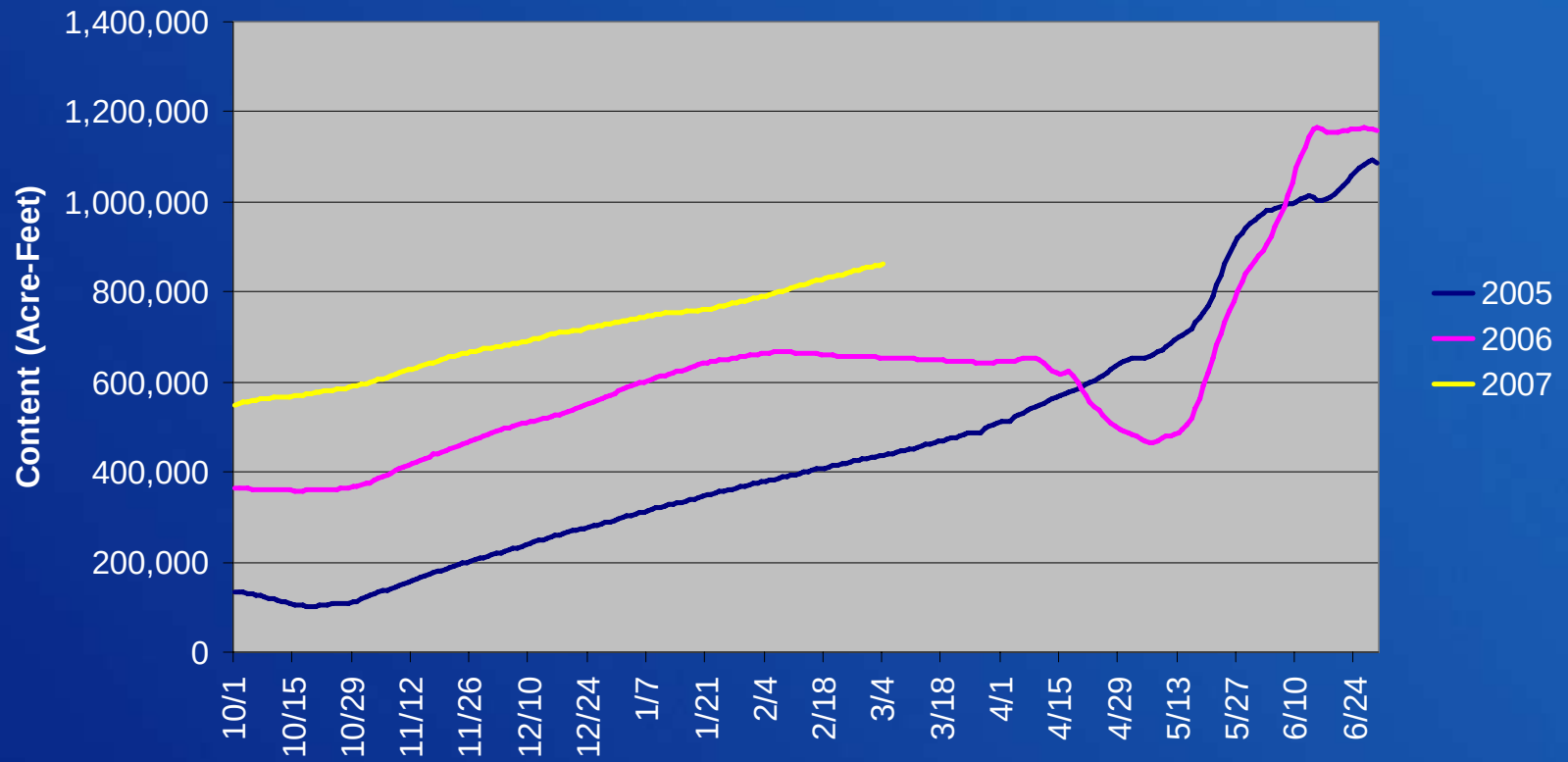
RECLAMATION

Snake River at Moran



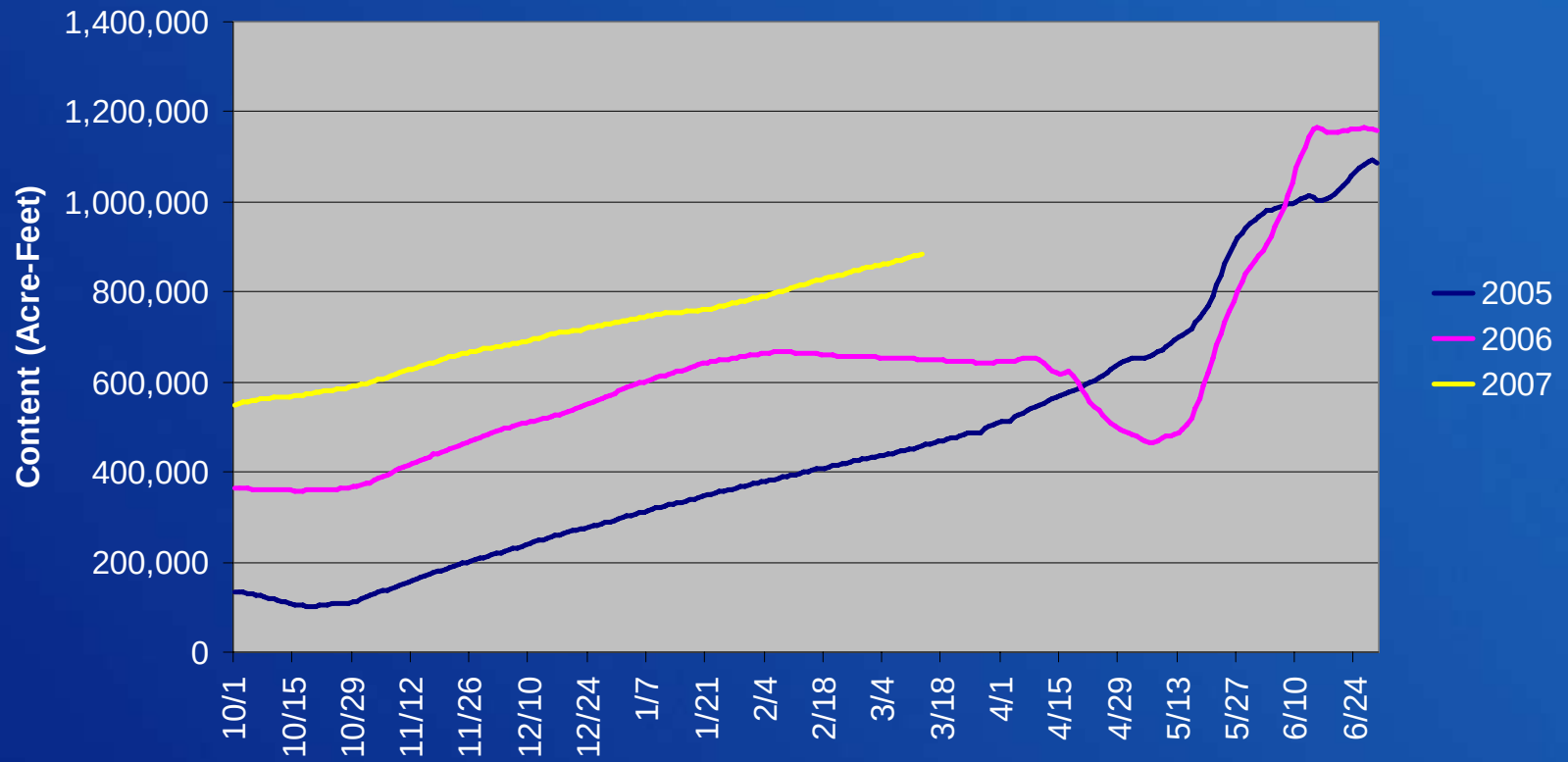
RECLAMATION

Palisades Reservoir



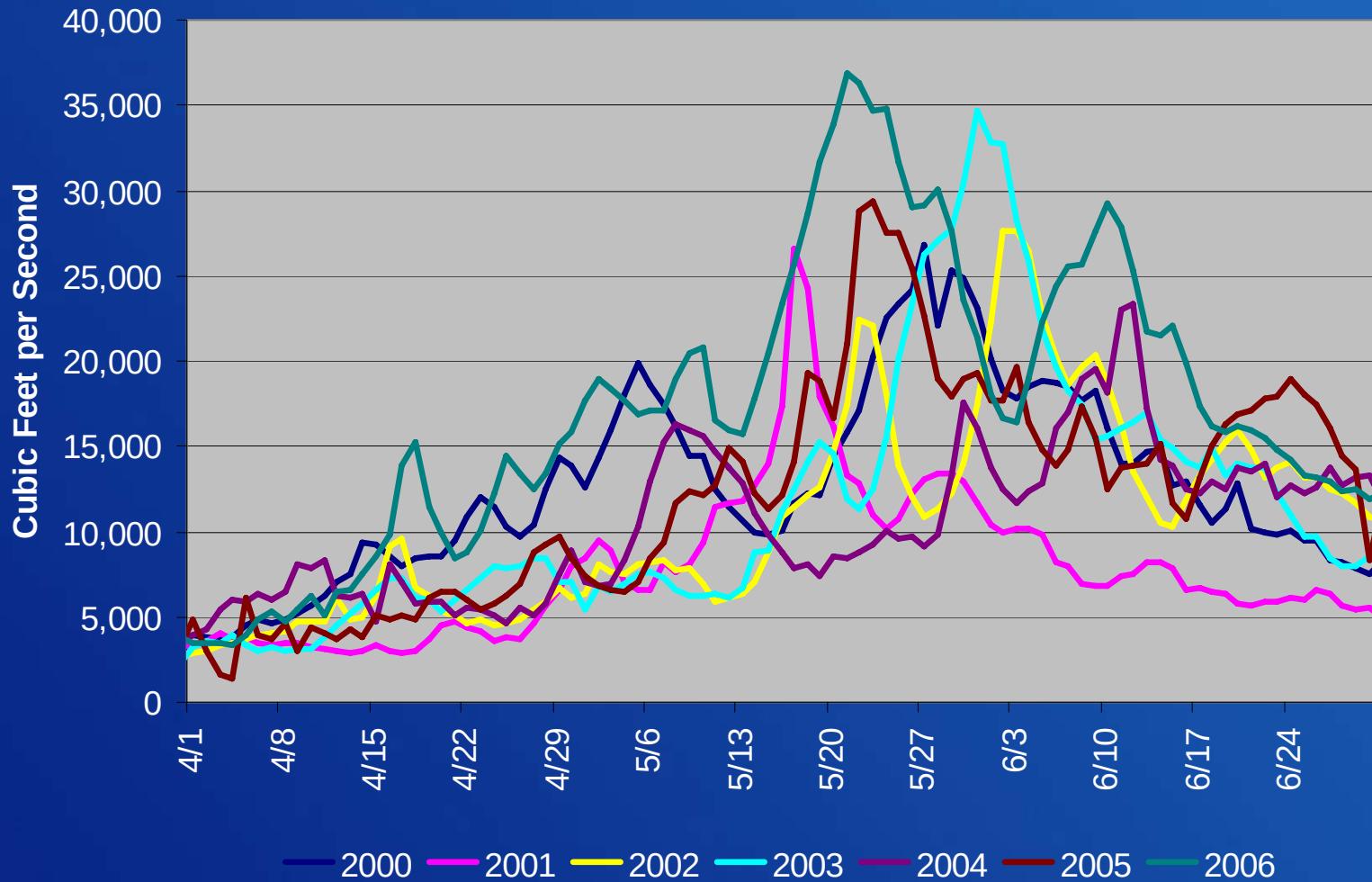
RECLAMATION

Palisades Reservoir



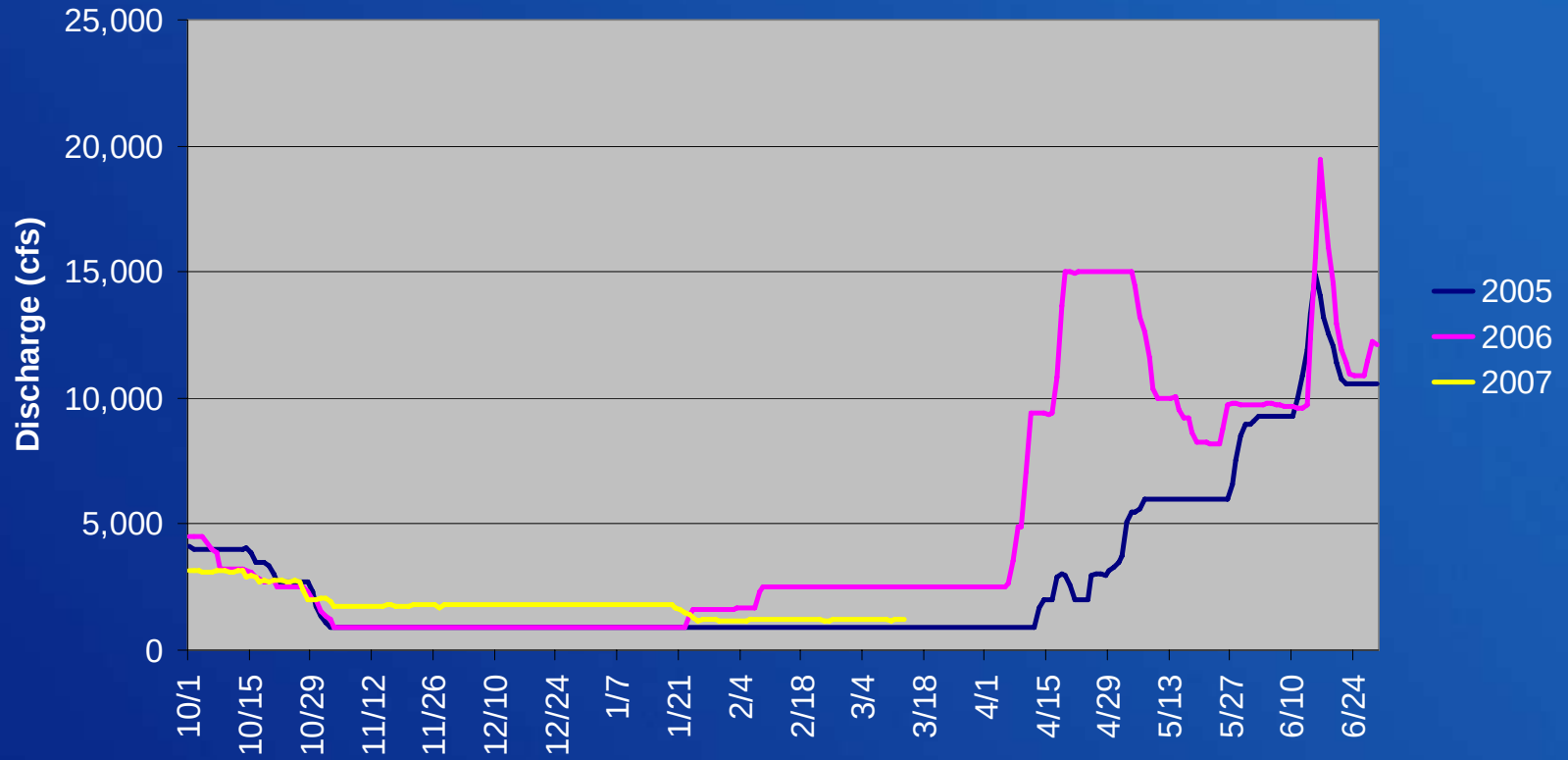
RECLAMATION

Unregulated Snake River Flow at Heise



