

# South Platte Summary

## December 2012



Photo by:  
Lee Cunning



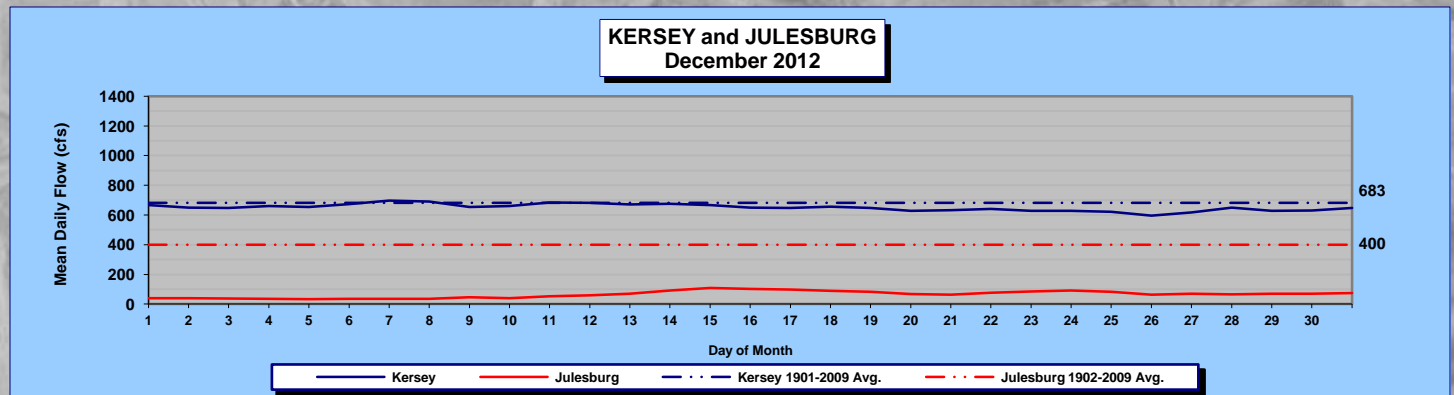
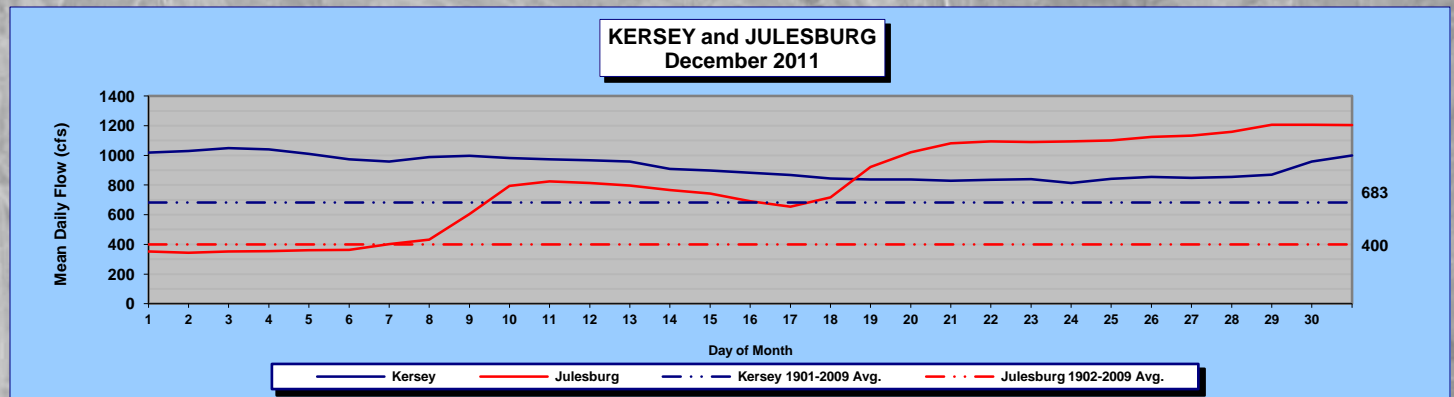
Compiled by Lee Cunning, P.E.

# COLORADO DIVISION OF WATER RESOURCES, DIVISION 1

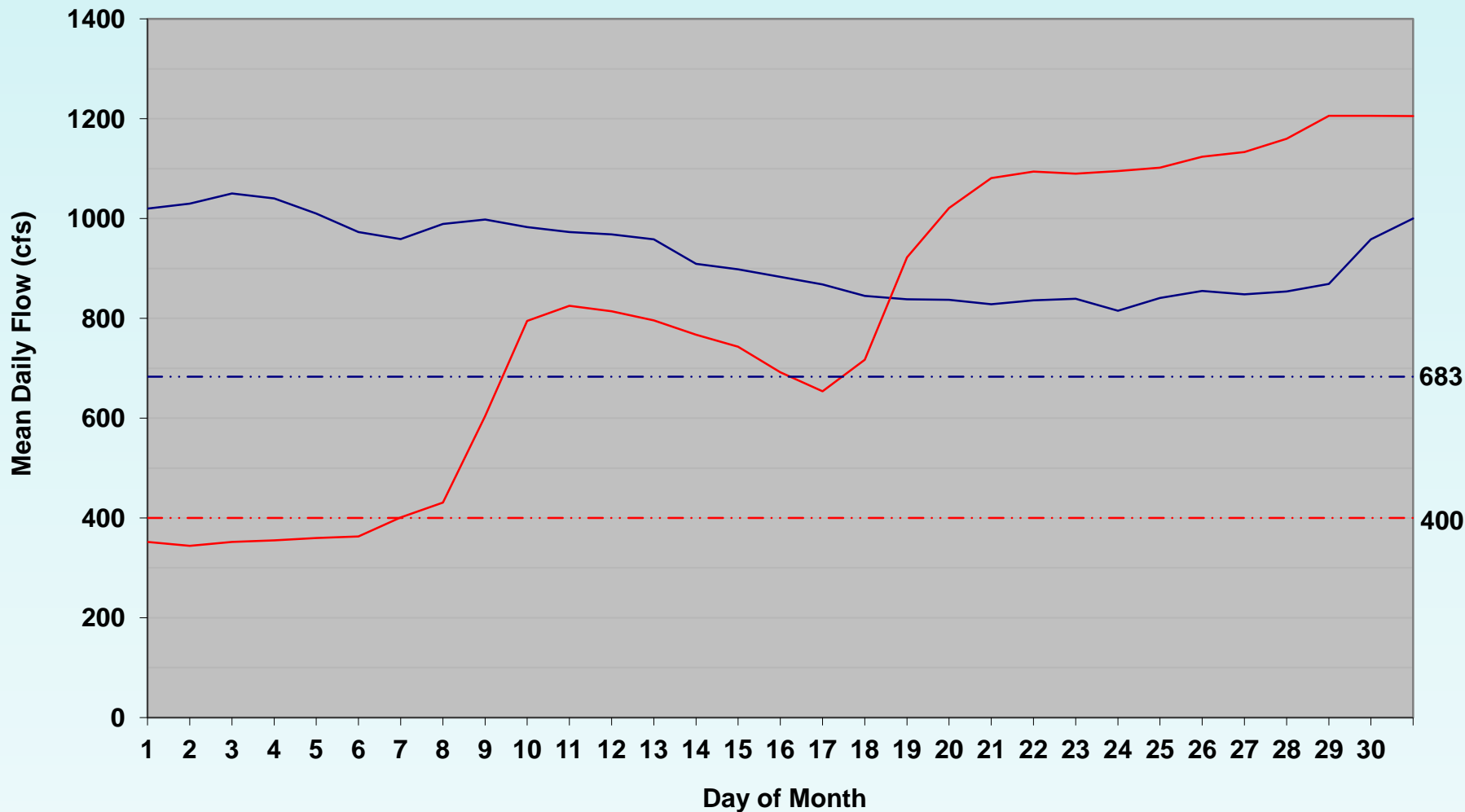
## MONTH OF DECEMBER 2012

| RESERVOIR   | FULL ALLOWABLE CAPACITY (ACRE FEET) | FIRST OF MONTH (ACRE FEET) | END OF MONTH (ACRE FEET) | DISTRICT | CHANGE IN STORAGE (ACRE FEET) | % CHANGE IN STORAGE BASED ON FIRST OF MONTH STORAGE | % OF CURRENT FULL ALLOWABLE CAPACITY | % OF CURRENT FULL ALLOWABLE CAPACITY THIS MONTH LAST YEAR | SURCHARGE (ACRE FEET) |
|-------------|-------------------------------------|----------------------------|--------------------------|----------|-------------------------------|---|--------------------------------------|---|-----------------------|
| JULESBURG   | 22,666                              | 14,521                     | 18,408                   | 64       | 3,887                         | 27%   | 81%                                  | 87%   | 0                     |
| N STERLING  | 73,730                              | 22,843                     | 34,777                   | 64       | 11,934                        | 52%   | 47%                                  | 95%   | 0                     |
| PREWITT     | 28,500                              | 5,981                      | 7,111                    | 64       | 1,130                         | 19%   | 25%                                  | 89%   | 0                     |
| JACKSON     | 27,257                              | 11,881                     | 21,467                   | 1        | 9,586                         | 81%   | 79%                                  | 85%   | 0                     |
| EMPIRE      | 37,700                              | 6,094                      | 22,207                   | 1        | 16,113                        | 264%  | 59%                                  | 81%   | 0                     |
| RIVERSIDE   | 63,113                              | 30,217                     | 28,133                   | 1        | -2,084                        | -7%   | 45%                                  | 76%   | 0                     |
| BARR LAKE   | 32,152                              | 7,399                      | 10,367                   | 2        | 2,968                         | 40%   | 32%                                  | 82%   | 0                     |
| CHEESMAN    | 79,064                              | 54,088                     | 48,338                   | 80       | -5,750                        | -11%  | 61%                                  | 91%   | 0                     |
| ELEVEN MILE | 97,779                              | 98,494                     | 99,452                   | 23       | 958                           | 1%  | 100%                                 | 100%  | 1,673                 |
| SPINNEY     | 53,651                              | 38,258                     | 34,067                   | 23       | -4,191                        | -11%  | 63%                                  | 92%   | 0                     |
| ANTERO      | 20,015                              | 15,310                     | 15,233                   | 23       | -77                           | -1%   | 76%                                  | 80%   | 0                     |

| RIVER GAGES                       | MEAN DAILY FLOW (CFS) |
|-----------------------------------|-----------------------|
| <b>KERSEY</b>                     | <b>651</b>            |
| <b>JULESBURG</b>                  | <b>65</b>             |
| <b>THIS MONTH LAST YEAR</b>       |                       |
| <b>KERSEY</b>                     | <b>922</b>            |
| <b>JULESBURG</b>                  | <b>800</b>            |
| <b>MEAN FOR PERIOD OF RECORD*</b> |                       |
| <b>KERSEY</b>                     | <b>683</b>            |
| <b>JULESBURG</b>                  | <b>400</b>            |
| * 1901-2011                       |                       |
| 1902-2011                         |                       |

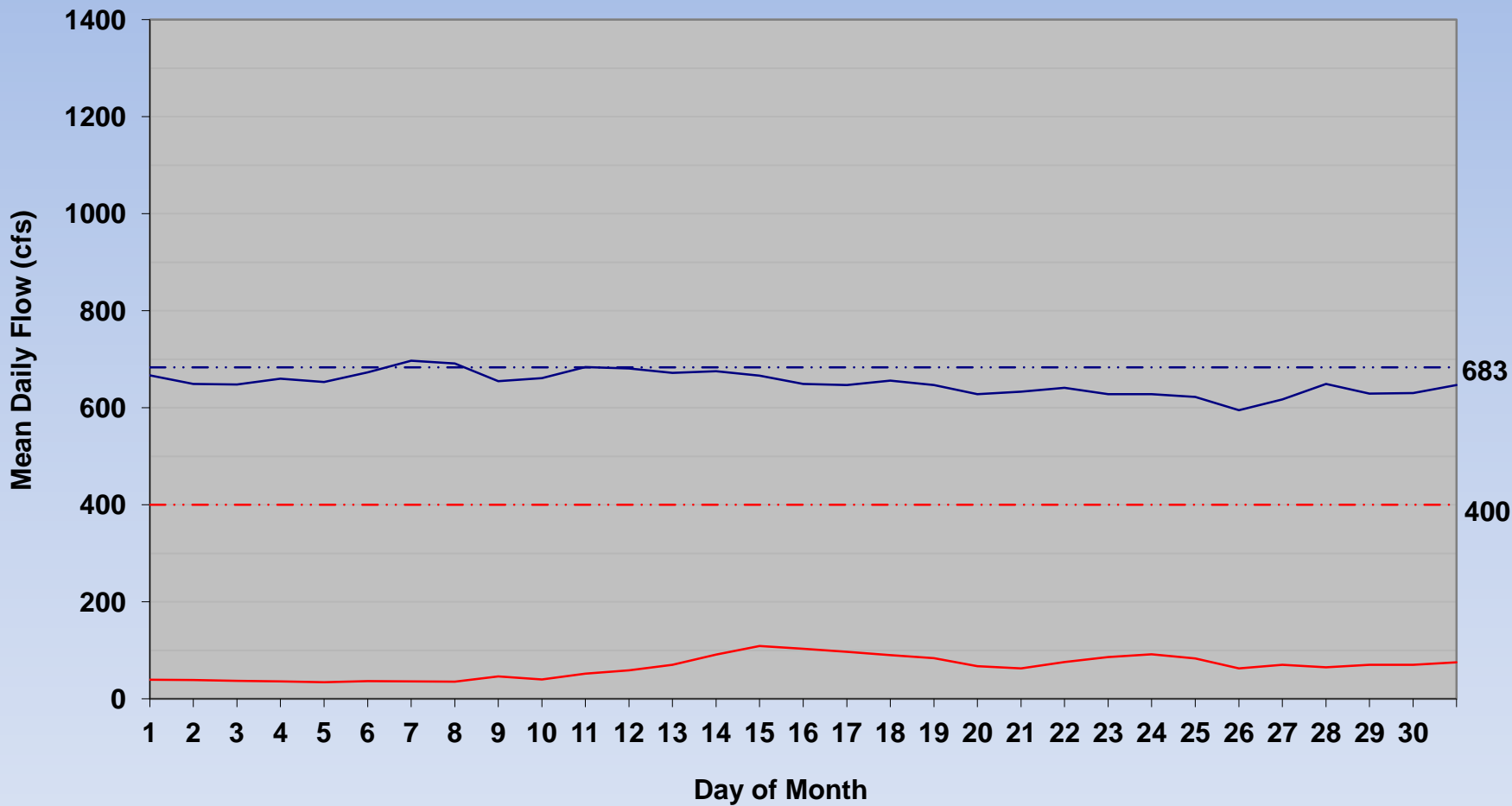


# KERSEY and JULESBURG December 2011



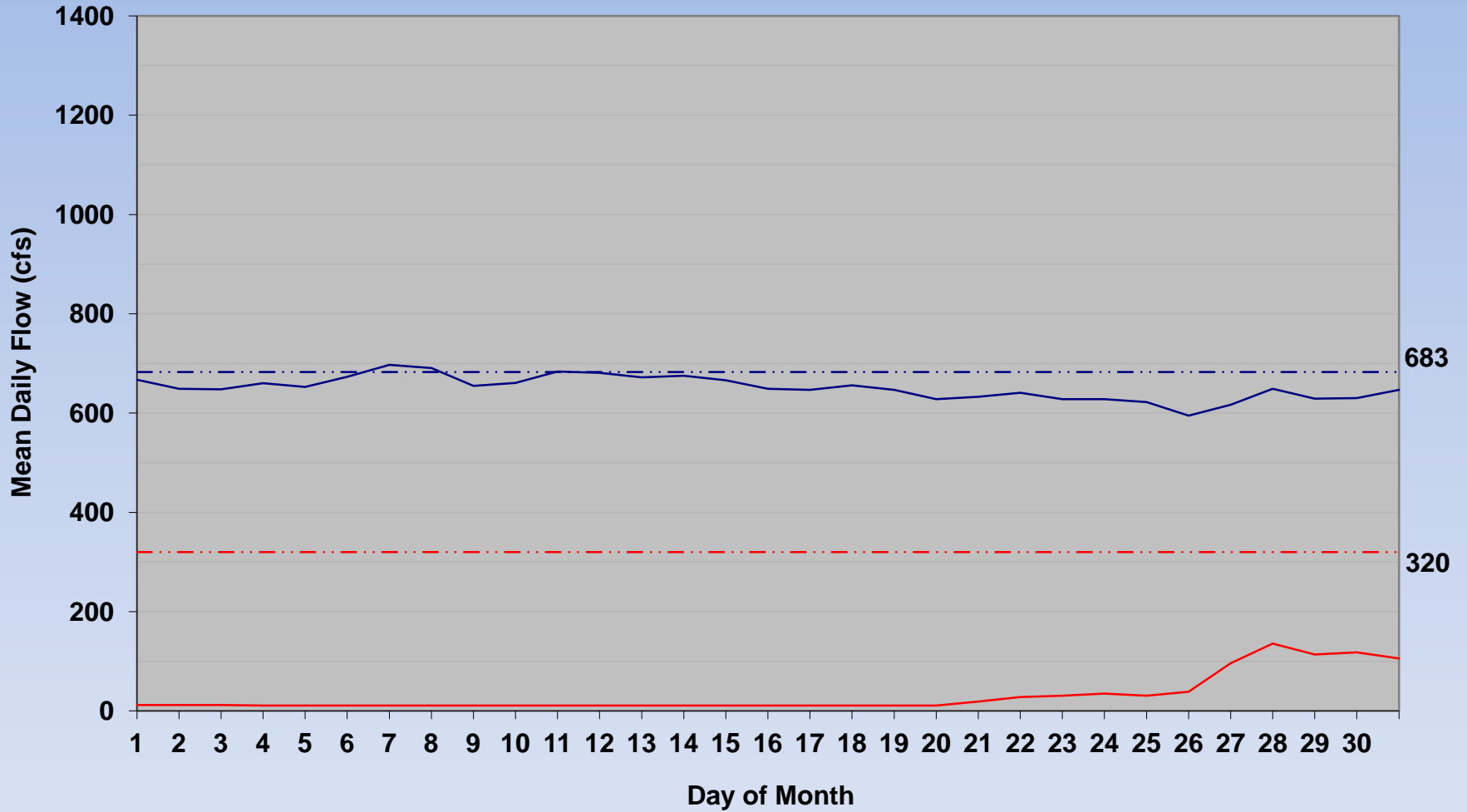
— Kersey — Julesburg — · · — Kersey 1901-2009 Avg. — · · · — Julesburg 1902-2009 Avg.

