



*Colorado River Municipal Water District*

# Monthly Water Report

July 2019

**COLORADO RIVER MUNICIPAL WATER DISTRICT**

PO Box 869, 400 East 24th Street

Big Spring, Texas 79721-0869

**Colorado River Municipal Water District  
Water Delivered  
July 2019**

**Raw Water System**

| <b>Member Cities</b> | <b>Total Deliveries This<br/>Month (Gal)</b> | <b>Daily Average For<br/>Month (Gal)</b> | <b>2019 Year to Date<br/>(Gal)</b> |
|----------------------|--|--|------------------------------------|
| Big Spring           | 204,764,000                                  | 6,605,290                                | 1,111,566,000                      |
| Odessa               | 842,752,300                                  | 27,185,558                               | 4,467,552,700                      |
| Snyder               | 72,979,000                                   | 2,354,161                                | 380,361,000                        |
| <b>Subtotal</b>      | <b>1,120,495,300</b>                         | <b>36,145,010</b>                        | <b>5,959,479,700</b>               |

**Municipal Customers**

|                         |                      |                   |                      |
|-------------------------|----------------------|-------------------|----------------------|
| Grandfalls              | 859,000              | 27,710            | 863,000              |
| Midland - 1966 Contract | 282,348,200          | 9,108,006         | 2,230,540,100        |
| Midland - Ivie Contract | 212,950,000          | 6,869,355         | 526,758,000          |
| Millersview Doole WSC   | 46,027,300           | 1,484,752         | 266,900,500          |
| Pyote                   | 2,517,800            | 81,219            | 12,085,500           |
| San Angelo - Spence     | 0                    | 0                 | 0                    |
| San Angelo - Ivie       | 401,557,000          | 12,953,452        | 2,090,031,000        |
| Stanton                 | 9,651,800            | 311,348           | 65,058,700           |
| University Lands        | 0                    | 0                 | 6,000                |
| West Central Texas MWD  | 100,405,000          | 3,238,871         | 558,644,000          |
| <b>Subtotal</b>         | <b>1,056,316,100</b> | <b>34,074,713</b> | <b>5,750,886,800</b> |

**Industrial Customers**

|                     |                   |                  |                    |
|---------------------|-------------------|------------------|--------------------|
| Alon Rural Meters   | 6,101,160         | 196,812          | 24,630,740         |
| Luminant Generation | 0                 | 0                | 5,209,000          |
| Occidental          | 13,410            | 433              | 70,940             |
| Parallel Petroleum  | 85,430            | 2,756            | 337,680            |
| Power Resources     | 36,722,000        | 1,184,581        | 134,782,000        |
| <b>Subtotal</b>     | <b>42,922,000</b> | <b>1,384,581</b> | <b>165,030,360</b> |

**Diverted Water System**

**Industrial Customers**

|                     |                   |                |                   |
|---------------------|-------------------|----------------|-------------------|
| BASA Resources      | 9,584,600         | 309,181        | 65,115,700        |
| Energen             | 0                 | 0              | 68,700            |
| Fasken Oil Co.      | 240,580           | 7,761          | 1,289,290         |
| Miranda Energy      | 0                 | 0              | 0                 |
| Rover Operating     | 164,280           | 5,299          | 452,000           |
| Sheridan Production | 121,660           | 3,925          | 1,215,620         |
| <b>Subtotal</b>     | <b>10,111,120</b> | <b>326,165</b> | <b>68,141,310</b> |

|                         |                      |                   |                       |
|-------------------------|----------------------|-------------------|-----------------------|
| <b>Total Deliveries</b> | <b>2,229,844,520</b> | <b>71,930,468</b> | <b>11,943,538,170</b> |
|-------------------------|----------------------|-------------------|-----------------------|

**COLORADO RIVER MUNICIPAL WATER DISTRICT  
RESERVOIR REPORT  
July 2019**

|  | <u>This Month</u> | <u>2019 Year-to-Date Total</u> |
|--|-------------------|--------------------------------|
| <b><u>Lake J. B. Thomas</u></b>              |                   |                                |
| <i><u>CONTENTS IN ACRE FEET</u></i>          |                   |                                |
| CAPACITY WHEN FULL                           | 200,604           |                                |
| CAPACITY THIS DATE                           | 62,172            |                                |
| PERCENT FULL                                 | 30.99%            |                                |
| FREE CAPACITY THIS DATE                      | 138,432           |                                |
| INFLOWS*                                     | 678               | 5,351                          |
| PASS THROUGH / RELEASES                      | 0                 | 0                              |
| WITHDRAWALS                                  | 951               | 7,871                          |
| EVAPORATION*                                 | (2,923)           | (11,575)                       |
| <i><u>ELEVATION ABOVE MEAN SEA LEVEL</u></i> |                   |                                |
| ELEVATION WHEN FULL                          | 2,258.00          |                                |
| ELEVATION THIS DATE                          | 2,232.36          |                                |
| <br>   |                   |                                |
| <b><u>E. V. Spence Reservoir</u></b>         |                   |                                |
| <i><u>CONTENTS IN ACRE FEET</u></i>          |                   |                                |
| CAPACITY WHEN FULL                           | 517,272           |                                |
| CAPACITY THIS DATE                           | 157,981           |                                |
| PERCENT FULL                                 | 30.54%            |                                |
| FREE CAPACITY THIS DATE                      | 359,291           |                                |
| INFLOWS*                                     | 0                 | 36,484                         |
| PASS THROUGH / RELEASES                      | 0                 | 0                              |
| WITHDRAWALS                                  | 887               | 5,886                          |
| EVAPORATION*                                 | (4,029)           | (12,127)                       |
| <i><u>ELEVATION ABOVE MEAN SEA LEVEL</u></i> |                   |                                |
| ELEVATION WHEN FULL                          | 1,898.00          |                                |
| ELEVATION THIS DATE                          | 1,864.30          |                                |

**COLORADO RIVER MUNICIPAL WATER DISTRICT  
RESERVOIR REPORT  
July 2019**

| <u>O. H. Ivie Reservoir</u>           | <u>This Month</u> | <u>2019 Year-to-Date Total</u> |
|---------------------------------------|-------------------|--------------------------------|
| <u>CONTENTS IN ACRE FEET</u>          |                   |                                |
| CAPACITY WHEN FULL                    | 554,340           |                                |
| CAPACITY THIS DATE                    | 418,897           |                                |
| PERCENT FULL                          | 75.57%            |                                |
| FREE CAPACITY THIS DATE               | 135,443           |                                |
| INFLOWS*                              | 627               | 173,146                        |
| PASS THROUGH / RELEASES               | 0                 | 685                            |
| WITHDRAWALS                           | 4,688             | 23,903                         |
| SPILLS                                | 0                 | 0                              |
| EVAPORATION*                          | (5,884)           | (9,238)                        |
| <u>ELEVATION ABOVE MEAN SEA LEVEL</u> |                   |                                |
| ELEVATION WHEN FULL                   | 1,551.50          |                                |
| ELEVATION THIS DATE                   | 1,543.78          |                                |

**Moss Creek Lake**

|                                       |          |         |
|---------------------------------------|----------|---------|
| <u>CONTENTS IN ACRE FEET</u>          |          |         |
| CAPACITY WHEN FULL                    | 3,441    |         |
| CAPACITY THIS DATE                    | 2,172    |         |
| PERCENT FULL                          | 63.12%   |         |
| FREE CAPACITY THIS DATE               | 1,269    |         |
| INFLOWS*                              | 20       | 957     |
| PASS THROUGH / RELEASES               | 0        | 0       |
| WITHDRAWALS                           | 87       | (1,324) |
| SPILLS                                | 0        | 0       |
| EVAPORATION*                          | (101)    | (389)   |
| <u>ELEVATION ABOVE MEAN SEA LEVEL</u> |          |         |
| ELEVATION WHEN FULL                   | 2,336.50 |         |
| ELEVATION THIS DATE                   | 2,327.71 |         |

| <b>Reservoir Summary</b> |                  |                                     |  |   |   |   |
|--------------------------|------------------|-------------------------------------|--|---|---|---|
| <b>Reservoir</b>         | <b>Elevation</b> | <b>Current Capacity (Acre Feet)</b> | <b>Year to Date Inflow (Acre Feet)</b> | <b>Year to Date Withdrawals (Acre Feet)</b> | <b>Year to Date Pass Through / Releases (Acre Feet)</b> | <b>Year to Date Evaporation (Acre Feet)</b> |
| Lake J.B. Thomas         | 2,232.36         | 62,172                              | 5,351                                  | 7,871                                       | 0   | (11,575)                                    |
| E.V. Spence Reservoir    | 1,864.30         | 157,981                             | 36,484                                 | 5,886                                       | 0   | (12,127)                                    |
| O.H. Ivie Reservoir      | 1,543.78         | 418,897                             | 173,146                                | 23,903                                      | 685   | (9,238)                                     |
| Moss Creek Lake          | 2,327.71         | 2,172                               | 957                                    | (1,324)                                     | 0   | (389)                                       |
| <b>Total</b>             |                  | <b>641,222</b>                      | <b>215,938</b>                         | <b>36,336</b>                               | <b>685</b>  | <b>(33,329)</b>                             |

\* Inflow and Evaporation are approximate.