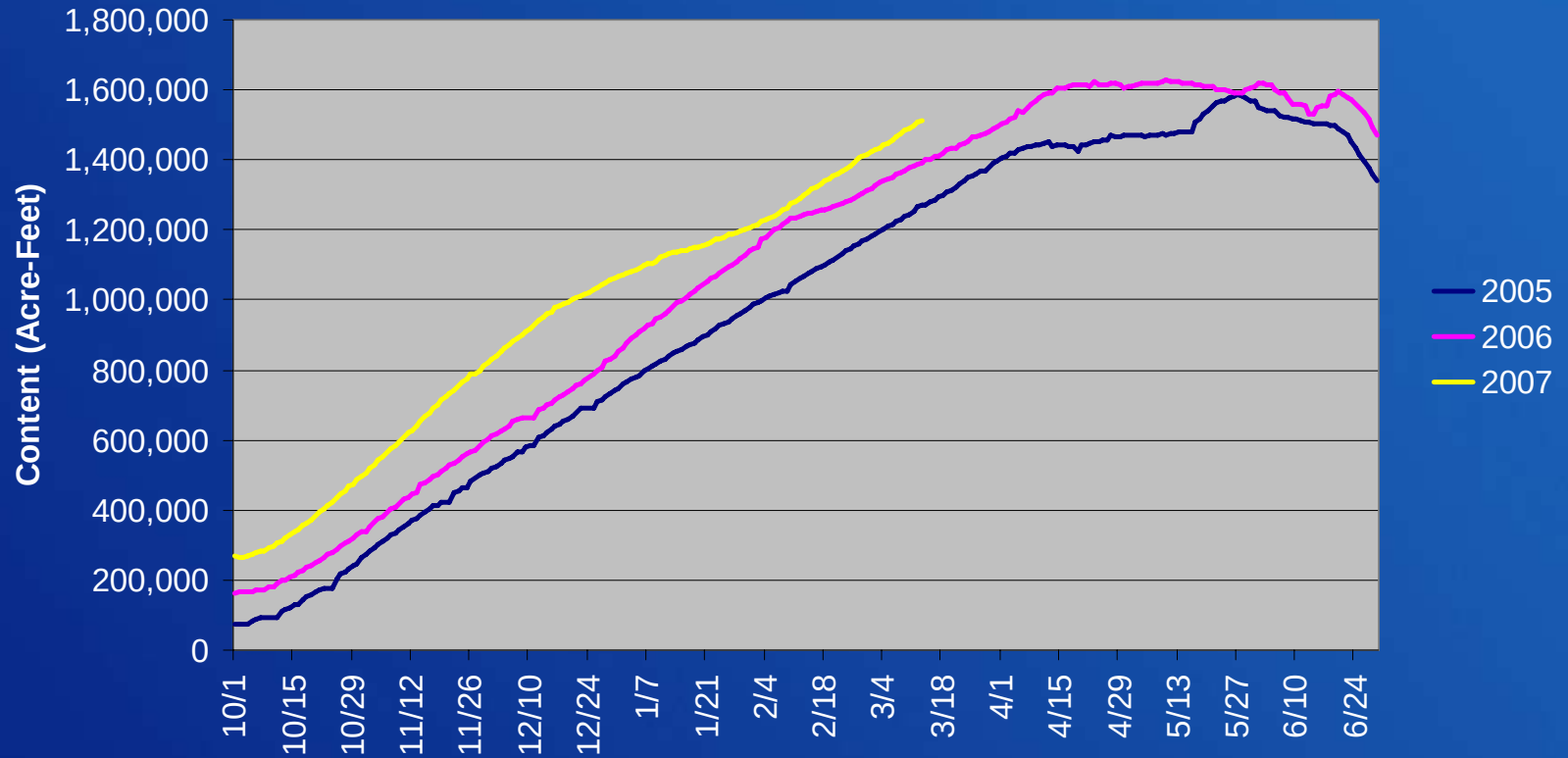
RECLAMATION

Snake River at Irwin



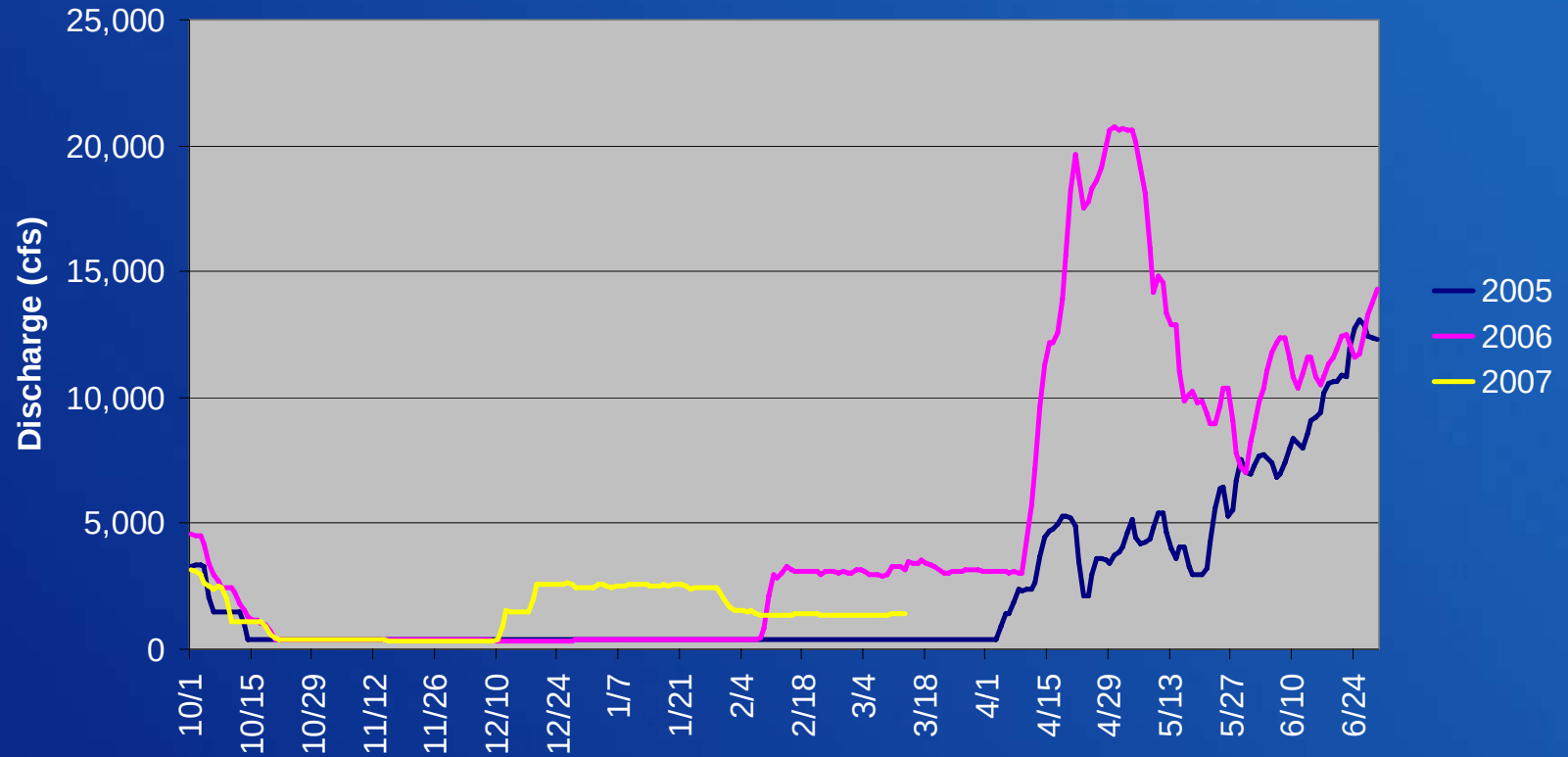
RECLAMATION

American Falls Reservoir



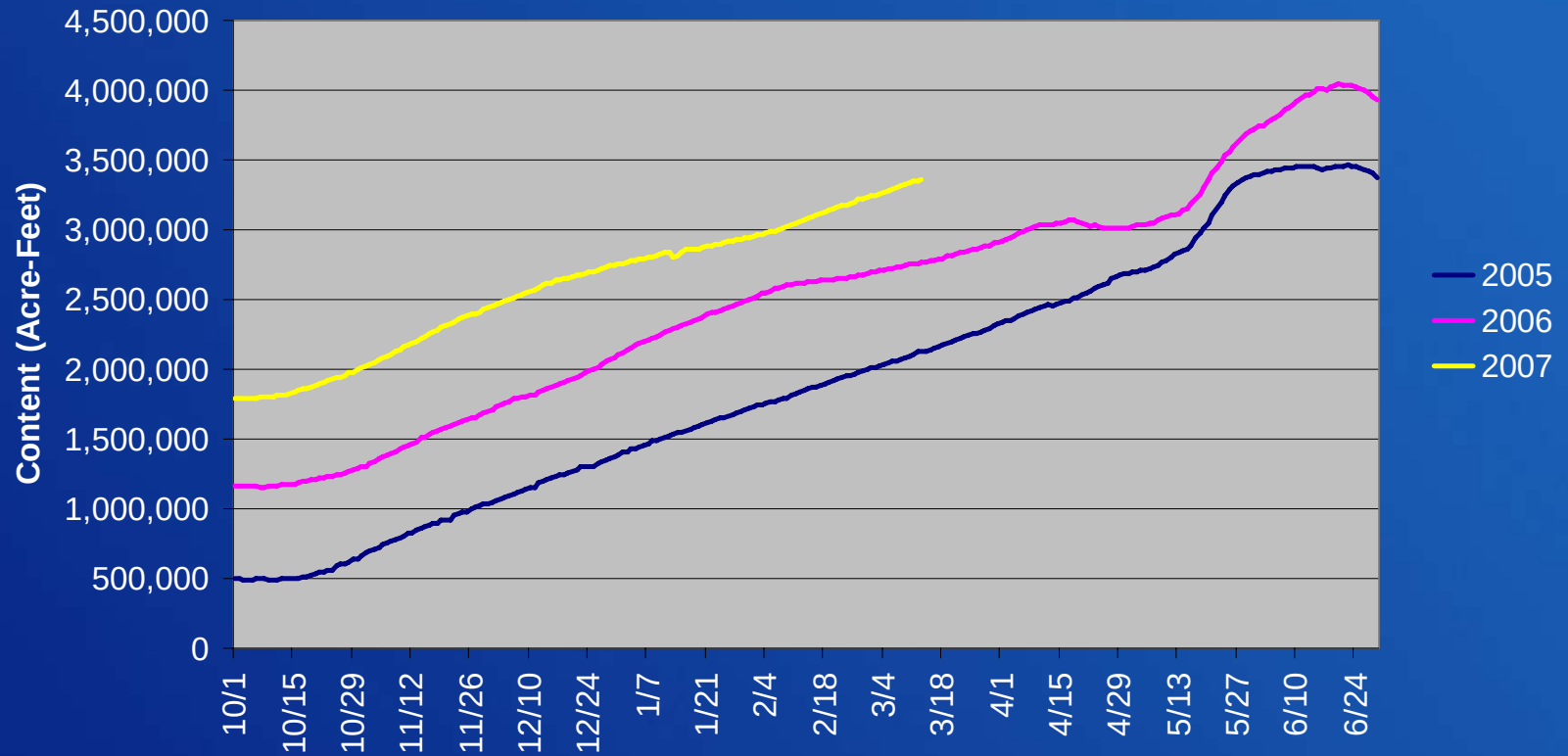
RECLAMATION

Snake River at Neeley



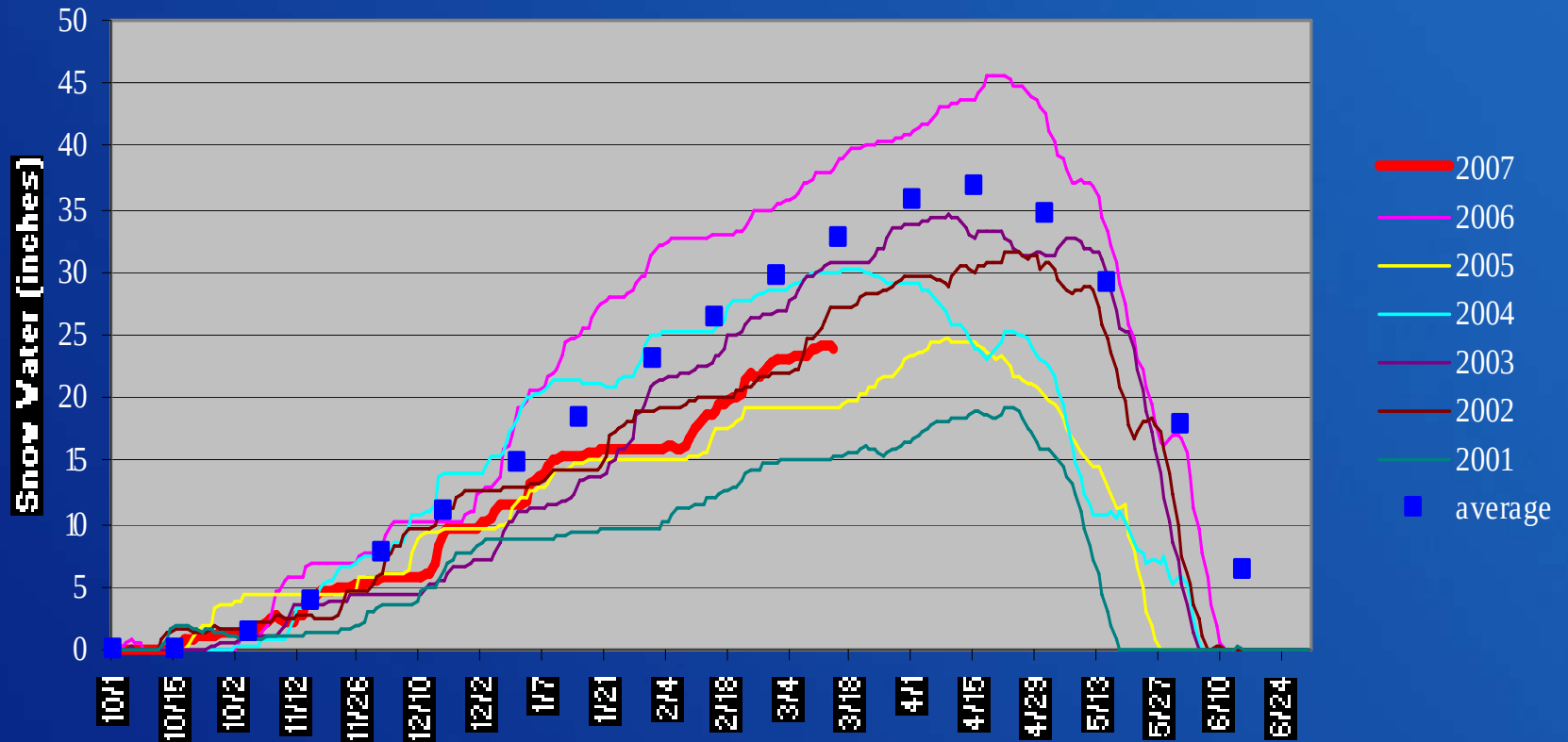
RECLAMATION

Upper Snake Total Storage



RECLAMATION

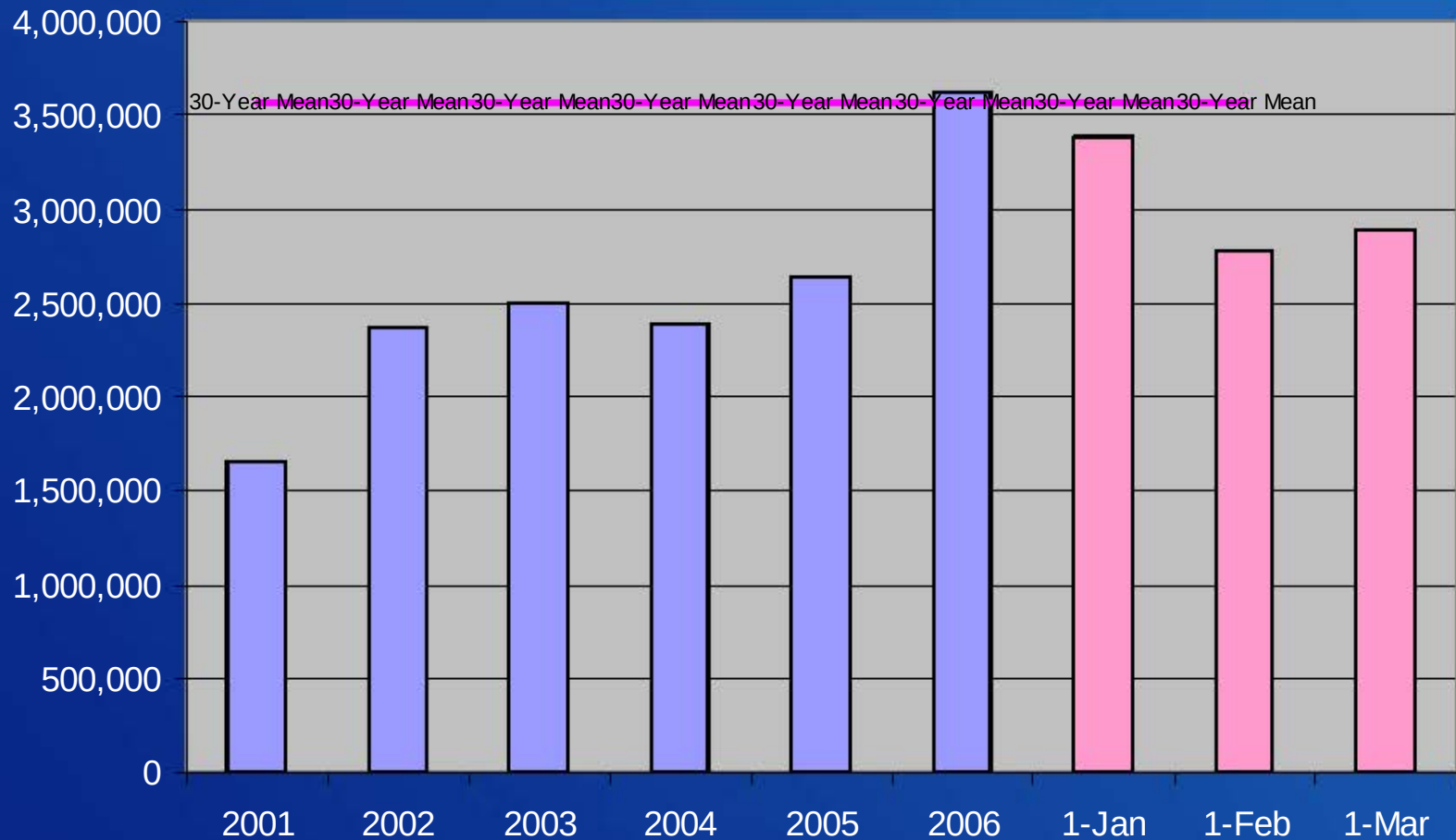