# KERSEY and JULESBURG December 2012



— Kersey — Julesburg - · - Kersey 1901-2009 Avg. - · - Julesburg 1902-2009 Avg.

# KERSEY and BALZAC December 2012



— Kersey — Balzac - · - · Kersey 1901-2009 Avg. - · - · Balzac 1917-2009 Avg.



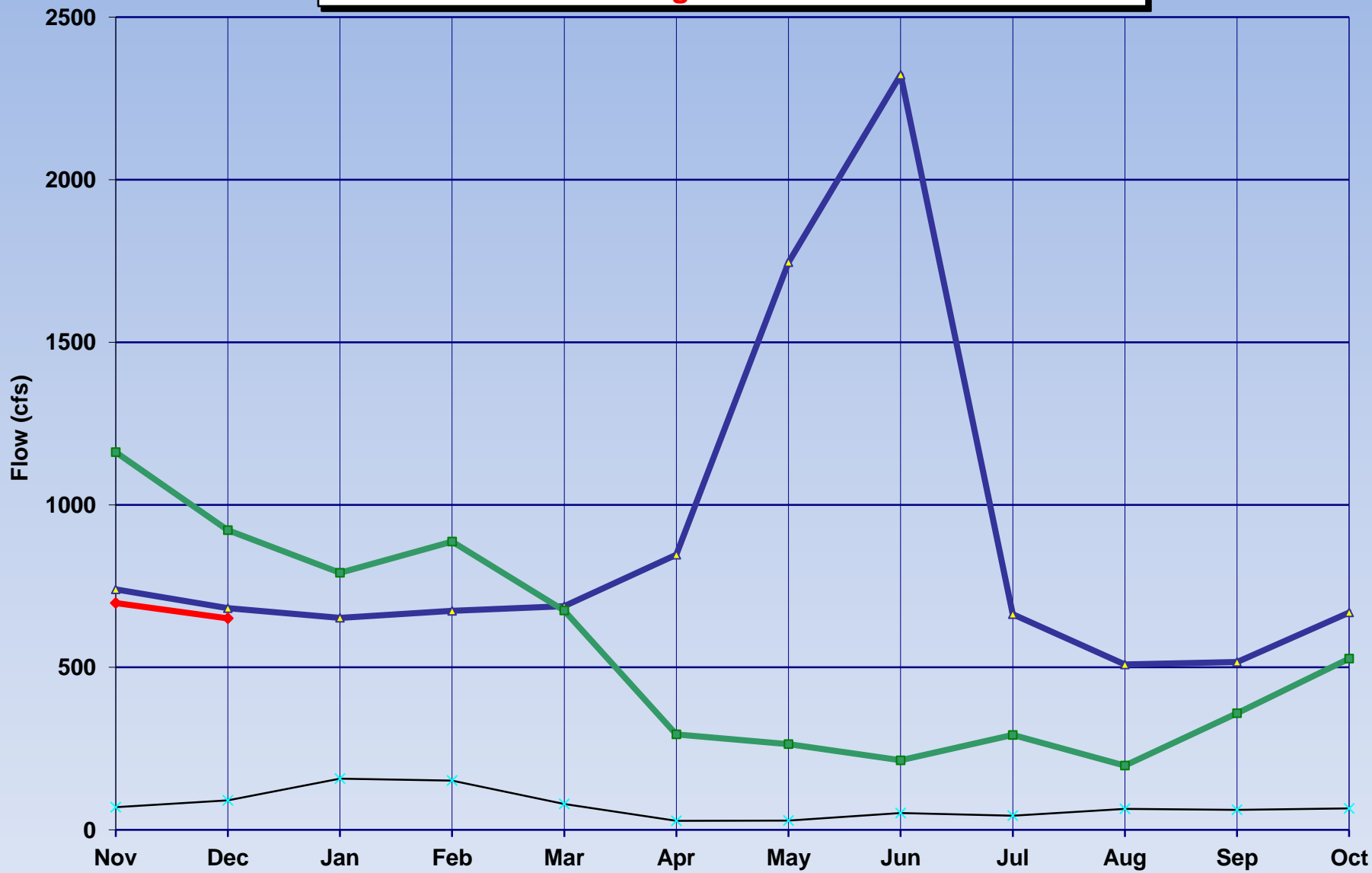


## South Platte River Monthly Stream Flow (cfs) Statistics

| South Platte River at Kersey |                           |                          |      |                          |      |                                    | South Platte River at Julesburg |                           |                          |      |                          |      |                                    |
|------------------------------|---------------------------|--------------------------|------|--------------------------|------|------------------------------------|---------------------------------|---------------------------|--------------------------|------|--------------------------|------|------------------------------------|
| Month                        | Historic*<br>Mean<br>Flow | Historic*<br>Max<br>Flow | Year | Historic*<br>Min<br>Flow | Year | IY 2013<br>Mean<br>Monthly<br>Flow | Month                           | Historic*<br>Mean<br>Flow | Historic*<br>Max<br>Flow | Year | Historic*<br>Min<br>Flow | Year | IY 2013<br>Mean<br>Monthly<br>Flow |
| Nov                          | 740                       | 3650                     | 1984 | 70                       | 1934 | 698                                | Nov                             | 335                       | 2900                     | 1984 | 4.2                      | 1903 | 46                                 |
| Dec                          | 682                       | 1890                     | 1961 | 91                       | 1934 | 651                                | Dec                             | 397                       | 1820                     | 1984 | 13                       | 2002 | 65                                 |
| Jan                          | 652                       | 2160                     | 1974 | 158                      | 1935 |                                    | Jan                             | 509                       | 2510                     | 1970 | 21                       | 2003 |                                    |
| Feb                          | 674                       | 3060                     | 1914 | 152                      | 1935 |                                    | Feb                             | 582                       | 3220                     | 1930 | 29                       | 2005 |                                    |
| Mar                          | 688                       | 3470                     | 1983 | 80                       | 1935 |                                    | Mar                             | 522                       | 12900                    | 1910 | 15                       | 1904 |                                    |
| Apr                          | 846                       | 18100                    | 1942 | 28                       | 1955 |                                    | Apr                             | 523                       | 14400                    | 1942 | 4.0                      | 1904 |                                    |
| May                          | 1746                      | 26100                    | 1973 | 29                       | 1955 |                                    | May                             | 1003                      | 18100                    | 1973 | 12                       | 1911 |                                    |
| Jun                          | 2323                      | 31000                    | 1921 | 52                       | 1954 |                                    | Jun                             | 1430                      | 30800                    | 1921 | 2.0                      | 1910 |                                    |
| Jul                          | 664                       | 12600                    | 1983 | 44                       | 1955 |                                    | Jul                             | 295                       | 12600                    | 1983 | 0.0                      | 1903 |                                    |
| Aug                          | 509                       | 9690                     | 1951 | 65                       | 1934 |                                    | Aug                             | 180                       | 8920                     | 1968 | 0.0                      | 1903 |                                    |
| Sep                          | 517                       | 14200                    | 1938 | 62                       | 1940 |                                    | Sep                             | 239                       | 7130                     | 1938 | 2.0                      | 1902 |                                    |
| Oct                          | 669                       | 6180                     | 1984 | 66                       | 1954 |                                    | Oct                             | 301                       | 3130                     | 1984 | 4.2                      | 1903 |                                    |
| *Period of record 1902-2011  |                           |                          |      |                          |      |                                    | *Period of record 1902-2011     |                           |                          |      |                          |      |                                    |

# South Platte River at Kersey

Irrigation Year

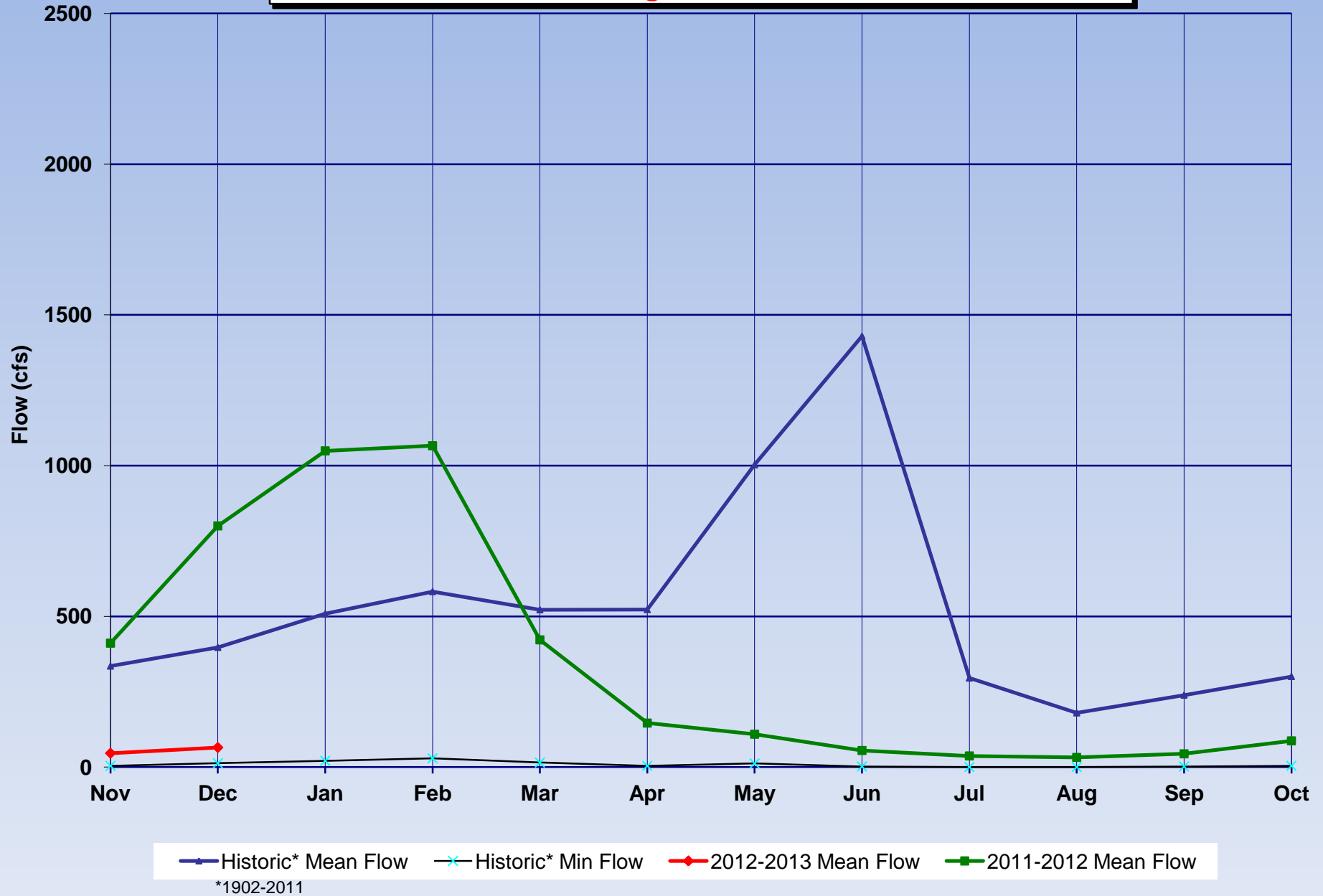


—▲— Historic\* Mean Flow    —×— Historic\* Min Flow    —◆— 2012-2013 Mean Flow    —■— 2011-2012 Mean Flow

\*1901-2011

# South Platte River at Julesburg

Irrigation Year



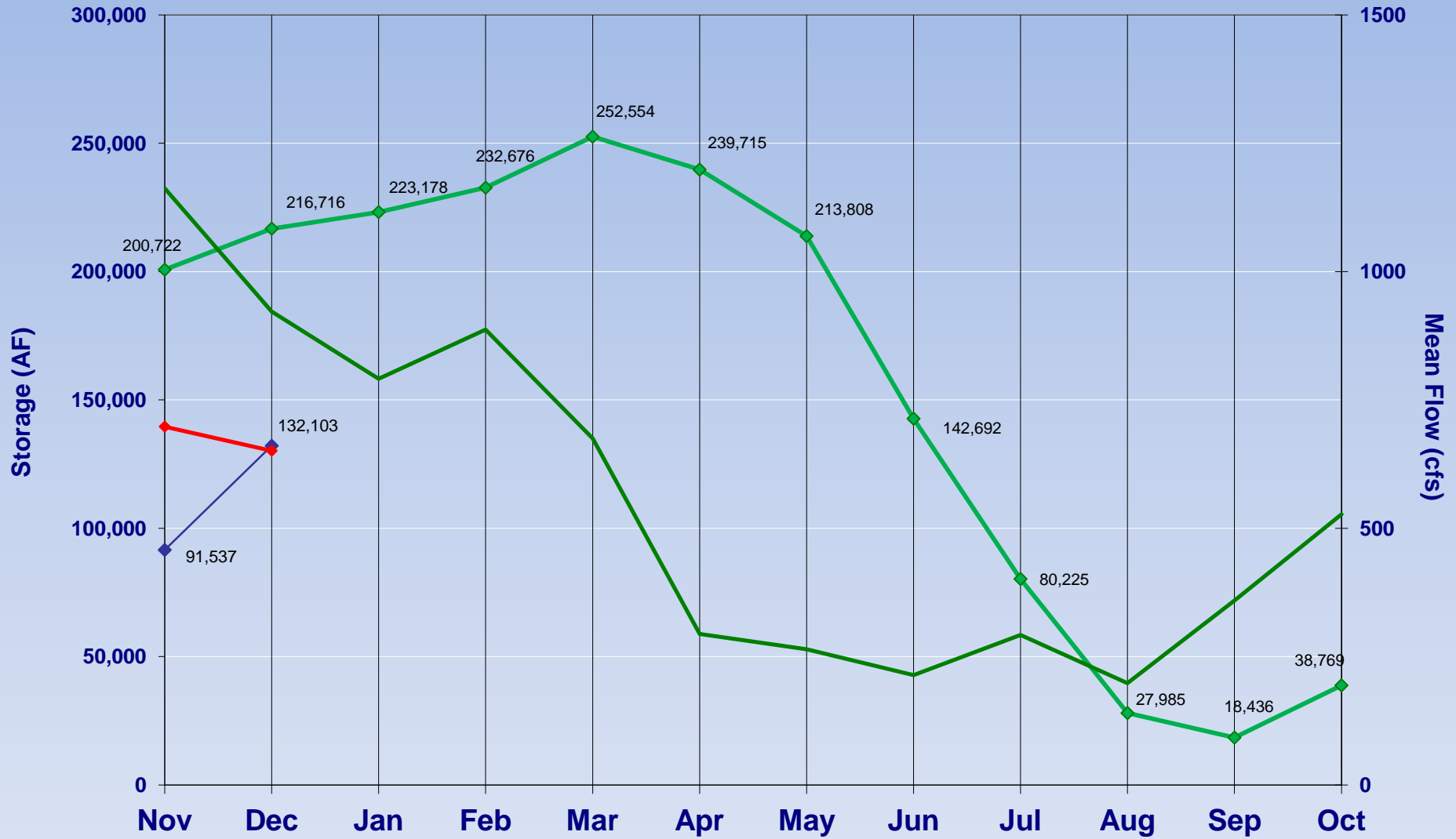




**Next three slides show Reservoir  
Storage above and below Kersey**

# Reservoir Storage below Kersey

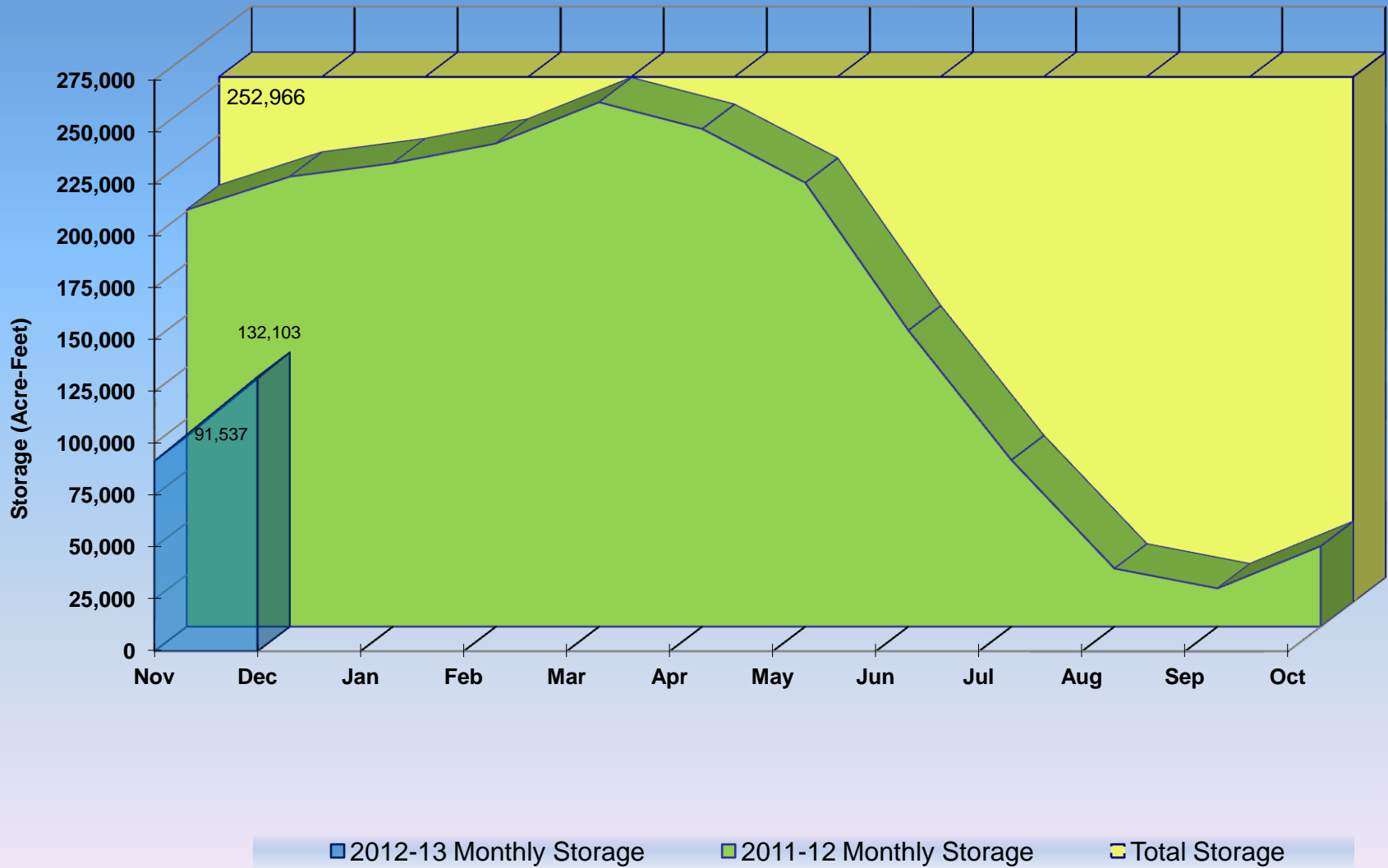
Selected Reservoirs\*



◆ 2011-12 Monthly Storage     
 ◆ 2012-13 Monthly Storage     
 — Kersey 2011-12     
 ◆ Kersey 2012-13