**COLORADO RIVER MUNICIPAL WATER DISTRICT  
 DIVERTED / WATER QUALITY ENHANCEMENT SYSTEM  
 RESERVOIRS REPORT  
 July 2019**

|  | <u>This Month</u> | <u>2019 Year-to-Date Total</u> |
|--|-------------------|--------------------------------|
| <b><u>Natural Dam</u></b>                    |                   |                                |
| <i><u>CONTENTS IN ACRE FEET</u></i>          |                   |                                |
| CAPACITY WHEN FULL                           | 54,560            |                                |
| CAPACITY THIS DATE                           | 9,057             |                                |
| PERCENT FULL                                 | 16.60%            |                                |
| FREE CAPACITY THIS DATE                      | 45,503            |                                |
| INFLOWS*                                     | 1,557             | 1,557                          |
| SPILLS                                       | 0                 | 0                              |
| EVAPORATION*                                 | (1,111)           | (4,739)                        |
| <i><u>ELEVATION ABOVE MEAN SEA LEVEL</u></i> |                   |                                |
| ELEVATION WHEN FULL                          | 2,457.00          |                                |
| ELEVATION THIS DATE                          | 2,437.90          |                                |
| <br>   |                   |                                |
| <b><u>Sulphur Draw Reservoir</u></b>         |                   |                                |
| <i><u>CONTENTS IN ACRE FEET</u></i>          |                   |                                |
| CAPACITY WHEN FULL                           | 7,997             |                                |
| CAPACITY THIS DATE                           | 655               |                                |
| PERCENT FULL                                 | 8.19%             |                                |
| FREE CAPACITY THIS DATE                      | 7,342             |                                |
| INFLOWS*                                     | 0                 | 0                              |
| PASS THROUGH / RELEASES                      | 0                 | 0                              |
| EVAPORATION*                                 | (151)             | (741)                          |
| <i><u>ELEVATION ABOVE MEAN SEA LEVEL</u></i> |                   |                                |
| ELEVATION WHEN FULL                          | 2,541.00          |                                |
| ELEVATION THIS DATE                          | 2,526.00          |                                |

**COLORADO RIVER MUNICIPAL WATER DISTRICT  
 DIVERTED / WATER QUALITY ENHANCEMENT SYSTEM  
 RESERVOIRS REPORT  
 July 2019**

|  | <u>This Month</u> | <u>2019 Year-to-Date Total</u> |
|--|-------------------|--------------------------------|
| <b><u>Barber Lake</u></b>                    |                   |                                |
| <i><u>CONTENTS IN ACRE FEET</u></i>          |                   |                                |
| CAPACITY WHEN FULL                           | 2,503             |                                |
| CAPACITY THIS DATE                           | 1,341             |                                |
| PERCENT FULL                                 | 53.58%            |                                |
| FREE CAPACITY THIS DATE                      | 1,162             |                                |
| INFLOWS*                                     | 0                 | 757                            |
| WIER FLOW                                    | 0                 | 8                              |
| PUMPED IN                                    | 55                | 1,477                          |
| WITHDRAWALS                                  | 63                | 63                             |
| SPILLS                                       | 0                 | 0                              |
| EVAPORATION*                                 | (114)             | (479)                          |
| <i><u>ELEVATION ABOVE MEAN SEA LEVEL</u></i> |                   |                                |
| ELEVATION WHEN FULL                          | 2,097.00          |                                |
| ELEVATION THIS DATE                          | 2,090.00          |                                |
| <br><b><u>Red Draw</u></b>                   |                   |                                |
| <i><u>CONTENTS IN ACRE FEET</u></i>          |                   |                                |
| CAPACITY WHEN FULL                           | 8,538             |                                |
| CAPACITY THIS DATE                           | 2,199             |                                |
| PERCENT FULL                                 | 25.76%            |                                |
| FREE CAPACITY THIS DATE                      | 6,339             |                                |
| INFLOWS*                                     | 0                 | 195                            |
| PUMPED IN                                    | 0                 | 722                            |
| WITHDRAWALS                                  | 0                 | 0                              |
| SPILLS                                       | 0                 | 0                              |
| EVAPORATION*                                 | (113)             | (501)                          |
| <i><u>ELEVATION ABOVE MEAN SEA LEVEL</u></i> |                   |                                |
| ELEVATION WHEN FULL                          | 2,445.00          |                                |
| ELEVATION THIS DATE                          | 2,419.90          |                                |

**COLORADO RIVER MUNICIPAL WATER DISTRICT  
 DIVERTED / WATER QUALITY ENHANCEMENT SYSTEM  
 RESERVOIRS REPORT  
 July 2019**

| <u><b>Mitchell County</b></u>         | <u>This Month</u> | <u>2019 Year-to-Date Total</u> |
|---------------------------------------|-------------------|--------------------------------|
| <u>CONTENTS IN ACRE FEET</u>          |                   |                                |
| CAPACITY WHEN FULL                    | 27,266            |                                |
| CAPACITY THIS DATE                    | 12,831            |                                |
| PERCENT FULL                          | 47.06%            |                                |
| FREE CAPACITY THIS DATE               | 14,435            |                                |
| INFLOWS*                              | 0                 | 3,126                          |
| SPILLS                                | 0                 | 0                              |
| TRANSFERS IN                          | (8)               | (38)                           |
| EVAPORATION*                          | (685)             | (3,070)                        |
| <u>ELEVATION ABOVE MEAN SEA LEVEL</u> |                   |                                |
| ELEVATION WHEN FULL                   | 2,200.00          |                                |
| ELEVATION THIS DATE                   | 2,187.50          |                                |

| <b>Diverted / Water Quality Enhancement System Summary</b> |                  |                 |  |   |
|--|------------------|-----------------|--|---|
| <b>Reservoir</b>   | <b>Elevation</b> | <b>Capacity</b> | <b>Year to Date Inflow (Acre Feet)</b> | <b>Year to Date Evaporation (Acre Feet)</b> |
| Natural Dam  | 2,437.90         | 9,057           | 1,557                                  | (4,739)                                     |
| Sulphur Draw   | 2,526.00         | 655             | 0                                      | (741)                                       |
| Barber Lake  | 2,090.00         | 1,341           | 757                                    | (479)                                       |
| Red Draw   | 2,419.90         | 2,199           | 195                                    | (501)                                       |
| Mitchell County Reservoir                                  | 2,187.50         | 12,831          | 3,126                                  | (3,070)                                     |
| <b>Total</b>   |                  | <b>26,083</b>   | <b>5,635</b>                           | <b>(9,530)</b>                              |

\* Inflow and Evaporation are approximate.

| <b>Water Quality Diversions</b> |                                  |                                 |
|---------------------------------|----------------------------------|---------------------------------|
| <b>Source</b>                   | <b>Current Month (Acre Feet)</b> | <b>Year to Date (Acre Feet)</b> |
| Colorado River                  | 55                               | 1,477                           |
| Beals Creek                     | 0                                | 117                             |
| <b>Total</b>                    | <b>55</b>                        | <b>1,595</b>                    |

**COLORADO RIVER MUNICIPAL WATER DISTRICT  
GROUNDWATER REPORT  
July 2019**

| <u>Well Field</u>                  | <u>Production<br/>This Month<br/>(Gallons)</u> | <u>Daily<br/>Average for<br/>Month (Gal)</u> | <u>2019 Production<br/>Year-to-Date<br/>(Gallons)</u> |
|------------------------------------|--|--|---|
| Ward County North Well Field       | 74,287,600                                     | 2,396,374                                    | 278,468,900   |
| Ward County South Well Field       | 2,000  | 65   | 22,228,000  |
| Odessa Well Field (Out of Service) | 0  | 0  | 0   |
| Martin County Well Field           | 1,407,240                                      | 45,395                                       | 13,039,480  |
| Snyder Well Field                  | 0  | 0  | 0   |
| Pyote Well Field                   | 1,927,500                                      | 62,177                                       | 12,244,800  |
| <b>Total</b>                       | <b>77,624,340</b>                              | <b>2,504,011</b>                             | <b>325,981,180</b>                                    |

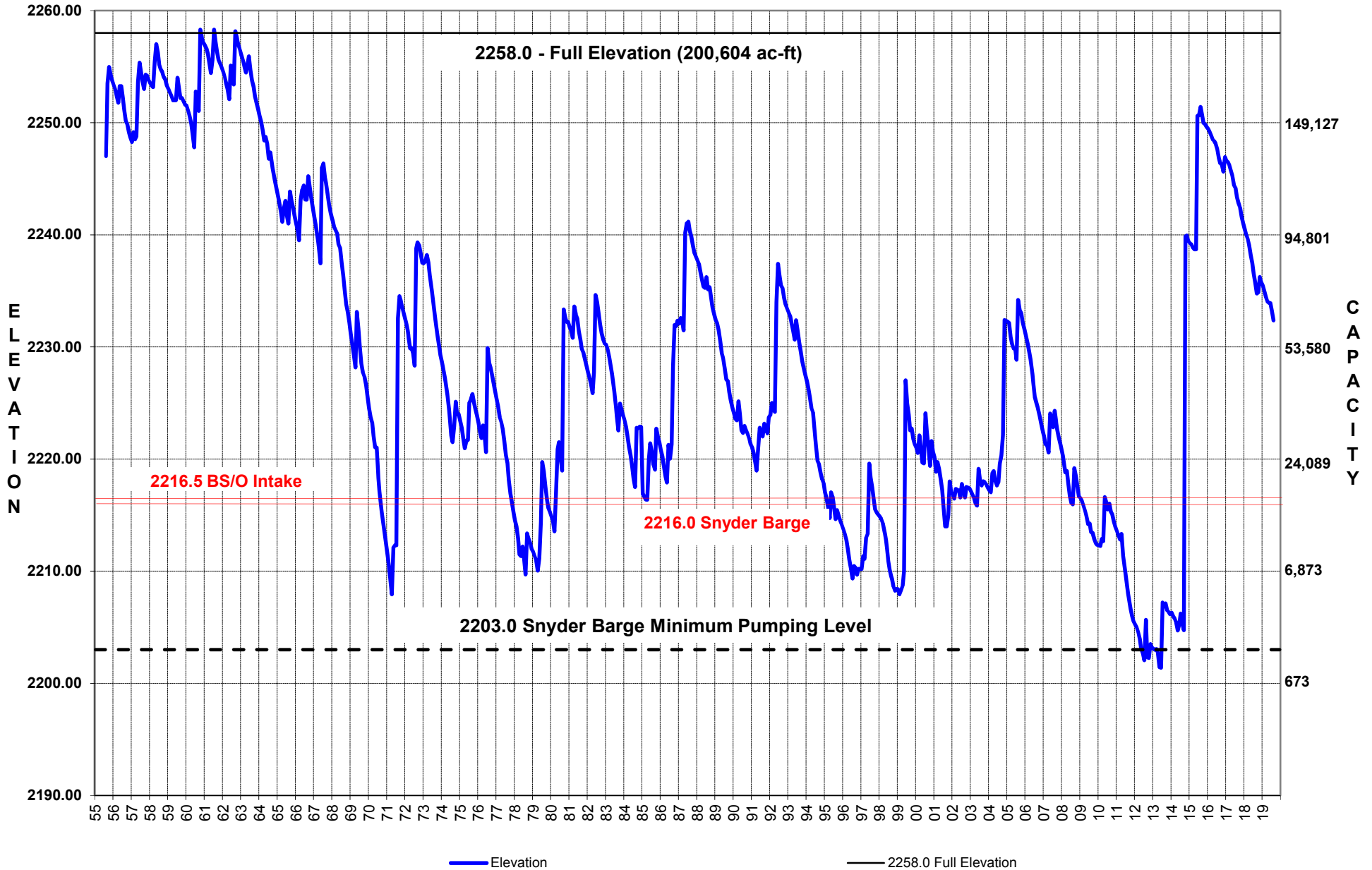
**BIG SPRING RAW WATER PRODUCTION FACILITY  
PRODUCTION REPORT  
July 2019**

