



California Cooperative  
Snow Surveys  
Bulletin 120-2-00

State of California  
The Resources Agency

Department of  
Water Resources

# Water Conditions in California

Report 2 March 1, 2000



Gray Davis  
Governor  
State of California

Mary D. Nichols  
Secretary for Resources  
The Resources Agency

Thomas M. Hannigan  
Director  
Department of Water Resources

# STATE OF CALIFORNIA

Gray Davis, Governor

## THE RESOURCES AGENCY

Mary D. Nichols, Secretary for Resources

### Department of Water Resources

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Director

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Deputy Director

Steve Macaulay  
Chief Deputy Director

Vacant  
Deputy Director

L. Lucinda Chipponeri  
Assistant Director for Legislation

Susan N. Weber  
Chief Counsel

### Division of Flood Management

George T. Qualley ..... Chief, Division of Flood Management  
Maury Roos ..... State Hydrologist  
Stein Buer ..... Chief, Hydrology and Flood Operations  
Gary B. Bardini ..... Chief Forecaster

#### Prepared by

Frank Gehrke ..... Chief, Snow Surveys  
J. Pierre Stephens ..... Senior Engineer, W.R.  
Robert R. Newton ..... Associate Engineer, W.R.  
David M. Hart ..... Water Resources Engineering Associate  
Shawn T. Perkins ..... Water Resources Technician II

### COOPERATING AGENCIES

#### Public Agencies

Buena Vista Water Storage District  
East Bay Municipal Utility District  
Eldorado Irrigation District  
Friant Water Users Association  
Kaweah Delta Water Conservation District  
Kern Delta Water District  
Kings River Conservation District  
Lower Tule River Irrigation District  
Merced Irrigation District  
Modesto Irrigation District  
Nevada Irrigation District  
North Kern Water Storage District  
Northern California Power Agency  
Oakdale Irrigation District  
Ornochumne-Hartnell Water District  
Oroville-Wyandotte Irrigation District  
Placer County Water Agency  
Sacramento Municipal Utility District  
San Joaquin Exchange Contractors Water Association  
South San Joaquin Irrigation District  
Tri-Dam Project  
Truckee River Basin Water Commission  
Tulare Lake Basin Water Storage District  
Turlock Irrigation District  
Yuba County Water Agency  
**Private Organizations**  
J.G. Boswell Company  
Kaweah and St. Johns River Association  
Kings River Water Association  
Tule River Association  
State Water Contractors

#### Municipalities

City of Bakersfield Water Department  
City of Los Angeles Department of Water and Power  
City and County of San Francisco Hetch Hetchy Water and Power

#### State Agencies

University of California  
Central Sierra Snow Laboratory  
Scripps Institution of Oceanography  
California Department of Forestry & Fire Protection  
California Department of Water Resources

#### Public Utilities

Pacific Gas and Electric Company  
Southern California Edison Company

#### Federal Agencies

U.S. Department of Agriculture  
Forest Service(14 National Forests)  
Natural Resource Conservation Service  
U.S. Department of Commerce  
National Weather Service  
U.S. Department of Interior  
Bureau of Reclamation  
Geological Survey, Water Resources  
National Park Service(3 National Parks)  
U.S. Department of Army  
Corps of Engineers

#### Other Cooperative Programs

Nevada Cooperative Snow Surveys  
Oregon Cooperative Snow Surveys

## Summary of Water Conditions March 1, 2000

For the third consecutive year February has been a very wet month. The snowpack has mounted to about 120 percent of average and is nearly as much as last year. It is an impressive improvement from the dismal levels of early January. For the sixth year in a row in northern California, water supply conditions are excellent.

**Forecasts** of April through July runoff are now above average at 110 percent overall. As was the case last year, northern Sierra forecasts are higher than in the south, but runoff in the south is expected to be more than last year. Water year runoff forecast percentages are similar at about 110 percent statewide, compared to actual runoff of 110 percent last year.

**Snowpack** water content has improved greatly from a month ago and now stands at 120 percent of average compared to 125 percent a year ago. The pack is about 105 percent of the April 1 average, which is the normal date of maximum accumulation.

**Precipitation** during February was twice average for the month and boosted seasonal precipitation to 105 percent of average compared to 75 percent one month ago and 100 percent one year ago. Monthly precipitation ranged from around 250 percent in the central part of the state to 70 percent in the southeast Colorado River region.

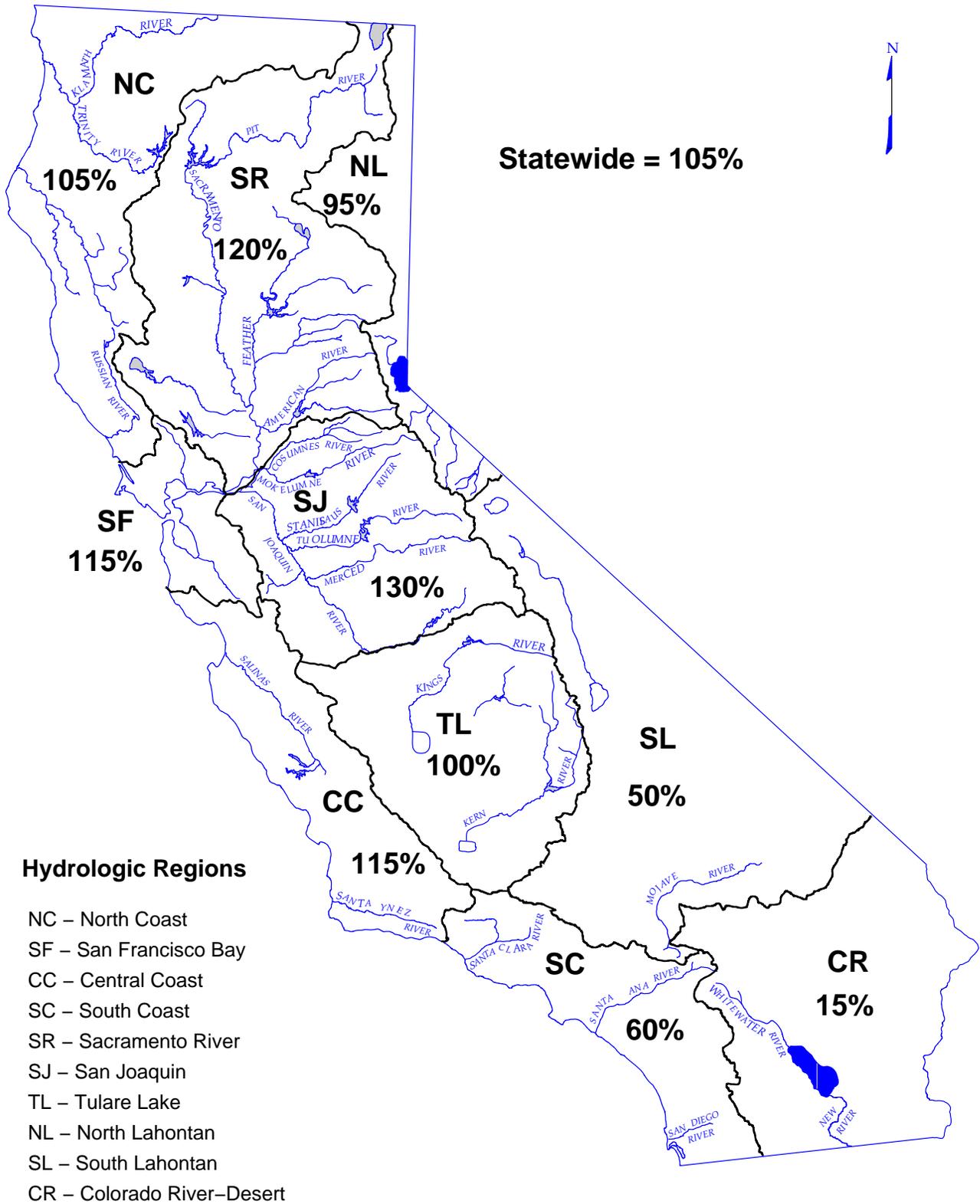
**Runoff** so far this season is about 95 percent of average, somewhat less than the 115 percent last year at this time. February runoff was about 175 percent of average. Estimated runoff of the eight major rivers of the Sacramento and San Joaquin River regions was 5.3 million acre-feet for February.

**Reservoir storage** remains excellent at about 120 percent of average statewide, approximately the same as one year and two years ago. Gains during February were more than normal, but were limited by flood control space requirements this time of year in many major reservoirs.

### SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

| HYDROLOGIC REGION         | PRECIPITATION<br>OCTOBER 1 TO<br>DATE | MARCH 1 SNOW<br>WATER CONTENT | MARCH 1<br>RESERVOIR<br>STORAGE | RUNOFF<br>OCTOBER 1 TO<br>DATE | APR-JULY RUNOFF<br>FORECAST | WATER YEAR<br>RUNOFF<br>FORECAST |
|---------------------------|---------------------------------------|-------------------------------|---------------------------------|--------------------------------|-----------------------------|----------------------------------|
| NORTH COAST               | 105                                   | 145                           | 115                             | 90                             | 120                         | 110                              |
| SAN FRANCISCO BAY         | 115                                   | --                            | 125                             | 95                             | --                          | --                               |
| CENTRAL COAST             | 115                                   | --                            | 135                             | 115                            | --                          | --                               |
| SOUTH COAST               | 60                                    | --                            | 110                             | 5                              | --                          | --                               |
| SACRAMENTO RIVER          | 120                                   | 125                           | 115                             | 105                            | 115                         | 110                              |
| SAN JOAQUIN RIVER         | 130                                   | 115                           | 130                             | 105                            | 110                         | 110                              |
| TULARE LAKE               | 100                                   | 115                           | 110                             | 65                             | 100                         | 90                               |
| NORTH LAHONTAN            | 95                                    | 90                            | 165                             | 80                             | 100                         | 95                               |
| SOUTH LAHONTAN            | 50                                    | 100                           | 100                             | 75                             | 100                         | 90                               |
| COLORADO RIVER-<br>DESERT | 15                                    | --                            | --                              | --                             | --                          | --                               |
| <b>STATEWIDE</b>          | 105                                   | 120                           | 120                             | 95                             | 110                         | 110                              |