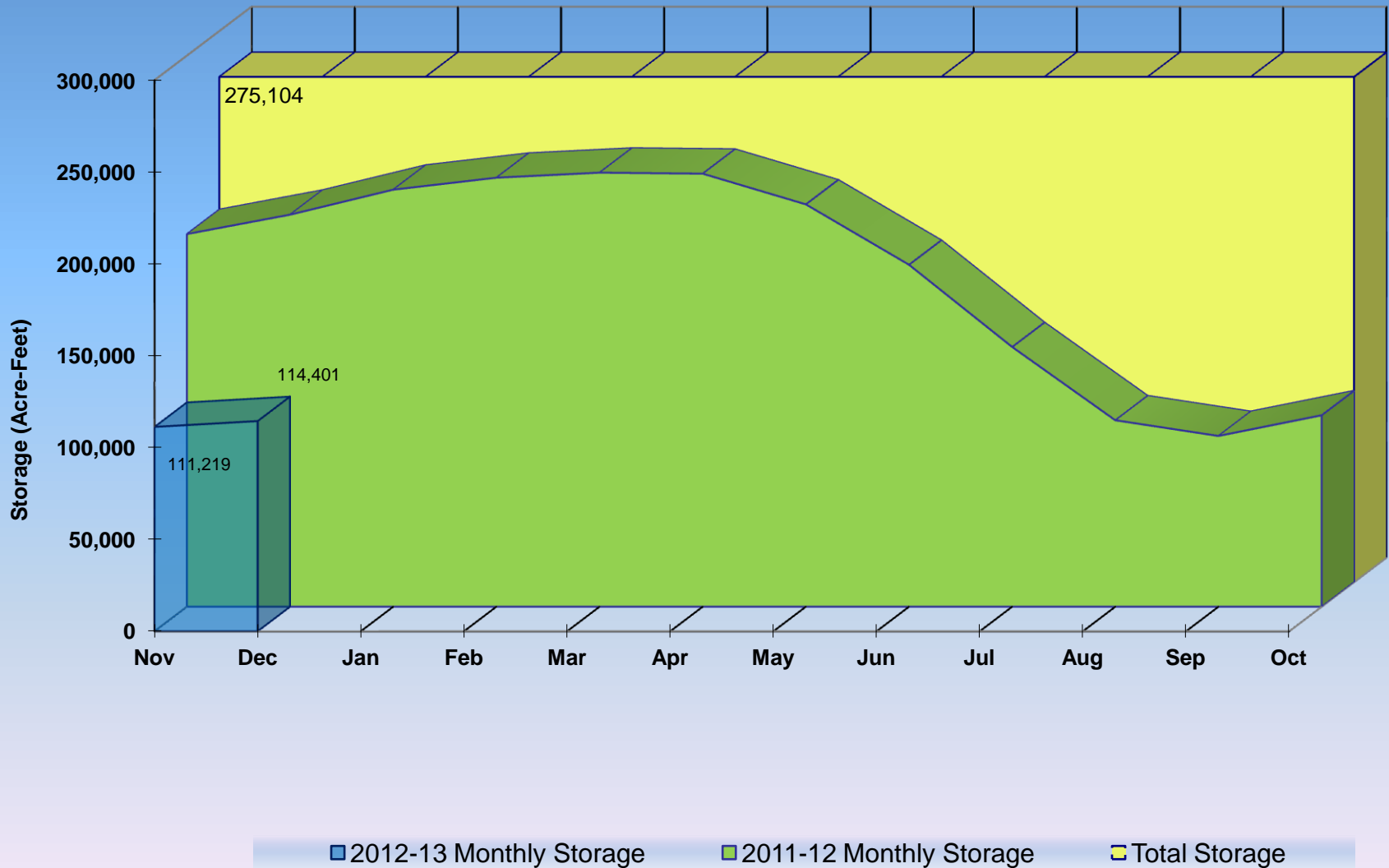
\*Empire, Riverside, Jackson, Prewitt, North Sterling, & Julesburg

# South Platte Reservoir Storage below Kersey\*



\*Empire, Riverside, Jackson, Prewitt, North Sterling, & Julesburg

# South Platte Reservoir Storage above Kersey\*



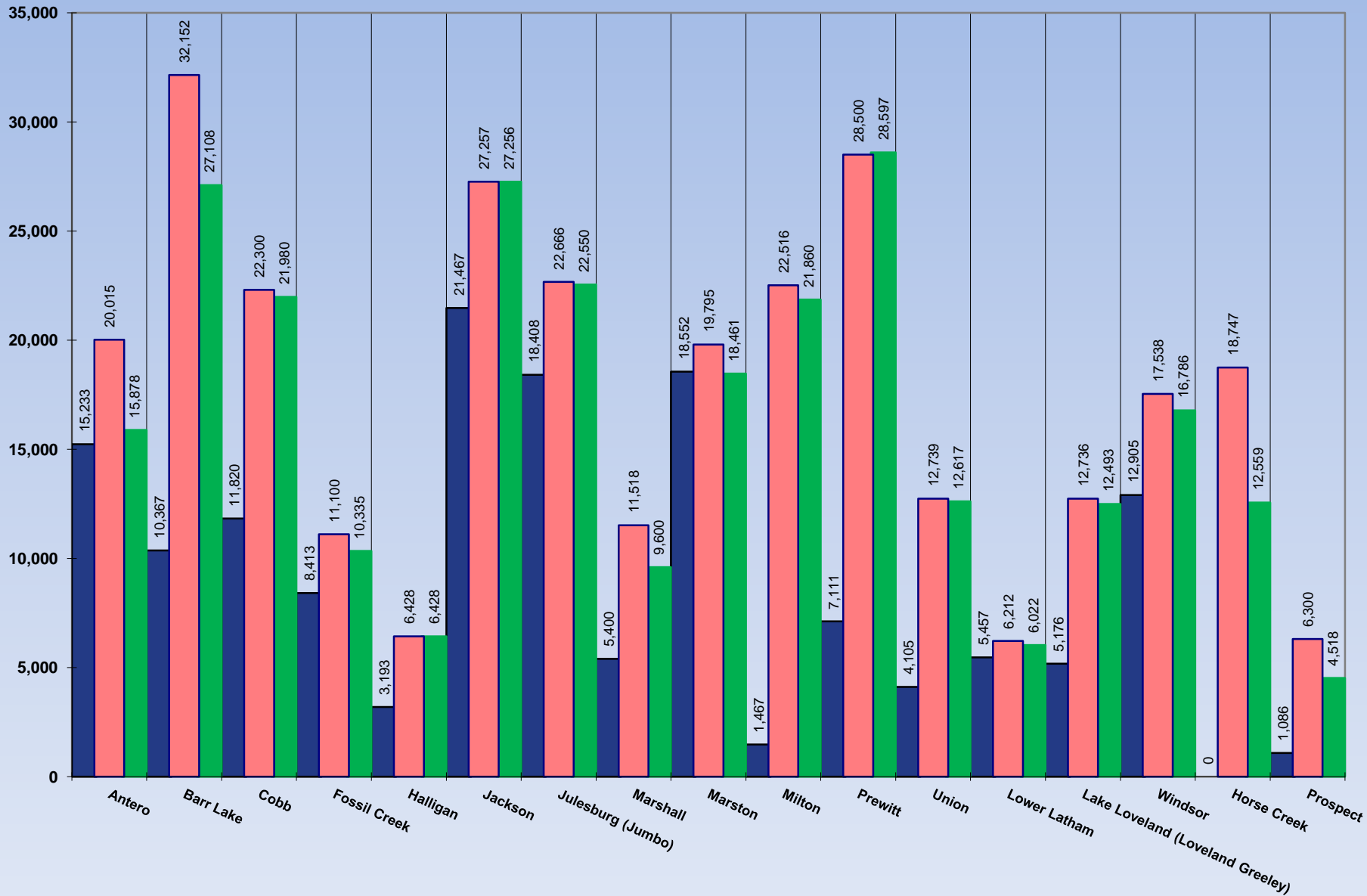
\*Barr, Cobb, Fossil Crk, Halligan, Marshall, Milton, Union, Standley, Lower Latham, Boyd, Loveland, Windsor, Horse Crk, & Prospect





**Individual Reservoir  
Storage Follows**

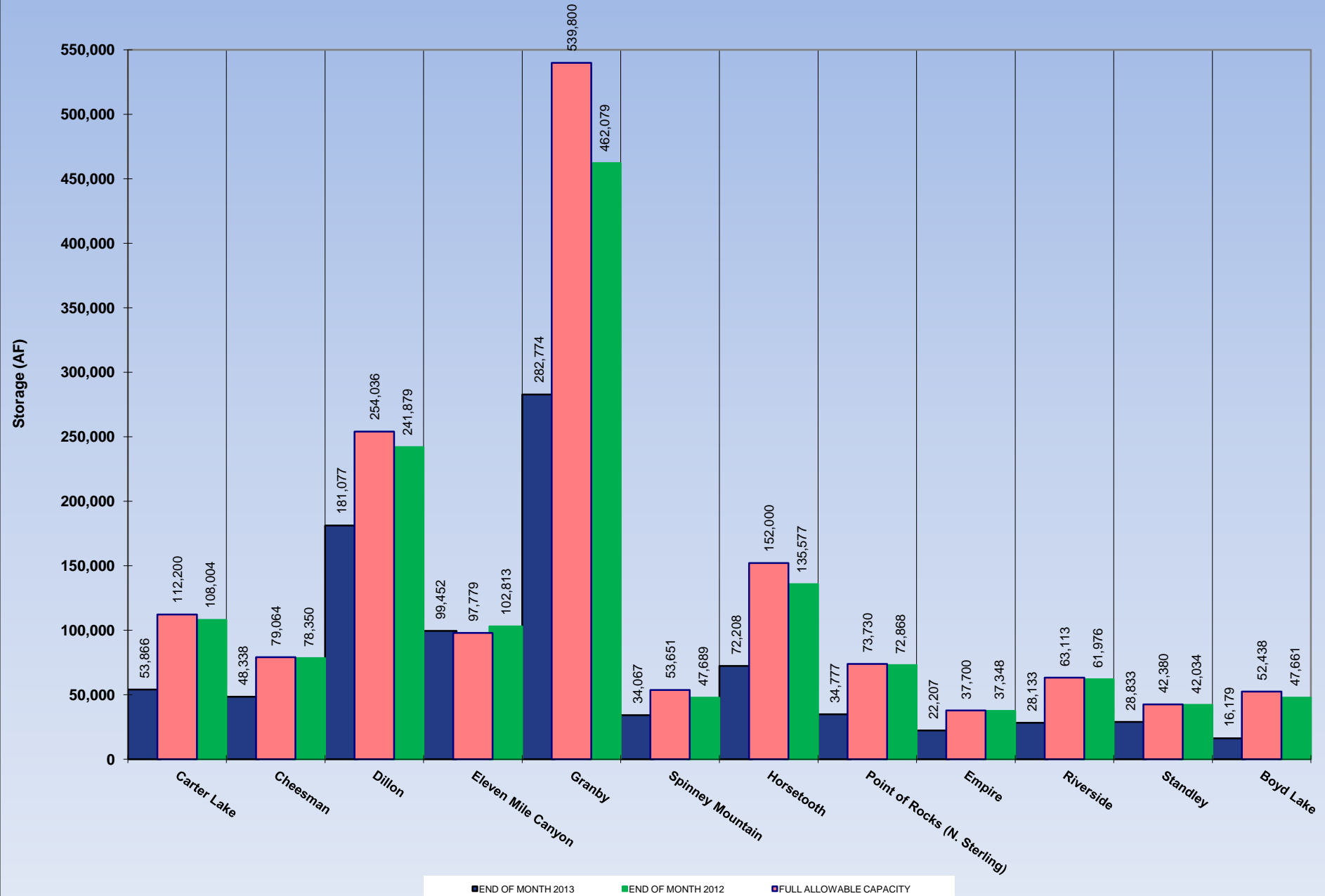
# December Reservoir Change in Storage 2012 versus 2013



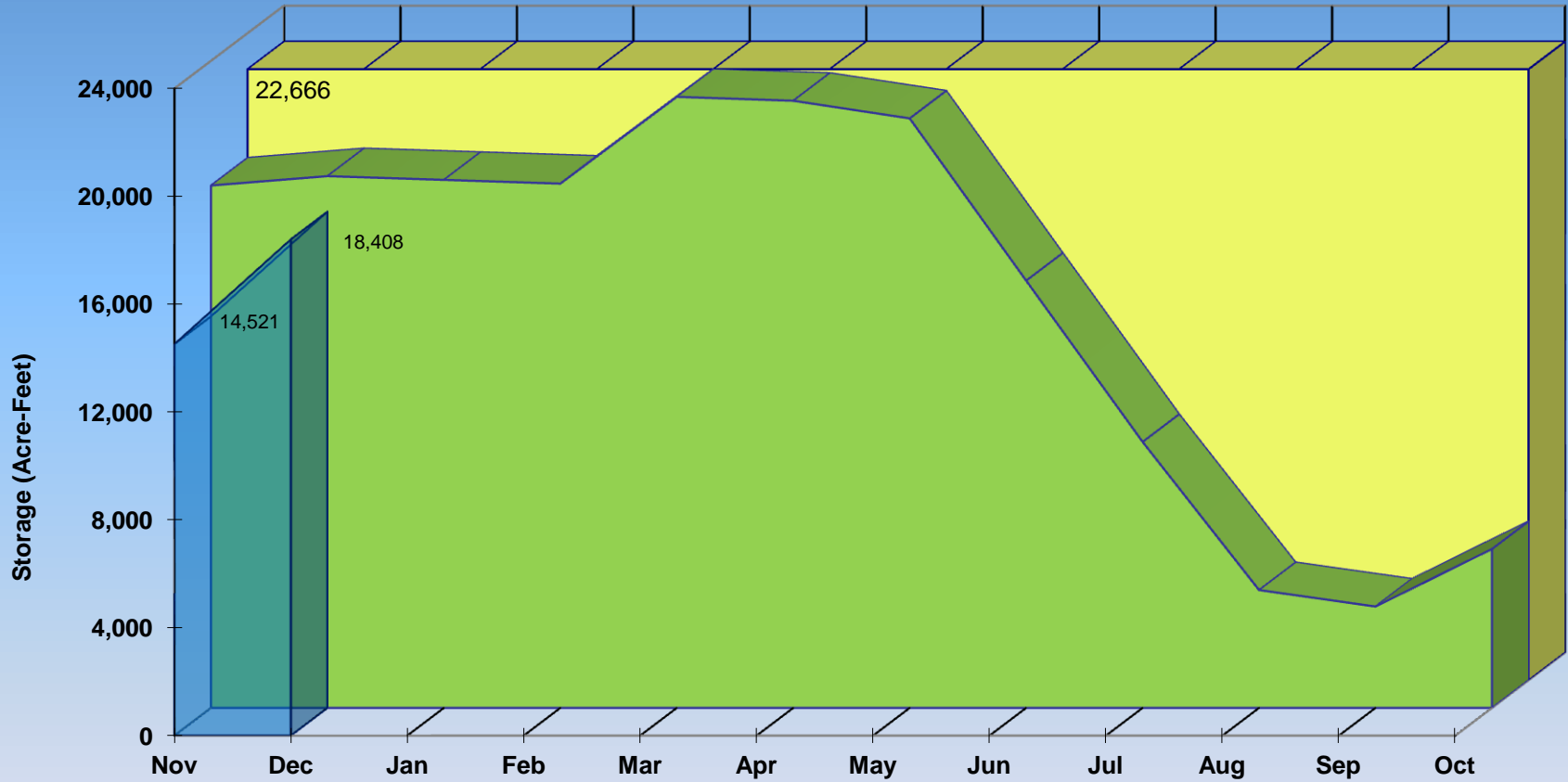
■ END OF MONTH 2013   ■ END OF MONTH 2012   ■ FULL ALLOWABLE CAPACITY