|  | <u>Production<br/>This Month<br/>(Gallons)</u> | <u>Daily<br/>Average for<br/>Month (Gal)</u> | <u>2019 Production<br/>Year-to-Date<br/>(Gallons)</u> |
|--|--|--|---|
| Big Spring Raw Water Production Facility | 49,450,000                                     | 1,595,161                                    | 140,980,000   |



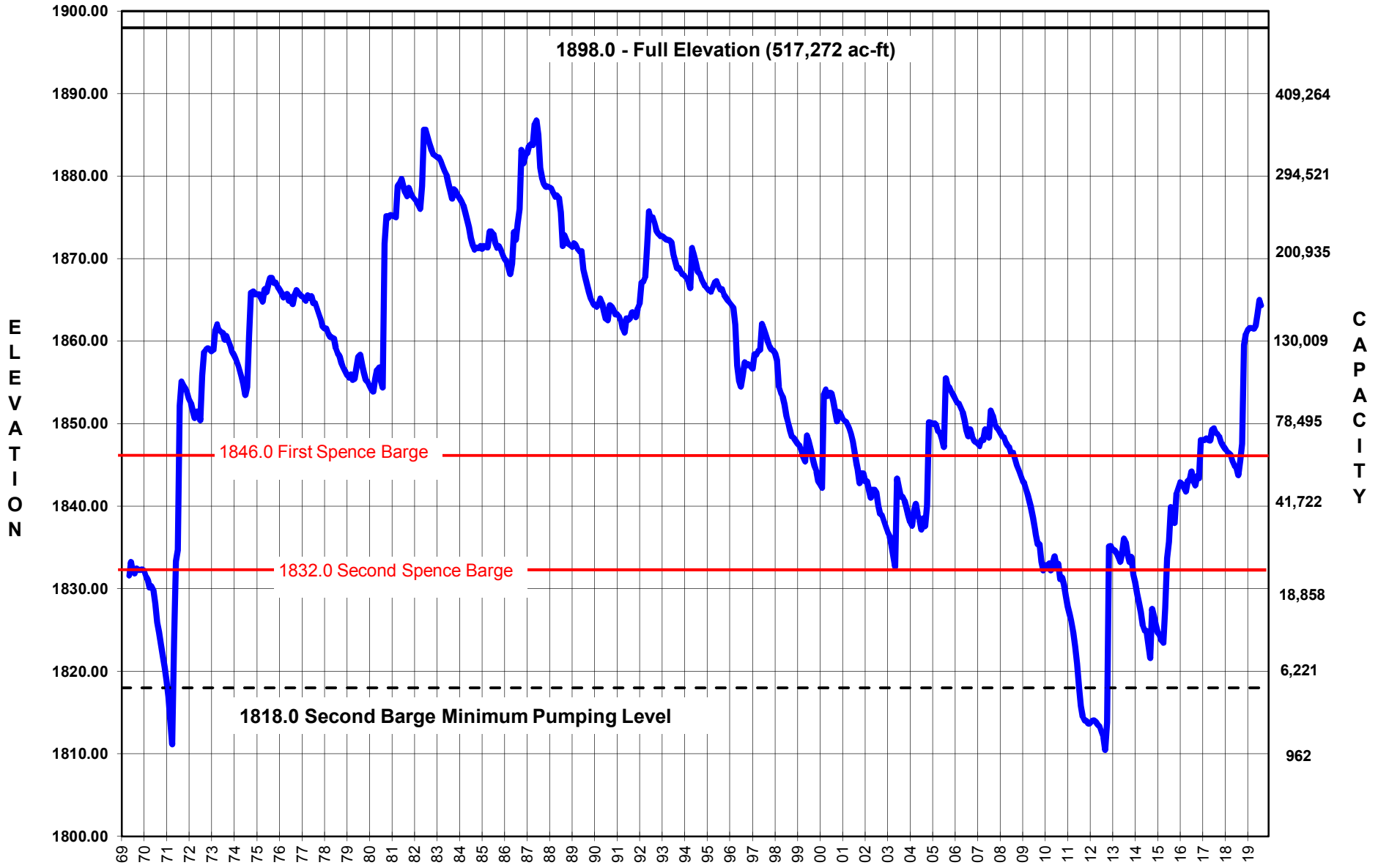