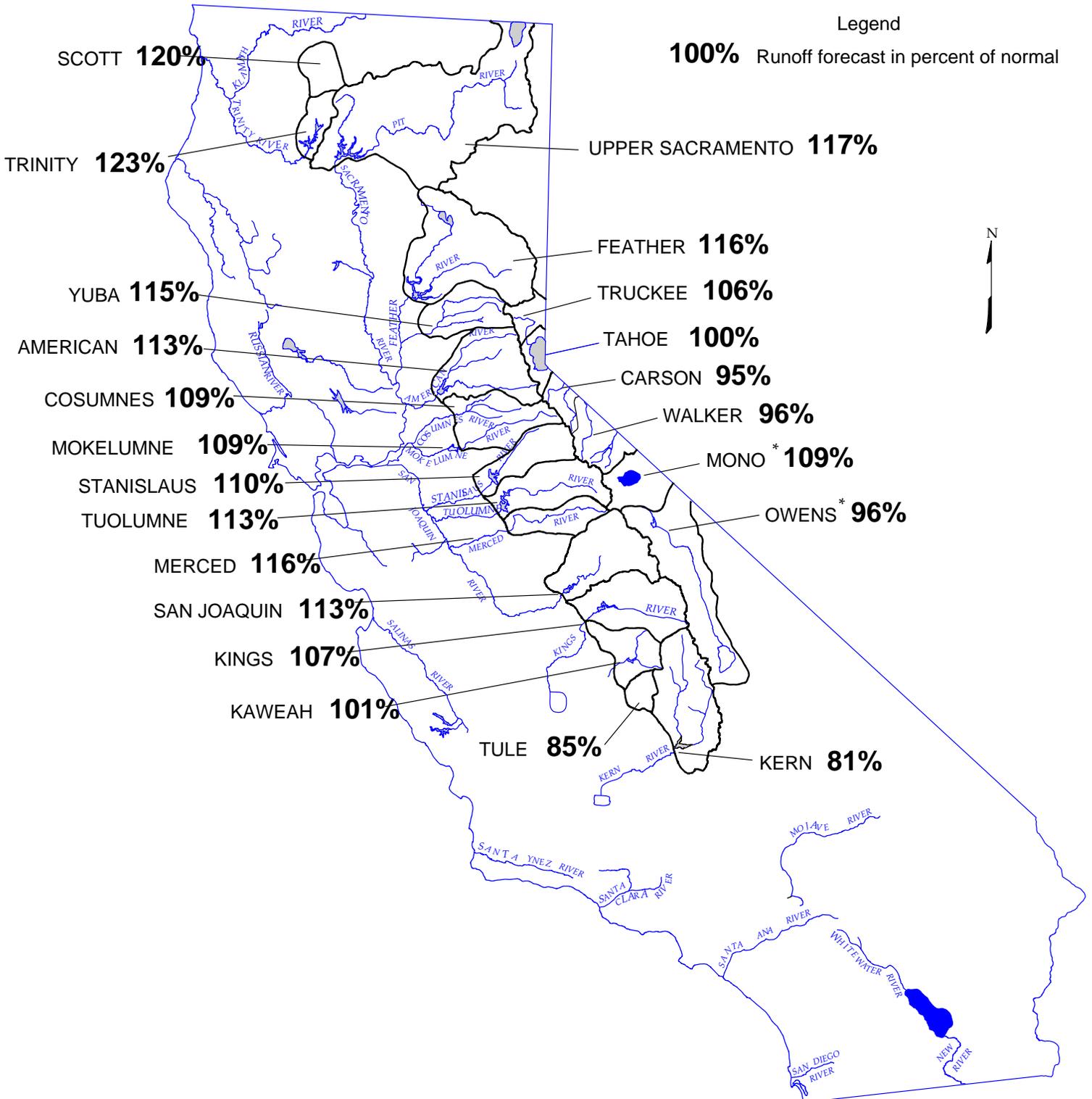
**SEASONAL PRECIPITATION**  
 IN PERCENT OF AVERAGE TO DATE  
 October 1, 1999 through February 29, 2000



WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

# FORECAST OF APRIL – JULY UNIMPAIRED SNOWMELT RUNOFF

March 1, 2000



\* FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGELES

**MARCH 1, 2000 FORECASTS**  
**APRIL-JULY UNIMPAIRED RUNOFF**

| HYDROLOGIC REGION<br>and Watershed                        | Unimpaired Runoff in 1,000 Acre-Feet (1) |                     |                     |                      |                  |                                  |
|---|--|---------------------|---------------------|----------------------|------------------|----------------------------------|
|   | HISTORICAL                               |                     |                     | FORECAST             |                  |                                  |
|   | 50 Yr<br>Avg<br>(2)                      | Max<br>of<br>Record | Min<br>of<br>Record | Apr-Jul<br>Forecasts | Pct<br>of<br>Avg | 80 %<br>Probability<br>Range (1) |
| <b>SACRAMENTO RIVER</b>                                   |  |                     |                     |                      |                  |                                  |
| <b>Upper Sacramento River</b>                             |  |                     |                     |                      |                  |                                  |
| Sacramento River at Shasta Lake (3)                       | 297                                      | 702                 | 39                  | 350                  | 118%             |                                  |
| McCloud River at Shasta Lake                              | 392                                      | 850                 | 185                 | 460                  | 117%             |                                  |
| Pit River at Shasta Lake                                  | 1,056                                    | 2,203               | 480                 | 1,170                | 111%             |                                  |
| Total Inflow to Shasta Lake                               | 1,801                                    | 3,525               | 726                 | <b>2,100</b>         | 117%             | 1,610 - 2,900                    |
| <b>Sacramento River above Bend Bridge, near Red Bluff</b> | 2,451                                    | 5,075               | 943                 | <b>2,850</b>         | 116%             | 2,130 - 4,030                    |
| <b>Feather River</b>                                      |  |                     |                     |                      |                  |                                  |
| Feather River at Lake Almanor near Prattville (3)         | 333                                      | 675                 | 120                 | 380                  | 114%             |                                  |
| North Fork at Pulga (3)                                   | 1,028                                    | 2,416               | 243                 | 1,160                | 113%             |                                  |
| Middle Fork near Clio (4)                                 | 86                                       | 518                 | 4                   | 100                  | 116%             |                                  |
| South Fork at Ponderosa Dam (3)                           | 110                                      | 267                 | 13                  | 130                  | 118%             |                                  |
| Total Inflow to Oroville Reservoir                        | 1,831                                    | 4,676               | 392                 | <b>2,120</b>         | 116%             | 1,620 - 3,080                    |
| <b>Yuba River</b>   |  |                     |                     |                      |                  |                                  |
| North Yuba below Goodyears Bar (3)                        | 286                                      | 647                 | 51                  | 330                  | 115%             |                                  |
| Inflow to Jackson Mdws and Bowman Reservoirs (3)          | 112                                      | 236                 | 25                  | 125                  | 112%             |                                  |
| South Yuba at Langs Crossing (3)                          | 233                                      | 481                 | 57                  | 260                  | 112%             |                                  |
| Yuba River at Smartville                                  | 1,029                                    | 2,424               | 200                 | <b>1,180</b>         | 115%             | 890 - 1,750                      |
| <b>American River</b>                                     |  |                     |                     |                      |                  |                                  |
| North Fork at North Fork Dam (3)                          | 262                                      | 716                 | 43                  | 290                  | 111%             |                                  |
| Middle Fork near Auburn (3)                               | 522                                      | 1,406               | 100                 | 590                  | 113%             |                                  |
| Silver Creek Below Camino Diversion Dam (3)               | 173                                      | 386                 | 37                  | 190                  | 110%             |                                  |
| Total Inflow to Folsom Reservoir                          | 1,261                                    | 3,074               | 229                 | <b>1,430</b>         | 113%             | 1,020 - 2,150                    |
| <b>SAN JOAQUIN RIVER</b>                                  |  |                     |                     |                      |                  |                                  |
| <b>Cosumnes River at Michigan Bar</b>                     | 128                                      | 363                 | 8                   | <b>140</b>           | 109%             | 90 - 240                         |
| <b>Mokelumne River</b>                                    |  |                     |                     |                      |                  |                                  |
| North Fork near West Point (5)                            | 437                                      | 829                 | 104                 | 450                  | 103%             |                                  |
| Total Inflow to Pardee Reservoir                          | 459                                      | 1,065               | 102                 | <b>500</b>           | 109%             | 380 - 720                        |
| <b>Stanislaus River</b>                                   |  |                     |                     |                      |                  |                                  |
| Middle Fork below Beardsley Dam (3)                       | 334                                      | 702                 | 64                  | 370                  | 111%             |                                  |
| North Fork Inflow to McKays Point Dam (3)                 | 224                                      | 503                 | 34                  | 240                  | 107%             |                                  |
| Total Inflow to New Melones Reservoir                     | 699                                      | 1,710               | 116                 | <b>770</b>           | 110%             | 590 - 1,110                      |
| <b>Tuolumne River</b>                                     |  |                     |                     |                      |                  |                                  |
| Cherry Creek & Eleanor Creek near Hetch Hetchy (3)        | 322                                      | 727                 | 97                  | 350                  | 109%             |                                  |
| Tuolumne River near Hetch Hetchy (3)                      | 606                                      | 1,392               | 153                 | 670                  | 111%             |                                  |
| Total Inflow to Don Pedro Reservoir                       | 1,184                                    | 2,682               | 301                 | <b>1,340</b>         | 113%             | 1,060 - 1,860                    |
| <b>Merced River</b>                                       |  |                     |                     |                      |                  |                                  |
| Merced River at Pohono Bridge (3)                         | 362                                      | 888                 | 80                  | 420                  | 116%             |                                  |
| Total Inflow to Lake McClure                              | 611                                      | 1,587               | 123                 | <b>710</b>           | 116%             | 570 - 1,020                      |
| <b>San Joaquin River</b>                                  |  |                     |                     |                      |                  |                                  |
| San Joaquin River at Mammoth Pool (6)                     | 1,014                                    | 2,279               | 235                 | 1,110                | 109%             |                                  |
| Big Creek below Huntington Lake (6)                       | 95                                       | 264                 | 11                  | 105                  | 111%             |                                  |
| South Fork near Florence Lake (6)                         | 202                                      | 511                 | 58                  | 220                  | 109%             |                                  |
| Total Inflow to Millerton Lake                            | 1,212                                    | 3,355               | 262                 | <b>1,370</b>         | 113%             | 1,070 - 1,910                    |
| <b>TULARE LAKE</b>  |  |                     |                     |                      |                  |                                  |
| <b>Kings River</b>  |  |                     |                     |                      |                  |                                  |
| North Fork Kings River near Cliff Camp (3)                | 239                                      | 565                 | 50                  | 250                  | 105%             |                                  |
| Total Inflow to Pine Flat Reservoir                       | 1,183                                    | 3,114               | 273                 | <b>1,260</b>         | 107%             | 960 - 1,760                      |
| <b>Kaweah River at Terminus Reservoir</b>                 | 276                                      | 814                 | 61                  | <b>280</b>           | 101%             | 210 - 420                        |
| <b>Tule River at Success Reservoir</b>                    | 59                                       | 259                 | 2                   | <b>50</b>            | 85%              | 38 - 94                          |
| <b>Kern River</b>   |  |                     |                     |                      |                  |                                  |
| Kern River near Kernville (3)                             | 373                                      | 1,203               | 83                  | 300                  | 80%              |                                  |
| Total Inflow to Isabella Reservoir                        | 442                                      | 1,657               | 84                  | <b>360</b>           | 81%              | 280 - 630                        |