# December Reservoir Change in Storage 2012 versus 2013

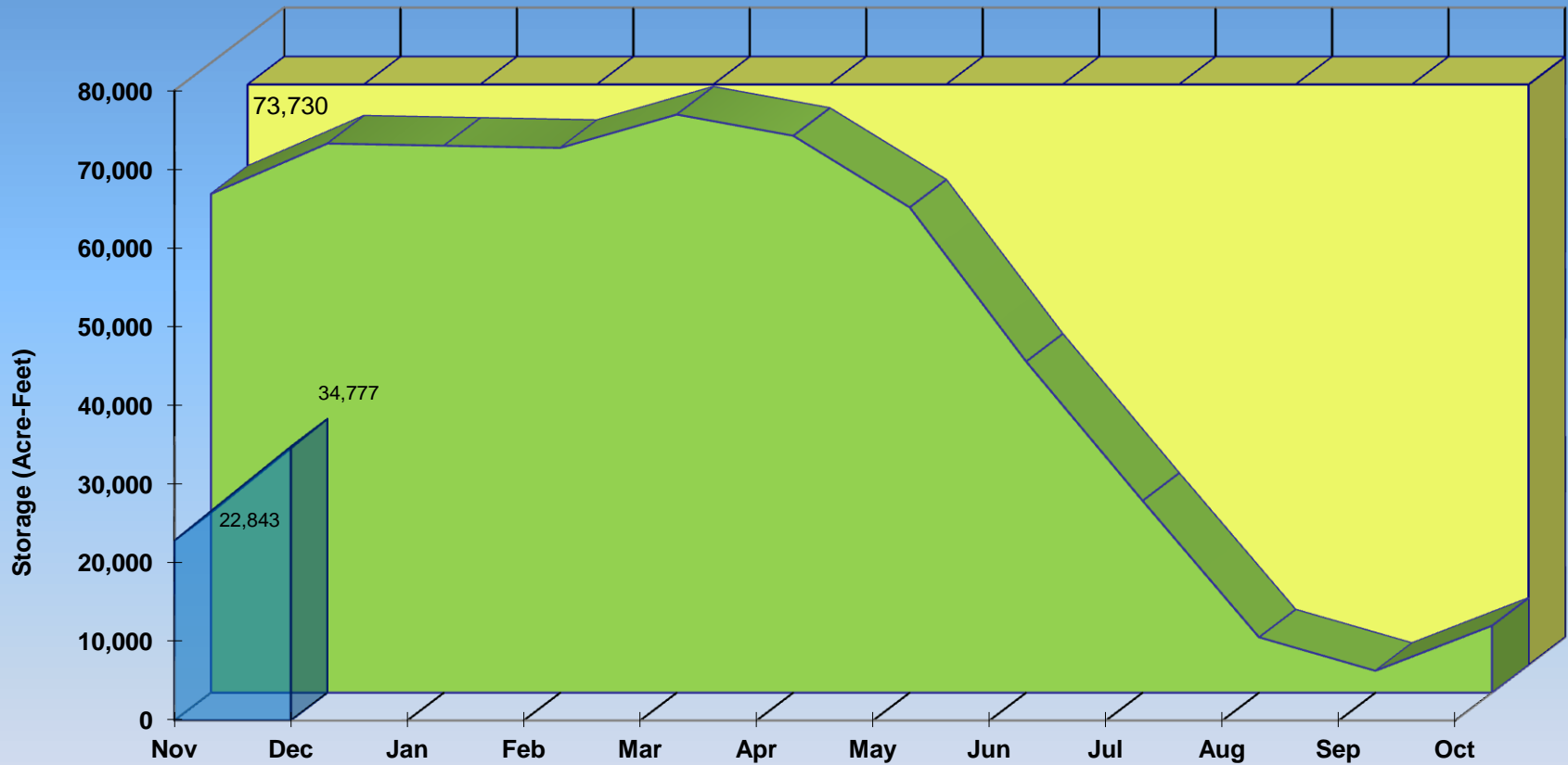


# Julesburg Reservoir (District 64 - Agricultural)



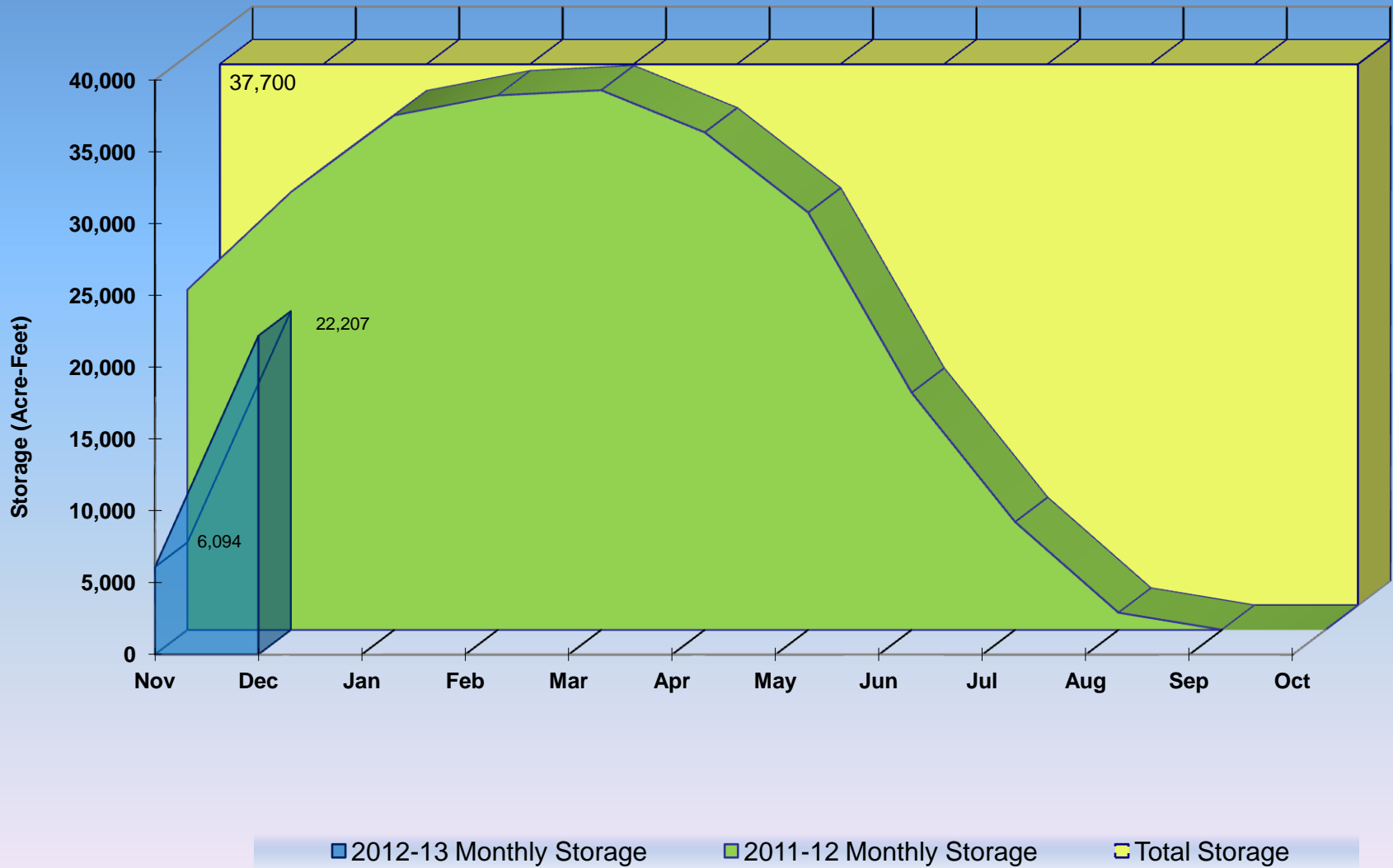
■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# North Sterling Reservoir (District 64- Agricultural)

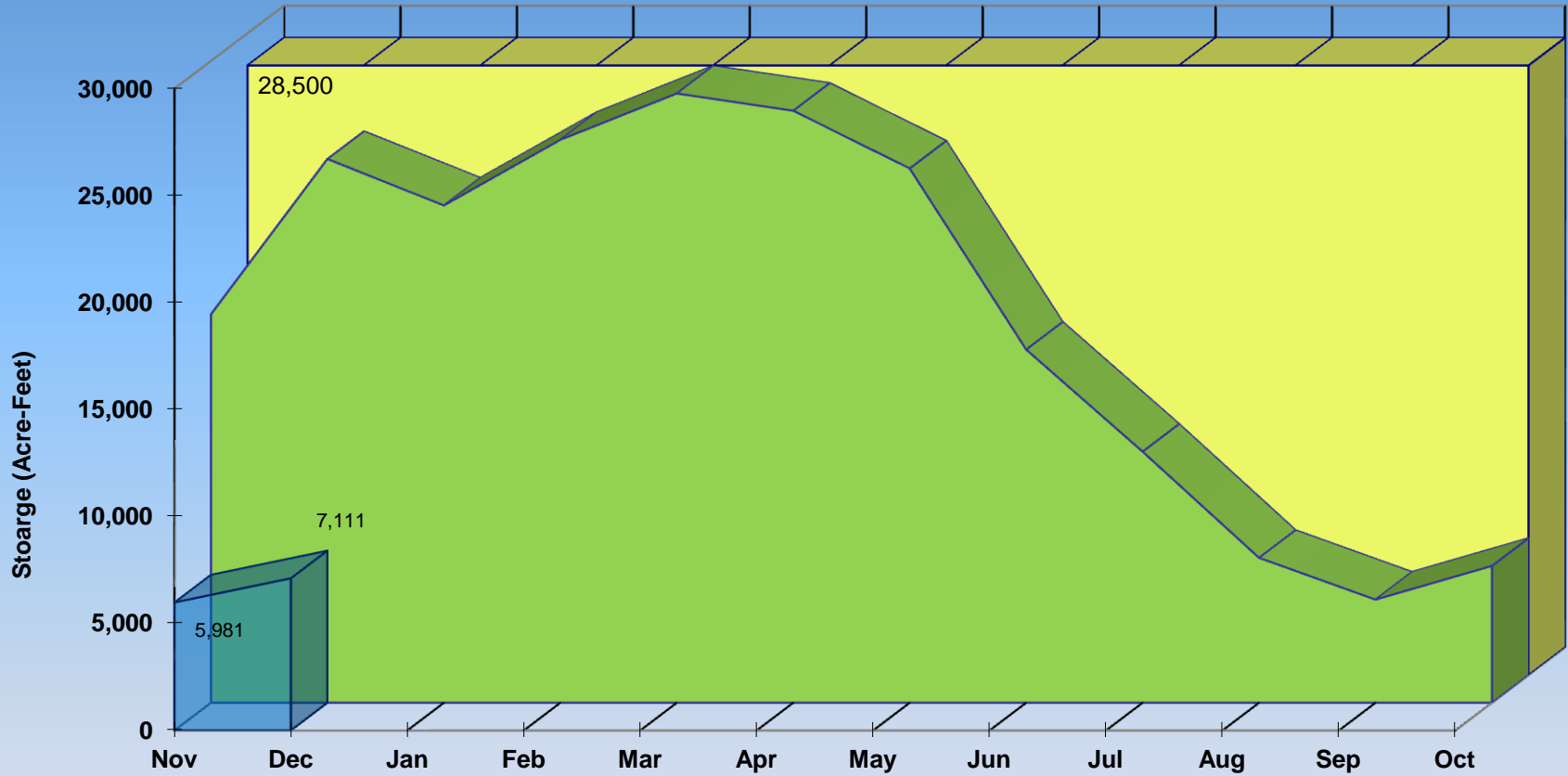


■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# Empire Reservoir (District 1- Agricultural)

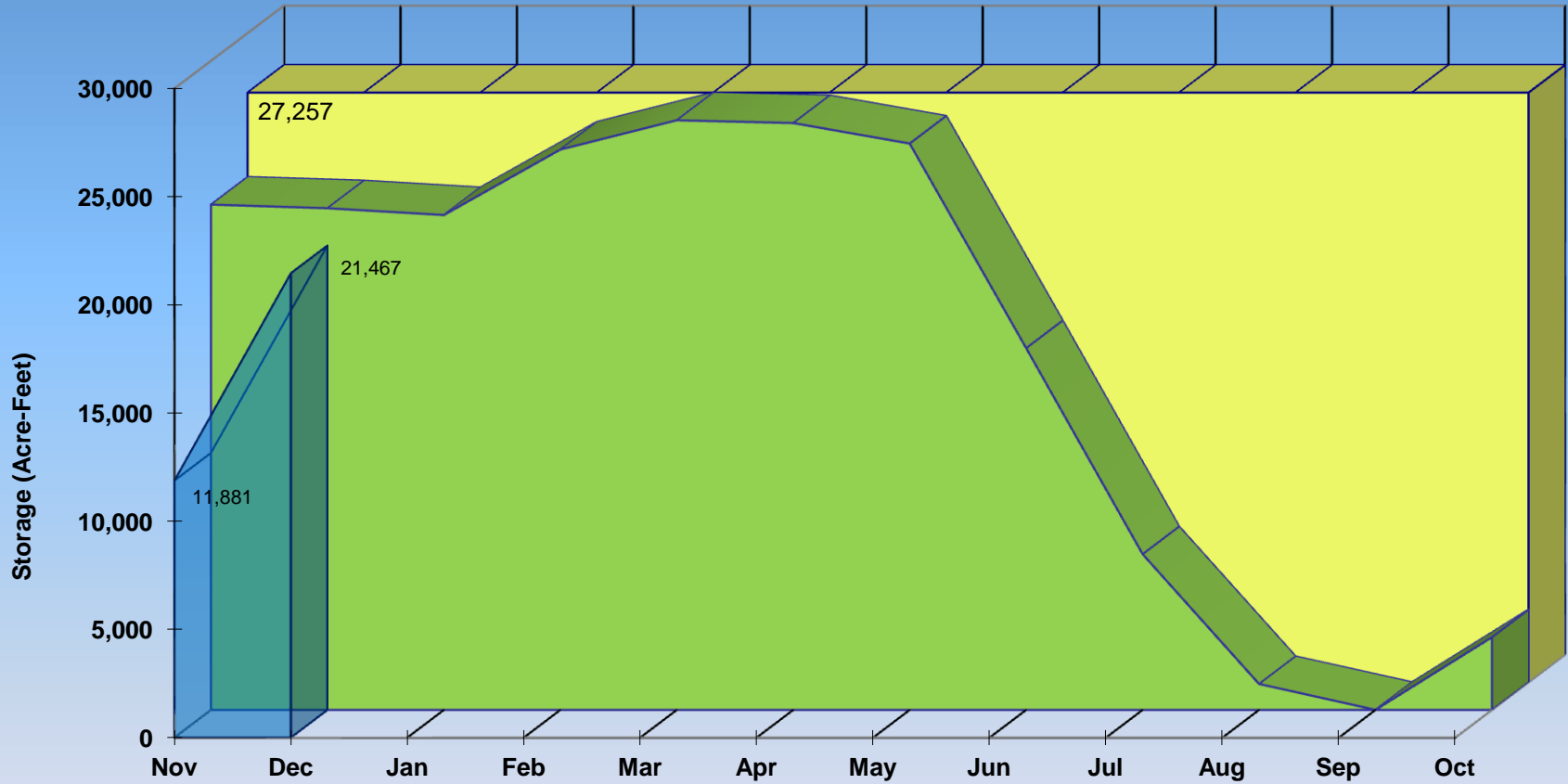


# Prewitt Reservoir (District 64- Agricultural)



■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

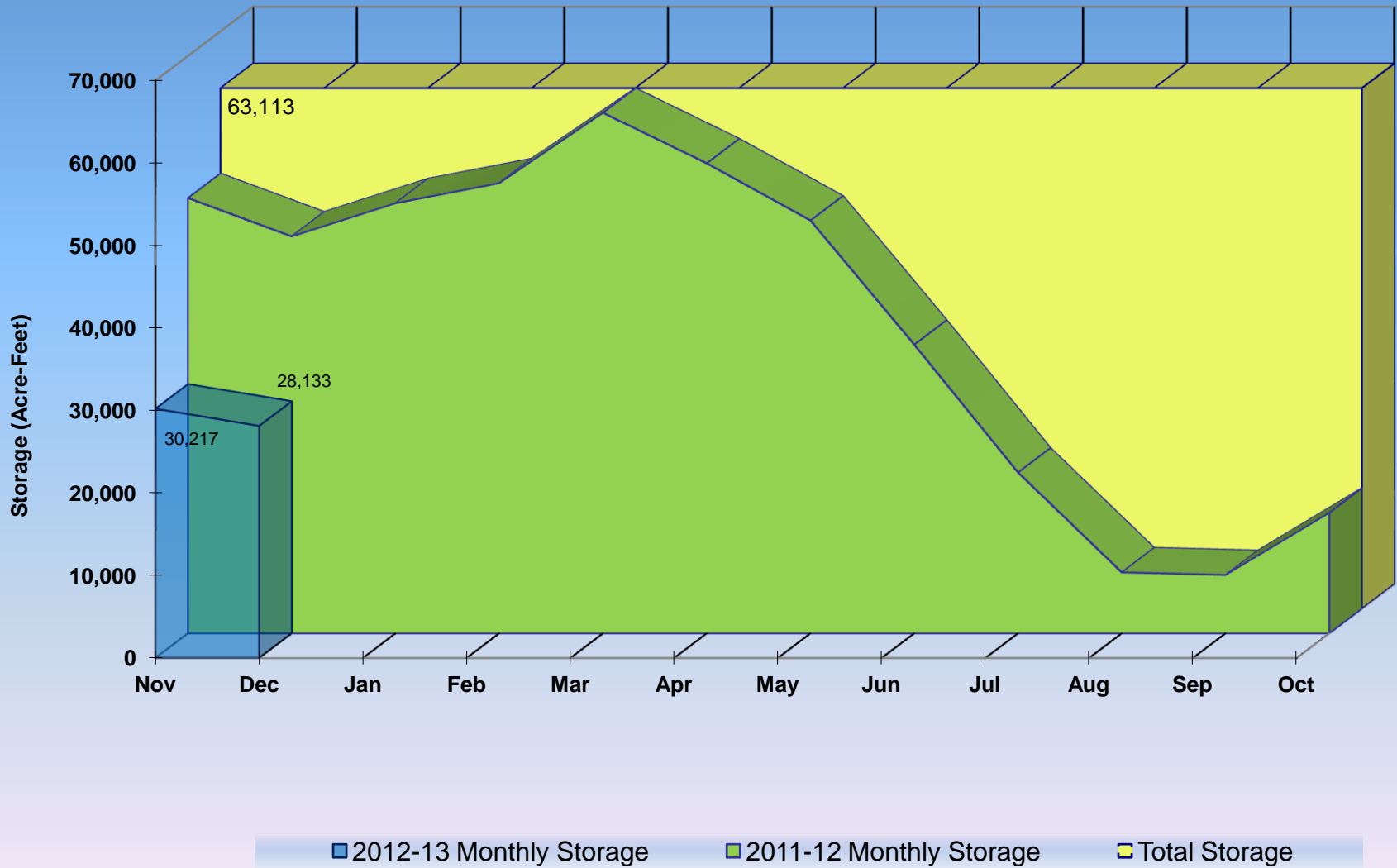
# Jackson Reservoir (District 1- Agricultural)