# LAKE J.B. THOMAS

## Elevation August 1955 - July 2019



# E.V. SPENCE RESERVOIR

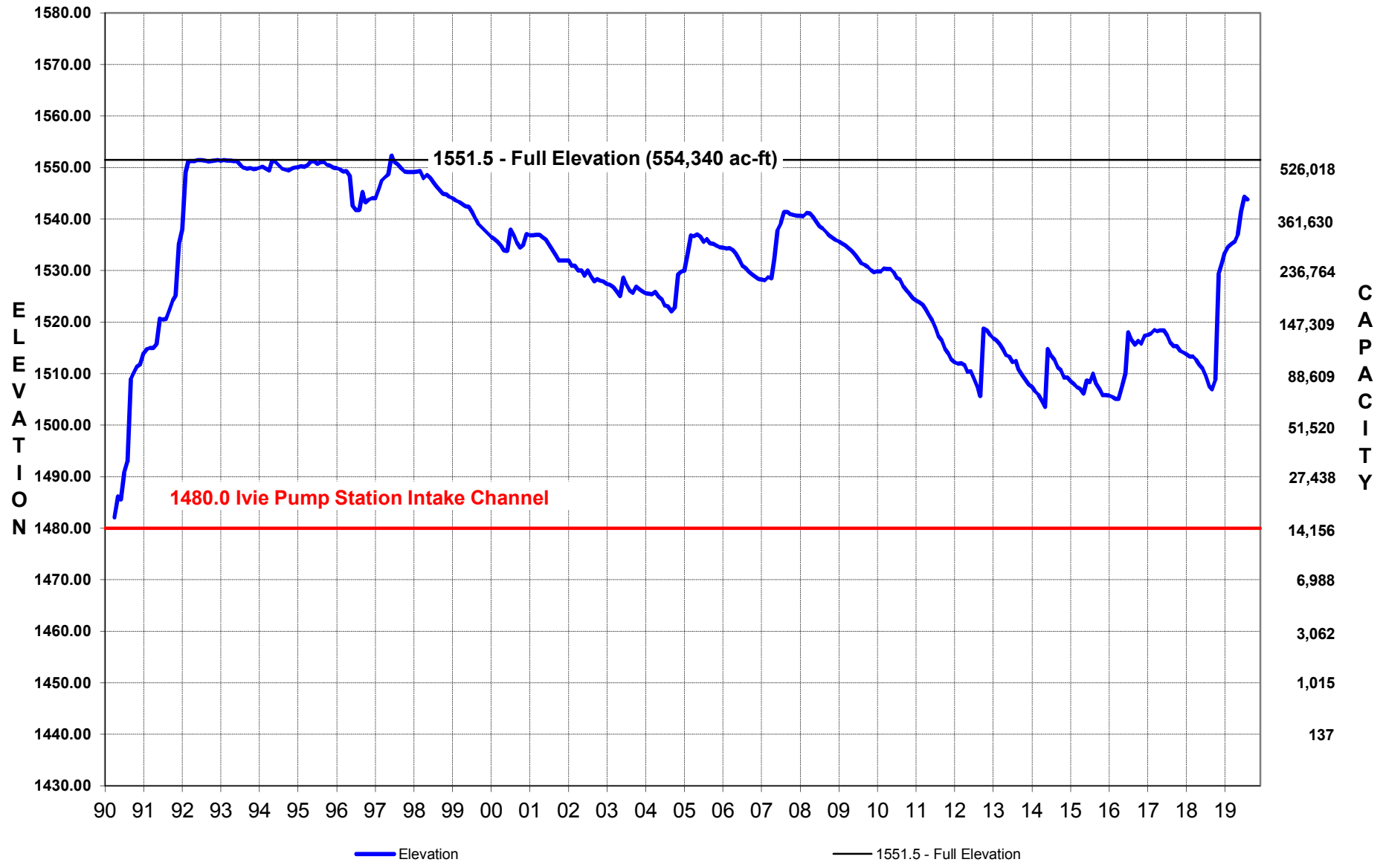
Elevation May 1969 - July 2019



— Elevation — 1898.0-Full Elevation

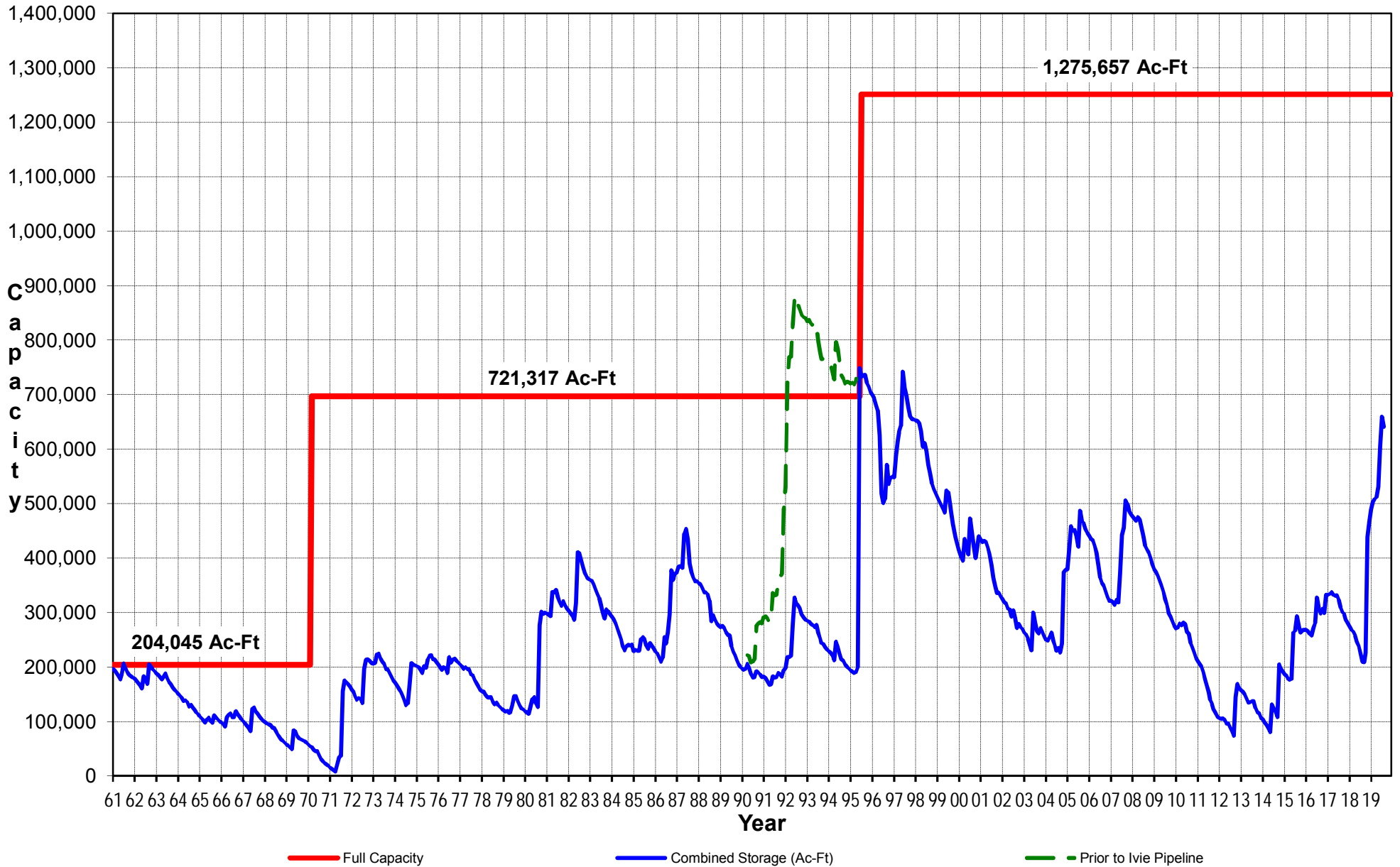
# O.H. IVIE RESERVOIR

Elevation April 1990 - July 2019



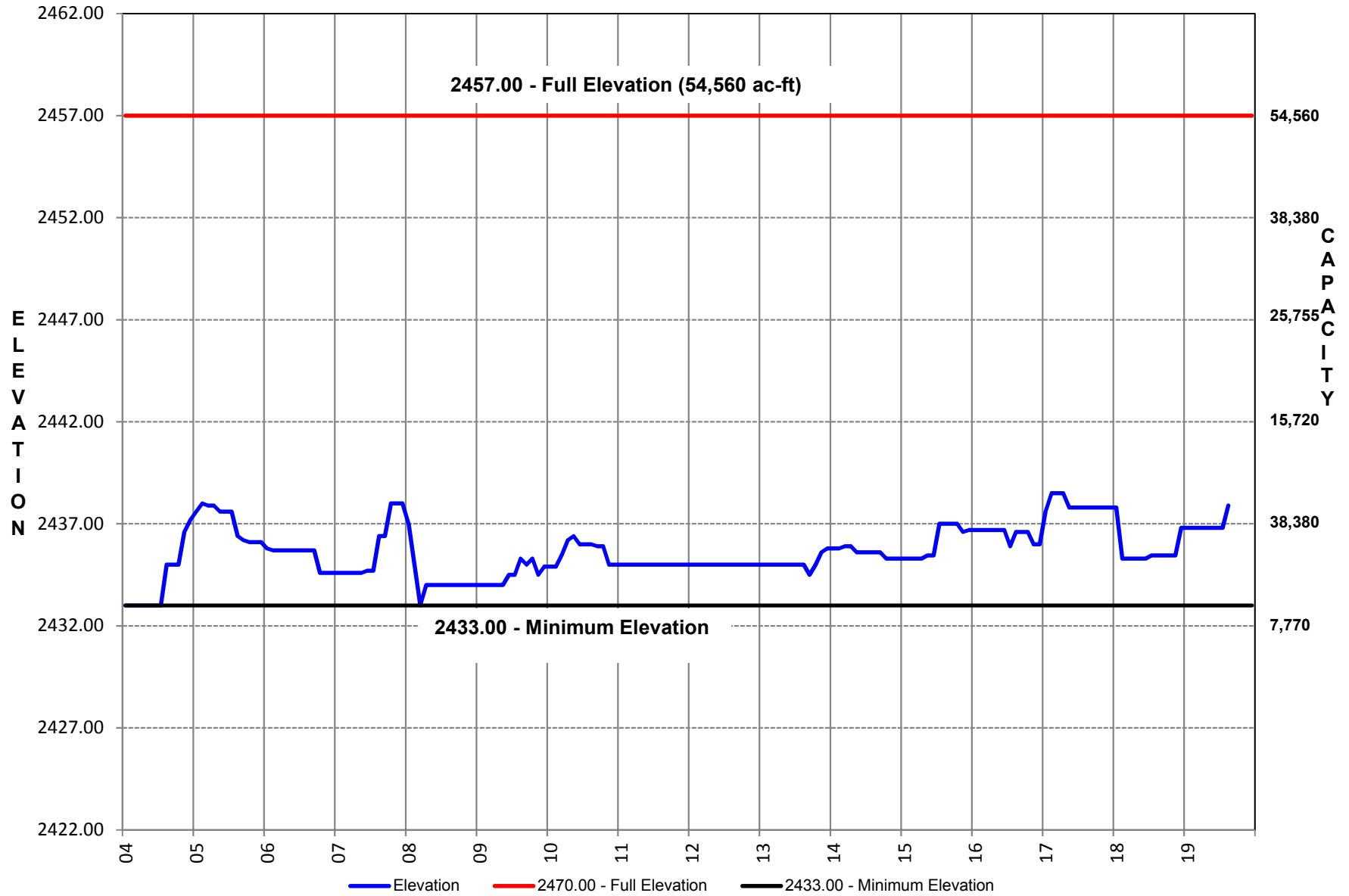
# COLORADO RIVER MUNICIPAL WATER DISTRICT