Lewis Lake Divide SNOTEL



RECLAMATION

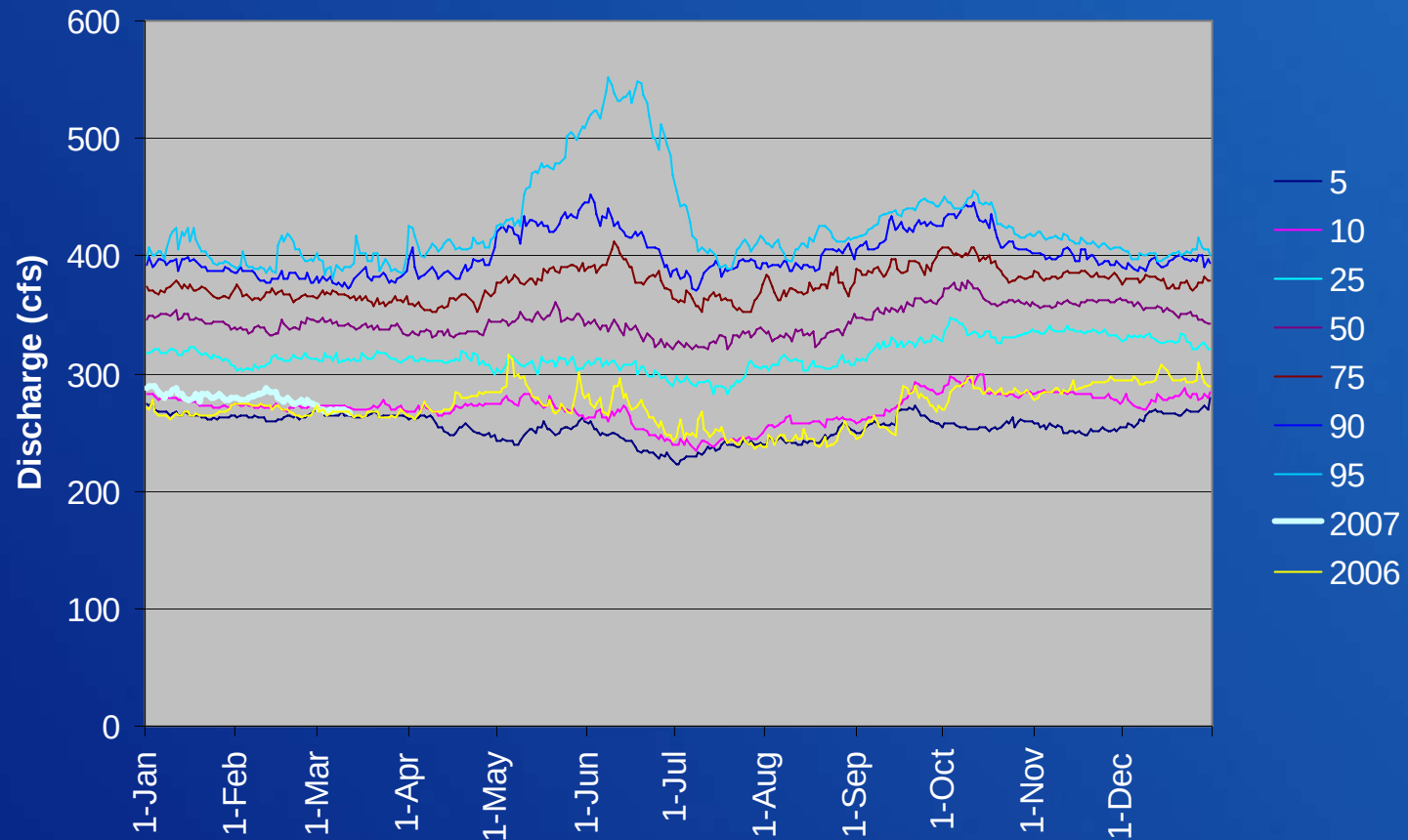
Snake River above Heise

Unregulated Runoff, April through July



RECLAMATION

Spring Creek at Sheepskin Road



RECLAMATION

RECLAMATION

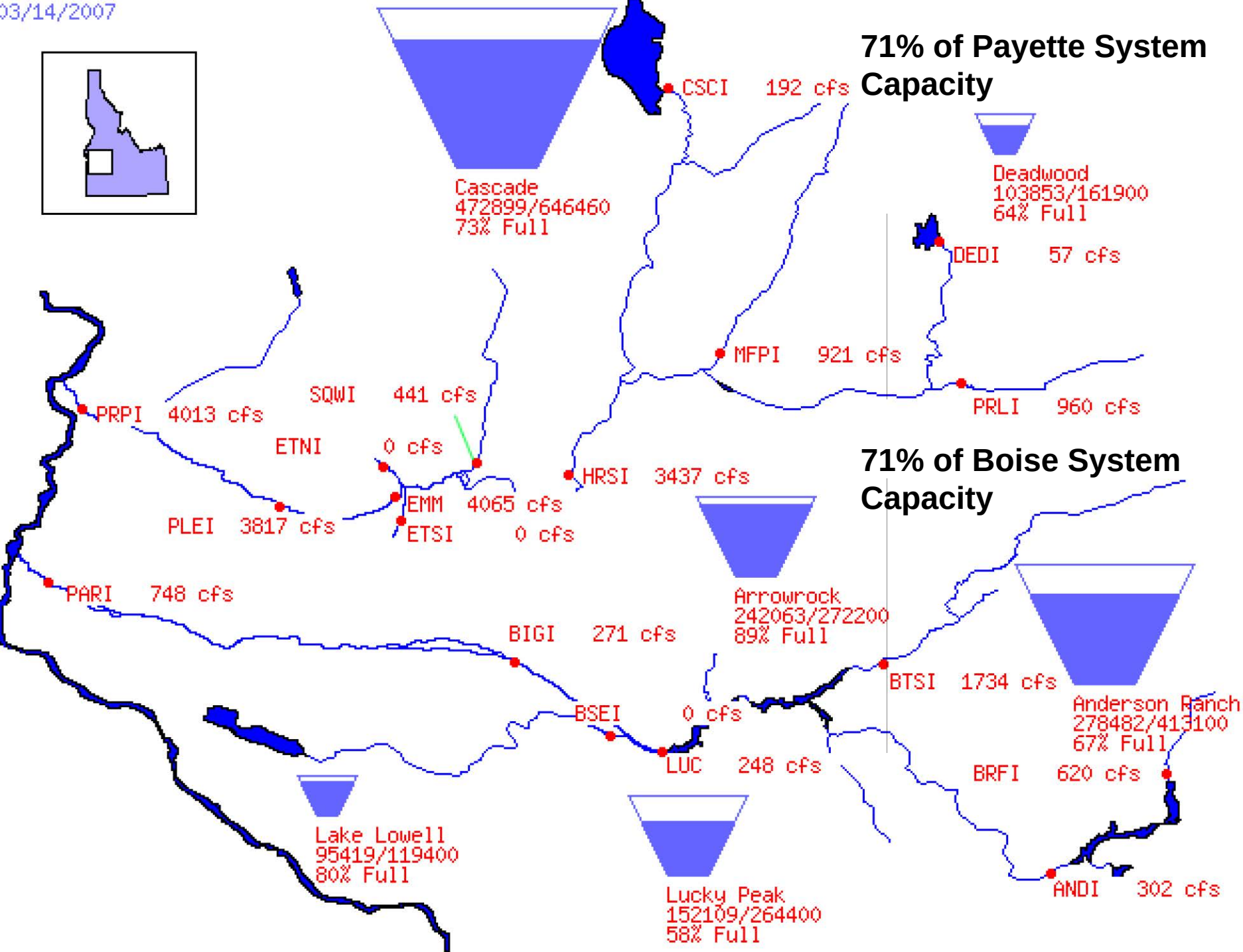
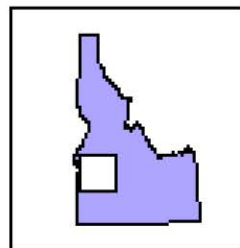
Managing Water in the West