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1946-1995 unless otherwise not

(3) 50 year average based on years 1941-9

(4) 44 year average based on years 1936-79

(5) 36 year average based on years 1936-7

(6) 45 year average based on years 1936-8

**MARCH 1, 2000 FORECASTS**  
**WATER YEAR UNIMPAIRED RUNOFF**

| HISTORICAL          |                     |                     | Unimpaired Runoff in 1,000 Acre-Feet (1) |          |       |       |     |     |     |                 |                            | FORECAST         |                                  |          |  |
|---------------------|---------------------|---------------------|--|----------|-------|-------|-----|-----|-----|-----------------|----------------------------|------------------|----------------------------------|----------|--|
|                     |                     |                     | DISTRIBUTION                             |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 50 Yr<br>Avg<br>(2) | Max<br>of<br>Record | Min<br>of<br>Record | Oct<br>Thru<br>Jan*                      | Feb<br>* | Mar   | Apr   | May | Jun | Jul | Aug<br>&<br>Sep | Water<br>Year<br>Forecasts | Pct<br>of<br>Avg | 80 %<br>Probability<br>Range (1) |          |  |
| 856                 | 1,964               | 165                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 1,184               | 2,353               | 577                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 3,078               | 5,647               | 1,484               |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 5,896               | 10,796              | 2,479               | 1,785                                    | 1,545    | 1,050 | 860   | 610 | 370 | 260 | 470             | <b>6,950</b>               | 118%             | 6,110                            | - 8,340  |  |
| 8,518               | 17,180              | 3,294               | 2,365                                    | 2,325    | 1,700 | 1,180 | 830 | 490 | 350 | 600             | <b>9,840</b>               | 116%             | 8,530                            | - 11,990 |  |
| 780                 | 1,269               | 366                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 2,417               | 4,400               | 666                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 219                 | 637                 | 24                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 291                 | 562                 | 32                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 4,526               | 9,492               | 994                 | 820                                      | 980      | 800   | 870   | 760 | 330 | 160 | 200             | <b>4,920</b>               | 109%             | 4,180                            | - 6,360  |  |
| 564                 | 1,056               | 102                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 181                 | 292                 | 30                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 379                 | 565                 | 98                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 2,337               | 4,926               | 369                 | 330                                      | 525      | 420   | 440   | 470 | 220 | 50  | 45              | <b>2,500</b>               | 107%             | 2,130                            | - 3,340  |  |
| 616                 | 1,234               | 66                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 1,070               | 2,575               | 144                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 318                 | 705                 | 59                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 2,674               | 6,381               | 349                 | 400                                      | 680      | 500   | 520   | 570 | 280 | 60  | 30              | <b>3,040</b>               | 114%             | 2,510                            | - 4,060  |  |
| 378                 | 1,253               | 20                  | 60                                       | 153      | 95    | 73    | 47  | 17  | 3   | 2               | <b>450</b>                 | 119%             | 360                              | - 620    |  |
| 626                 | 1,009               | 197                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 736                 | 1,800               | 129                 | 75                                       | 110      | 100   | 140   | 210 | 130 | 20  | 5               | <b>790</b>                 | 107%             | 640                              | - 1,060  |  |
| 471                 | 929                 | 88                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 1,131               | 2,952               | 155                 | 130                                      | 205      | 150   | 210   | 320 | 190 | 50  | 15              | <b>1,270</b>               | 112%             | 1,060                            | - 1,700  |  |
| 461                 | 1,147               | 123                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 770                 | 1,661               | 258                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 1,857               | 4,430               | 383                 | 170                                      | 275      | 240   | 310   | 500 | 420 | 110 | 35              | <b>2,060</b>               | 111%             | 1,720                            | - 2,730  |  |
| 461                 | 1,020               | 92                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 952                 | 2,859               | 150                 | 70                                       | 175      | 120   | 170   | 290 | 200 | 50  | 15              | <b>1,090</b>               | 114%             | 900                              | - 1,480  |  |
| 1,337               | 2,964               | 308                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 112                 | 298                 | 14                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 248                 | 653                 | 71                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 1,753               | 4,642               | 362                 | 120                                      | 155      | 160   | 270   | 490 | 450 | 160 | 75              | <b>1,880</b>               | 107%             | 1,540                            | - 2,580  |  |
| 284                 | 607                 | 58                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 1,647               | 4,294               | 383                 | 85                                       | 110      | 120   | 230   | 470 | 440 | 120 | 55              | <b>1,630</b>               | 99%              | 1,290                            | - 2,260  |  |
| 431                 | 1,402               | 92                  | 22                                       | 42       | 46    | 70    | 110 | 80  | 20  | 10              | <b>400</b>                 | 93%              | 310                              | - 570    |  |
| 135                 | 615                 | 16                  | 11                                       | 25       | 22    | 22    | 18  | 8   | 2   | 2               | <b>110</b>                 | 81%              | 90                               | - 180    |  |
| 558                 | 1,577               | 163                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |          |  |
| 694                 | 2,309               | 175                 | 55                                       | 30       | 45    | 80    | 130 | 100 | 50  | 30              | <b>520</b>                 | 75%              | 420                              | - 870    |  |

\* Indicates observed runoff

**MARCH 1, 2000 FORECASTS  
APRIL-JULY UNIMPAIRED RUNOFF**

| HYDROLOGIC REGION<br>and Watershed                             | Unimpaired Runoff in 1,000 Acre-Feet (1) |                     |                     |                      |                  |
|--|--|---------------------|---------------------|----------------------|------------------|
|  | HISTORICAL                               |                     |                     | FORECAST             |                  |
|  | 50 Yr<br>Avg<br>(2)                      | Max<br>of<br>Record | Min<br>of<br>Record | Apr-Jul<br>Forecasts | Pct<br>of<br>Avg |
| <b>NORTH COAST</b>   |  |                     |                     |                      |                  |
| <b>Trinity River</b><br>Total Inflow to Lewiston Lake          | 642                                      | 1,593               | 80                  | <b>790</b>           | 123%             |
| <b>Scott River</b><br>Near Fort Jones                          | 200                                      | n/a                 | n/a                 | <b>240</b>           | 120%             |
| <b>Klamath River</b><br>Total inflow to Upper Klamath Lake (3) | 509                                      | 758                 | 280                 | <b>570</b>           | 112%             |
| <hr/>  |  |                     |                     |                      |                  |
| <b>NORTH LAHONTAN</b>  |  |                     |                     |                      |                  |
| <b>Truckee River</b><br>Lake Tahoe to Farad accretions         | 264                                      | 713                 | 58                  | <b>280</b>           | 106%             |
| Lake Tahoe Rise (assuming gates closed, in feet)               | 1.4                                      | 3.6                 | 0.2                 | <b>1.4</b>           | 100%             |
| <b>Carson River</b><br>West Fork at Woodfords                  | 54                                       | 135                 | 12                  | <b>50</b>            | 93%              |
| East Fork near Gardnerville                                    | 183                                      | 407                 | 43                  | <b>175</b>           | 96%              |
| <b>Walker River</b><br>West Fork near Coleville                | 143                                      | 330                 | 35                  | <b>140</b>           | 98%              |
| East Fork near Bridgeport                                      | 61                                       | 209                 | 7                   | <b>55</b>            | 90%              |
| <hr/>  |  |                     |                     |                      |                  |
| <b>SOUTH LAHONTAN</b>  |  |                     |                     |                      |                  |
| <b>Owens River</b><br>Total tributary flow to Owens River (4)  | 226                                      | 579                 | 96                  | <b>217</b>           | 96%              |

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1946-1995 unless otherwise not

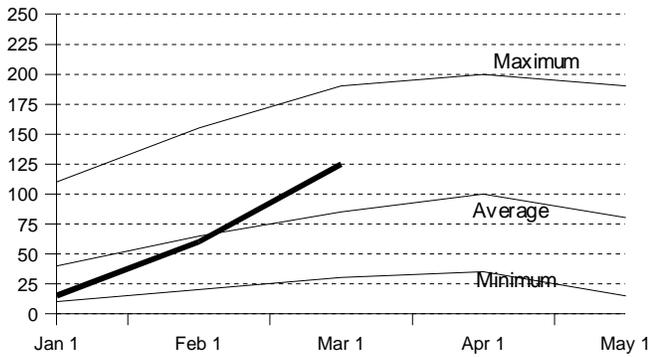
(3) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center  
April through September forecast, 30 year average based on years 1961-199

(4) Forecast by Department of Water and Power, City of Los Angeles

## NORTH COAST REGION

### Snowpack Accumulation

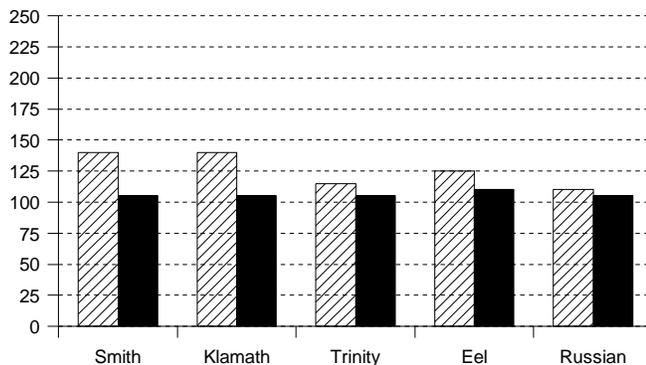
Water Content in % of April 1 Average



**SNOWPACK**– First of the month measurements made at 11 snow courses indicate an area wide snow water equivalent of 41.0 inches. This is 145 percent of the March 1 average and 125 percent of the seasonal (April 1) average. Last year at this time the pack was holding 35.5 inches of water.