■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

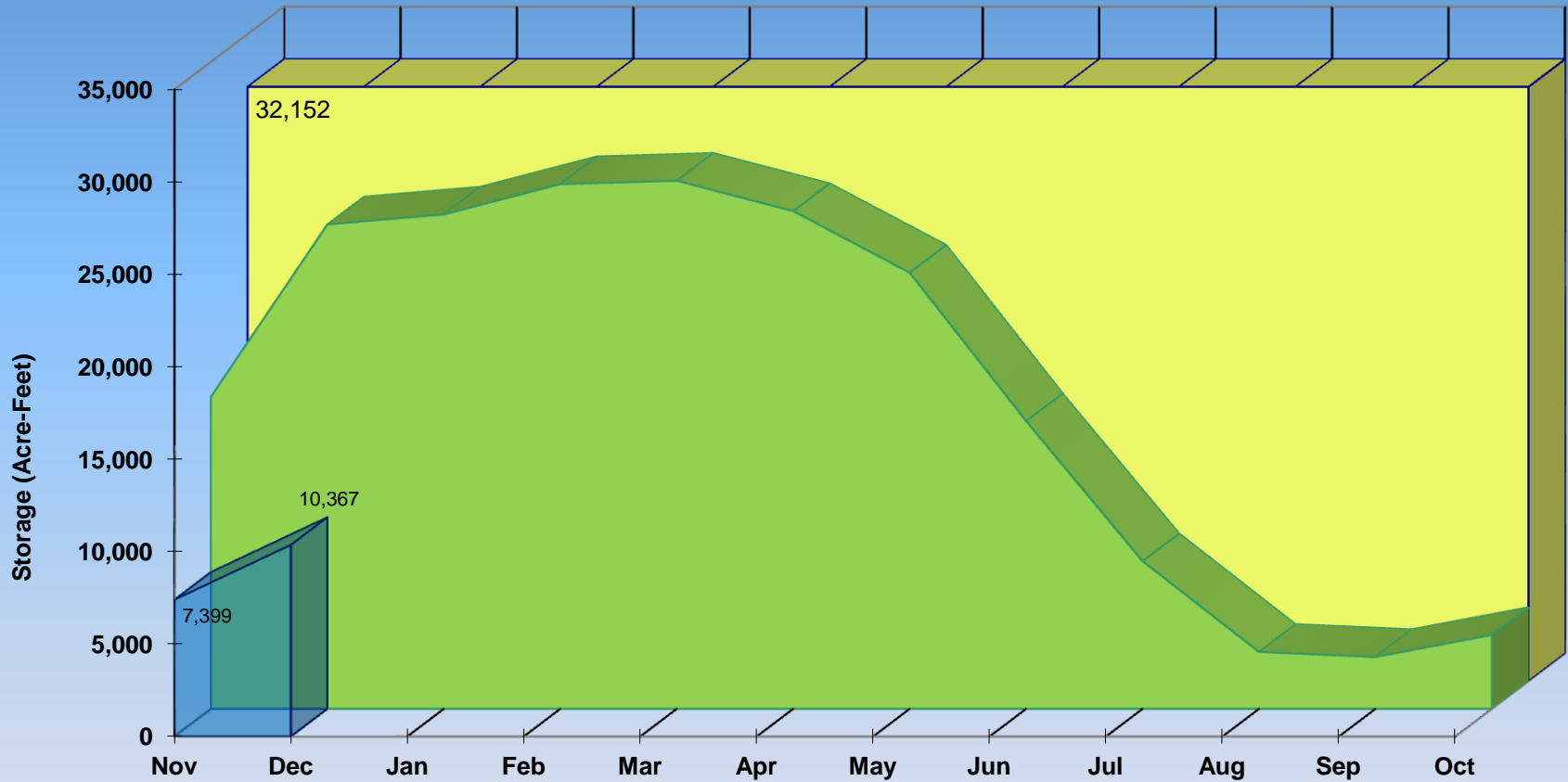


# Riverside Reservoir (District 1 - Agricultural)



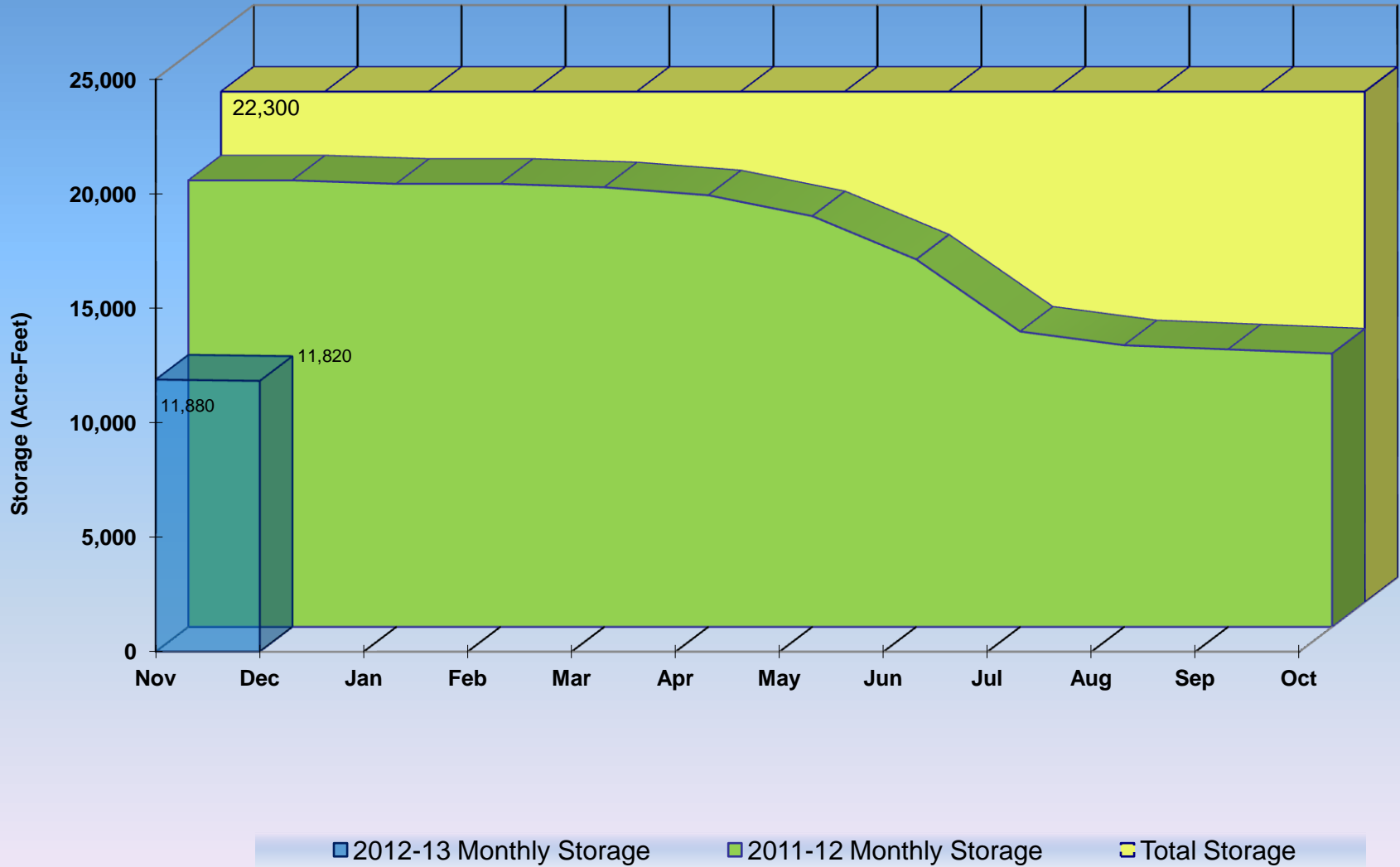
# Barr Lake

(District 2 - Agricultural)

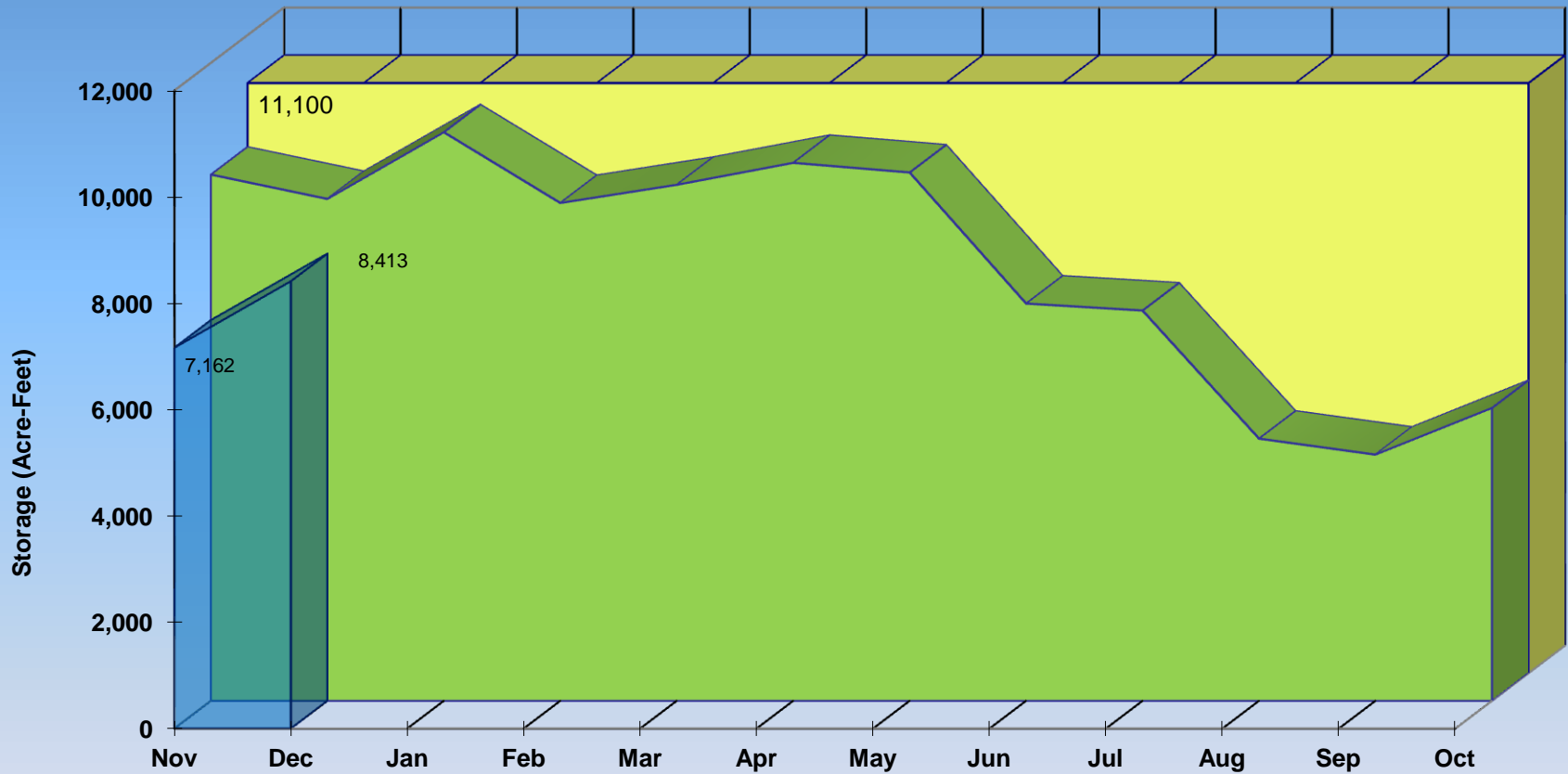


■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# Cobb Lake (District 3, Poudre River - Agricultural)

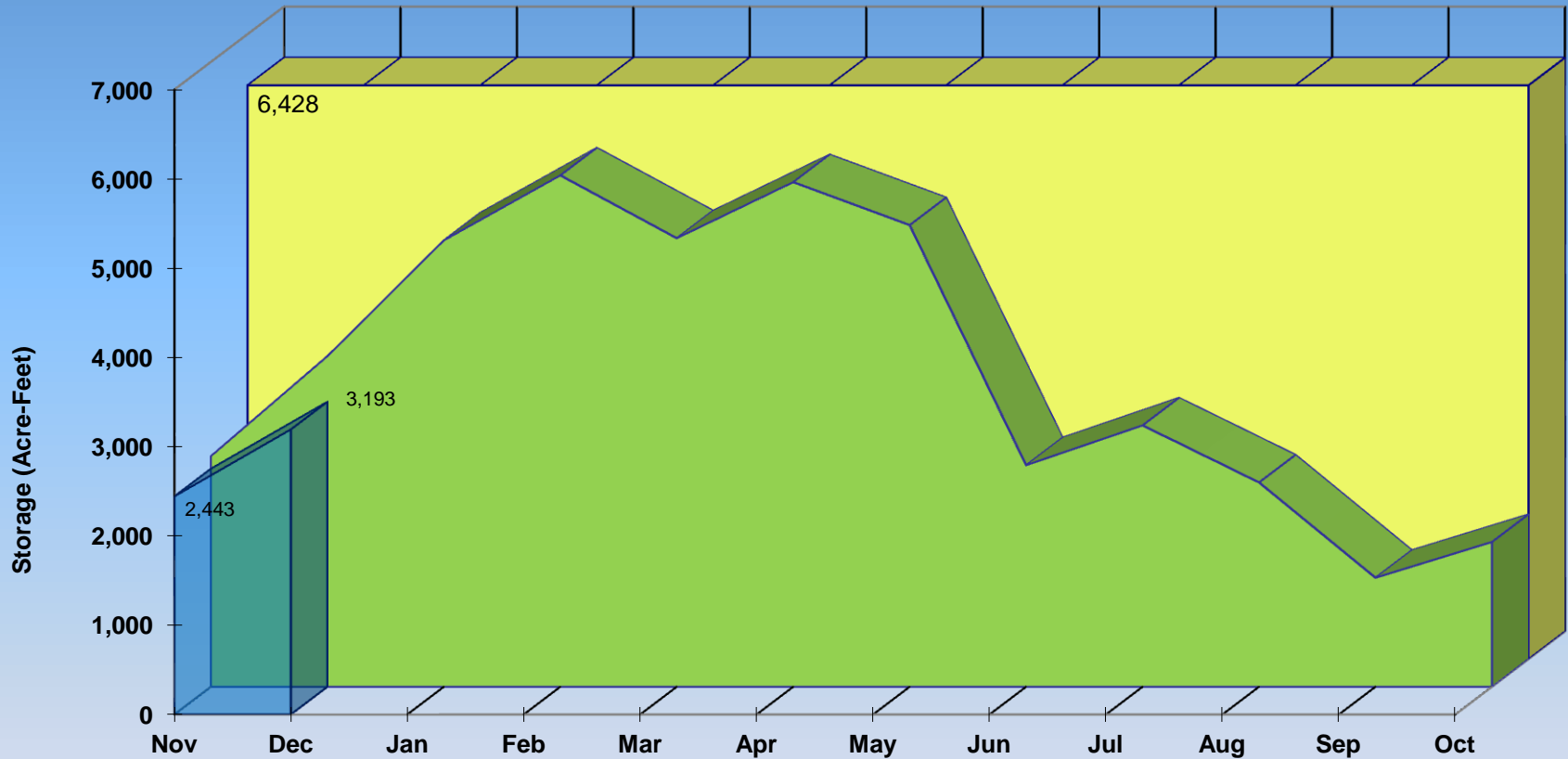


# Fossil Creek Reservoir (District 3, Poudre River - Agricultural)



■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# Halligan Reservoir (District 3, Poudre River - Agricultural)