Idaho Water Supply Committee Meeting

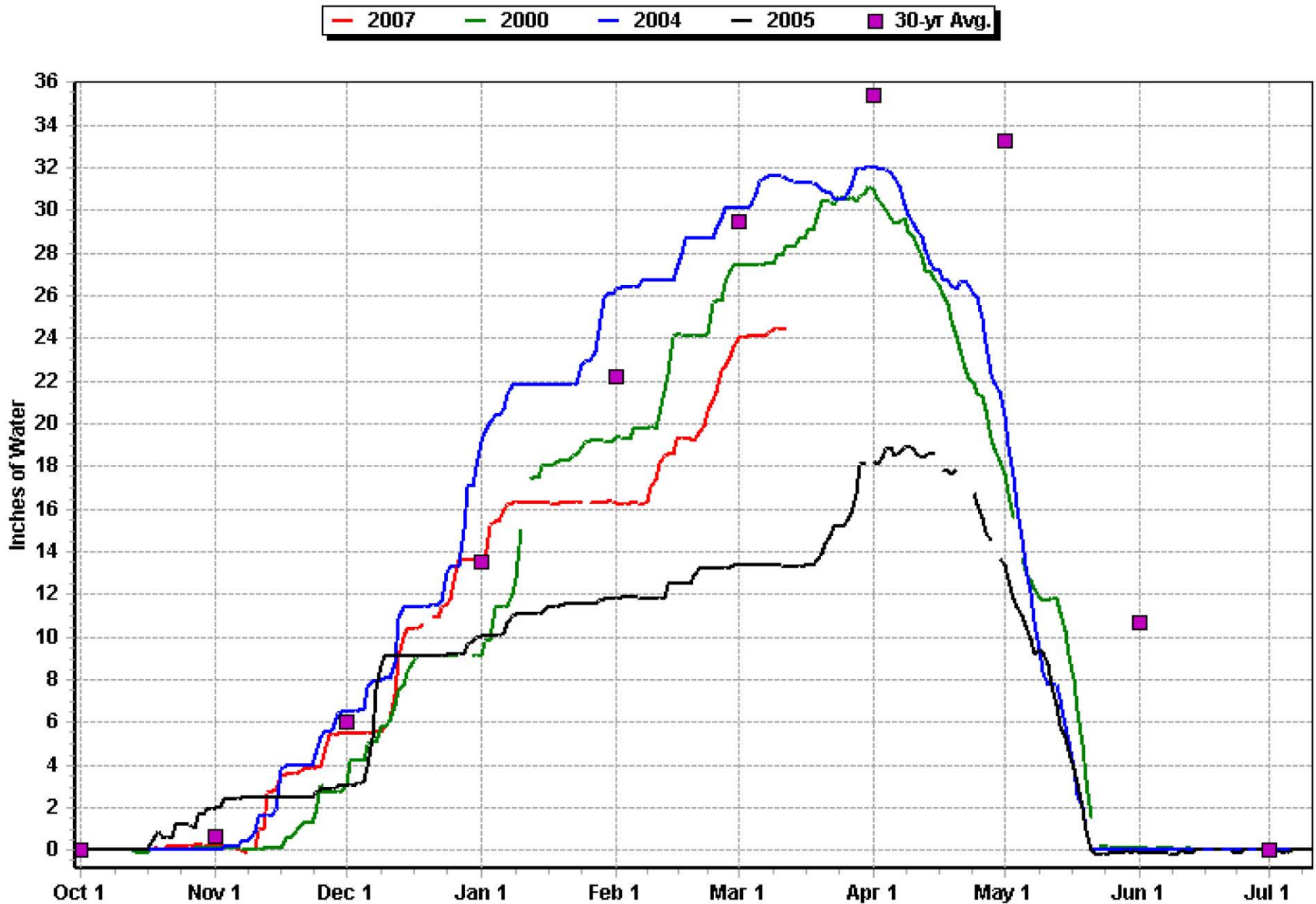
March 15, 2007



U.S. Department of the Interior
Bureau of Reclamation

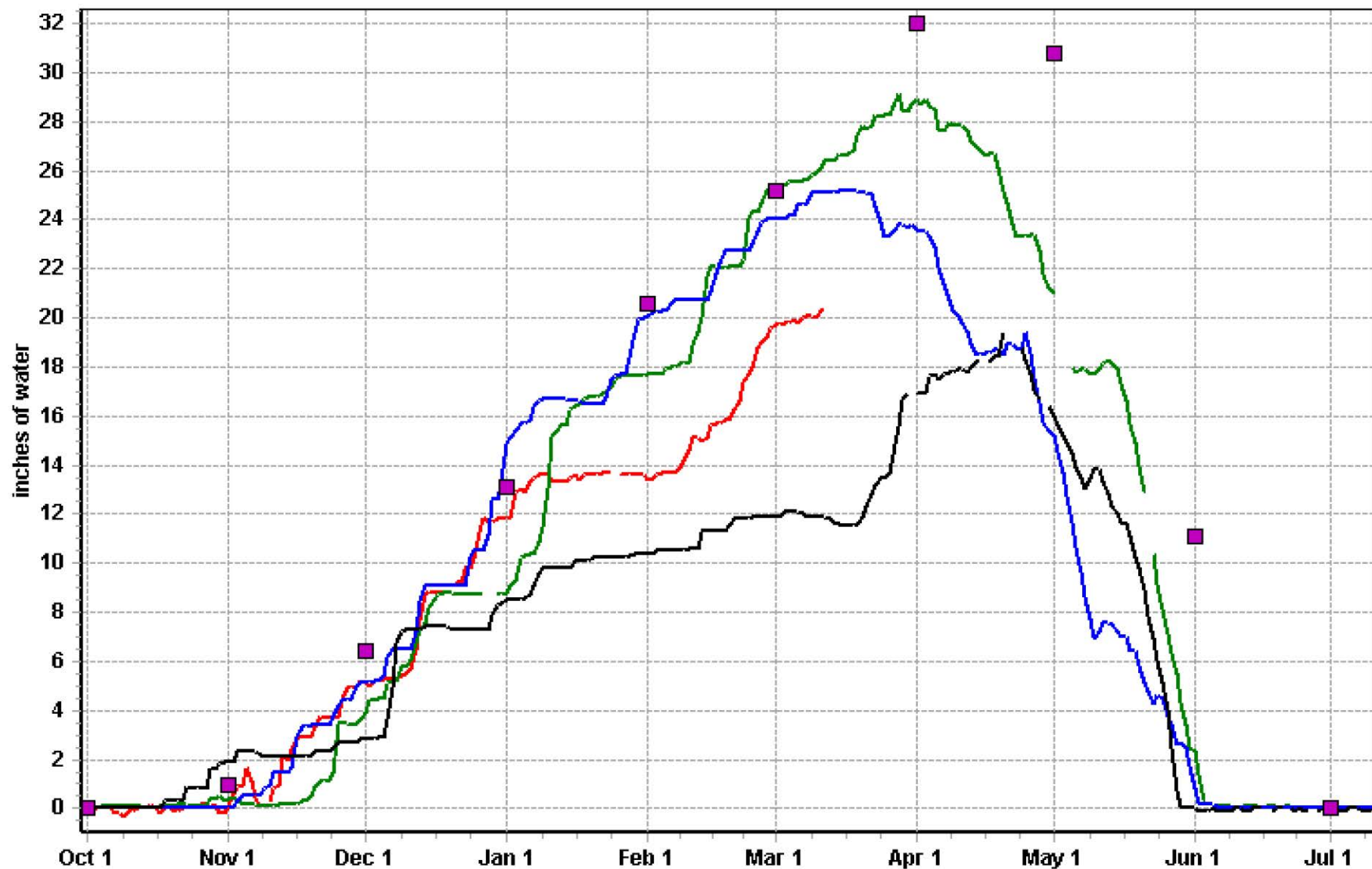


Moores Creek Summit Snotel - Elev. 6100



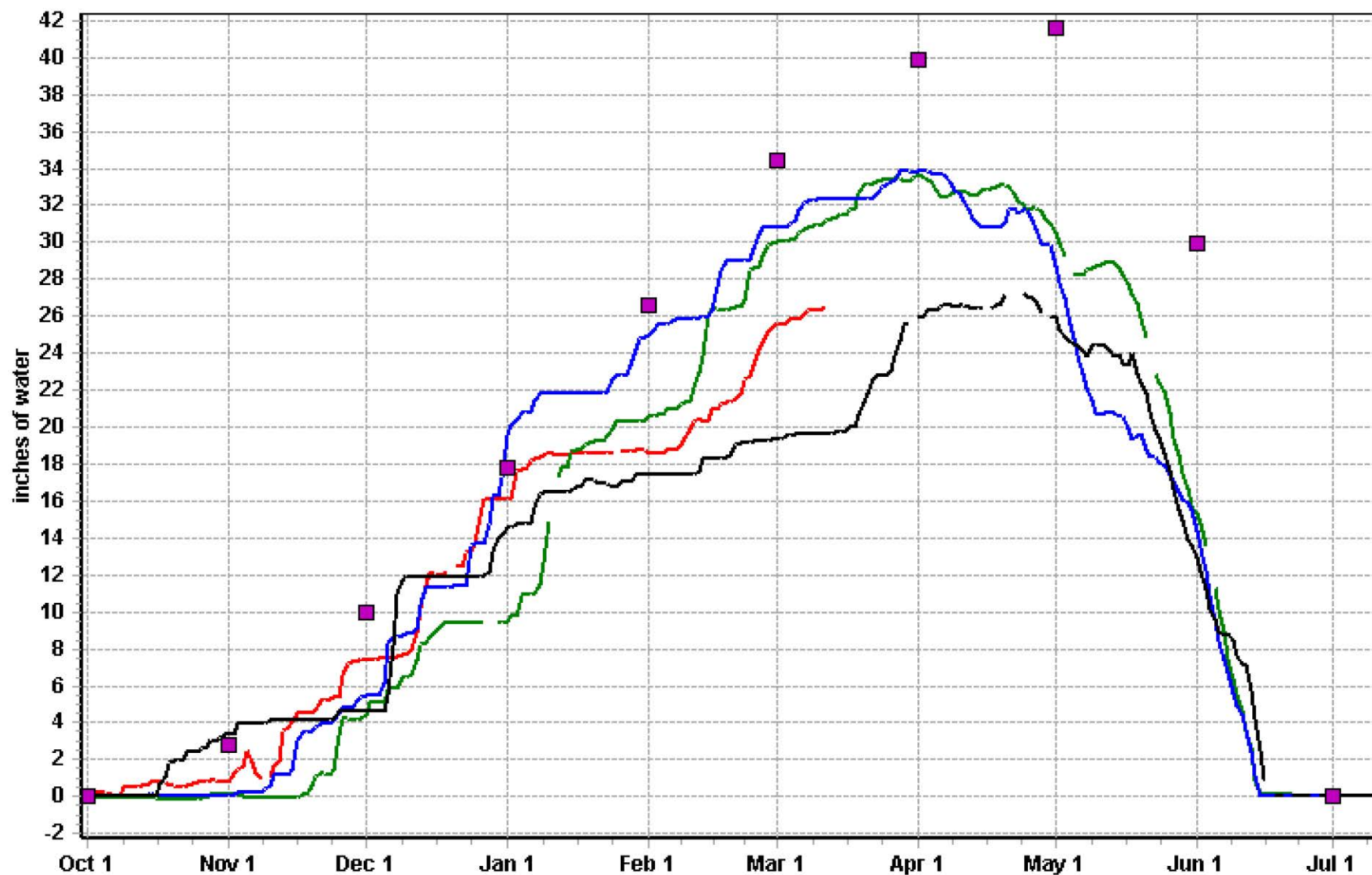
Jackson Peak Snotel - elev. 7070

— 2007 — 2000 — 2004 — 2005 ■ 30-yr Avg.



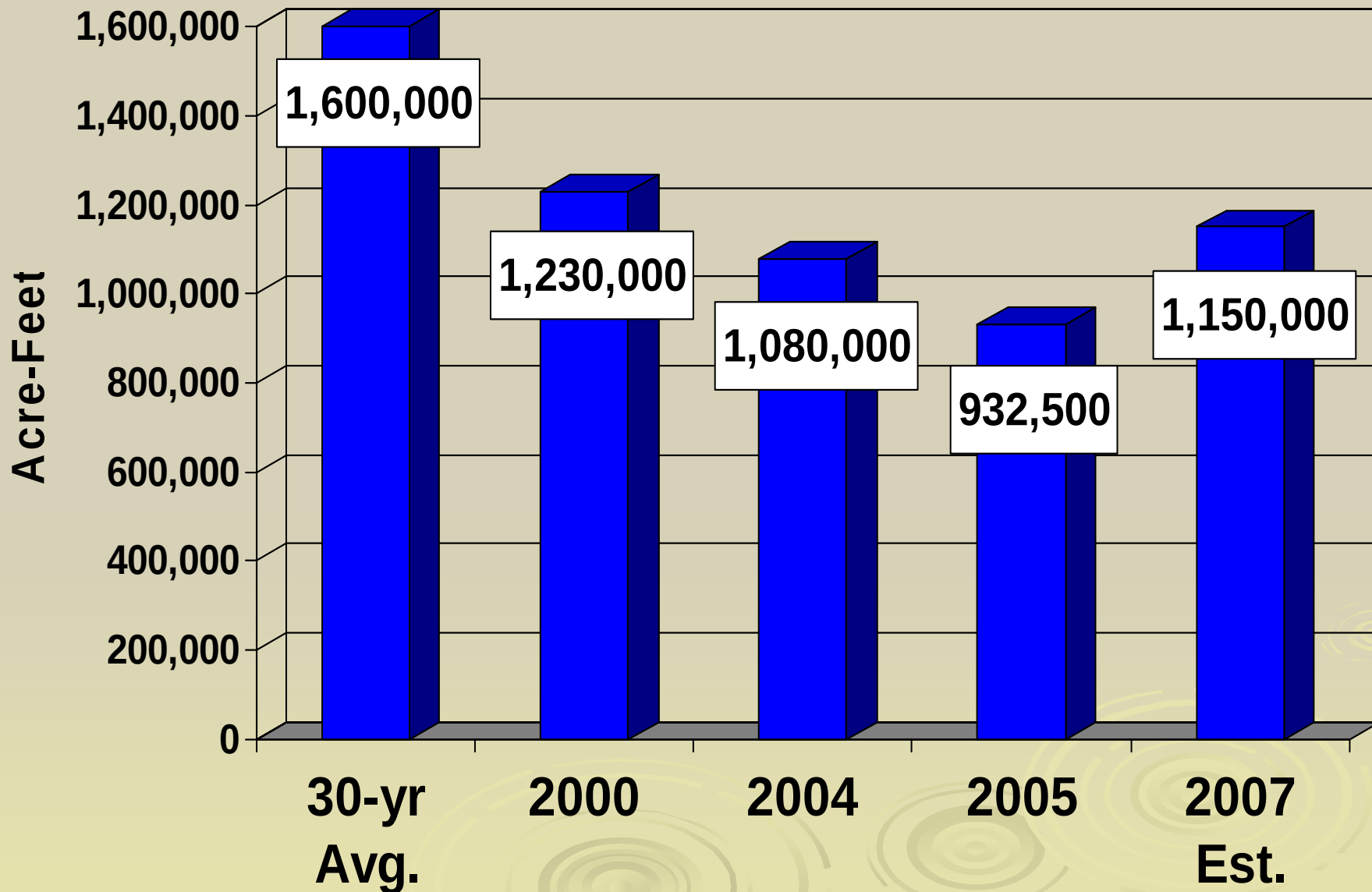
Trinity Mountain Snotel - elev. 7770

— 2007 — 2000 — 2004 — 2005 ■ 30-yr Avg.

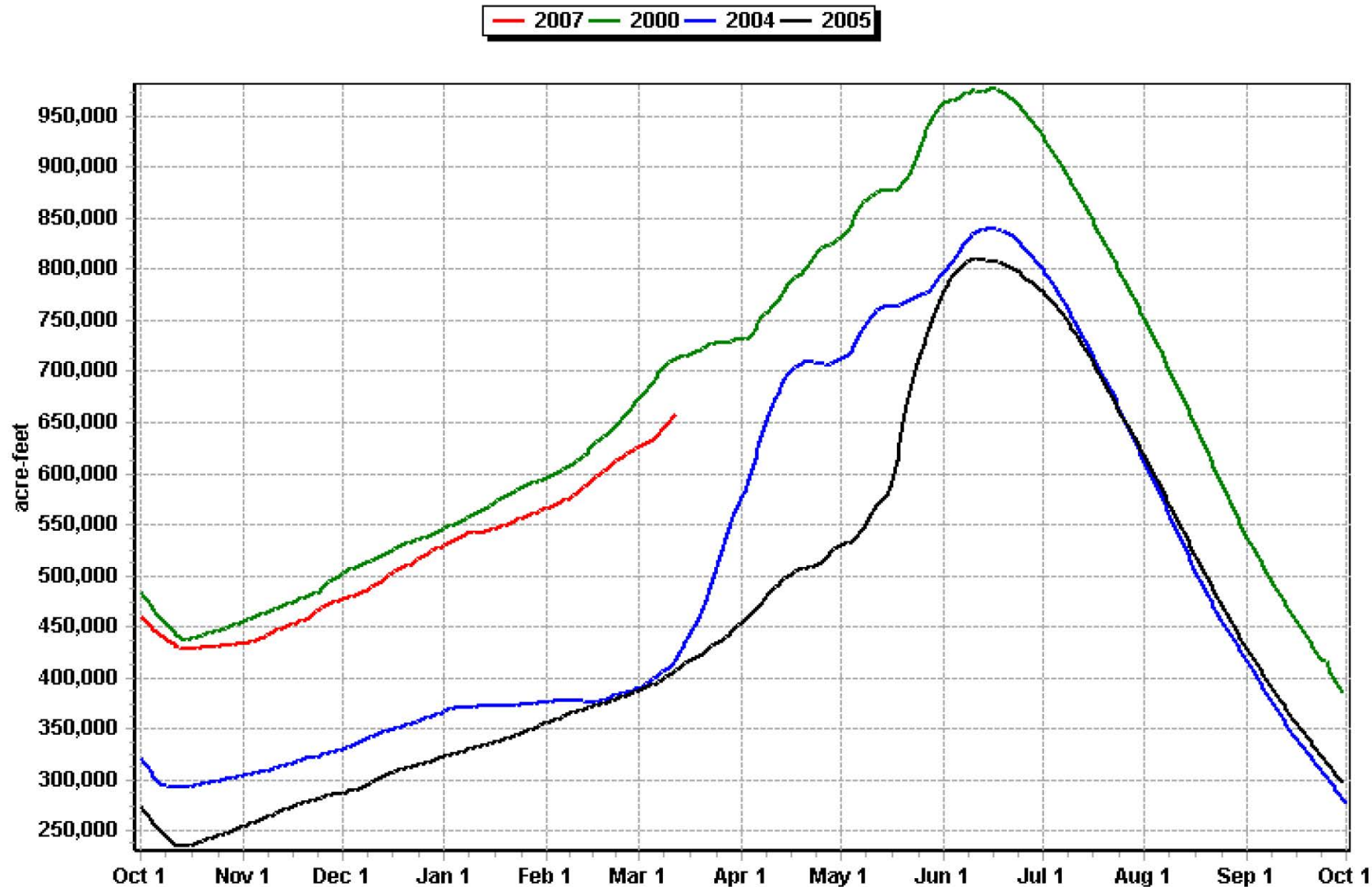


Boise Basin Runoff

March 1 – July 30

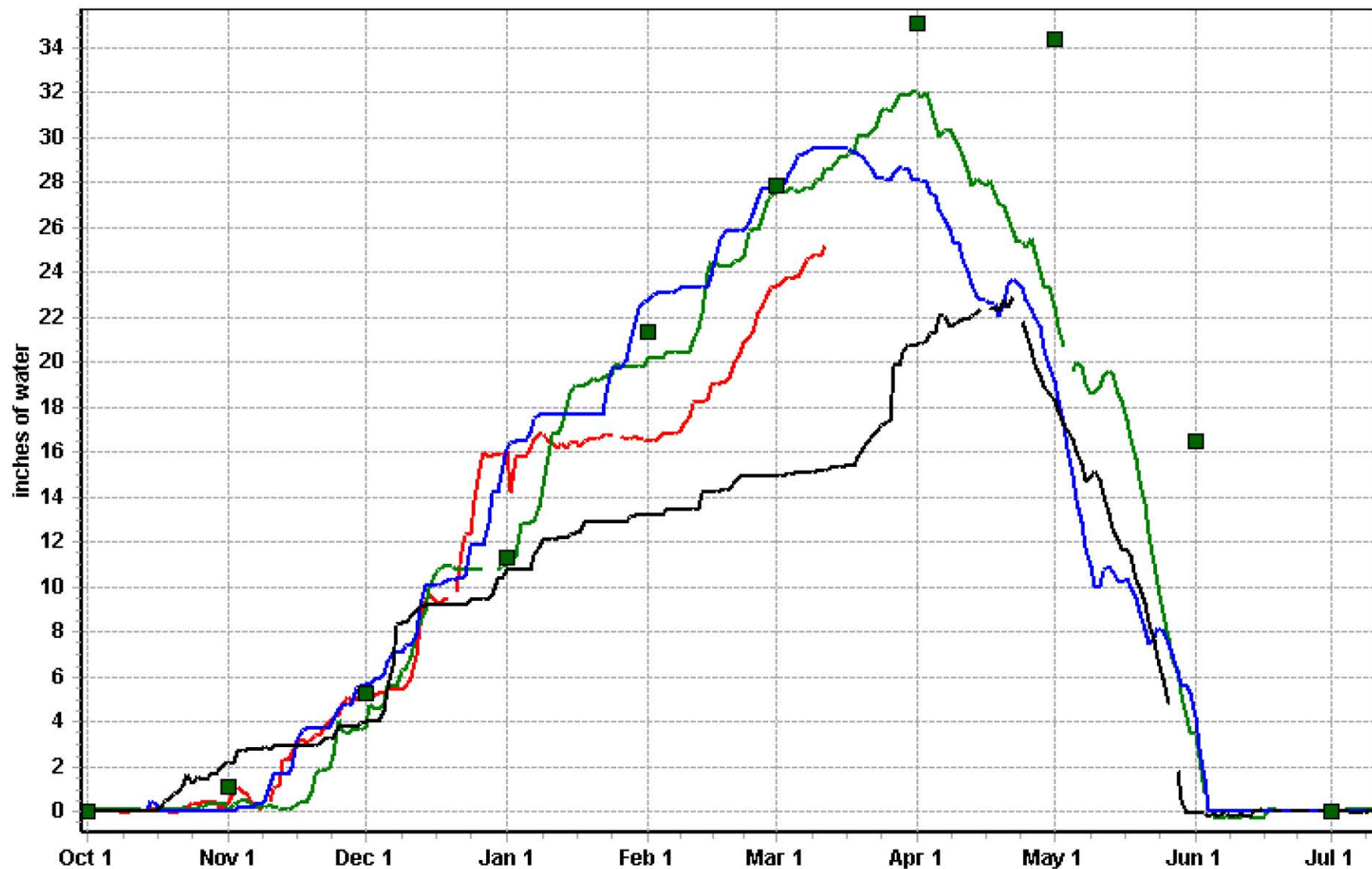


Boise River Reservoir System Storage (Anderson Ranch, Arrowrock & Lucky Peak - Cap. = 949,700 AF)