## COMBINED STORAGE Thomas, Spence, Moss, Ivie



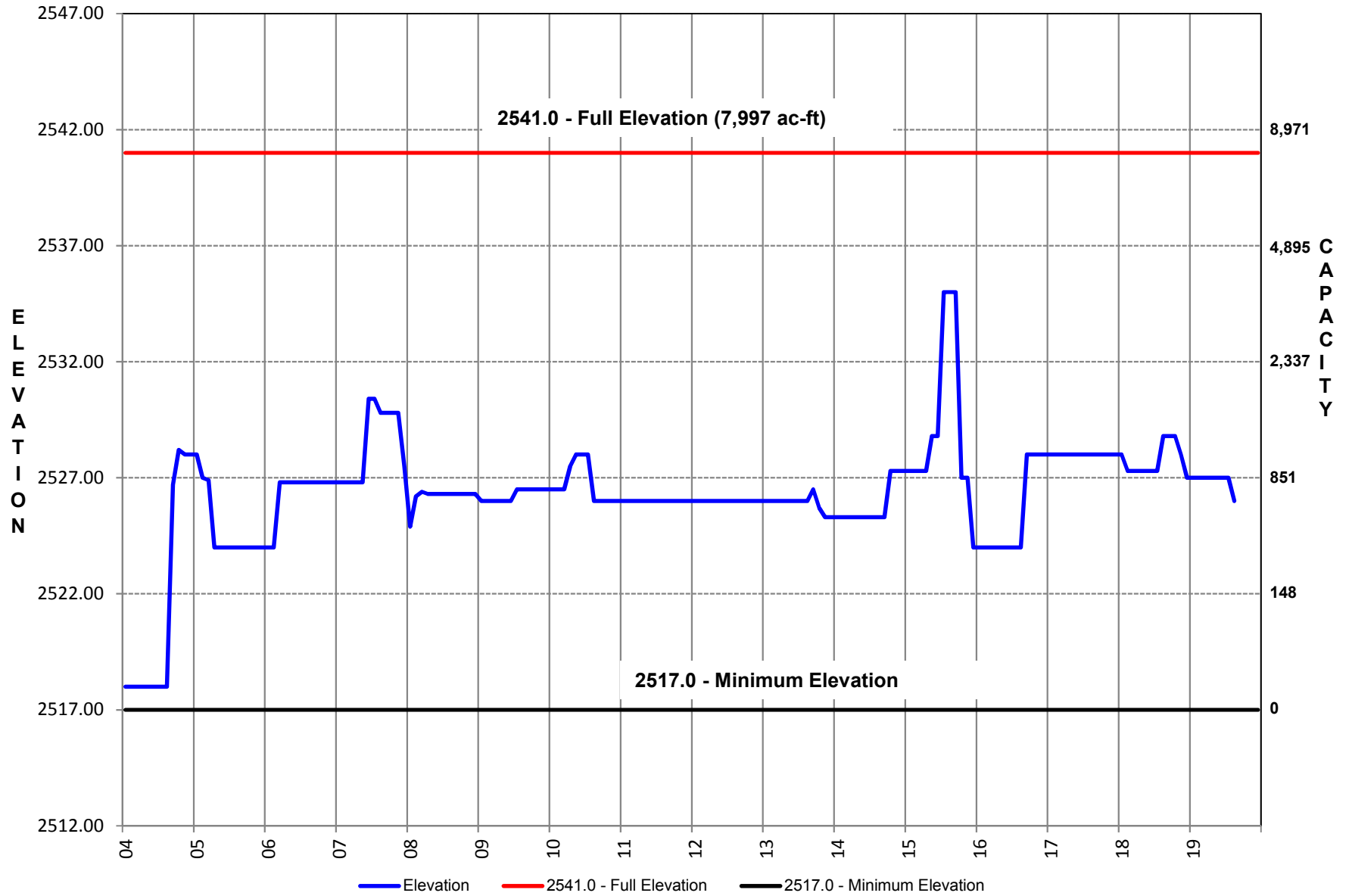
# Natural Dam Reservoir

## Elevation January 2004 - July 2019



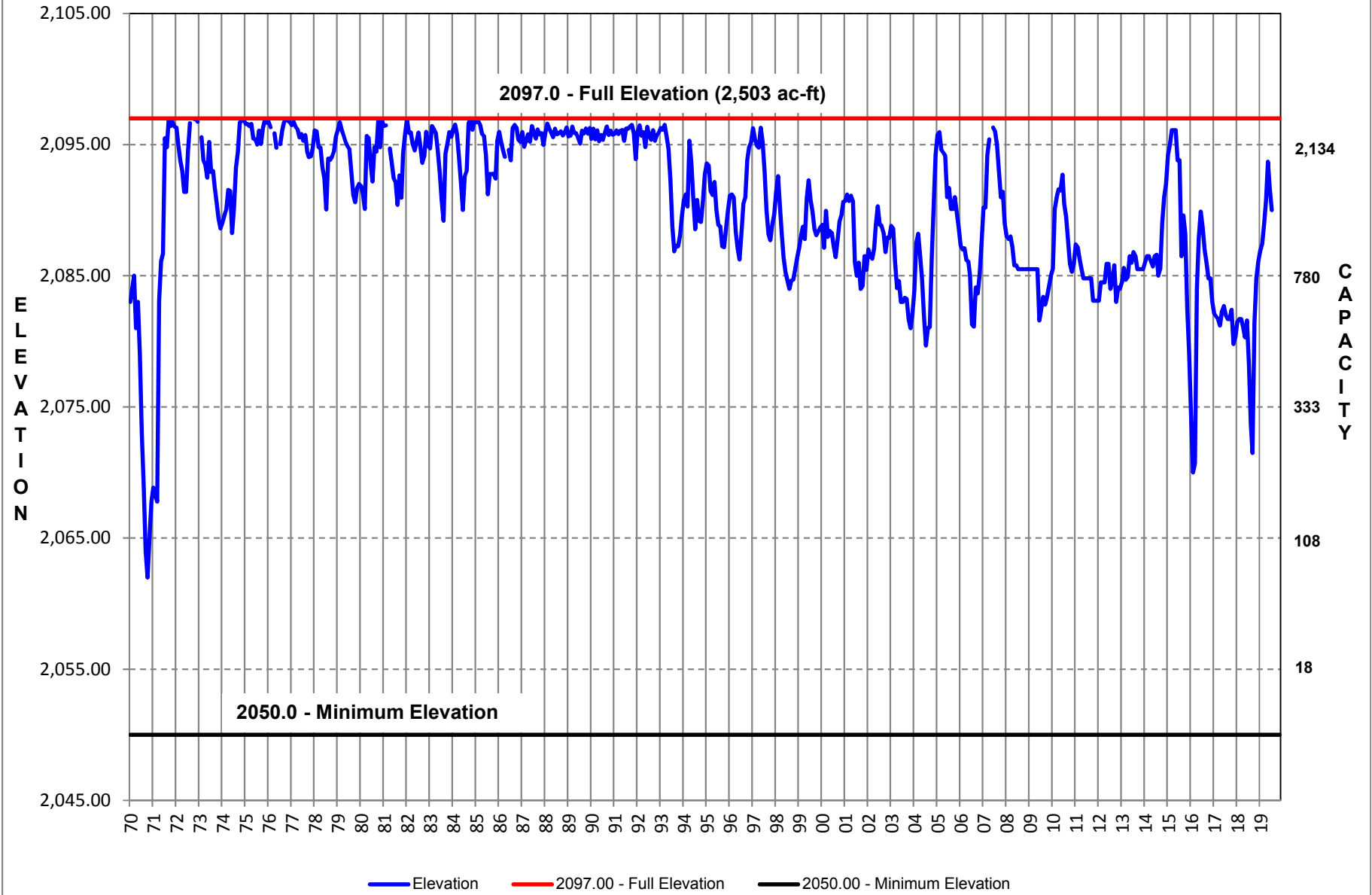
# Sulphur Draw Reservoir

Elevation January 2004 - July 2019



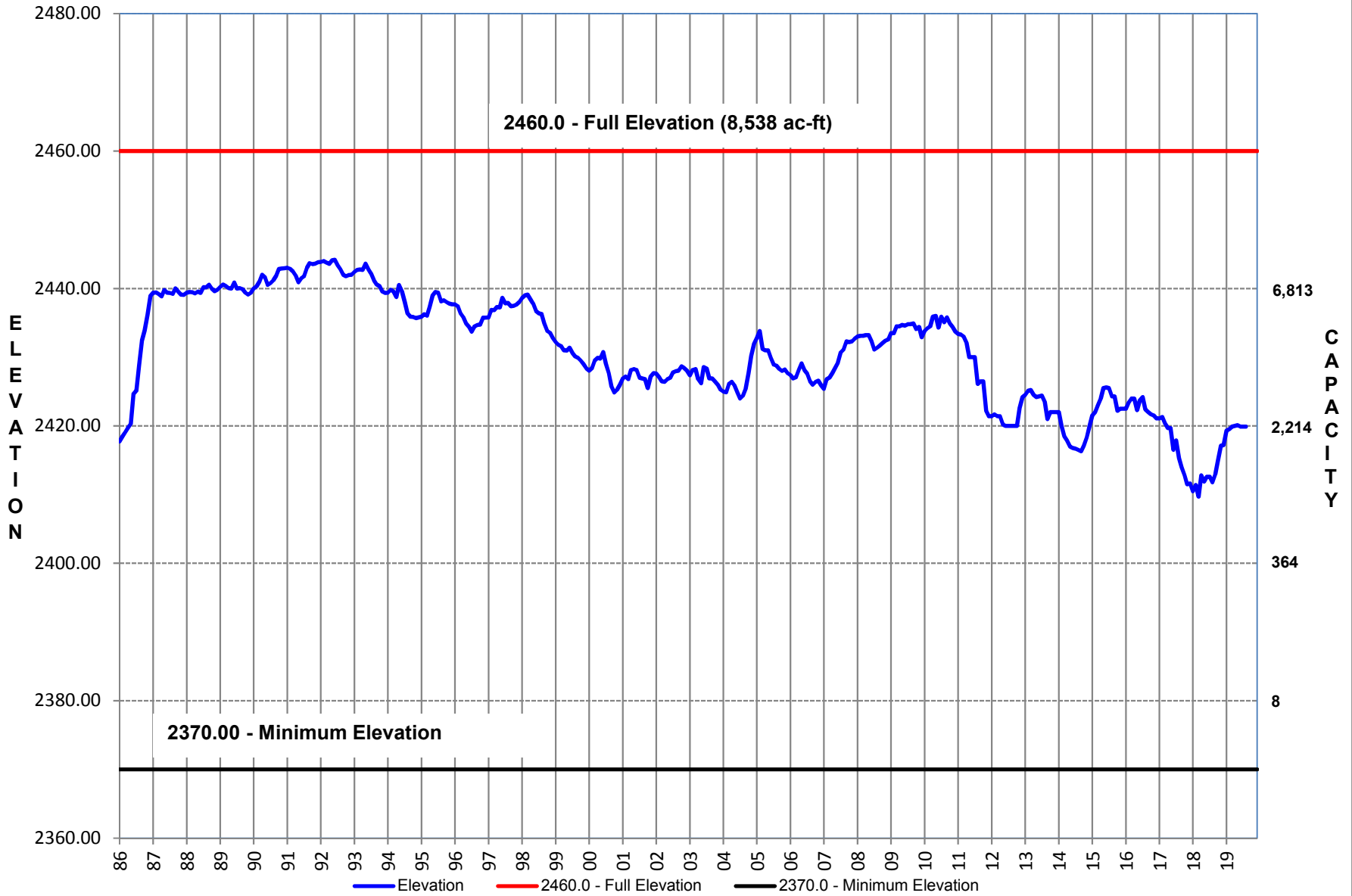
# Barber Lake

Elevation February 1970 - July 2019



## Red Draw

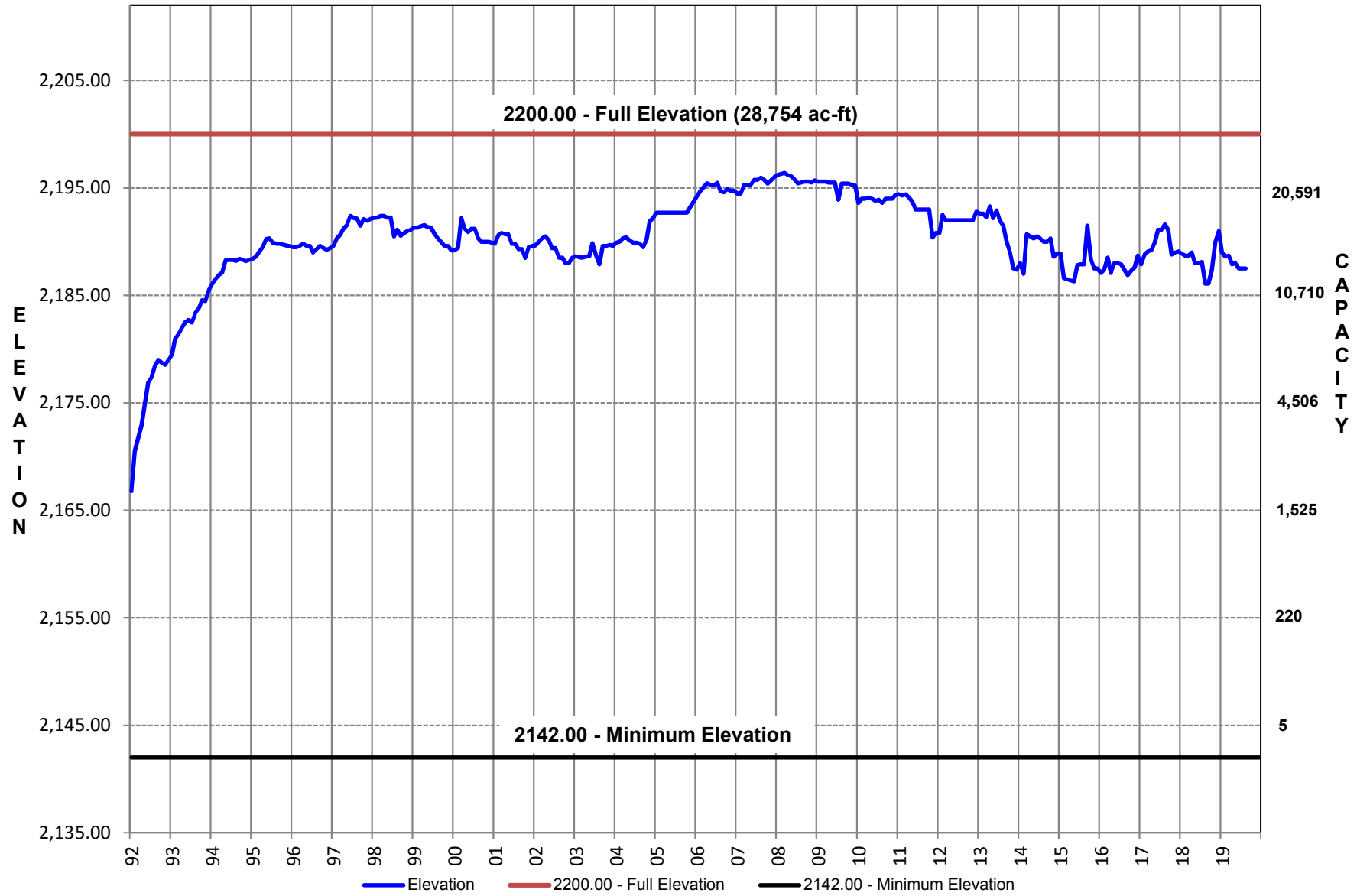
Elevation January 1986 - July 2019





# Mitchell County Reservoir

Elevation January 1992 - July 2019



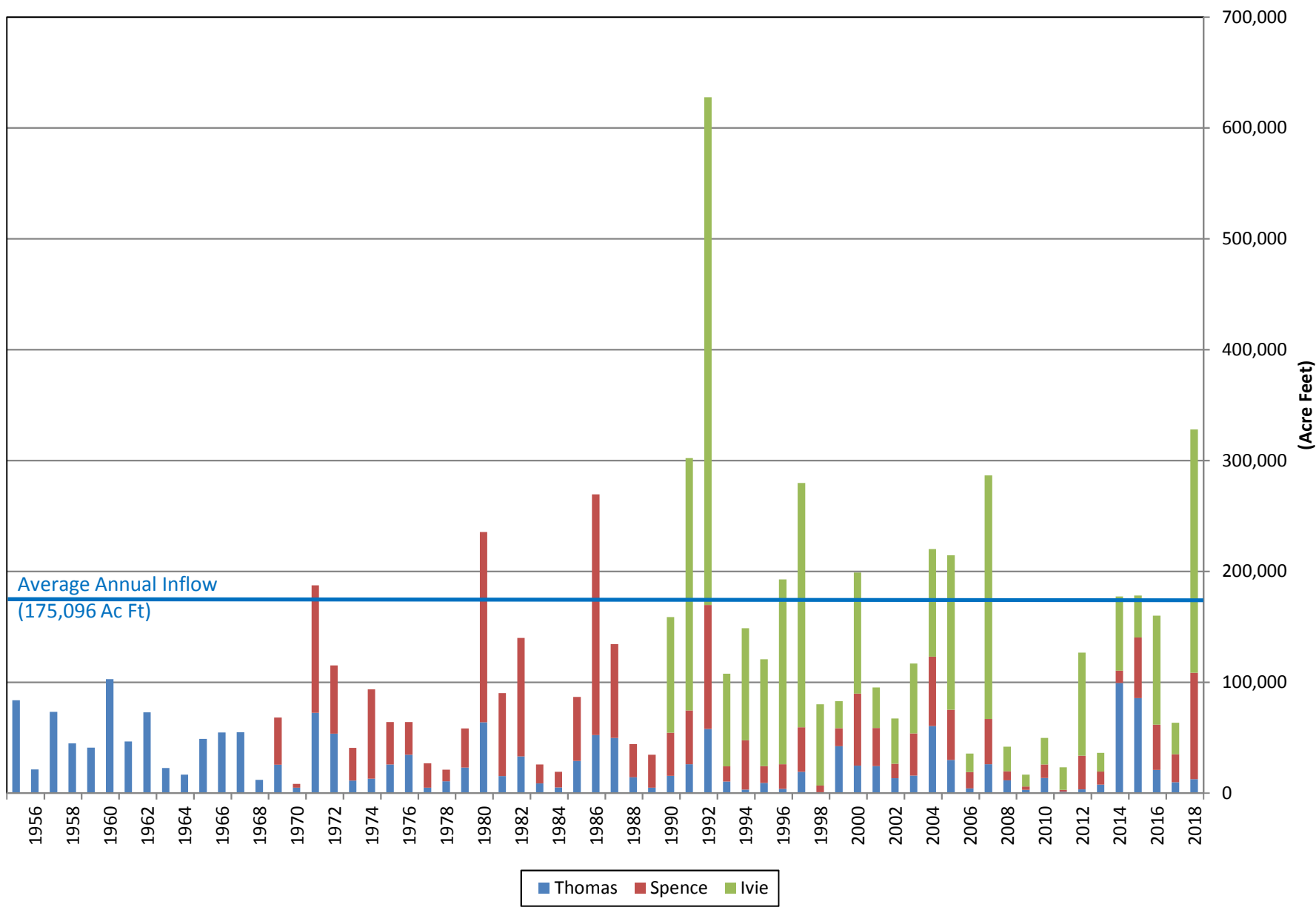
# **Annual Historical Data**

COLORADO RIVER MUNICIPAL WATER DISTRICT

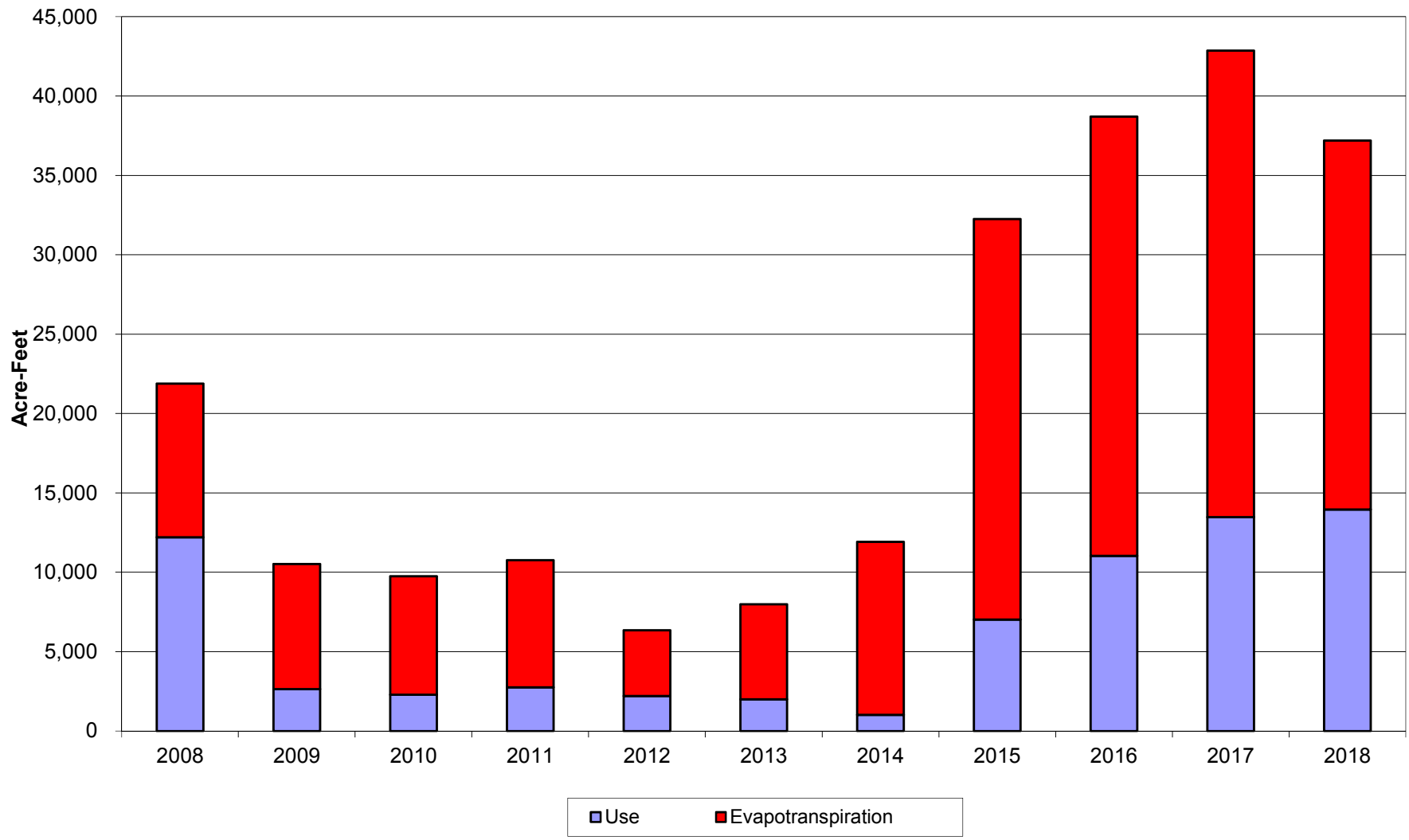
RESERVOIR INFLOW SUMMARY

| Calendar Year         | J.B. Thomas<br>(AC-FT) | E.V. Spence<br>(AC-FT) | O.H. Ivie<br>(AC-FT) | Total<br>(AC-FT) |
|-----------------------|------------------------|------------------------|----------------------|------------------|
| 2018                  | 12,555                 | 96,010                 | 219,357              | 327,922          |
| 2017                  | 9,768                  | 25,255                 | 28,405               | 63,428           |
| 2016                  | 20,888                 | 40,914                 | 98,262               | 160,064          |
| 2015                  | 85,698                 | 54,737                 | 37,696               | 178,131          |
| 2014                  | 99,308                 | 11,218                 | 66,819               | 177,345          |
| 2013                  | 7,739                  | 11,754                 | 16,824               | 36,317           |
| 2012                  | 3,408                  | 30,247                 | 93,091               | 126,746          |
| 2011                  | 1,343                  | 1,585                  | 20,411               | 23,339           |
| 2010                  | 13,717                 | 12,034                 | 24,069               | 49,820           |
| 2009                  | 2,901                  | 2,996                  | 10,659               | 16,556           |
| 2008                  | 11,565                 | 8,125                  | 22,229               | 41,919           |
| 2007                  | 26,077                 | 40,861                 | 219,568              | 286,506          |
| 2006                  | 4,339                  | 14,624                 | 16,716               | 35,679           |
| 2005                  | 29,804                 | 45,367                 | 139,349              | 214,520          |
| 2004                  | 60,474                 | 62,624                 | 96,945               | 220,043          |
| 2003                  | 15,828                 | 38,048                 | 62,910               | 116,786          |
| 2002                  | 13,341                 | 13,094                 | 40,928               | 67,363           |