### Precipitation

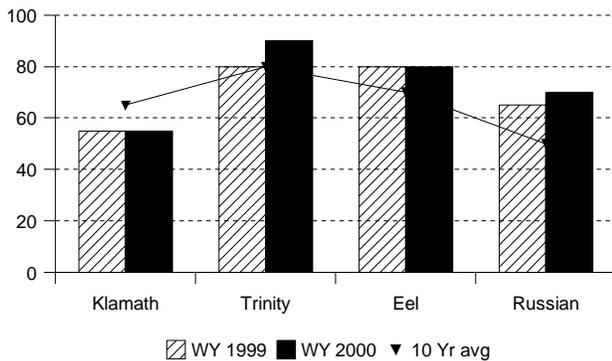
October 1 to date in % of Average



**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on this area was 105 percent of normal. Precipitation last month was about 170 percent of the monthly average. Seasonal precipitation at this time last year stood at 125 percent of normal.

### Reservoir Storage

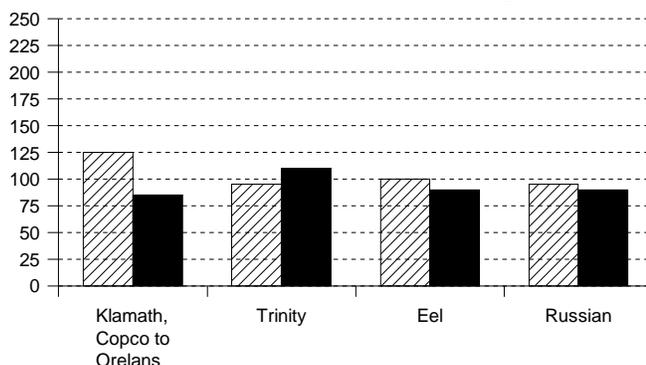
Contents of major reservoirs in % of capacity



**RESERVOIR STORAGE**– First of the month storage in 7 reservoirs was 2.7 million acre–feet which is 115 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.

### Runoff

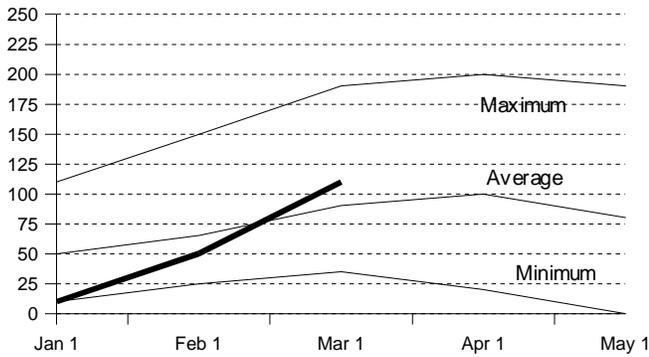
October 1 to date in % of average



**RUNOFF** –Seasonal runoff of streams draining the area totaled 6.6 million acre–feet which is 90 percent of the average for this period. Last year, runoff for the same period was 110 percent of average.

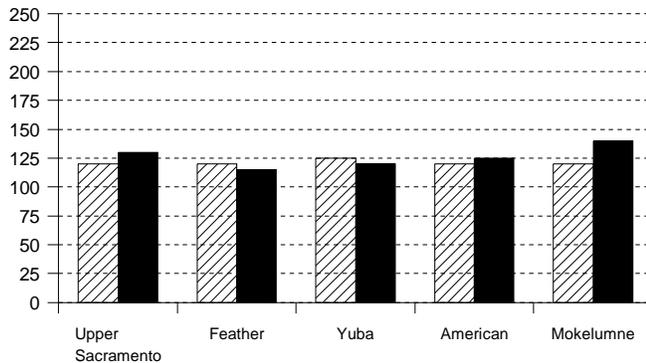
## Snowpack Accumulation

Water Content in % of April 1 Average



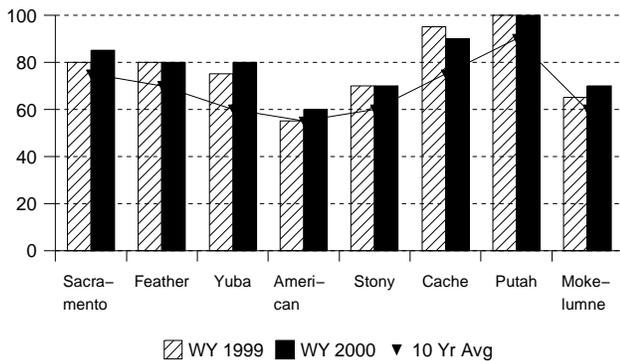
## Precipitation

October 1 to date in % of Average



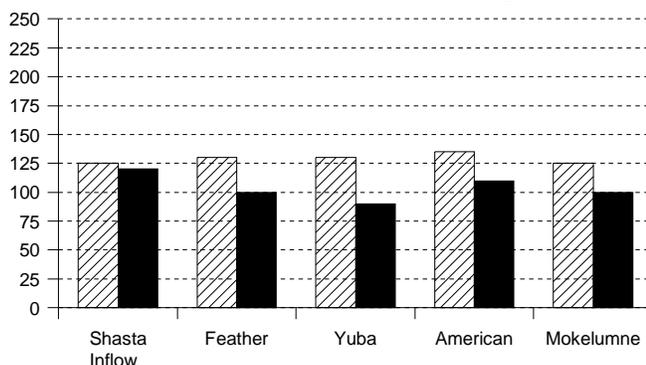
## Reservoir Storage

Contents of major reservoirs in % of capacity



## Runoff

October 1 to date in % of average



## SACRAMENTO RIVER REGION

**SNOWPACK**– First of the month measurements made at 66 snow courses indicate an area wide snow water equivalent of 31.4 inches. This is 125 percent of the March 1 average and 110 percent of the seasonal (April 1) average. Last year at this time the pack was holding 38.1 inches of water.

**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on this area was 120 percent of normal. Precipitation last month was about 230 percent of the monthly average. Seasonal precipitation at this time last year stood at 115 percent of normal.

**RESERVOIR STORAGE**– First of the month storage in 43 reservoirs was 12.9 million acre–feet which is 116 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.

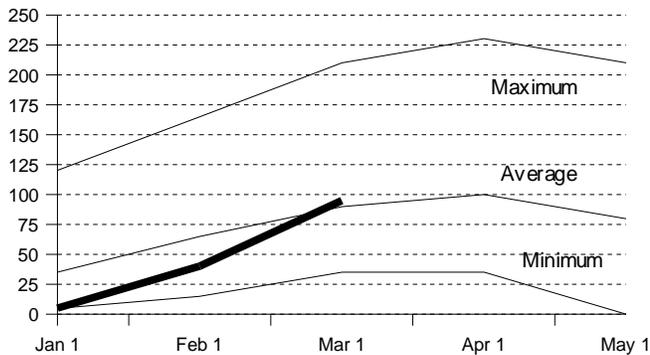
**RUNOFF** – Seasonal runoff of streams draining the area totaled 8.4 million acre–feet which is 105 percent of average for this period. Last year, runoff for the same period was 120 percent of average.

The **Sacramento Region 40–30–30 Water Supply Index** is forecast to be 9.5 assuming median meteorological conditions for the remainder of the year. This classifies the year as "wet" in the Sacramento Valley according to the State Water Resources Control Board.

# SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

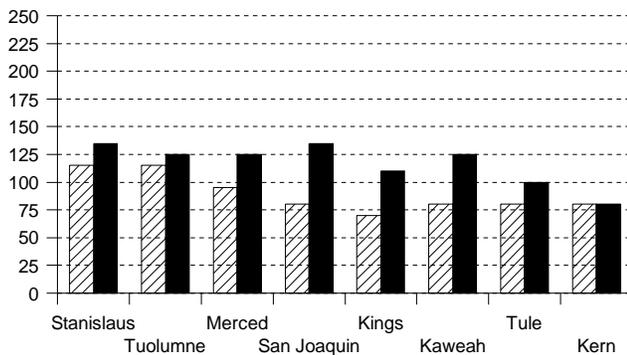
## Snowpack Accumulation

Water Content in % of April 1 Average



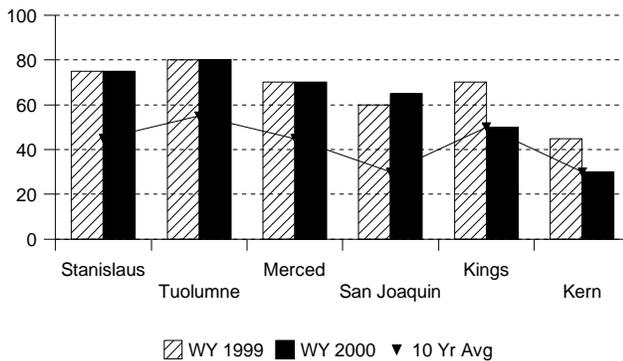
## Precipitation

October 1 to date in % of Average



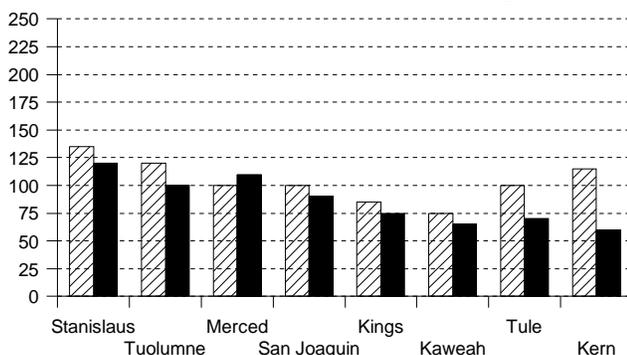
## Reservoir Storage

Contents of major reservoirs in % of capacity



## Runoff

October 1 to date in % of average



**SNOWPACK**– First of the month measurements made at 62 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 30.5 inches. This is 115 percent of the March 1 average and 100 percent of seasonal (April 1) average. Last year at this time the pack was holding 32.3 inches of water.