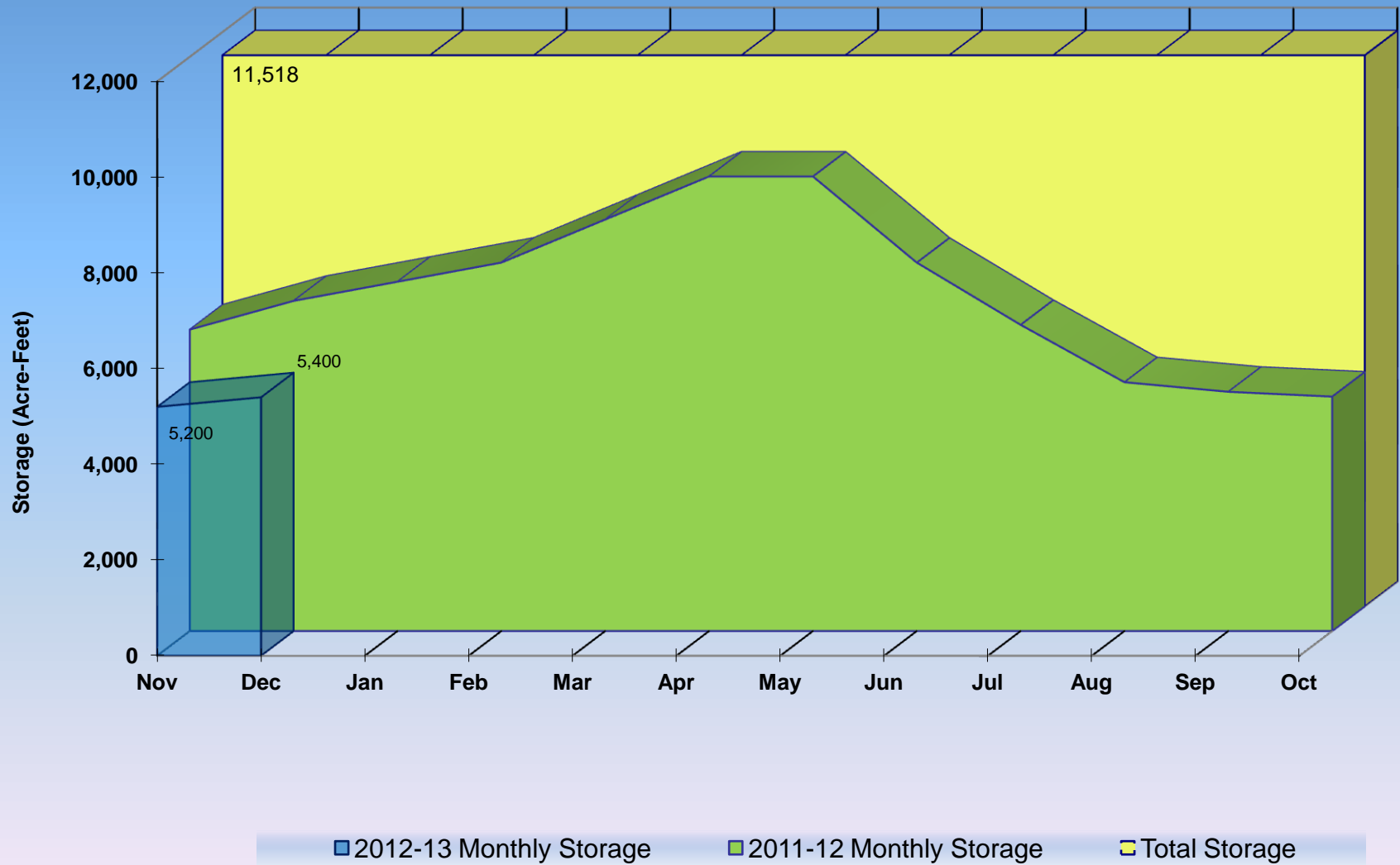


2012-13 Monthly Storage

2011-12 Monthly Storage

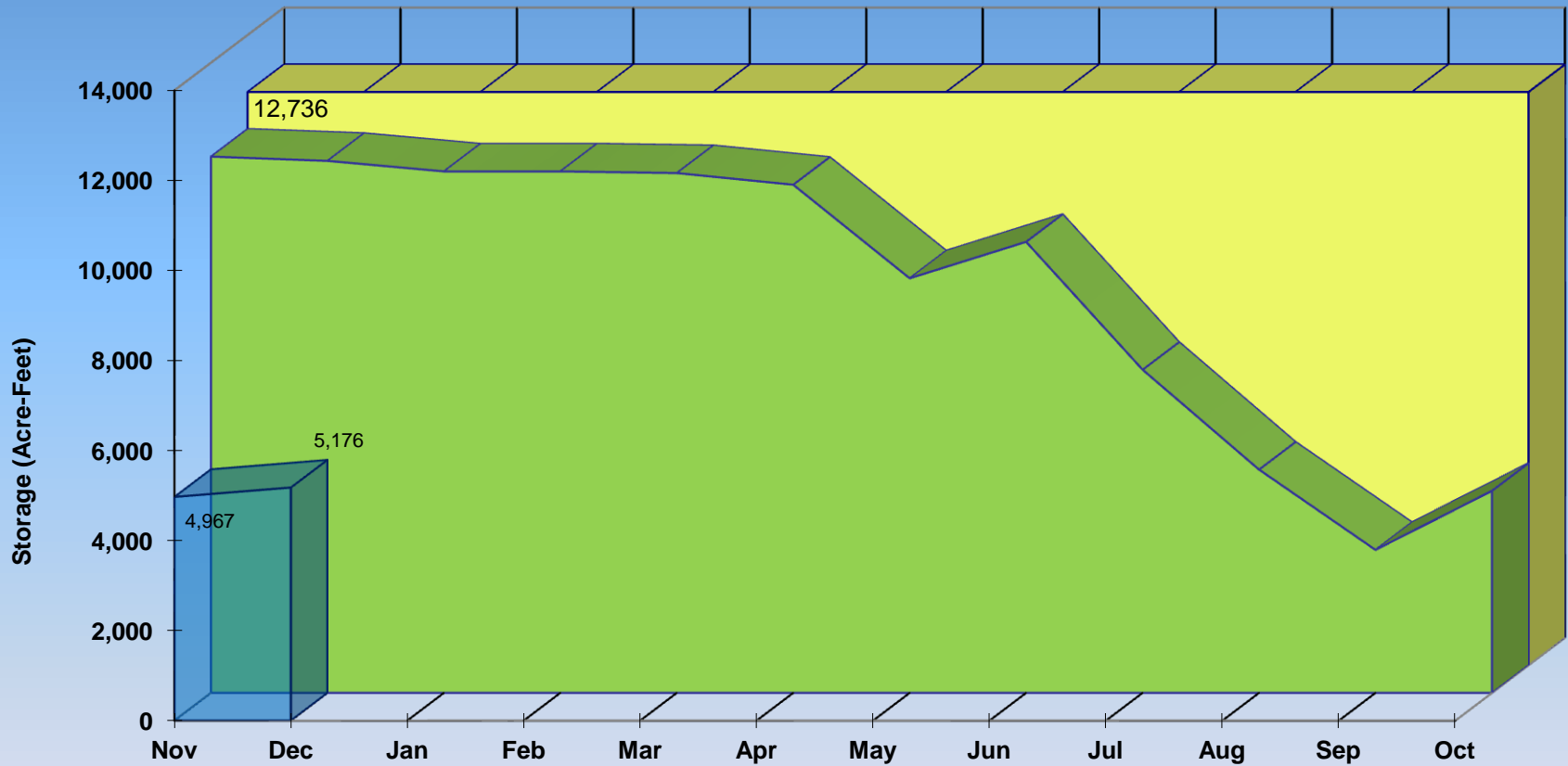
Total Storage

# Marshall Lake (District 6, Boulder Creek - Agricultural)



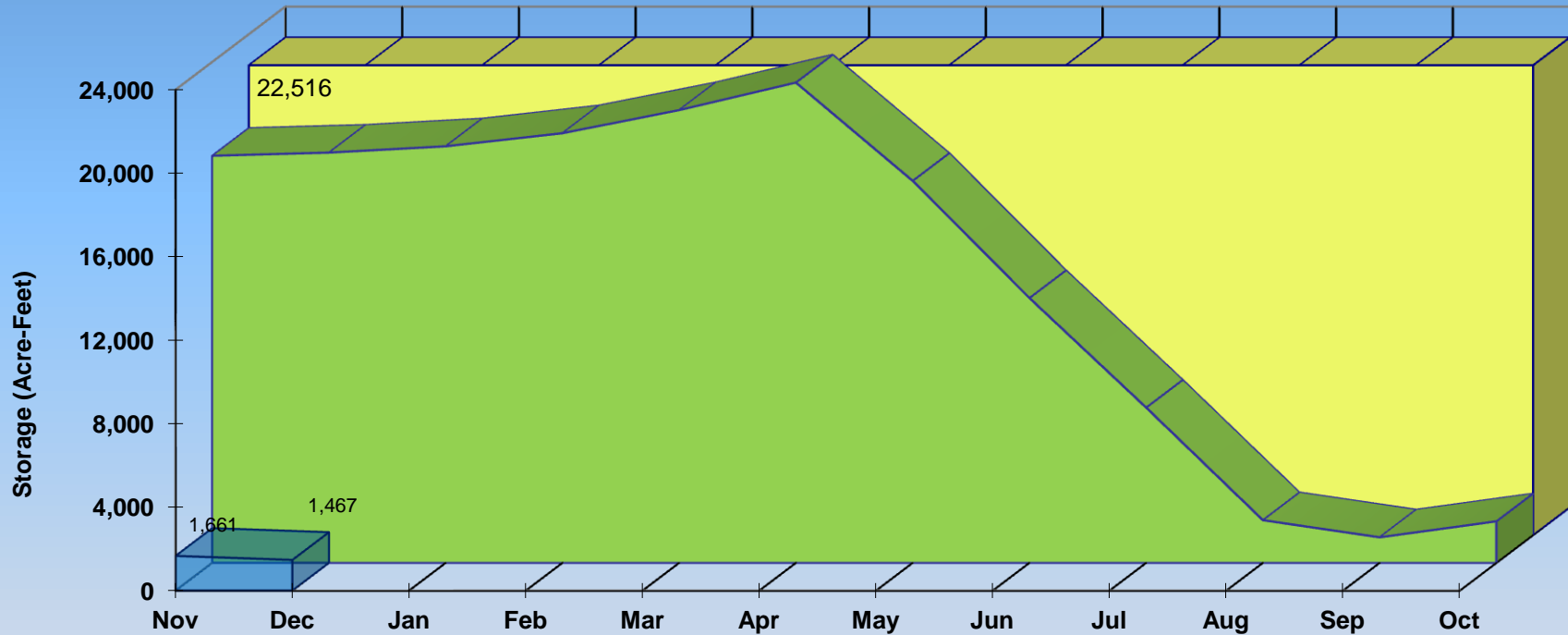


# Loveland Greeley Reservoir (District 4, Big Thompson River - Agricultural)



■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# Milton Reservoir (District 2 - Agricultural)