| 2001                  | 24,294                 | 34,528                 | 36,355               | 95,177           |
| 2000                  | 24,713                 | 65,118                 | 109,145              | 198,976          |
| 1999                  | 42,206                 | 16,323                 | 24,368               | 82,897           |
| 1998                  | 856                    | 6,032                  | 73,280               | 80,168           |
| 1997                  | 19,189                 | 40,288                 | 220,148              | 279,625          |
| 1996                  | 3,920                  | 22,193                 | 166,633              | 192,746          |
| 1995                  | 9,176                  | 15,140                 | 96,358               | 120,674          |
| 1994                  | 3,100                  | 44,557                 | 101,101              | 148,758          |
| 1993                  | 10,473                 | 13,600                 | 83,592               | 107,665          |
| 1992                  | 57,863                 | 111,840                | 457,817              | 627,520          |
| 1991                  | 26,110                 | 48,525                 | 227,569              | 302,204          |
| 1990                  | 15,584                 | 38,972                 | 104,278              | 158,834          |
| 1989                  | 4,832                  | 29,657                 | -                    | 34,489           |
| 1988                  | 14,181                 | 29,968                 | -                    | 44,149           |
| 1987                  | 49,818                 | 84,582                 | -                    | 134,400          |
| 1986                  | 52,244                 | 217,121                | -                    | 269,365          |
| 1985                  | 29,106                 | 57,565                 | -                    | 86,671           |
| 1984                  | 5,027                  | 14,101                 | -                    | 19,128           |
| 1983                  | 8,661                  | 17,236                 | -                    | 25,897           |
| 1982                  | 33,049                 | 106,852                | -                    | 139,901          |
| 1981                  | 15,314                 | 74,911                 | -                    | 90,225           |
| 1980                  | 63,972                 | 171,415                | -                    | 235,387          |
| 1979                  | 23,011                 | 35,366                 | -                    | 58,377           |
| 1978                  | 10,553                 | 10,674                 | -                    | 21,227           |