At the same time 34 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 21.4 inches which is 115 percent of the average for March 1 and 95 percent of the seasonal average. Last year at this time the basin was holding 14.6 inches of water.

**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 130 percent of normal. Precipitation last month was about 250 percent of the monthly average. Seasonal precipitation at this time last year stood at 100 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 100 percent of normal. Precipitation last month was about 220 percent of the monthly average. Seasonal precipitation at this time last year stood at 80 percent of normal.

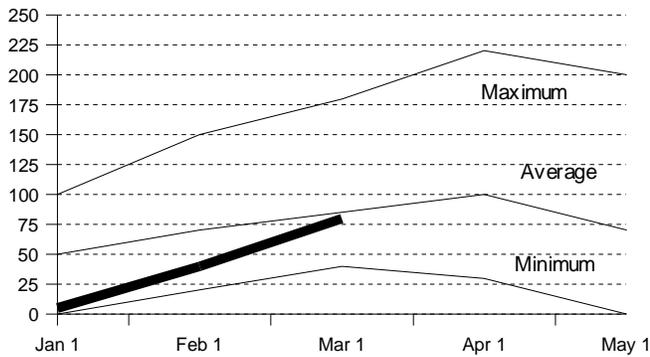
**RESERVOIR STORAGE**– First of the month storage in 34 **San Joaquin Region** reservoirs was 8.8 million acre-feet which is 130 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was also 130 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 891 thousand acre-feet which is 110 percent of average and about 45 percent of available capacity. Storage in these reservoirs at this time last year was 140 percent of average.

**RUNOFF**– Seasonal runoff of streams draining the **San Joaquin Region** totaled 1.7 million acre-feet which is 105 percent of average for this period. Last year, runoff for the same period was 120 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 380 thousand acre-feet which is 65 percent of average for this period. Last year runoff for this same period was 95 percent of average.

The **San Joaquin Region 60–20–20 Water Supply Index** is forecast to be 3.6 assuming median meteorological conditions. This classifies the year as "above normal" in the San Joaquin Region according to the State Water Resources Control Board.

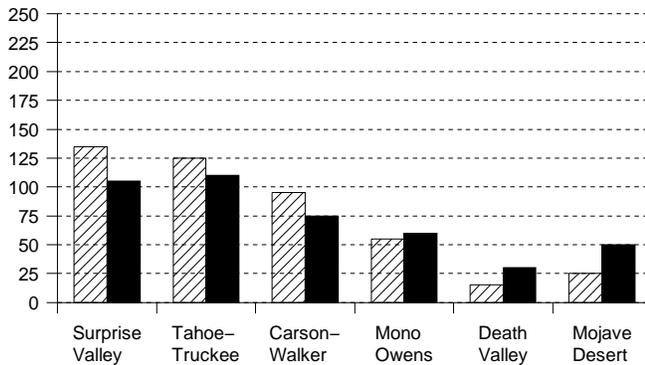
## Snowpack Accumulation

Water Content in % of April 1 Average



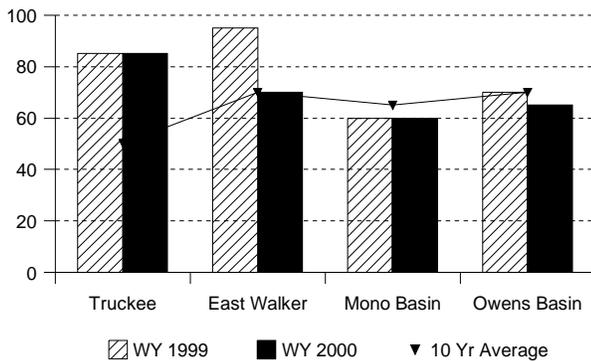
## Precipitation

October 1 to date in % of Average



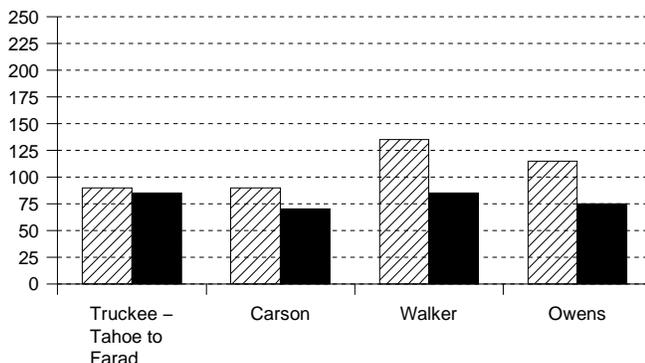
## Reservoir Storage

Contents of major reservoirs in % of capacity



## Runoff

October 1 to date in % of average



## NORTH AND SOUTH LAHONTAN REGIONS

**SNOWPACK**– First of the month measurements made at 12 **North Lahontan** snow courses indicate an area wide snow water equivalent of 23.3 inches. This is 90 percent of the March 1 average and 80 percent of seasonal (April 1) average. Last year at this time the pack was holding 33.7 inches of water. At the same time 19 **South Lahontan Region** snow courses indicated a basin-wide snow water equivalent of 18.2 inches which is 100 percent of the average for March 1 and 85 percent of the seasonal average. Last year at this time the basin was holding 17.3 inches of water.

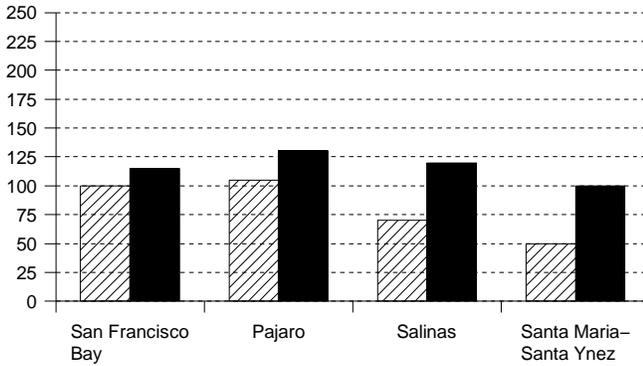
**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan** was 95 percent of normal. Precipitation last month was about 155 percent of the monthly average. Seasonal precipitation at this time last year stood at 120 percent of normal. Seasonal precipitation on the **South Lahontan** was 50 percent of normal. Precipitation last month was about 130 percent of the monthly average. Seasonal precipitation at this time last year stood at 30 percent of normal.

**RESERVOIR STORAGE**– First of the month storage in 5 **North Lahontan** reservoirs was 890 thousand acre-feet which is 165 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 155 percent of average. Lake Tahoe was 5.2 feet above its natural rim on March 1. First of the month storage in 8 **South Lahontan** reservoirs was 280 thousand acre-feet which is 100 percent of average and about 70 percent of available capacity. Storage in these reservoirs at this time last year was 100 percent of average.

**RUNOFF**– Seasonal runoff of streams draining the **North Lahontan Region** totaled 161 thousand acre-feet which is 80 percent of average for this period. Last year, runoff for the same period was 100 percent of average. Seasonal runoff of the Owens River in the **South Lahontan** totaled 40 thousand acre-feet which is 75 percent of average for this period. Last year runoff for this same period was 115 percent of average.

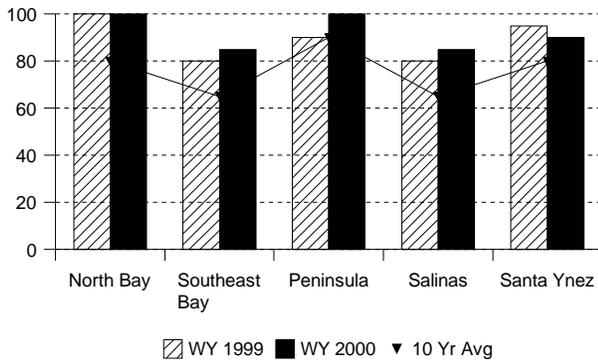
## Precipitation

October 1 to date in % of Average



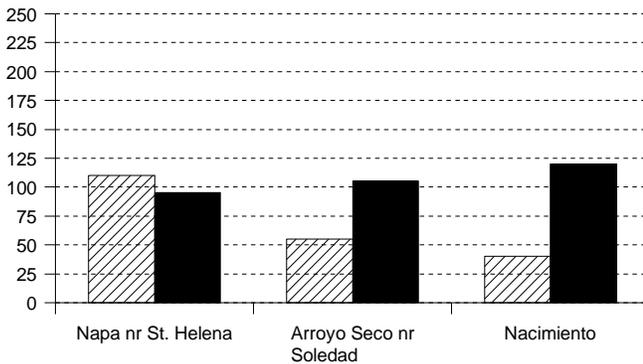
## Reservoir Storage

Contents of major reservoirs in % of capacity



## Runoff

October 1 to date in % of average



## SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 115 percent of normal. Precipitation last month was about 250 percent of the monthly average. Seasonal precipitation at this time last year stood at 100 percent of normal. Seasonal precipitation on the **Central Coast Region** was 115 percent of normal. Precipitation last month was about 250 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.