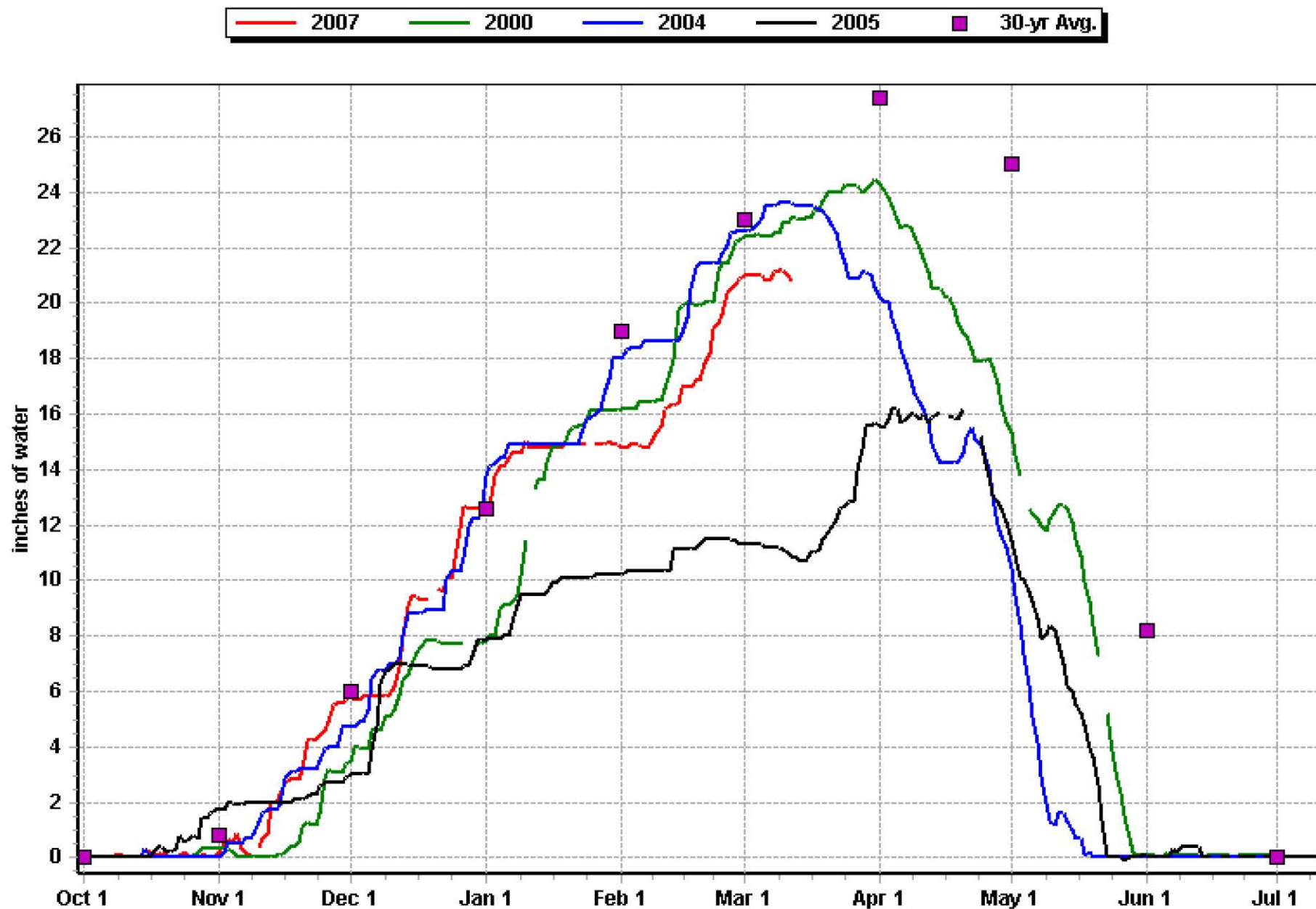


Big Creek Summit Snotel - elev. 6580

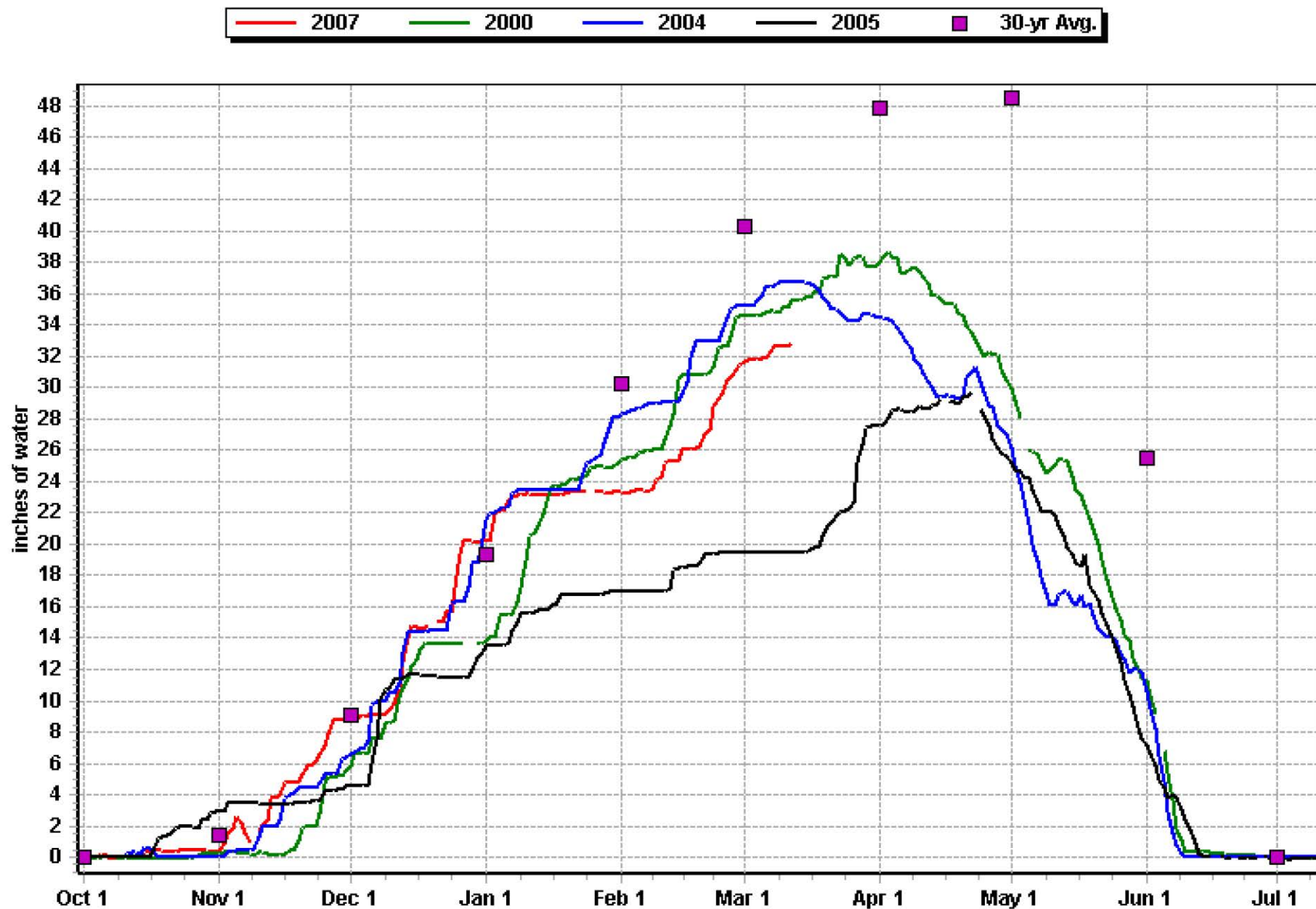
2007 2000 2004 2005 30-yr Avg.