| 1977                  | 4,802                  | 22,138                 | -                    | 26,940           |
| 1976                  | 34,534                 | 29,457                 | -                    | 63,991           |
| 1975                  | 25,897                 | 38,081                 | -                    | 63,978           |
| 1974                  | 13,095                 | 80,377                 | -                    | 93,472           |
| 1973                  | 11,190                 | 29,502                 | -                    | 40,692           |
| 1972                  | 53,512                 | 61,546                 | -                    | 115,058          |
| 1971                  | 72,391                 | 115,082                | -                    | 187,473          |
| 1970                  | 4,945                  | 3,364                  | -                    | 8,309            |
| 1969                  | 25,609                 | 42,628                 | -                    | 68,237           |
| 1968                  | 11,977                 | -                      | -                    | 11,977           |
| 1967                  | 54,971                 | -                      | -                    | 54,971           |
| 1966                  | 54,777                 | -                      | -                    | 54,777           |
| 1965                  | 48,975                 | -                      | -                    | 48,975           |
| 1964                  | 16,660                 | -                      | -                    | 16,660           |
| 1963                  | 22,580                 | -                      | -                    | 22,580           |
| 1962                  | 72,841                 | -                      | -                    | 72,841           |
| 1961                  | 46,456                 | -                      | -                    | 46,456           |
| 1960                  | 102,836                | -                      | -                    | 102,836          |
| 1959                  | 41,080                 | -                      | -                    | 41,080           |
| 1958                  | 44,921                 | -                      | -                    | 44,921           |
| 1957                  | 73,285                 | -                      | -                    | 73,285           |
| 1956                  | 21,240                 | -                      | -                    | 21,240           |
| 1955                  | 83,755                 | -                      | -                    | 83,755           |
| <b>Annual Average</b> | <b>29,818</b>          | <b>44,765</b>          | <b>100,513</b>       | <b>175,096</b>   |

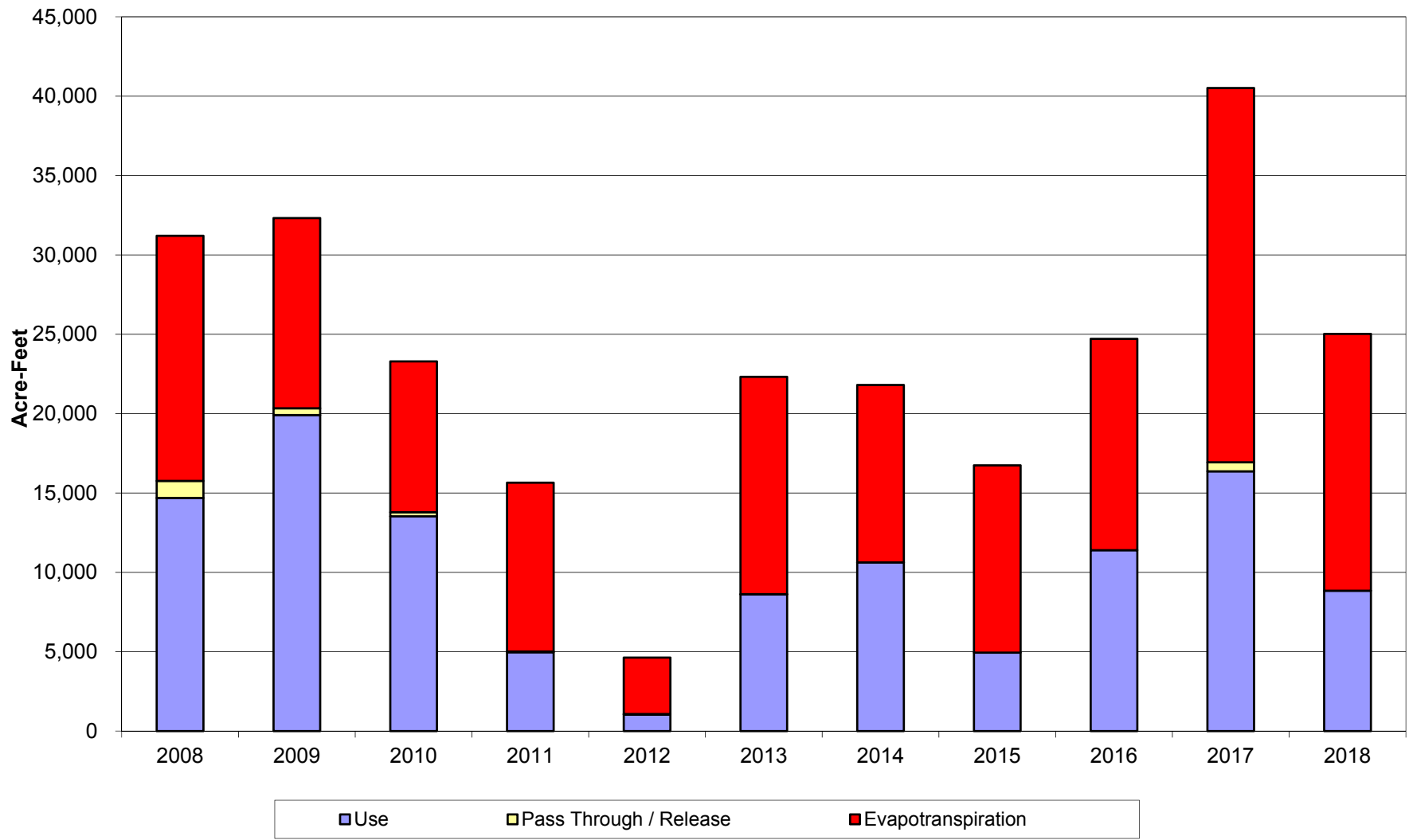
## Combined Inflow (1955 through 2018)