**RESERVOIR STORAGE**– First of the month storage in 18 **San Francisco Bay Region** reservoirs was 615 thousand acre–feet which is 125 percent of average. About 90 percent of available capacity was being used. Storage in these reservoirs at this time last year was 120 percent of average. First of the month storage in 6 **Central Coast Region** reservoirs was 824 thousand acre–feet which is 135 percent of average and about 85 percent of available capacity. Storage in these reservoirs at this time last year was 130 percent of average.

**RUNOFF**– Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 45 thousand acre–feet which is 95 percent of average for this period. Last year, runoff for the same period was 110 percent of average. Seasonal runoff of streams draining the **Central Coast Region** totaled 236 thousand acre–feet which is 115 percent of average for this period. Last year runoff for this same period was 45 percent of average.

## **SOUTH COAST AND COLORADO RIVER REGIONS**

**PRECIPITATION** – October through January (seasonal) precipitation on the **South Coast Region** was 60 percent of normal. February precipitation was 175 percent of the monthly average. Seasonal precipitation at this time last year was 45 percent of normal. Seasonal precipitation on the **Colorado River–Desert Region** was 15 percent of normal and last year's seasonal precipitation on the **Colorado River–Desert Region** was 30 percent of normal. Precipitation in February was 70 percent of average.

**RESERVOIR STORAGE** – March 1 storage in 29 major **South Coast Region** reservoirs was 1.5 million acre–feet or 110 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 120 percent of average. On March 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 48 million acre–feet or about 121 percent of average. About 90 percent of available capacity was in use. Last year at this time, these reservoirs were also storing about 48 million acre–feet.

**RUNOFF** – Seasonal runoff from selected **South Coast Region** streams totaled 1.5 thousand acre–feet which is 5 percent of average. Seasonal runoff from these streams last year was 50 percent of average.

**COLORADO RIVER** – The April –July inflow to Lake Powell is forecast to be 6.0 million acre–feet, which is 78 percent of average. The March 1 snowpack in the Upper Colorado River basin was 86 percent of average, highest in the Upper Colorado at 101 percent and lowest in the San Juan at 50 percent.

## **STATE WATER PROJECT**

The state share of San Luis Reservoir storage was filled (1.06 million acre–feet) on February 23, 2000. State Water Project fill was completed last water year on November 17, 1998. The combined storage of our southern reservoirs was about 650,500 acre–feet on February 29 as compared with 572,000 acre–feet at this same time last year. State Water Project water deliveries for 2000 through February were about 360,500 acre–feet. This is a combination of project, transfer, and exchange waters. This is about 162,800 acre–feet more than that delivered during the same period in 1999.

State Water Project delivery allocations for 2000 were increased to 70% (2.8 million acre–feet).

**MAJOR WATER DISTRIBUTION PROJECTS  
RESERVOIR STORAGE**

(AVERAGES BASED ON 1946-95 OR PERIOD RECORD)

| RESERVOIR                                  | CAPACITY<br>1,000 AF | AVERAGE<br>STORAGE<br>1,000 AF | STORAGE AT END OF FEBRUARY |                  | PERCENT<br>AVERAGE | PERCENT<br>CAPACITY |
|--|----------------------|--------------------------------|----------------------------|------------------|--------------------|---------------------|
|  |                      |                                | 1999<br>1,000 AF           | 2000<br>1,000 AF |                    |                     |
| <i>STATE WATER PROJECT</i>                 |                      |                                |                            |                  |                    |                     |
| Lake Oroville                              | 3,538                | 2,539                          | 2,791                      | 2,766            | 109%               | 78%                 |
| San Luis Reservoir (SWP)                   | 1,062                | 914                            | 1,097                      | 1,058            | 116%               | 100%                |
| Lake Del Valle                             | 77                   | 33                             | 35                         | 39               | 116%               | 50%                 |
| Lake Silverwood                            | 73                   | 67                             | 59                         | 69               | 103%               | 95%                 |
| Pyramid Lake                               | 171                  | 162                            | 161                        | 169              | 104%               | 99%                 |
| Castaic Lake                               | 324                  | 264                            | 228                        | 291              | 110%               | 90%                 |
| Perris Lake                                | 131                  | 117                            | 123                        | 120              | 103%               | 91%                 |
| <i>CENTRAL VALLEY PROJECT</i>              |                      |                                |                            |                  |                    |                     |
| Clair Engle Lake                           | 2,448                | 1,823                          | 2,006                      | 2,149            | 118%               | 88%                 |
| Lake Shasta                                | 4,552                | 3,301                          | 3,713                      | 3,857            | 117%               | 85%                 |
| Whiskeytown Lake                           | 241                  | 207                            | 205                        | 208              | 101%               | 86%                 |
| Folsom Lake                                | 977                  | 559                            | 496                        | 599              | 107%               | 61%                 |
| New Melones Reservoir                      | 2,420                | 1,372                          | 1,972                      | 2,008            | 146%               | 83%                 |
| Millerton Lake                             | 520                  | 325                            | 428                        | 423              | 130%               | 81%                 |
| San Luis Reservoir (CVP)                   | 971                  | 781                            | 888                        | 768              | 98%                | 79%                 |
| <i>COLORADO RIVER PROJECT</i>              |                      |                                |                            |                  |                    |                     |
| Lake Mead                                  | 26,159               | 20,121                         | 24,899                     | 24,974           | 124%               | 95%                 |
| Lake Powell                                | 25,002               | 17,587                         | 21,088                     | 20,948           | 119%               | 84%                 |
| Lake Mohave                                | 1,810                | 1,645                          | 1,677                      | 1,664            | 101%               | 92%                 |
| Lake Havasu                                | 619                  | 546                            | 521                        | 538              | 99%                | 87%                 |
| <i>EAST BAY MUNICIPAL UTILITY DISTRICT</i> |                      |                                |                            |                  |                    |                     |
| PARDEE RESERVOIR                           | 198                  | 178                            | 199                        | 193              | 109%               | 98%                 |
| Camanche Reservoir                         | 417                  | 242                            | 284                        | 302              | 125%               | 72%                 |
| East Bay (4 res.)                          | 151                  | 129                            | 137                        | 131              | 102%               | 87%                 |
| <i>CITY AND COUNTY OF SAN FRANCISCO</i>    |                      |                                |                            |                  |                    |                     |
| Hetch-Hetchy Reservoir                     | 360                  | 130                            | 258                        | 216              | 166%               | 60%                 |
| Cherry Lake                                | 268                  | 106                            | 224                        | 228              | 215%               | 85%                 |
| Lake Eleanor                               | 26                   | 10                             | 21                         | 24               | 253%               | 92%                 |
| South Bay/Peninsula (4 res.)               | 225                  | 168                            | 209                        | 222              | 132%               | 99%                 |
| <i>CITY OF LOS ANGELES (D.W.P.)</i>        |                      |                                |                            |                  |                    |                     |
| Lake Crowley                               | 183                  | 126                            | 136                        | 125              | 100%               | 68%                 |
| Grant Lake                                 | 48                   | 26                             | 40                         | 38               | 148%               | 80%                 |
| Other Aqueduct Storage (6 res.)            | 83                   | 75                             | 59                         | 67               | 89%                | 81%                 |

# TELEMETERED SNOW WATER EQUIVALENTS

March 1, 2000

(AVERAGES BASED ON PERIOD RECORD)