Banner Summit Snotel - elev. 7040

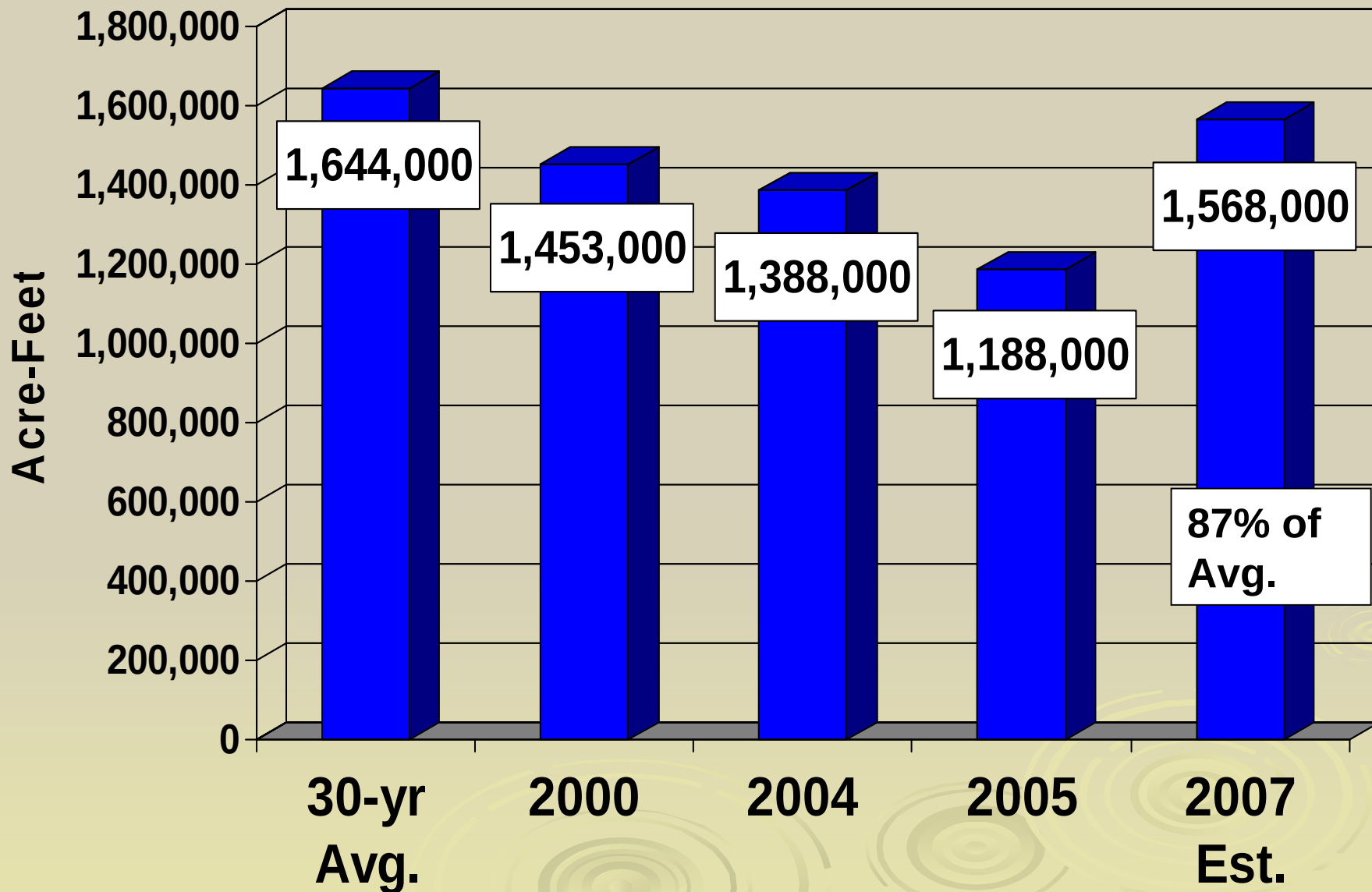


Deadwood Summit Snotel - elev. 6860



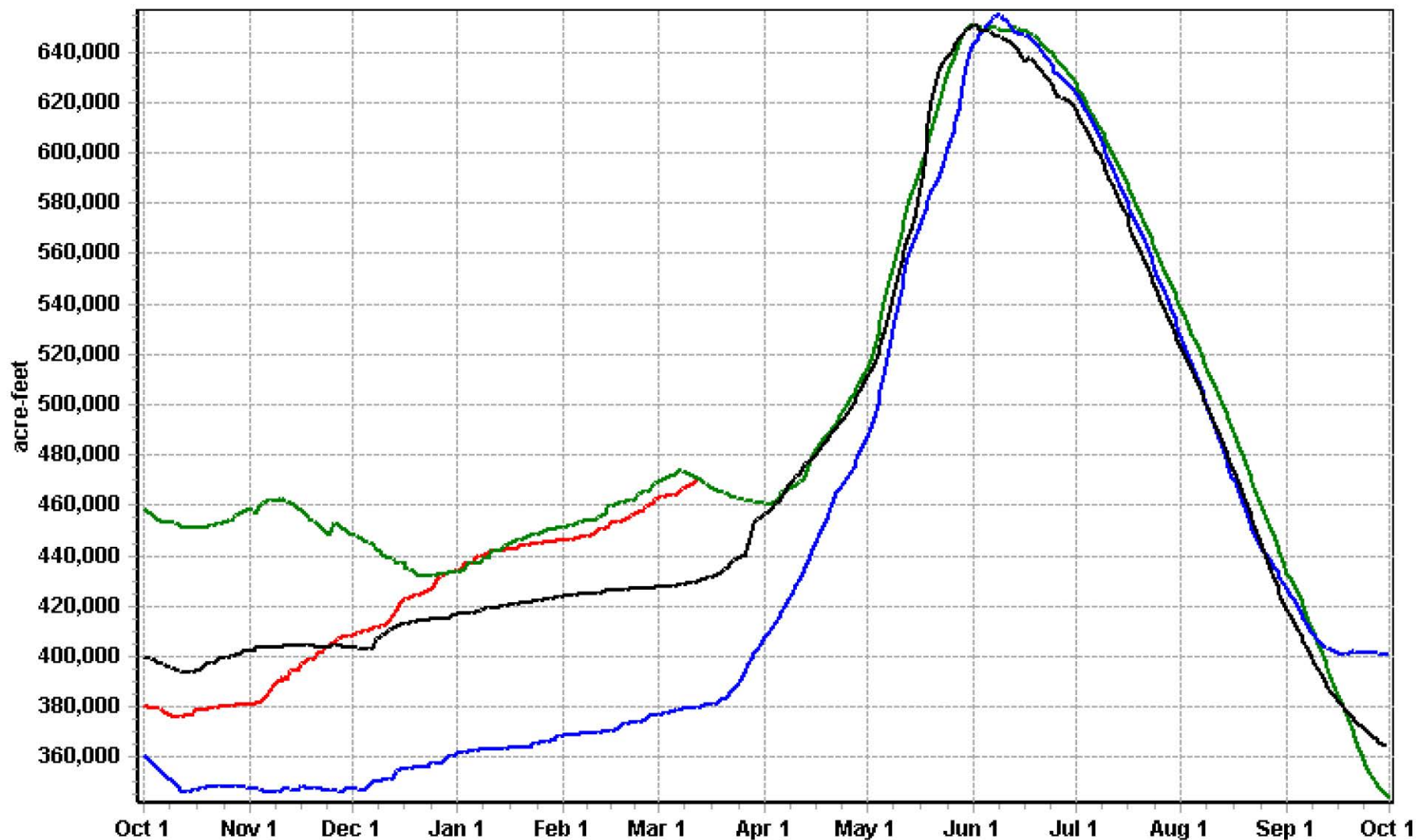
Payette Basin Runoff

March 1 –July 30 @ Horseshoe Bend



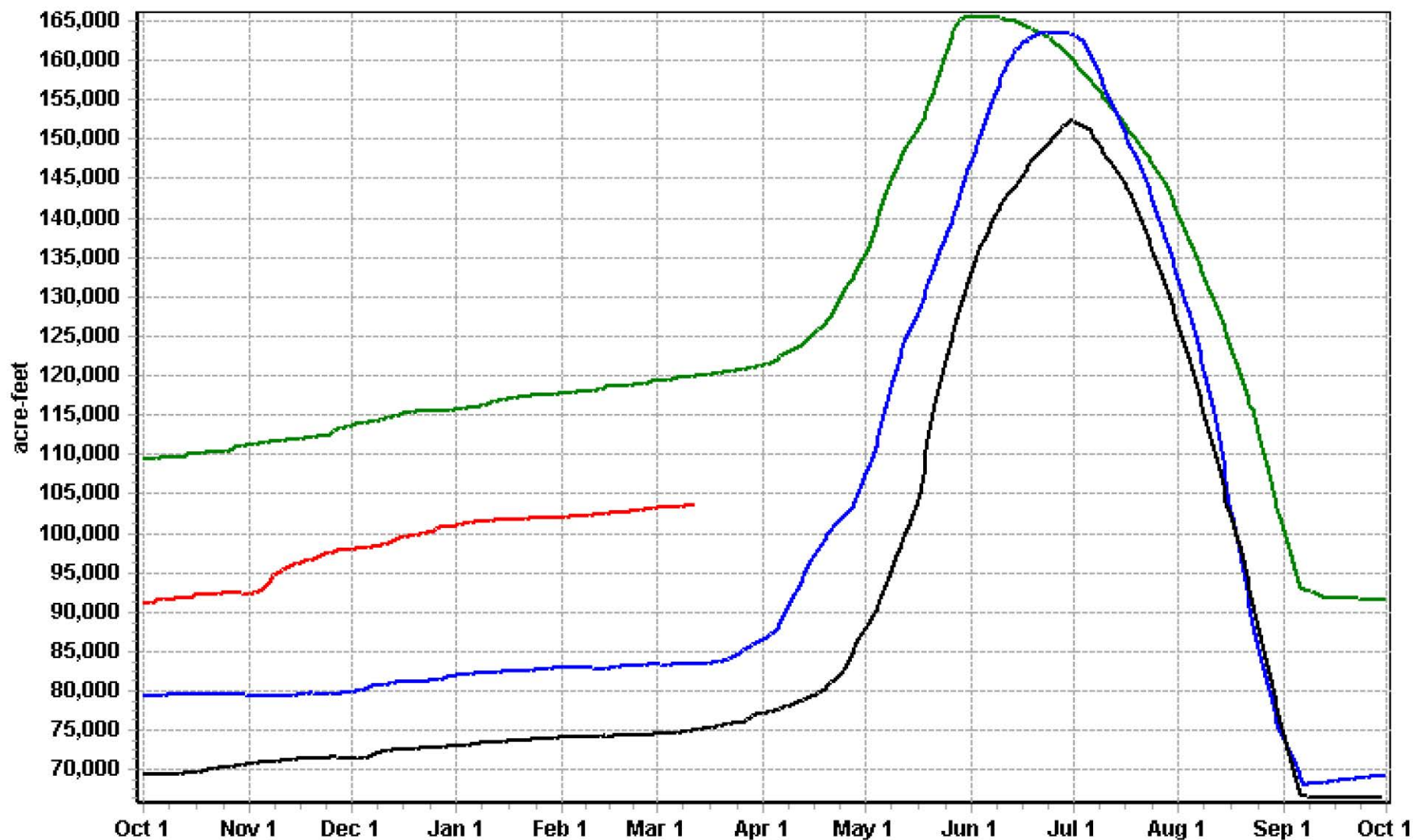
Cascade Reservoir Storage (capacity = 646,460 AF)

— 2007 — 2000 — 2004 — 2005

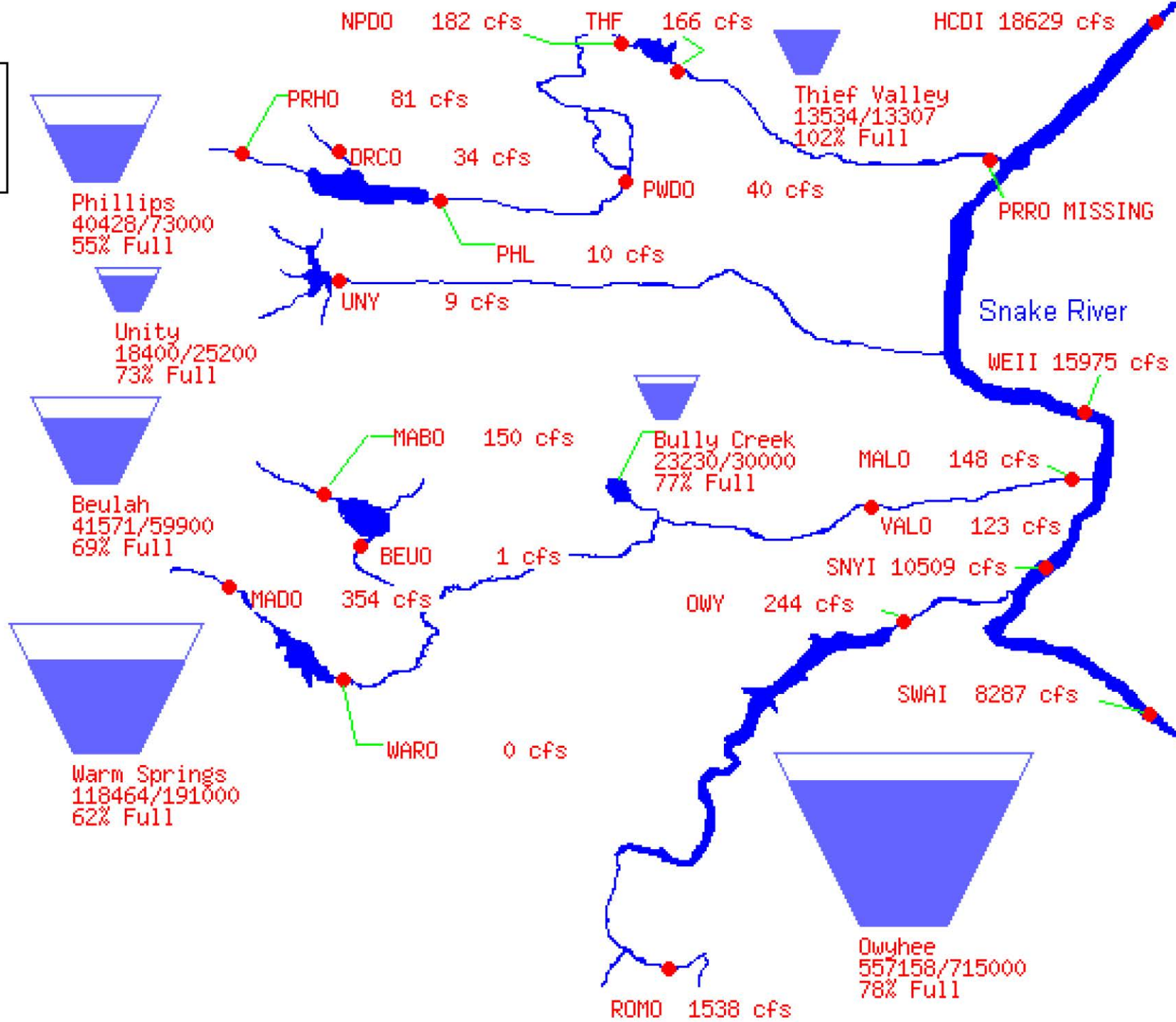
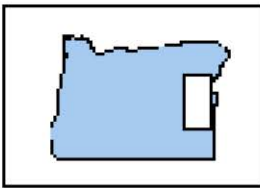


Deadwood Reservoir Storage (capacity = 161,900 AF)

— 2007 — 2000 — 2004 — 2005

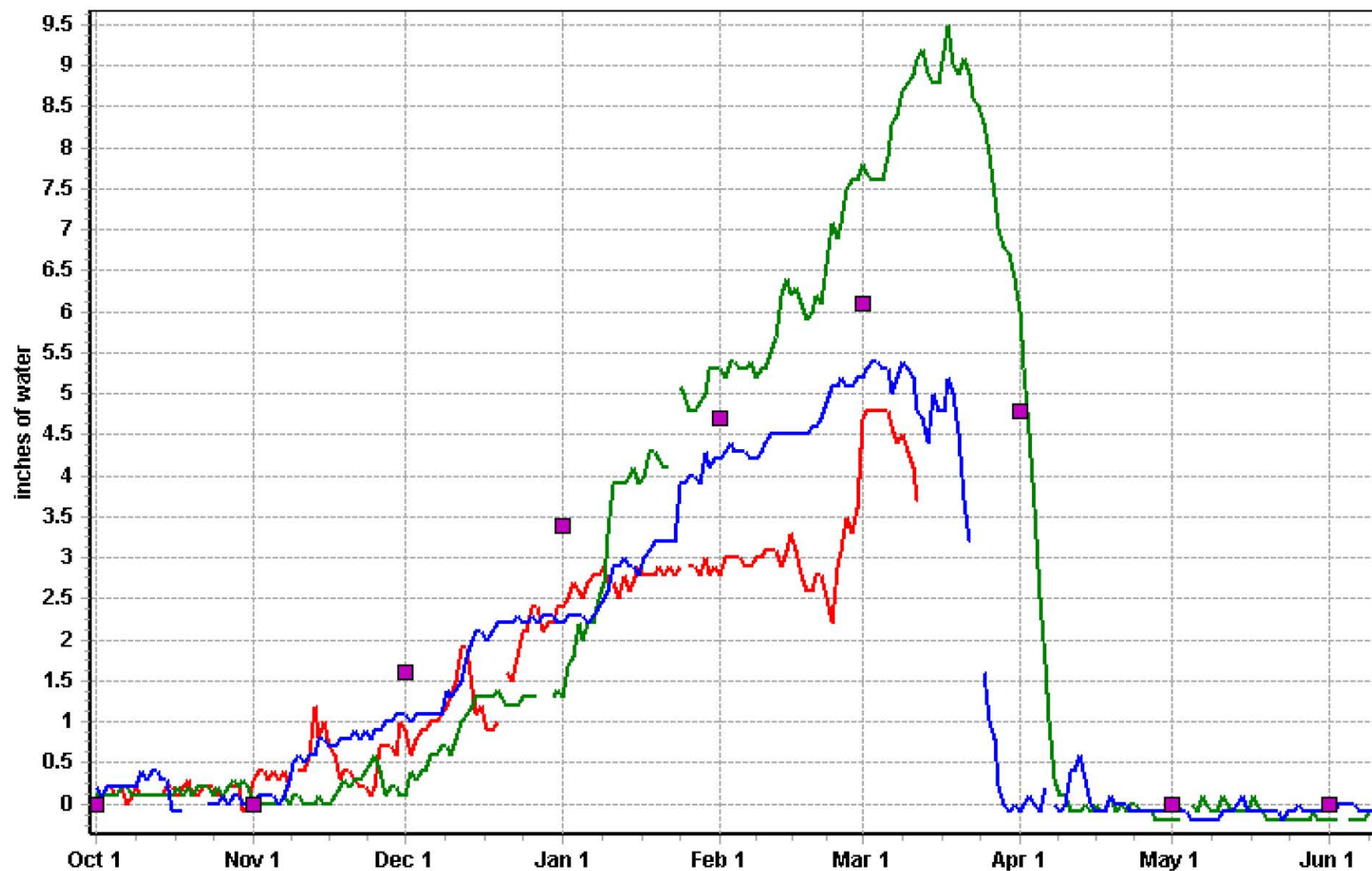


03/14/2007



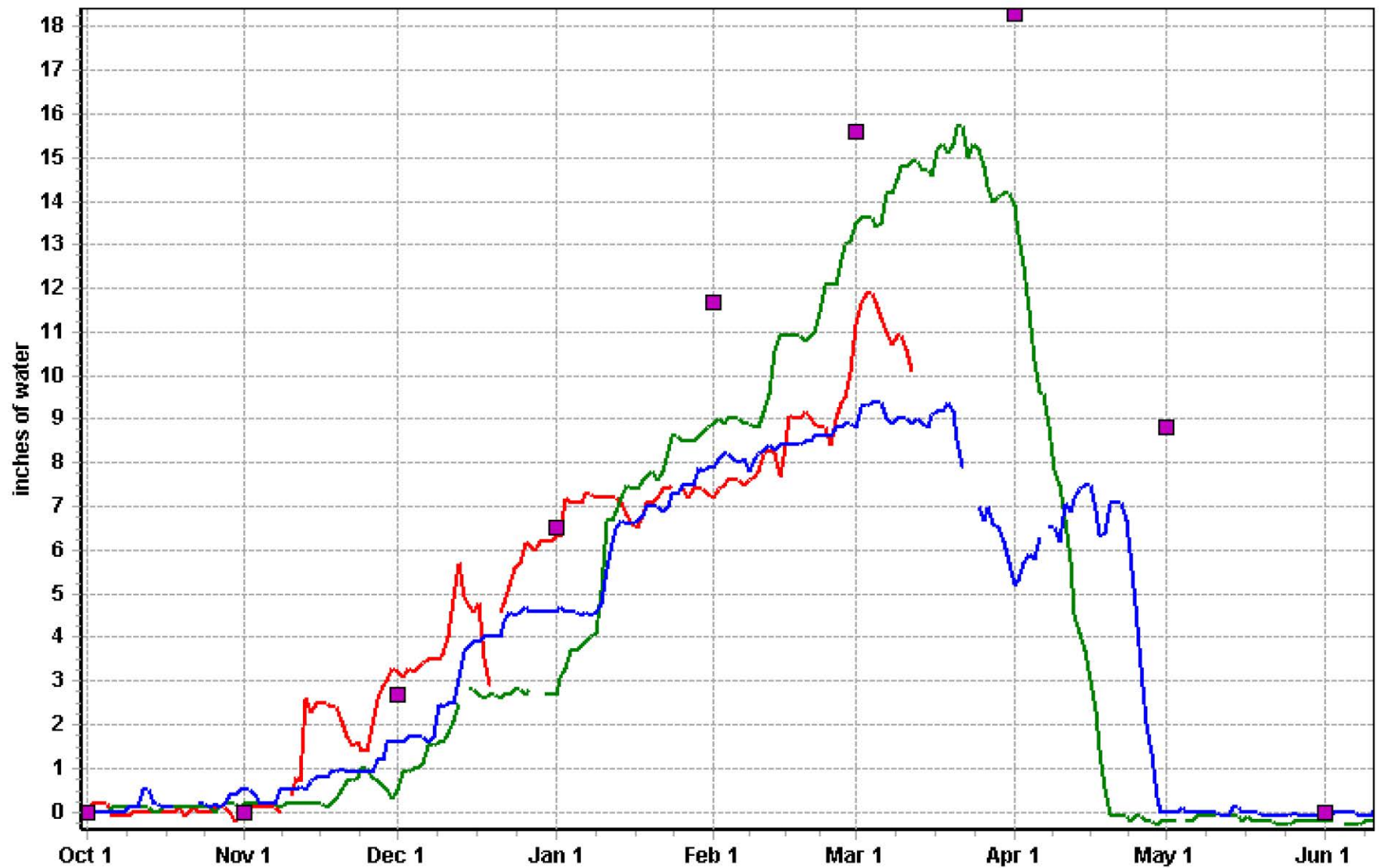
Mud Flat Snotel - elev 5730

2007 2000 2001 30-yr Avg.