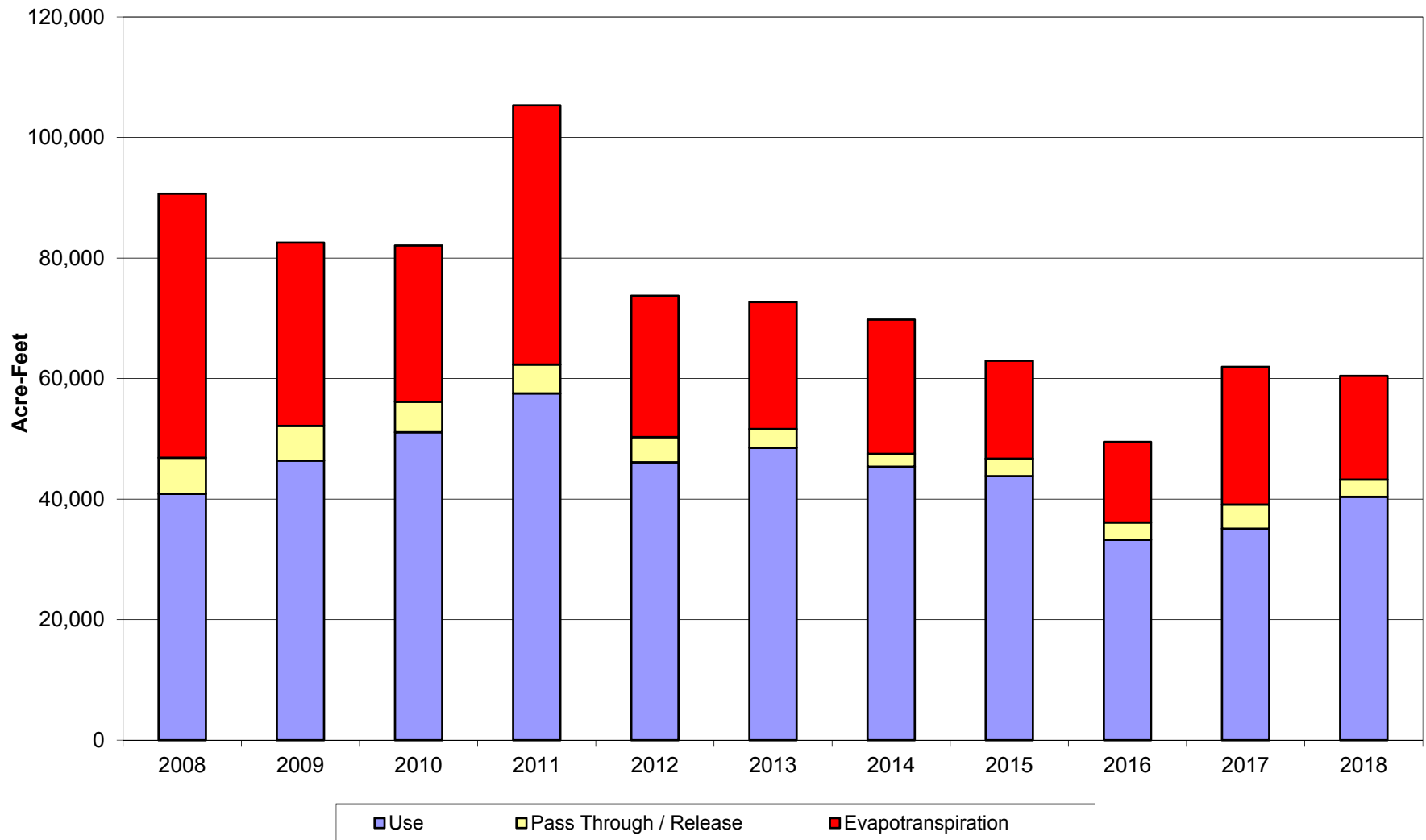
Lake J.B. Thomas  
January 2008 thru December 2018



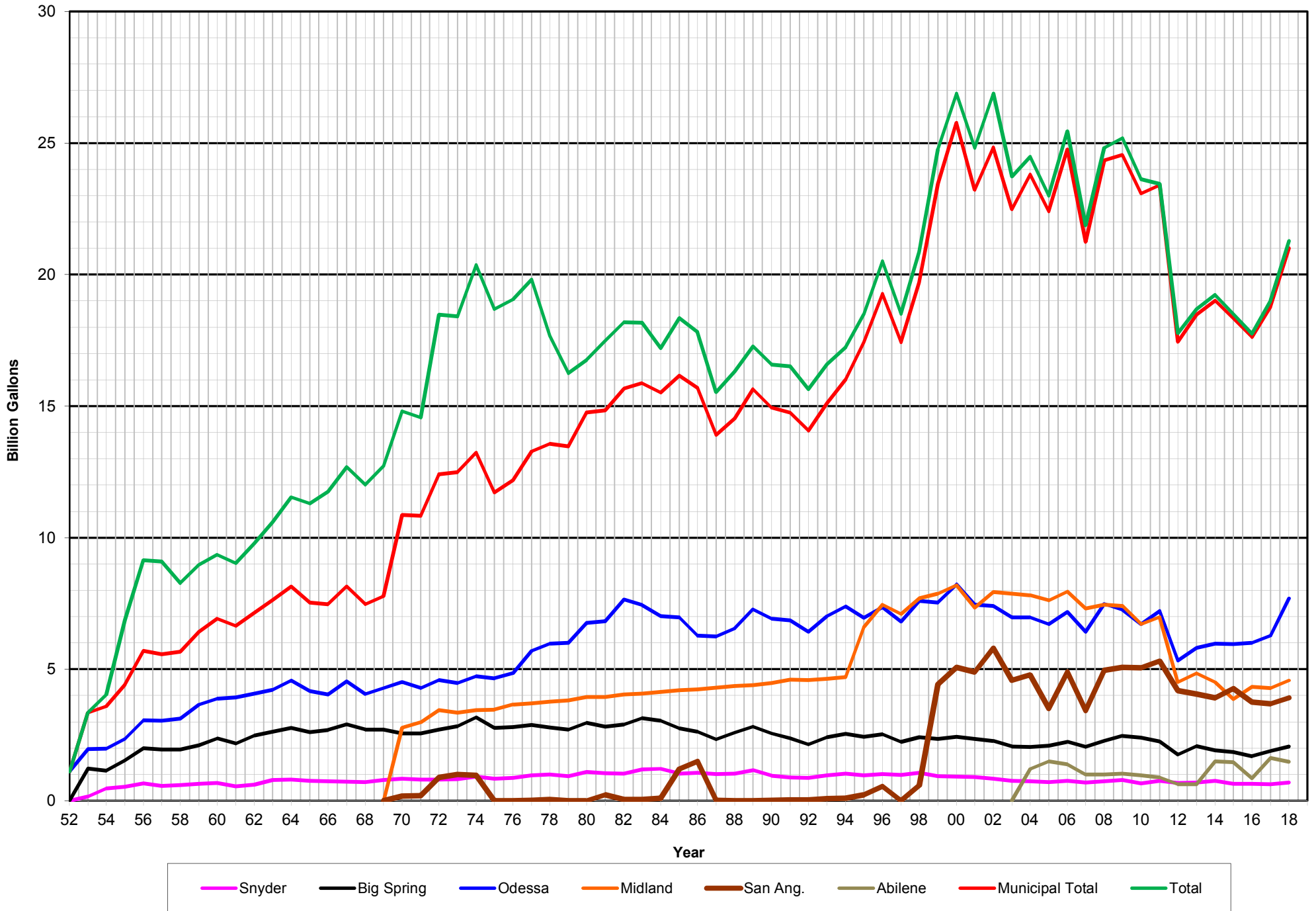
**E.V. Spence Reservoir  
January 2008 thru December 2018**



O.H. Ivie Reservoir  
January 2008 thru December 2018



# Colorado River Municipal Water District Historical Water Delivery - FY 1952 - 2018





# Colorado River Municipal Water District Source of Supply January 1962 through December 2018