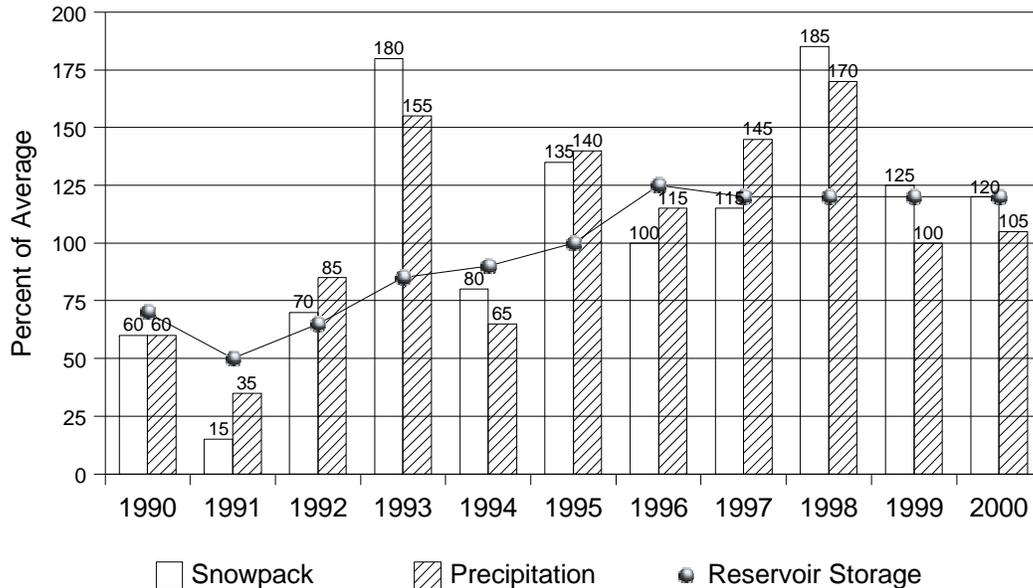
| BASIN NAME                               | STATION NAME            | ELEV  | INCHES OF WATER EQUIVALENT |                             |                    |                    |      |
|--|-------------------------|-------|----------------------------|-----------------------------|--------------------|--------------------|------|
|  |                         |       | APRIL 1<br>AVERAGE         | PERCENT<br>Mar 1 OF AVERAGE | 24 HRS<br>PREVIOUS | 1 WEEK<br>PREVIOUS |      |
| <b>TRINITY RIVER</b>                     |                         |       |                            |                             |                    |                    |      |
|  | Peterson Flat           | 7150' | 29.2                       | 28.8                        | 98.6               | 28.6               | 24.7 |
|  | Red Rock Mountain       | 6700' | 39.6                       | —                           | —                  | —                  | —    |
|  | Bonanza King            | 6450' | 40.5                       | 41.0                        | 101.2              | 40.5               | 33.0 |
|  | Shimmy Lake             | 6200' | 40.3                       | —                           | —                  | —                  | —    |
|  | Middle Boulder 3        | 6200' | 28.3                       | 36.1                        | 127.7              | 36.1               | 31.6 |
|  | Highland Lakes          | 6030' | 29.9                       | 42.6                        | 142.5              | 41.9               | 34.4 |
|  | Scott Mountain          | 5900' | 16.0                       | 32.4                        | 202.5              | 32.0               | 27.8 |
|  | Mumbo Basin             | 5700' | 22.4                       | 19.8                        | 88.4               | 19.3               | 14.6 |
|  | Big Flat                | 5100' | 15.8                       | 18.7                        | 118.2              | 18.4               | 15.3 |
| <b>SACRAMENTO RIVER</b>                  |                         |       |                            |                             |                    |                    |      |
|  | Cedar Pass              | 7100' | 18.1                       | 14.2                        | 78.5               | 14.0               | 12.8 |
|  | Blacks Mountain         | 7100' | 12.7                       | 13.4                        | 105.8              | 13.1               | 11.3 |
|  | Sand Flat               | 6750' | 42.4                       | 44.8                        | 105.6              | 43.9               | 37.9 |
|  | Medicine Lake           | 6700' | 32.6                       | 32.9                        | 100.9              | 32.8               | 28.3 |
|  | Adin Mountain           | 6350' | 13.6                       | 12.7                        | 93.4               | 12.5               | 10.9 |
|  | Snow Mountain           | 5950' | 27.0                       | 37.6                        | 139.1              | 36.0               | 28.9 |
|  | Slate Creek             | 5600' | 29.0                       | 42.4                        | 146.1              | 41.6               | 33.0 |
|  | Stouts Meadow           | 5400' | 36.0                       | 40.3                        | 112.0              | 39.0               | 34.2 |
| <b>FEATHER RIVER</b>                     |                         |       |                            |                             |                    |                    |      |
|  | Kettle Rock             | 7300' | 25.5                       | 34.0                        | 133.5              | 33.6               | 28.3 |
|  | Grizzly Ridge           | 6900' | 29.7                       | 30.2                        | 101.8              | 30.1               | 25.7 |
|  | Pilot Peak              | 6800' | 52.6                       | 42.0                        | 79.8               | 40.8               | 34.0 |
|  | Gold Lake               | 6750' | 36.5                       | 40.9                        | 112.1              | 40.4               | 34.9 |
|  | Humbug                  | 6500' | 28.0                       | 44.0                        | 157.3              | 43.6               | 37.3 |
|  | Rattlesnake             | 6100' | 14.0                       | 31.0                        | 221.1              | 30.6               | 25.4 |
|  | Bucks Lake              | 5750' | 44.7                       | 41.2                        | 92.1               | 39.7               | 33.5 |
|  | Four Trees              | 5150' | 20.0                       | 24.8                        | 124.2              | 23.8               | 17.9 |
| <b>EEL RIVER</b>                         |                         |       |                            |                             |                    |                    |      |
|  | Noel Spring             | 5100' | —                          | 4.5                         | —                  | 4.5                | 3.7  |
| <b>YUBA &amp; AMERICAN RIVERS</b>        |                         |       |                            |                             |                    |                    |      |
|  | Lake Lois               | 8800' | 39.5                       | 41.8                        | 105.9              | 40.5               | 37.9 |
|  | Schneiders              | 8750' | 34.5                       | 40.9                        | 118.6              | 40.4               | 36.2 |
|  | Caples Lake             | 7800' | 30.9                       | 25.6                        | 82.7               | 25.2               | 21.7 |
|  | Alpha                   | 7600' | 35.9                       | 33.6                        | 93.6               | 32.9               | 29.0 |
|  | Beta                    | 7600' | 35.9                       | —                           | —                  | —                  | —    |
|  | Meadow Lake             | 7200' | 55.5                       | —                           | —                  | —                  | —    |
|  | Silver Lake             | 7100' | 22.7                       | 24.9                        | 109.7              | 24.5               | 21.1 |
|  | Central Sierra Snow Lab | 6950' | 33.6                       | 42.0                        | 125.0              | 41.4               | 34.7 |
|  | Huysink                 | 6600' | 42.6                       | 33.0                        | 77.5               | 32.2               | 26.6 |
|  | Van Vleck               | 6700' | 35.9                       | 35.2                        | 98.1               | 34.2               | 29.1 |
|  | Robbs Saddle            | 5900' | 21.4                       | 22.4                        | 104.8              | 21.6               | 17.4 |
|  | Greek Store             | 5600' | 21.0                       | 23.4                        | 111.4              | 22.6               | 17.3 |
|  | Blue Canyon             | 5280' | 9.0                        | 13.4                        | 149.1              | 12.6               | 8.5  |
|  | Robbs Powerhouse        | 5150' | 5.2                        | 10.6                        | 203.5              | 10.1               | 7.0  |
| <b>MOKELUMNE &amp; STANISLAUS RIVERS</b> |                         |       |                            |                             |                    |                    |      |
|  | Deadman Creek           | 9250' | 37.2                       | 23.8                        | 63.9               | 23.3               | 19.3 |
|  | Highland Meadow         | 8800' | 47.9                       | 33.1                        | 69.0               | 33.1               | 29.1 |
|  | Gianelli Meadow         | 8350' | 55.5                       | 39.2                        | 70.7               | 38.0               | 31.6 |
|  | Lower Relief Valley     | 8100' | 41.2                       | 37.7                        | 91.6               | 37.1               | 32.5 |
|  | Blue Lakes              | 8000' | 33.1                       | 24.1                        | 72.8               | 23.7               | 20.5 |
|  | Mud Lake                | 7900' | 44.9                       | 49.9                        | 111.0              | 49.0               | 42.7 |
|  | Stanislaus Meadow       | 7750' | 47.5                       | 38.6                        | 81.3               | 37.9               | 32.0 |
|  | Bloods Creek            | 7200' | 35.5                       | 26.0                        | 73.4               | 25.4               | 21.0 |
|  | Black Springs           | 6500' | 32.0                       | 19.1                        | 59.6               | 18.6               | 14.2 |
| <b>TUOLUMNE &amp; MERCED RIVERS</b>      |                         |       |                            |                             |                    |                    |      |
|  | Dana Meadows            | 9800' | 27.7                       | 26.8                        | 96.7               | 26.1               | 23.5 |
|  | Slide Canyon            | 9200' | 41.1                       | 35.3                        | 86.0               | 34.7               | 29.5 |
|  | Lake Tenaya             | 8150' | 33.1                       | 50.1                        | 151.4              | 48.1               | 41.6 |
|  | Tuolumne Meadows        | 8600' | 22.6                       | 18.4                        | 81.2               | 18.0               | 15.7 |
|  | Horse Meadow            | 8400' | 48.6                       | 43.9                        | 90.2               | 43.2               | 38.0 |
|  | Ostrander Lake          | 8200' | 34.8                       | 29.1                        | 83.5               | 27.8               | 25.1 |
|  | Paradise Meadow         | 7650' | 41.3                       | 41.0                        | 99.2               | 40.3               | 34.4 |
|  | Gin Flat                | 7050' | 34.2                       | 20.6                        | 60.4               | 20.0               | 15.2 |
|  | Lower Kibbie Ridge      | 6600' | 27.4                       | 16.9                        | 61.6               | 16.2               | 11.0 |