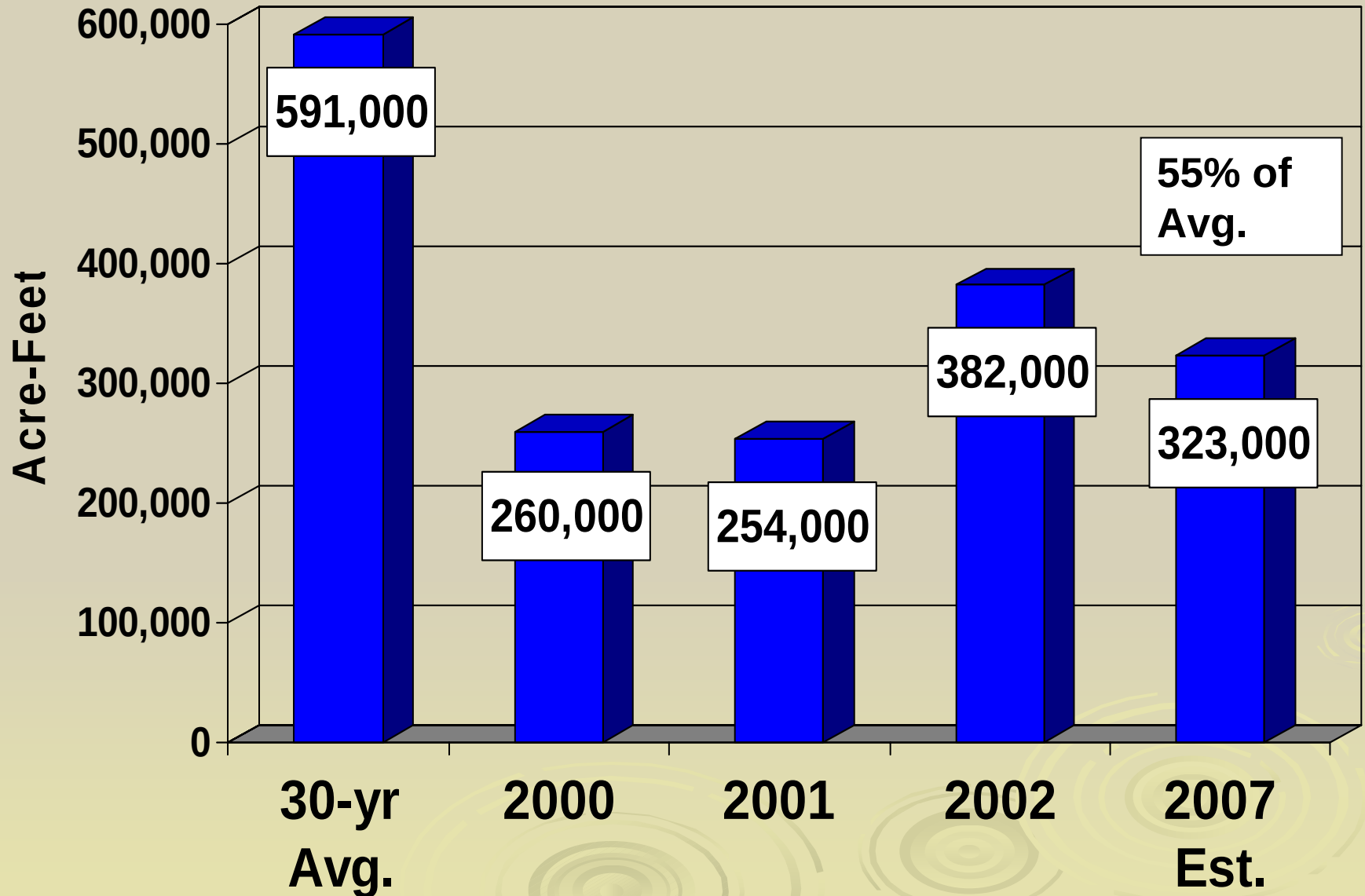
South Mountain Snotel - elev. 6500

— 2007 — 2000 — 2001 ■ 30-yr Avg.



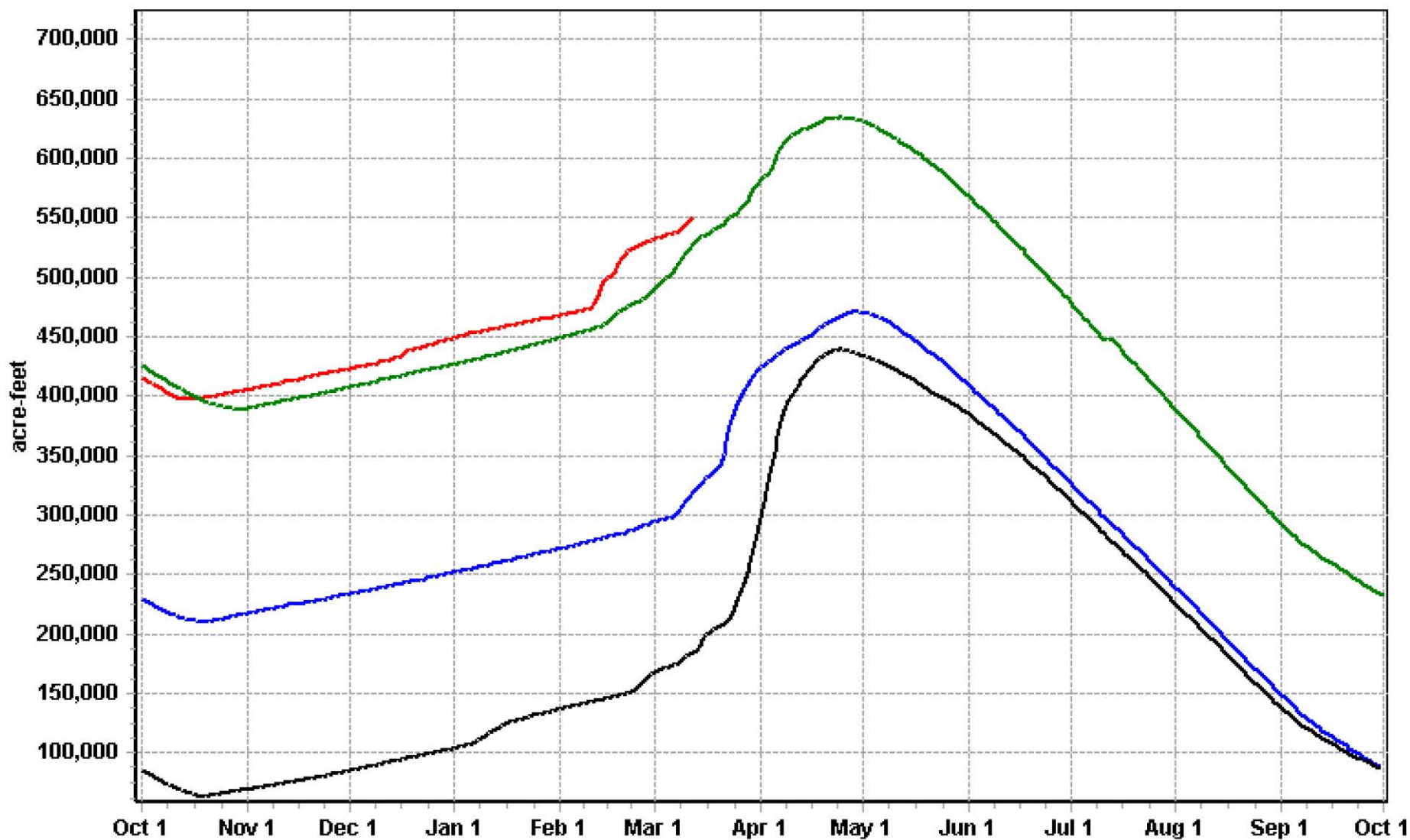
Owyhee Basin Runoff

March 1 – June 30



Owyhee Reservoir Storage (capacity = 715,000 AF)