| BASIN NAME                      | STATION NAME          | ELEV   | INCHES OF WATER EQUIVALENT |                    |                 |                 |      |
|---------------------------------|-----------------------|--------|----------------------------|--------------------|-----------------|-----------------|------|
|                                 |                       |        | APRIL 1 AVERAGE            | PERCENT OF AVERAGE | 24 HRS PREVIOUS | 1 WEEK PREVIOUS |      |
| <b>SAN JOAQUIN RIVER</b>        |                       |        |                            |                    |                 |                 |      |
|                                 | Volcanic Knob         | 10100' | 30.1                       | 24.8               | 82.5            | 23.5            | 20.3 |
|                                 | Agnew Pass            | 9450'  | 32.3                       | 27.3               | 84.4            | 26.9            | 23.3 |
|                                 | Kaiser Point          | 9200'  | 37.8                       | 31.4               | 83.2            | 30.7            | 26.4 |
|                                 | Green Mountain        | 7900'  | 30.8                       | 30.7               | 99.7            | 30.2            | 27.2 |
|                                 | Tamarack Summit       | 7600'  | 30.5                       | 24.8               | 81.4            | 24.2            | 19.8 |
|                                 | Chilkoot Meadow       | 7150'  | 38.0                       | 27.4               | 72.0            | 26.8            | 21.1 |
|                                 | Huntington Lake       | 7000'  | 20.1                       | 19.9               | 99.1            | 19.0            | 15.7 |
|                                 | Graveyard Meadow      | 6900'  | 18.8                       | 20.2               | 107.2           | 19.6            | 15.5 |
|                                 | Poison Ridge          | 6900'  | 28.9                       | 22.7               | 78.5            | 21.7            | 15.7 |
| <b>KINGS RIVER</b>              |                       |        |                            |                    |                 |                 |      |
|                                 | Bishop Pass           | 11200' | 34.0                       | 22.6               | 66.5            | 22.6            | 20.0 |
|                                 | Charlotte Lake        | 10400' | 27.5                       | 22.4               | 81.4            | 21.8            | 19.2 |
|                                 | State Lakes           | 10400' | 29.0                       | —                  | —               | —               | —    |
|                                 | Mitchell Meadow       | 10375' | 32.9                       | 31.0               | 94.2            | 30.2            | 26.1 |
|                                 | Blackcap Basin        | 10300' | 34.3                       | 35.0               | 102.1           | 34.4            | 31.1 |
|                                 | Upper Burnt Corral    | 9700'  | 34.6                       | 39.0               | 112.8           | 38.4            | 34.5 |
|                                 | West Woodchuck Meadow | 9100'  | 32.8                       | 32.1               | 97.9            | 31.0            | 27.6 |
|                                 | Big Meadows           | 7600'  | 25.9                       | 27.6               | 106.6           | 26.8            | 22.6 |
| <b>KAWEAH &amp; TULE RIVERS</b> |                       |        |                            |                    |                 |                 |      |
|                                 | Quaking Aspen         | 7200'  | 21.0                       | 17.4               | 82.9            | 16.7            | 12.6 |
|                                 | Giant Forest          | 6400'  | 10.0                       | 14.0               | 140.0           | 13.1            | 8.9  |
| <b>KERN RIVER</b>               |                       |        |                            |                    |                 |                 |      |
|                                 | Upper Tyndall Creek   | 11500' | 27.7                       | —                  | —               | —               | —    |
|                                 | Crabtree Meadow       | 10700' | 19.8                       | 13.0               | 65.7            | —               | —    |
|                                 | Chagoopa Plateau      | 10300' | 21.8                       | 22.0               | 100.9           | 21.3            | 19.4 |
|                                 | Pascoes               | 9150'  | 24.9                       | —                  | —               | —               | 17.0 |
|                                 | Tunnel Guard Station  | 8950'  | 15.6                       | 11.4               | 73.1            | 11.4            | 9.4  |
|                                 | Wet Meadows           | 8900'  | 30.3                       | —                  | —               | —               | 18.0 |
|                                 | Casa Vieja Meadows    | 8400'  | 20.9                       | 15.7               | 75.3            | 15.7            | 13.8 |
|                                 | Beach Meadows         | 7650'  | 11.0                       | 9.9                | 90.0            | 9.7             | 7.7  |
| <b>SURPRISE VALLEY AREA</b>     |                       |        |                            |                    |                 |                 |      |
|                                 | Dismal Swamp          | 7050'  | 29.2                       | 26.5               | 90.8            | 26.2            | 23.6 |
| <b>TRUCKEE RIVER</b>            |                       |        |                            |                    |                 |                 |      |
|                                 | Mount Rose Ski Area   | 8850'  | 38.5                       | 32.9               | 85.5            | 32.5            | 29.0 |
|                                 | Independence Lake     | 8450'  | 41.4                       | 39.4               | 95.2            | 39.0            | 34.4 |
|                                 | Big Meadows           | 8700'  | 25.7                       | 18.0               | 70.0            | 17.8            | 15.3 |
|                                 | Squaw Valley          | 7800'  | 46.5                       | 52.1               | 112.0           | 51.4            | 44.3 |
|                                 | Independence Camp     | 7000'  | 21.8                       | 16.6               | 76.1            | 16.6            | 14.5 |
|                                 | Independence Creek    | 6500'  | 12.7                       | 13.6               | 107.1           | 13.6            | 11.7 |
|                                 | Truckee 2             | 6350'  | 14.3                       | 20.0               | 139.9           | 20.0            | 16.9 |
| <b>LAKE TAHOE BASIN</b>         |                       |        |                            |                    |                 |                 |      |
|                                 | Heavenly Valley       | 8800'  | 28.1                       | 21.5               | 76.5            | 21.2            | 18.5 |
|                                 | Hagans Meadow         | 8000'  | 16.5                       | 14.5               | 87.9            | 14.4            | 11.7 |
|                                 | Marlette Lake         | 8000'  | 21.1                       | 20.8               | 98.6            | 20.5            | 17.7 |
|                                 | Echo Peak 5           | 7800'  | 39.5                       | 41.3               | 104.6           | 40.2            | 34.5 |
|                                 | Rubicon Peak 2        | 7500'  | 29.1                       | 23.9               | 82.1            | 23.3            | 19.5 |
|                                 | Tahoe City Cross      | 6750'  | 16.0                       | 17.2               | 107.5           | 17.1            | 15.0 |
|                                 | Ward Creek 3          | 6750'  | 39.4                       | 34.0               | 86.3            | 33.8            | 29.4 |
|                                 | Fallen Leaf Lake      | 6300'  | 7.0                        | 5.0                | 71.4            | 5.0             | 3.7  |
| <b>CARSON RIVER</b>             |                       |        |                            |                    |                 |                 |      |
|                                 | Ebbetts Pass          | 8700'  | 38.8                       | 29.6               | 76.3            | 29.2            | 24.3 |
|                                 | Poison Flat           | 7900'  | 16.2                       | 13.3               | 82.1            | 13.3            | 11.7 |
|                                 | Monitor Pass          | 8300'  | —                          | 11.4               | —               | 11.4            | 9.0  |
|                                 | Spratt Creek          | 6150'  | 4.5                        | 2.2                | 48.9            | 2.1             | 0.3  |
| <b>WALKER RIVER</b>             |                       |        |                            |                    |                 |                 |      |
|                                 | Leavitt Lake          | 9400'  | —                          | 53.6               | —               | 53.0            | 46.3 |
|                                 | Virginia Lakes        | 9200'  | 20.3                       | 12.6               | 62.1            | 12.4            | 10.5 |
|                                 | Lobdell Lake          | 9200'  | 17.3                       | 11.3               | 65.3            | 11.1            | 9.2  |
|                                 | Sonora Pass Bridge    | 8750'  | 26.0                       | 19.8               | 76.2            | 19.3            | 16.0 |
|                                 | Leavitt Meadows       | 7200'  | 8.0                        | 11.4               | 142.5           | 11.4            | 9.3  |
| <b>OWENS RIVER/MONO LAKE</b>    |                       |        |                            |                    |                 |                 |      |
|                                 | Gem Pass              | 10750' | 31.7                       | 29.0               | 91.6            | 29.0            | 27.1 |
|                                 | Sawmill               | 10300' | 19.4                       | 13.7               | 70.8            | 13.7            | 12.4 |
|                                 | Cottonwood Lakes      | 10200' | 11.6                       | 8.4                | 72.8            | 8.3             | 7.8  |
|                                 | Big Pine Creek        | 9800'  | 17.9                       | 9.2                | 51.1            | 9.2             | 7.2  |
|                                 | South Lake            | 9600'  | 16.0                       | 16.3               | 101.6           | 15.8            | 14.0 |
|                                 | Mammoth Pass          | 9500'  | 42.4                       | 34.6               | 81.5            | 33.8            | 29.8 |
|                                 | Rock Creek Lakes      | 10000' | 14.0                       | 11.1               | 79.1            | 10.4            | 8.9  |

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

| AREA                 | JANUARY | FEBRUARY | MARCH | APRIL | MAY |
|----------------------|---------|----------|-------|-------|-----|
| Central Valley North | 45%     | 70%      | 90%   | 100%  | 75% |
| Central Valley South | 45%     | 65%      | 85%   | 100%  | 80% |
| North Coast          | 40%     | 60%      | 85%   | 100%  | 80% |

## March 1 Statewide Conditions



## SNOWLINES

**THE DEADLINE** for the 2000 Western Snow Conference annual meeting is approaching. It will be held April 17–20 at Port Angeles, WA. If you have not been receiving information regarding the Western Snow Conference contact Frank Gehrke at 916–574–2635 or [gridley@water.ca.gov](mailto:gridley@water.ca.gov). Information is available on the web at <http://snobear.colorado.edu/WSC/WSC.html>.

**DEPICTED** on this month's cover is a crew from the Lemoore Naval Air Station Search and Rescue group checking out the ice on Charlotte Lake during a winter emergency repair mission last year.

**BULLETIN 120** in pdf format, including the maps, is now available on the web. See <http://snow.water.ca.gov> under the forecasts section for access.

**LAST MONTH'S** reservoir storage table contained some errors. A corrected copy is available at <http://cdec.water.ca.gov/snow/bulletin120/feb00stor.pdf>.

**SNOWPACK** - Snow data is a major index of spring and summer runoff from Sierra Nevada watersheds. April 1 data historically reflects the magnitude of the snowpack at or near the maximum seasonal accumulation. Averages are based on April 1 data for the period 1941-1990 (50 years, except for data sites established after 1941).

**PRECIPITATION** - Averages are based on April 1 data for the period 1941-1990 (50 years, except for data sites established after 1941).

**RUNOFF AND FORECASTS** - Runoff data and runoff forecasts are shown as unimpaired values. Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Forecast of runoff assumes median conditions subsequent to the date of forecast.

Runoff probability ranges are statistically derived from historical data. The 80 percent probability range is comprised of the 90 percent exceedence level value and the 10 percent exceedence level value. This means that actual runoff should fall within the stated limits eight times out of ten.

Runoff averages for most streams are based on the period 1946-1995. For more details contact California Cooperative Snow Surveys, P.O. Box 942836, Sacramento, CA 94236-0001, (916) 574-2635 or gridley@water.ca.gov.

### **INDICES OF WATER AVAILABILITY**

The Sacramento River Hydrologic Region 40-30-30 Water Supply Index. The values 40-30-30 represent the percentage weight given to the three variables in the formula for the index. The first variable is the forecasted unimpaired runoff from April through July (40 Percent). The second variable is the forecasted unimpaired runoff from October through March (30 Percent). The third variable is the previous year's index with a cap to account for required flood control releases during wet years. The basins used in this computation are those used in the Sacramento River water year unimpaired runoff.

The Sacramento River water year unimpaired runoff is the sum of: Sacramento River above Bend Bridge, Feather River Inflow to Lake Oroville, Yuba River near Smartville and American River Inflow to Folsom Lake.

The San Joaquin River Hydrologic Region 60-20-20 Water Supply Index. In a similar manner, the values 60-20-20 represents the percentage weights on April through July runoff, October through March runoff and previous year's index. The San Joaquin River unimpaired runoff is the sum of: Stanislaus River Inflow to New Melones Lake, Tuolumne River Inflow to New Don Pedro Reservoir, Merced River Inflow to Lake McClure and San Joaquin River Inflow to Millerton Lake.

Runoff of the eight major rivers of the Sacramento and San Joaquin Regions is the sum of the runoff in the eight major rivers used in the two above indices.

State of California – The Resources Agency  
DEPARTMENT OF WATER RESOURCES  
P.O. Box 942836  
Sacramento, CA 94236-0001

# First Class