— 2007 — 2000 — 2001 — 2002



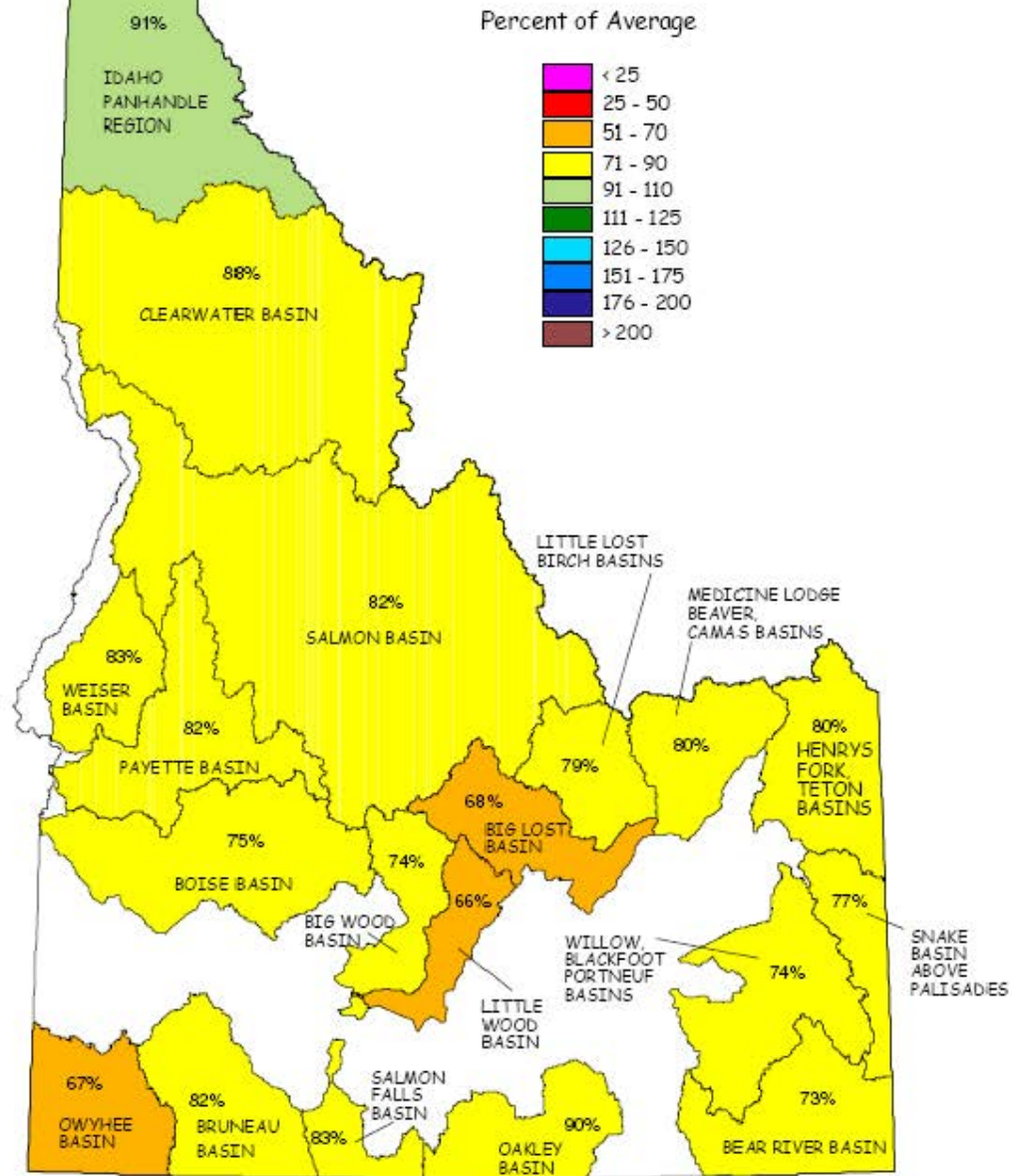




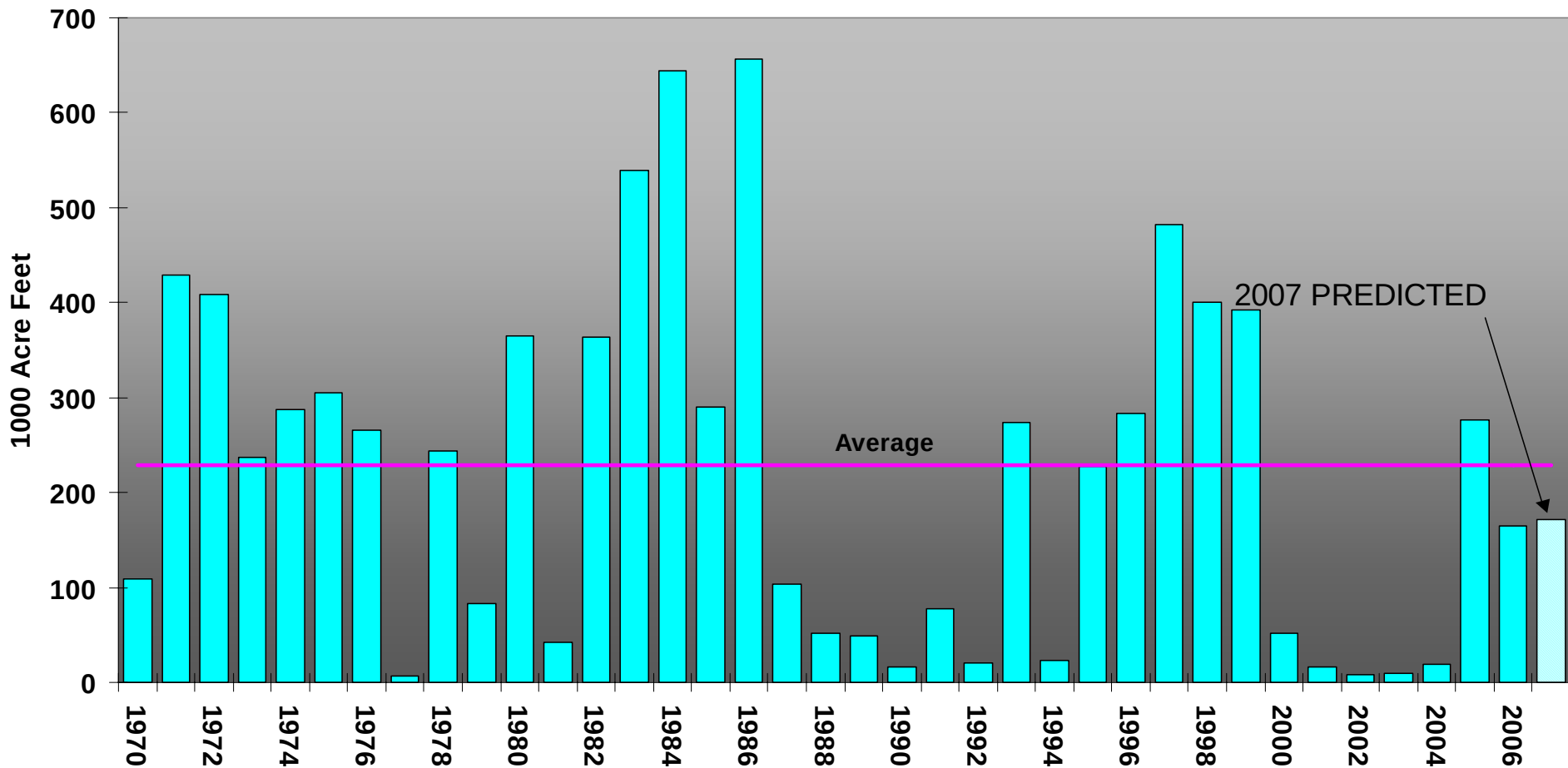
March 2007 Water Supply Committee

Mountain Snow Water Equivalent

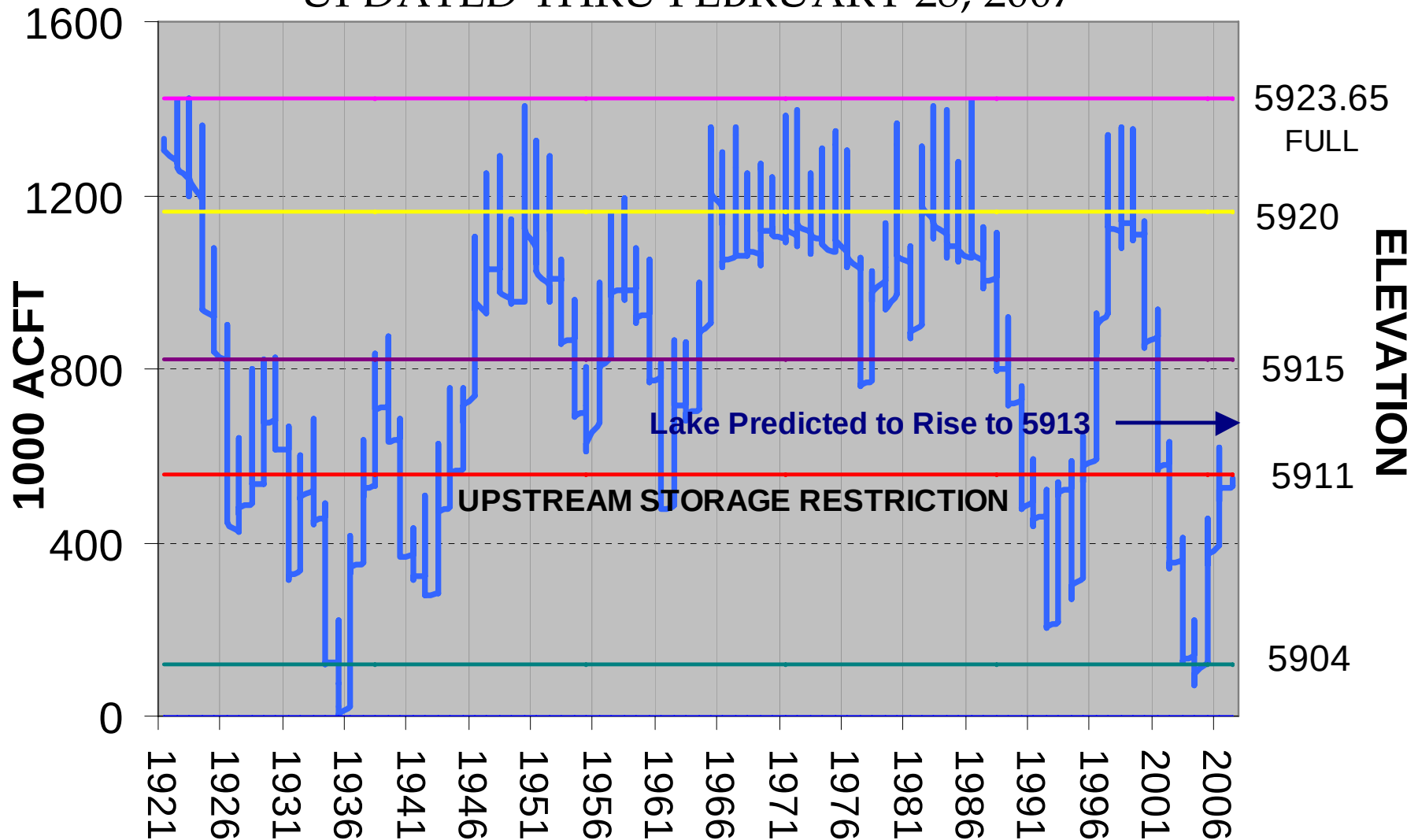
As of Monday, March 12, 2007.
Idaho Snow Survey SNOTEL Data



Bear Lake Inflow
APRIL THROUGH SEPTEMBER RAINBOW INLET CANAL VOLUME

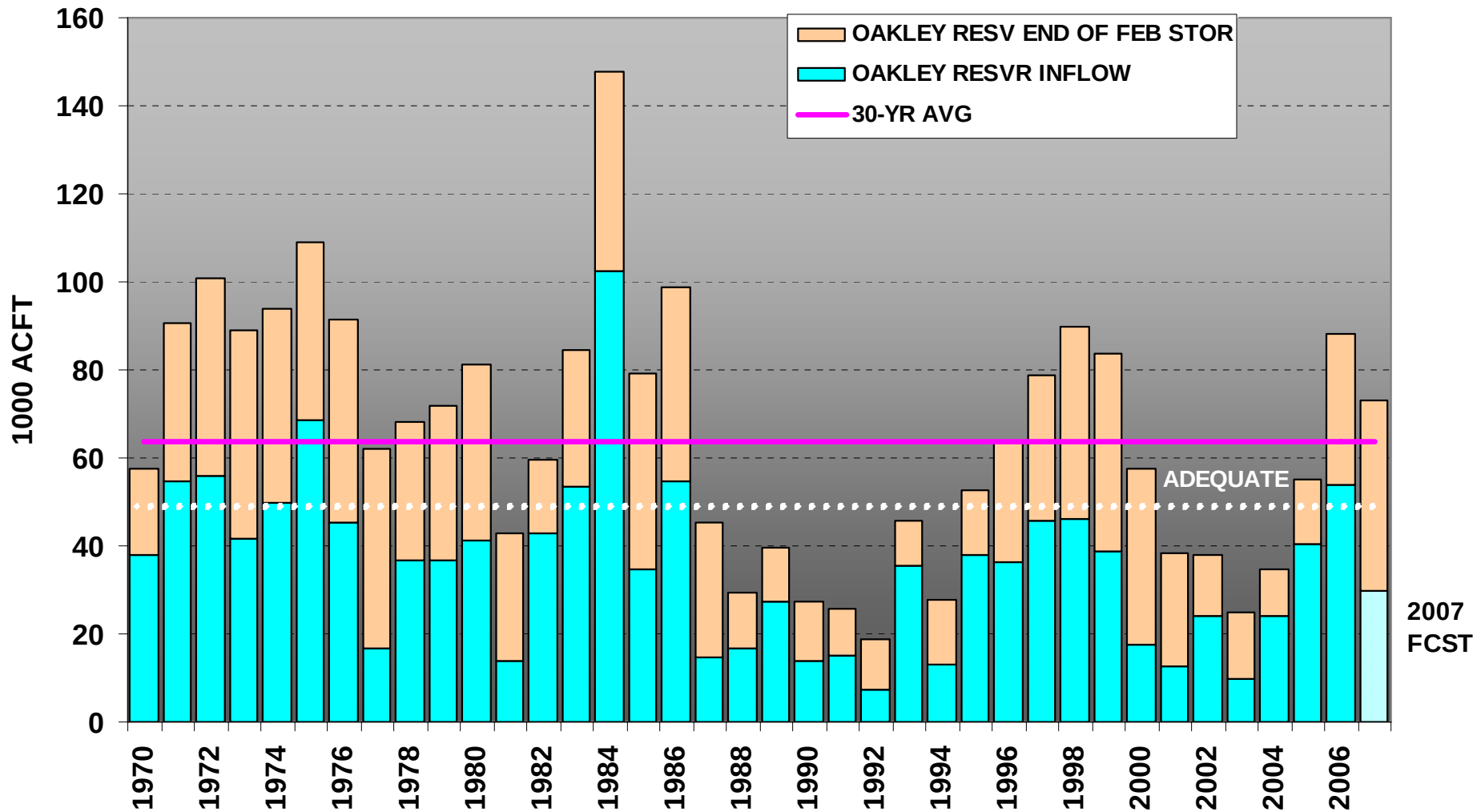


BEAR LAKE END OF MONTH STORAGE
WATER YEARS 1922-2005
UPDATED THRU FEBRUARY 28, 2007

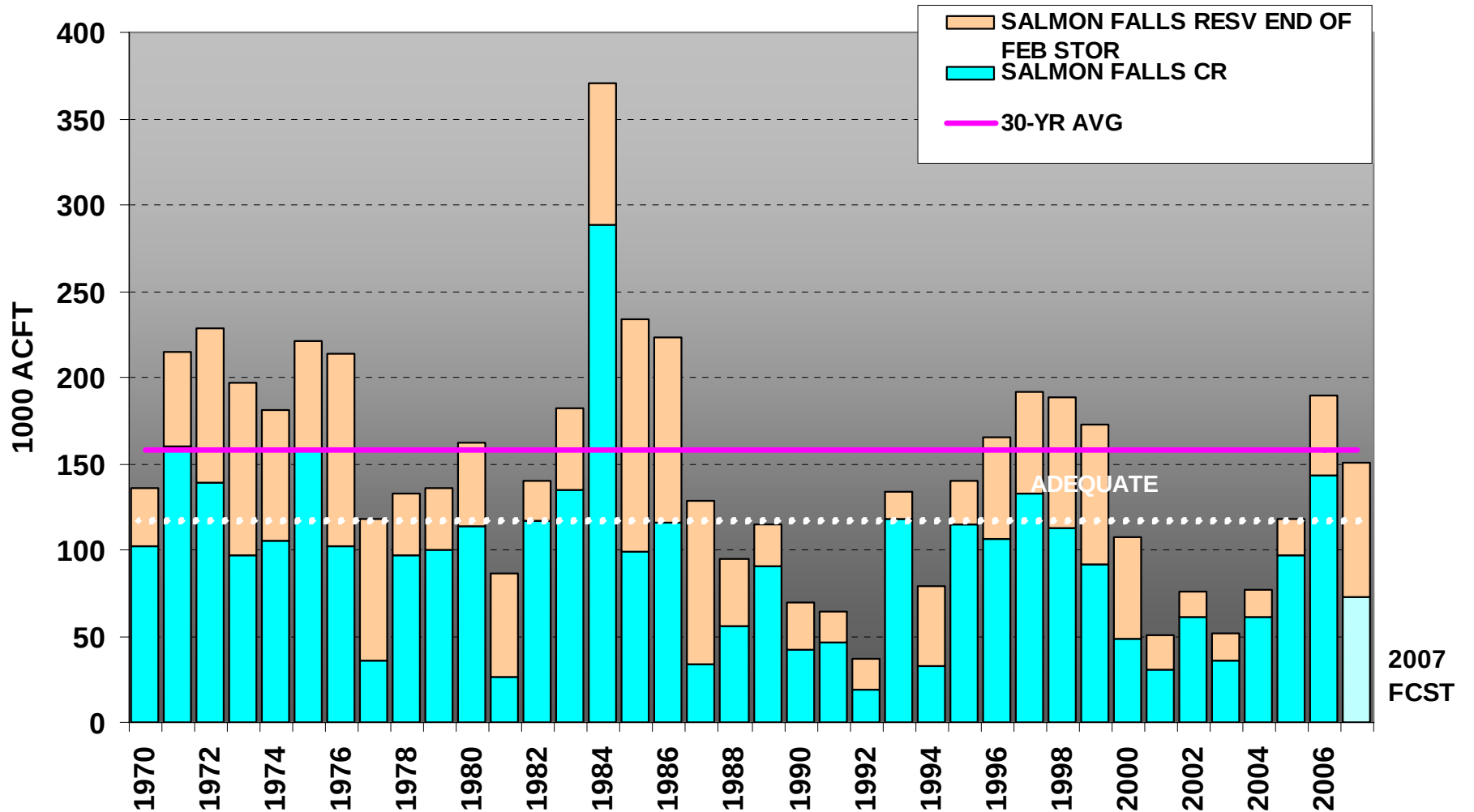


OAKLEY RESERVOIR INFLOW MARCH THROUGH SEPTEMBER VOLUME

END OF FEBRUARY STORAGE

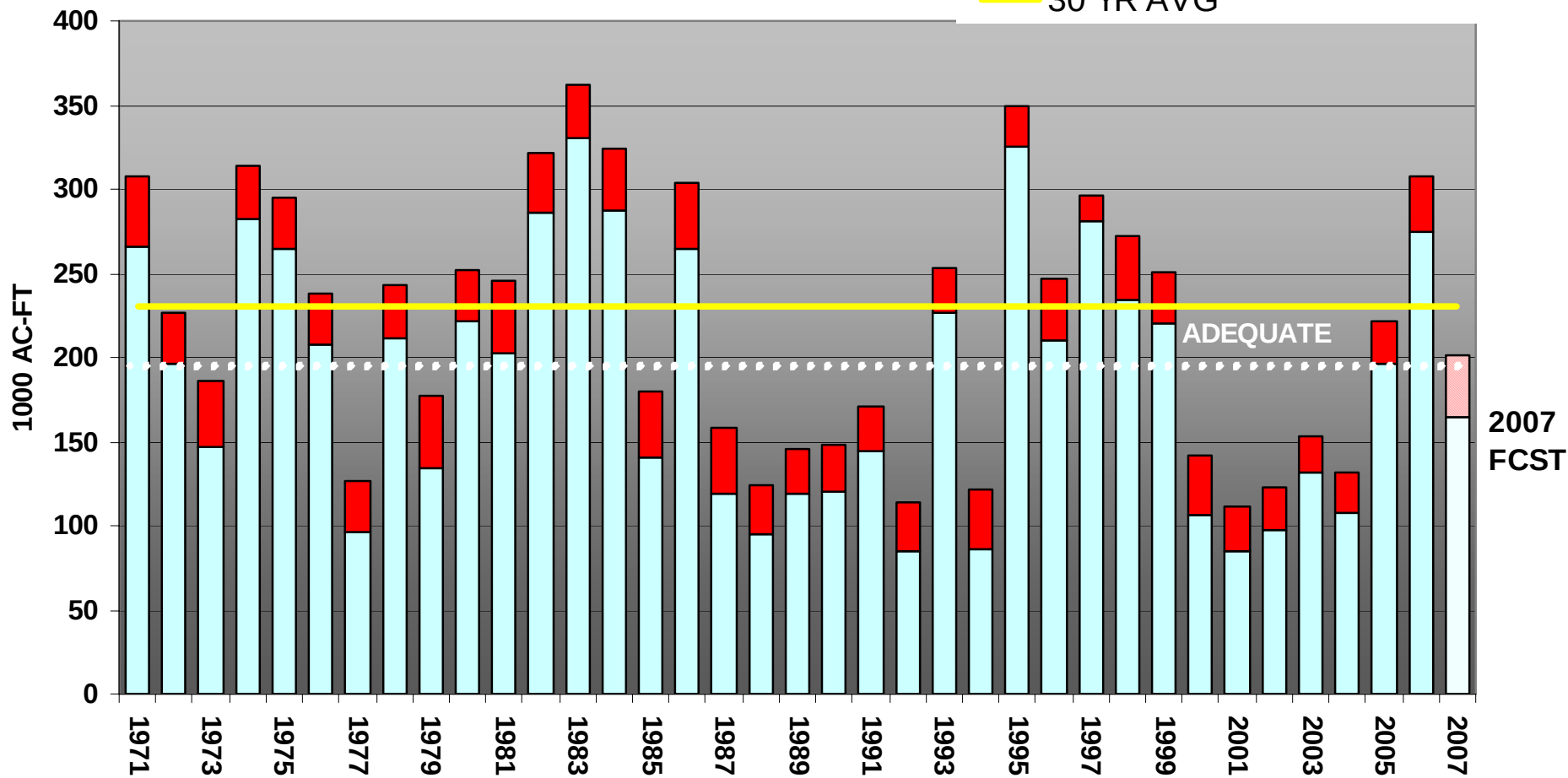


SALMON FALLS CREEK NR SAN JACINTO, NV **MARCH THROUGH SEPTEMBER VOLUME** **+ SALMON FALLS RESERVOIR**



BIG LOST APR - SEP FLOW VOLUMES MACKAY RESERVOIR END OF MARCH STORAGE

MACAKY RESERVOIR END
OF MAR STOR
BIG LOST AT HOWELL
30 YR AVG



BIG WOOD - SEP FLOW VOLUMES MAGIC STORAGE MARCH 31

MAGIC RESERVOIR END OF
MAR STOR
MAGIC INFLOW

30 YR AVG