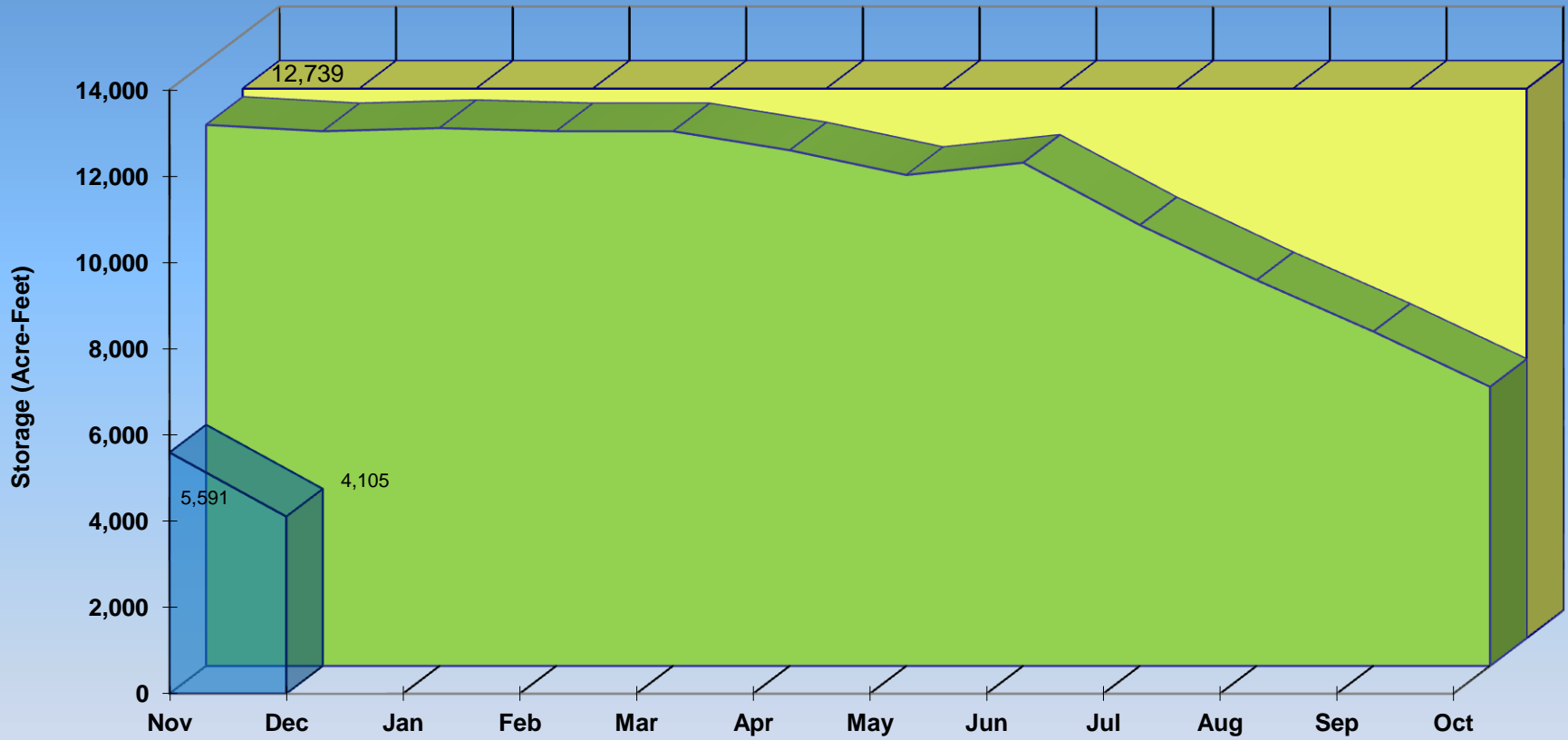


■ 2012-13 Monthly Storage

■ 2011-12 Monthly Storage

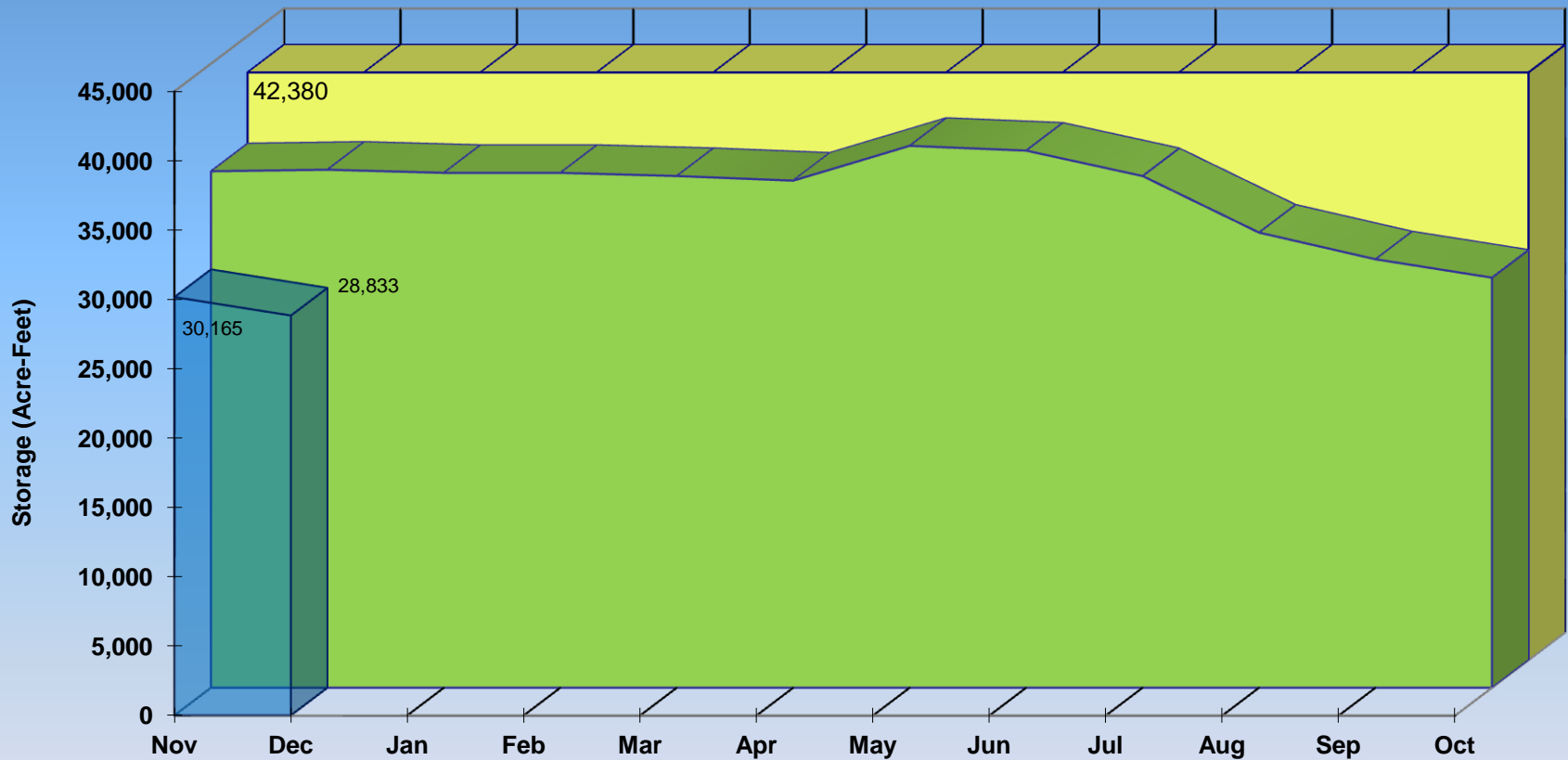
■ Total Storage

# Union Reservoir (District 5, St. Vrain Creek - Agricultural)



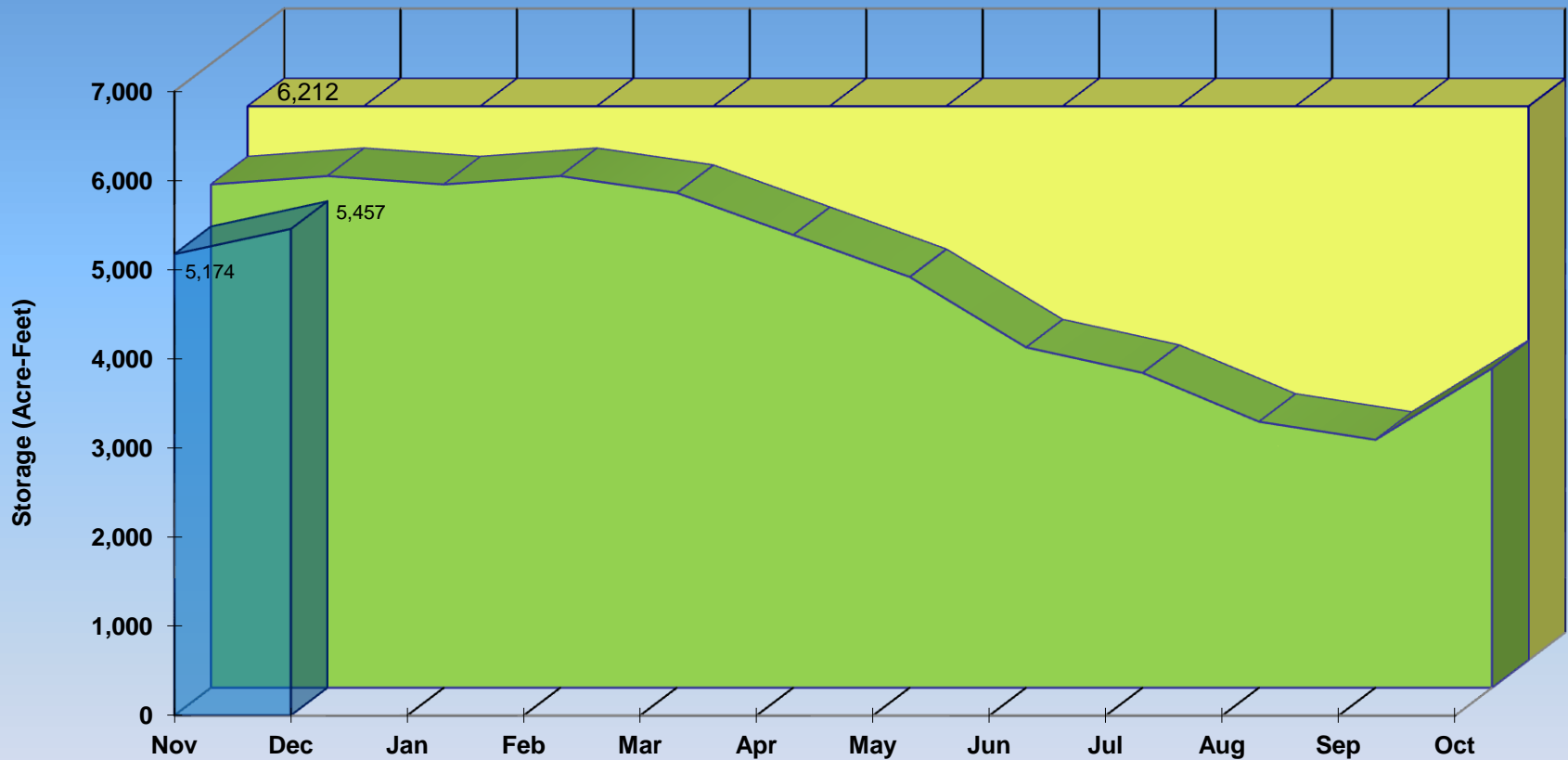
■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# Standley Lake (Agricultural)



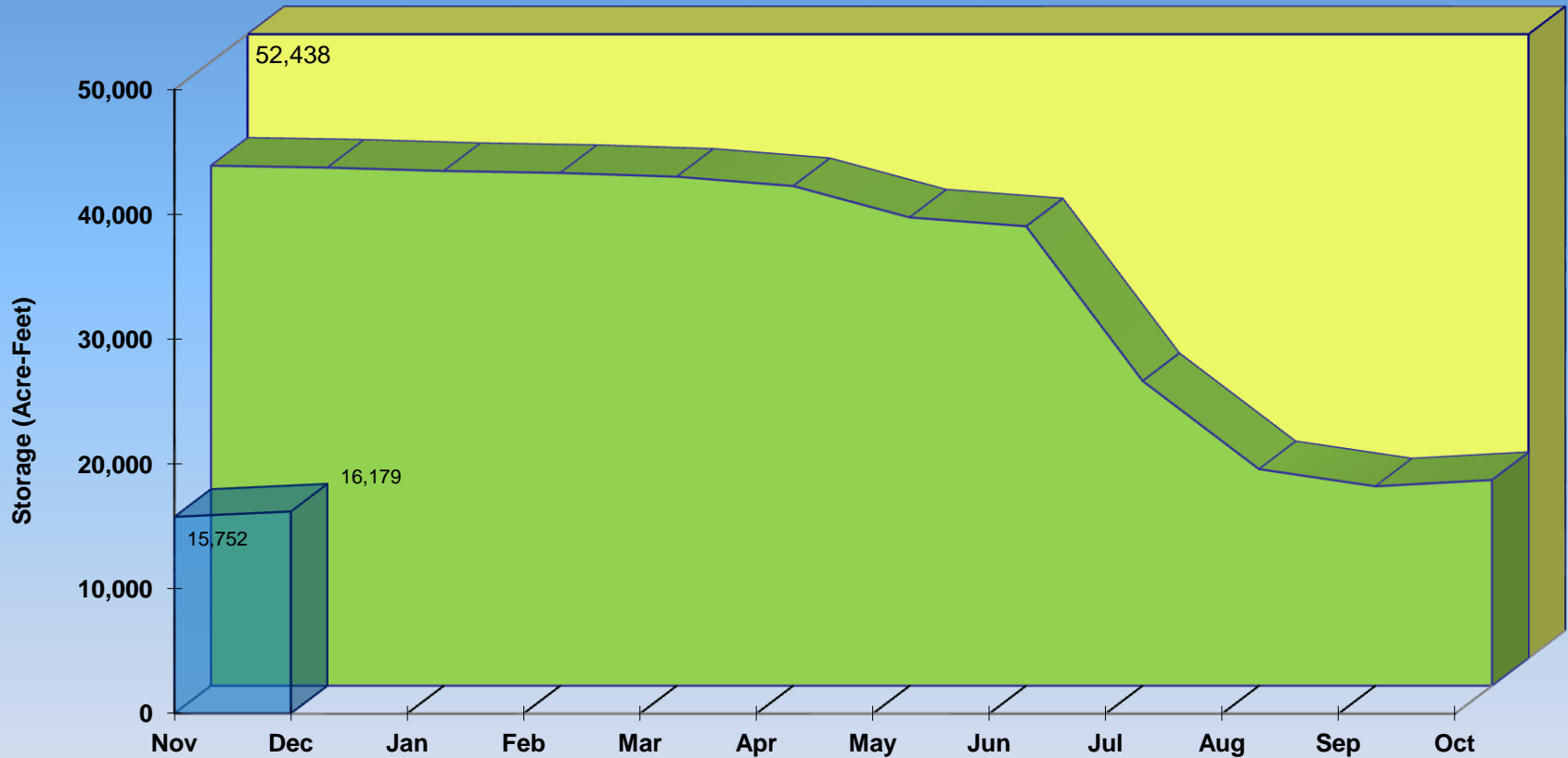
■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# Lower Latham Reservoir (District 2 - Agricultural)



■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

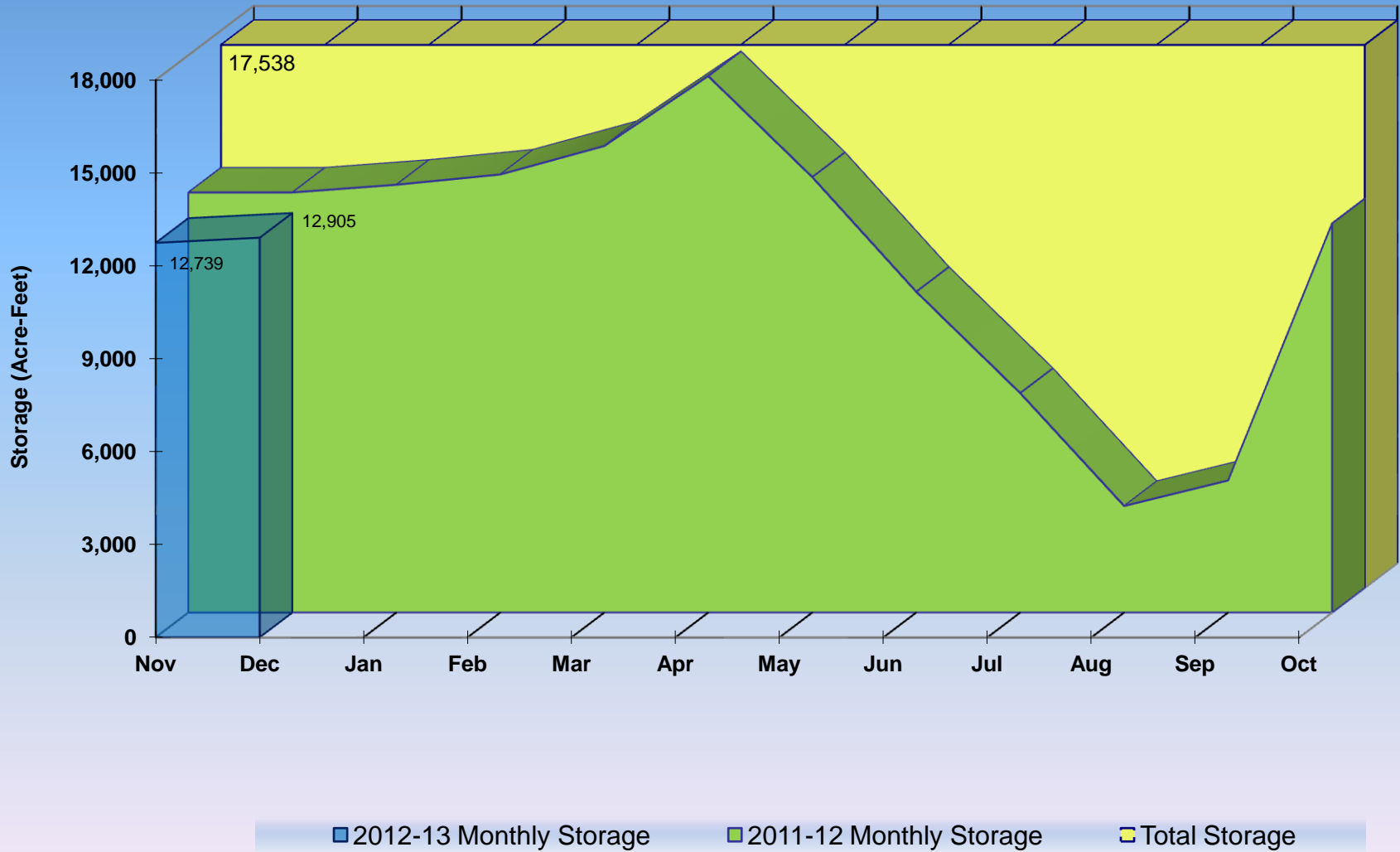
# Boyd Lake (District 4, Big Thompson River - Agricultural)



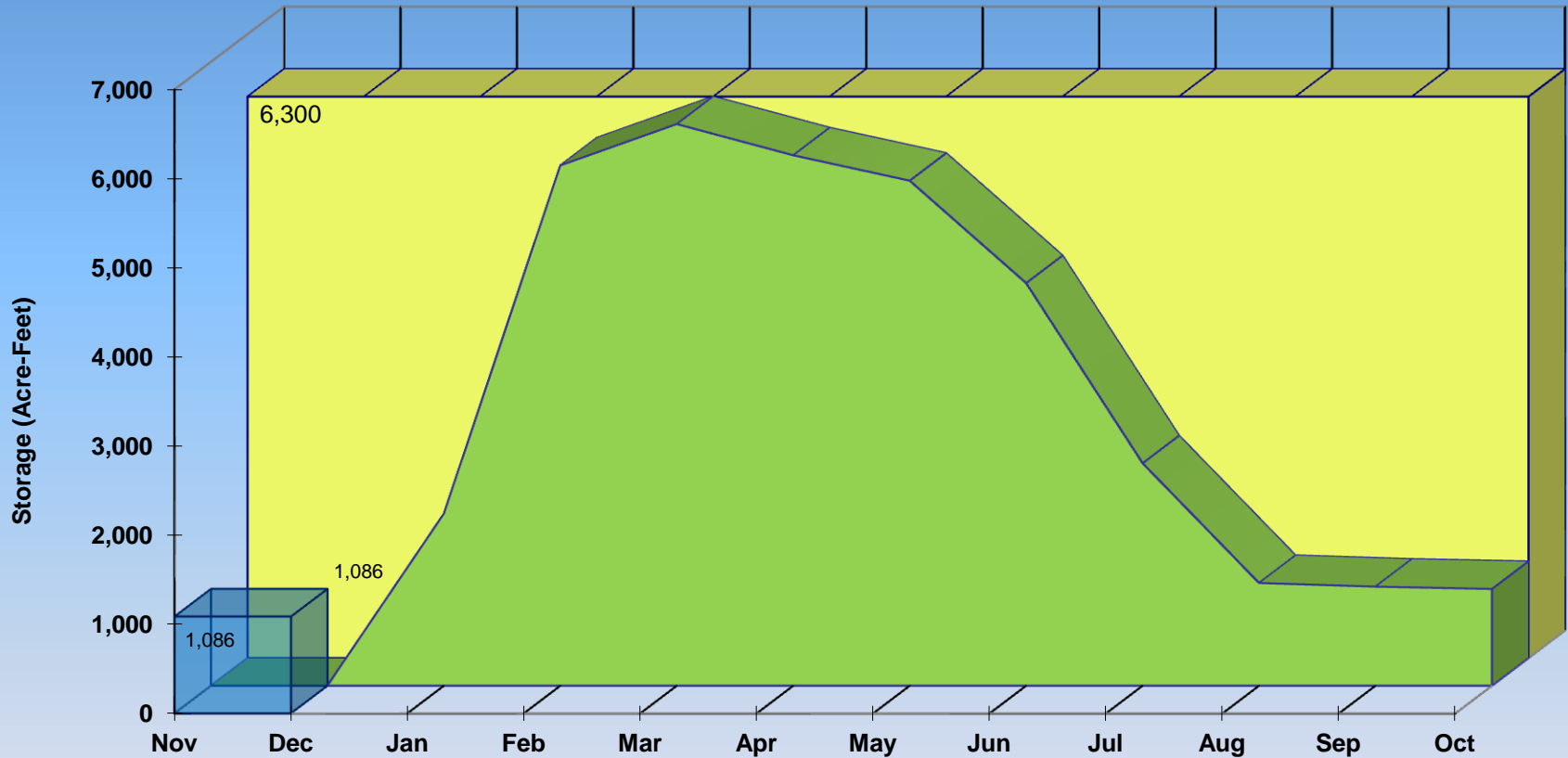
■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage



# Windsor Reservoir (District 3, Poudre River - Agricultural)



# Prospect Reservoir (District 1- Agricultural)

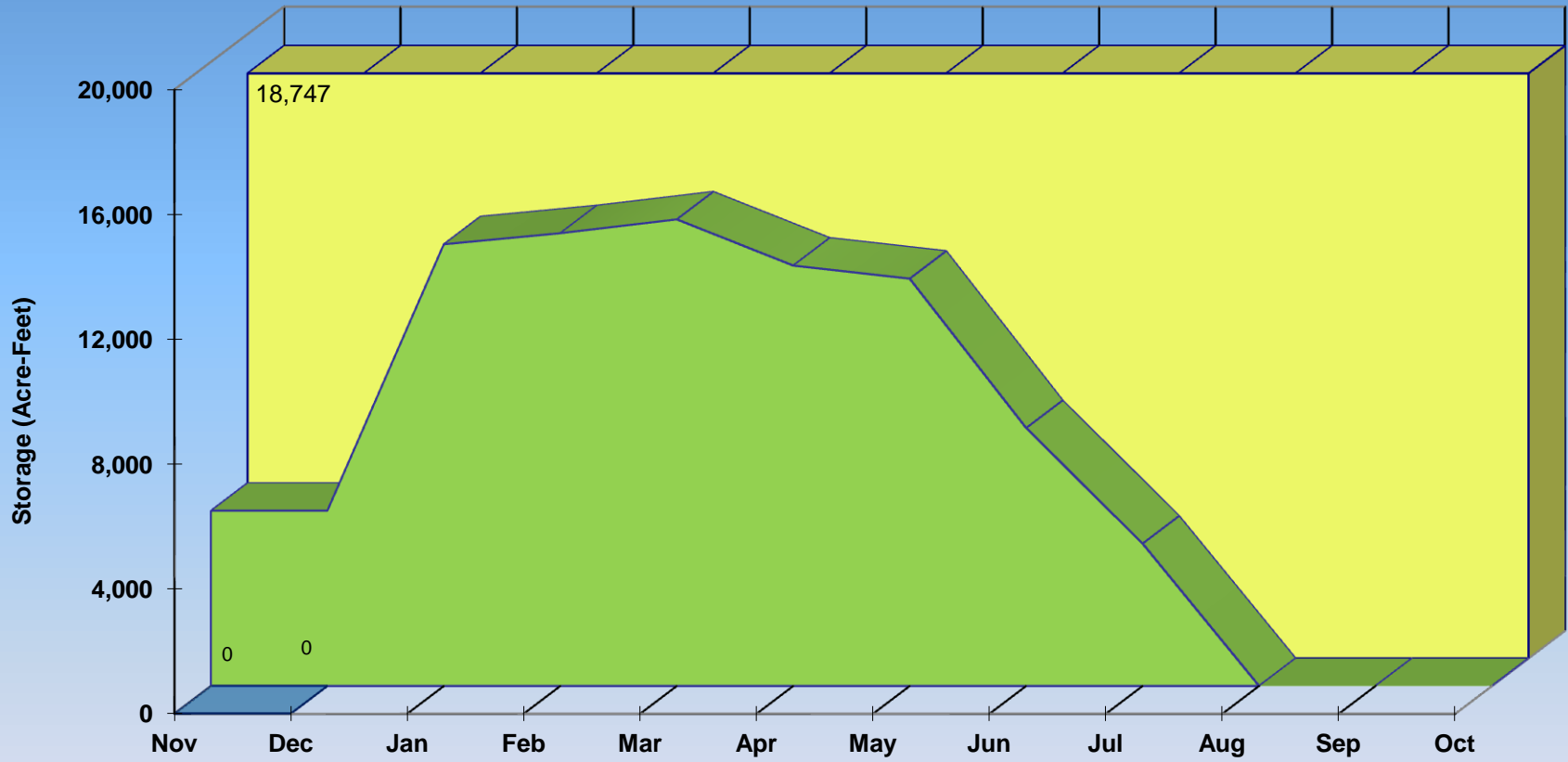


2012-13 Monthly Storage

2011-12 Monthly Storage

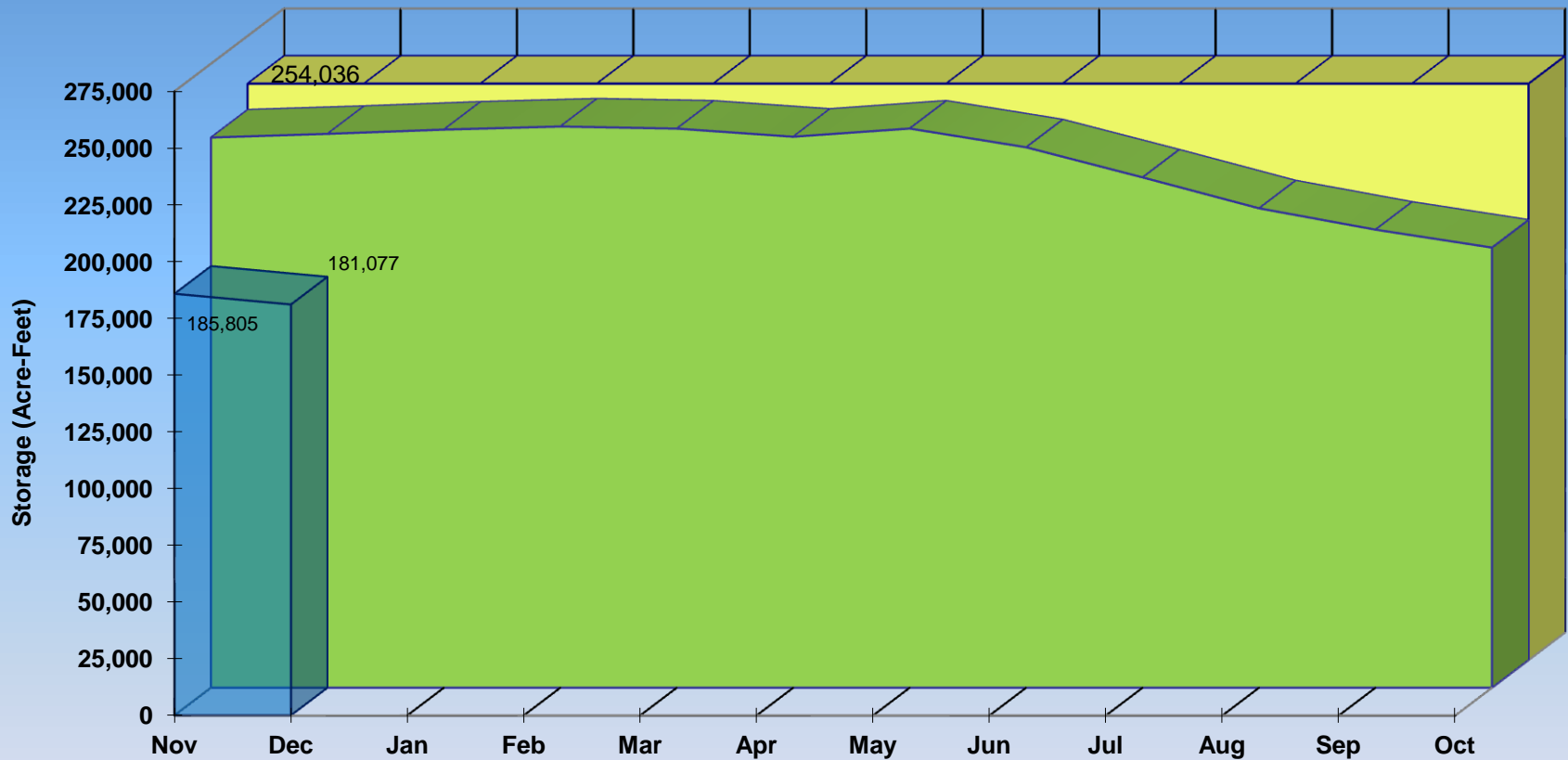
Total Storage

# Horse Creek Reservoir (District 1 - Agricultural)



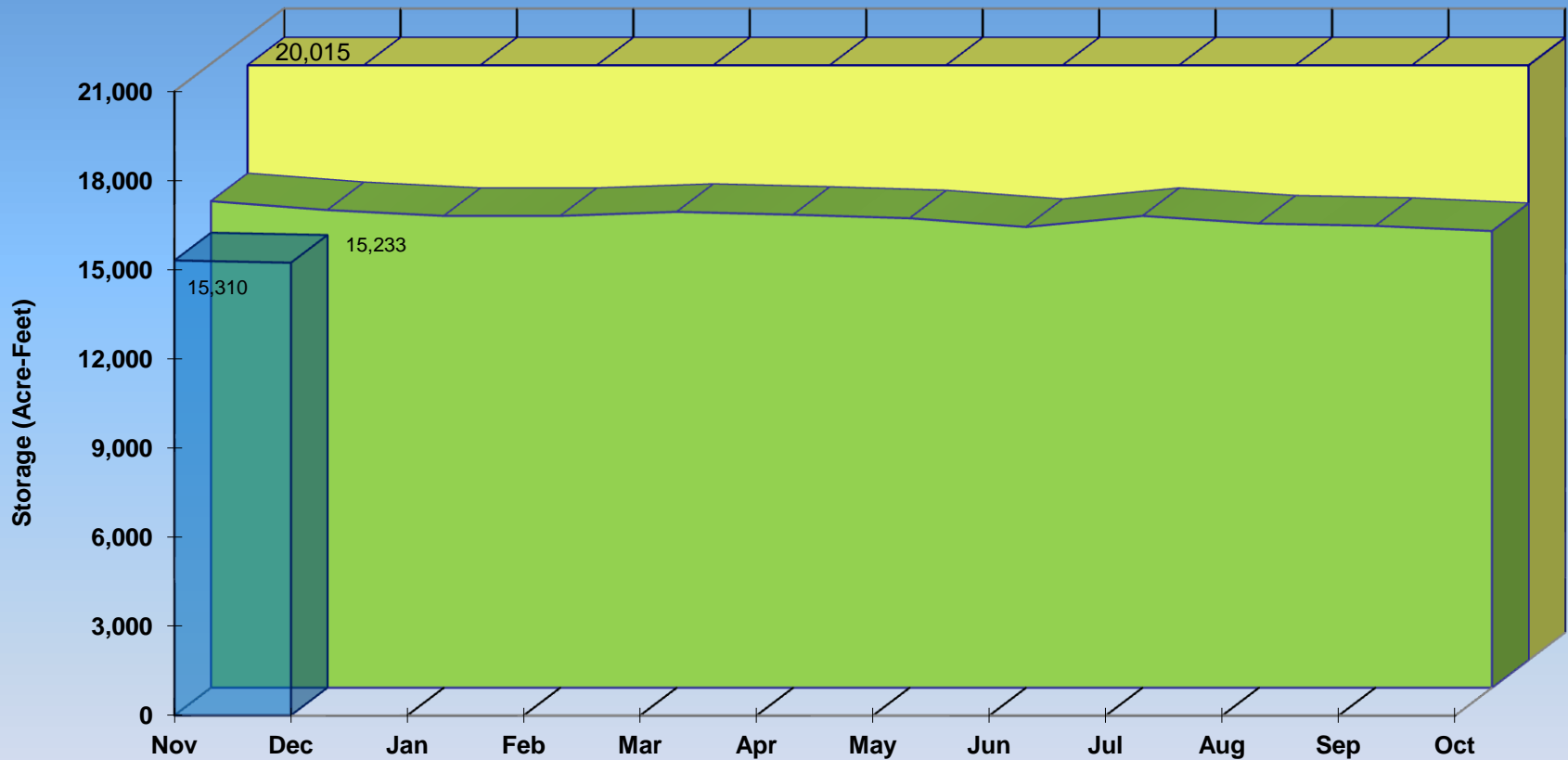
■ 2012-13 Monthly Storage    ■ 2011-12 Monthly Storage    ■ Total Storage

# Dillon Reservoir (Municipal)



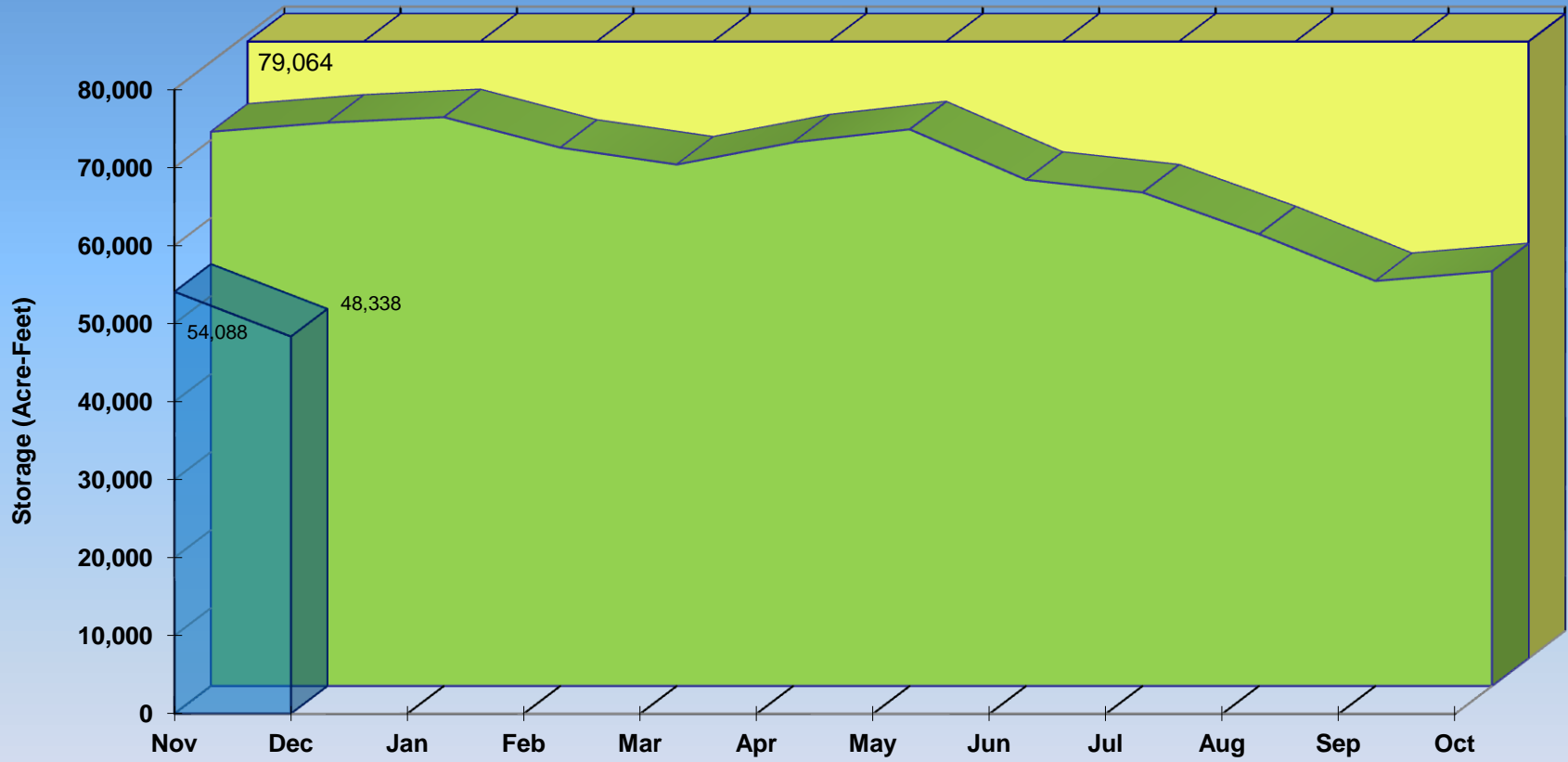
■ 2012-13 Monthly Storage    
 ■ 2011-12 Monthly Storage    
 ■ Total Storage

# Antero Reservoir (District 23 - Municipal)



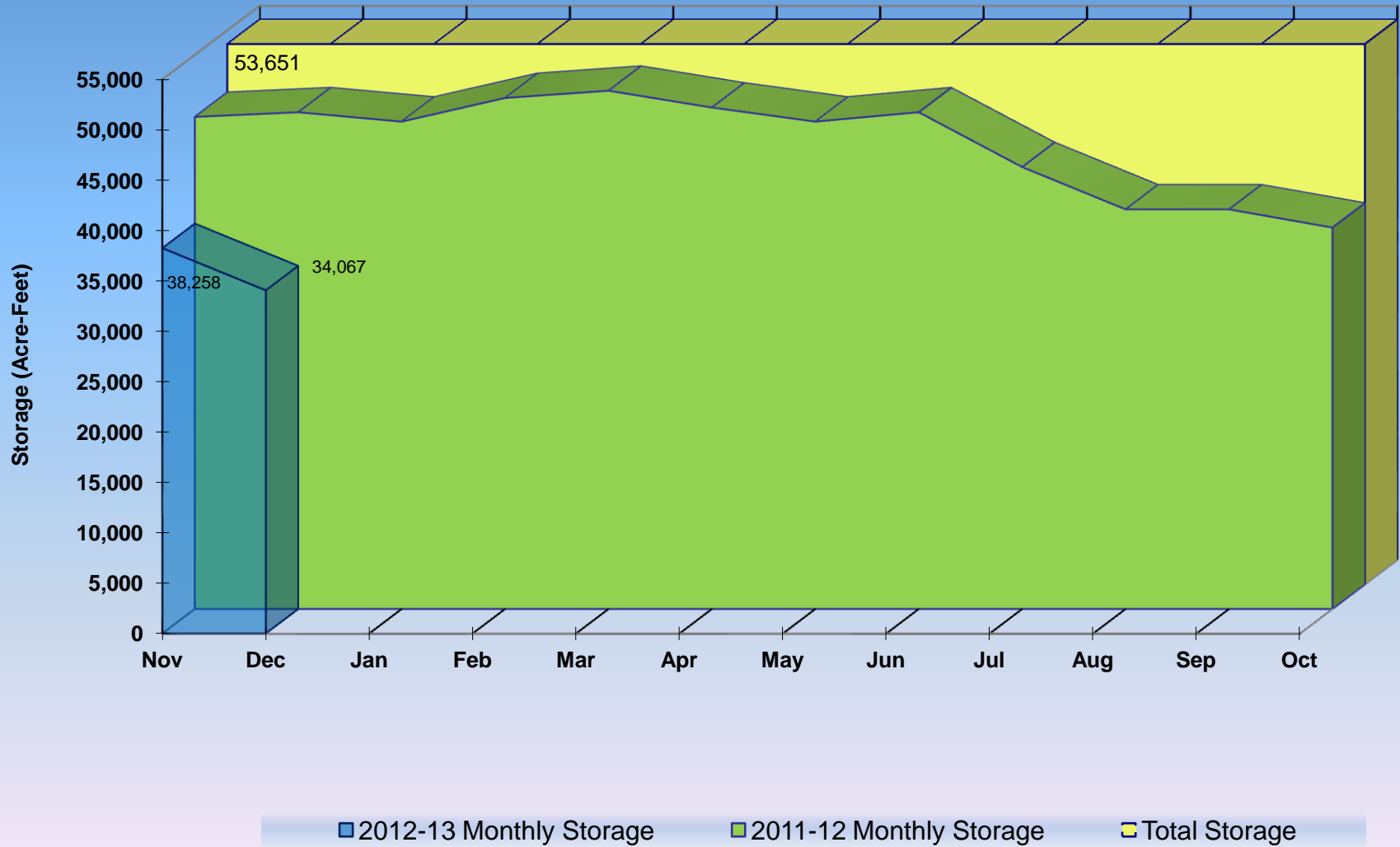
■ 2012-13 Monthly Storage    ■ 2011-12 Monthly Storage    ■ Total Storage

# Cheesman Reservoir (District 80 - Municipal)

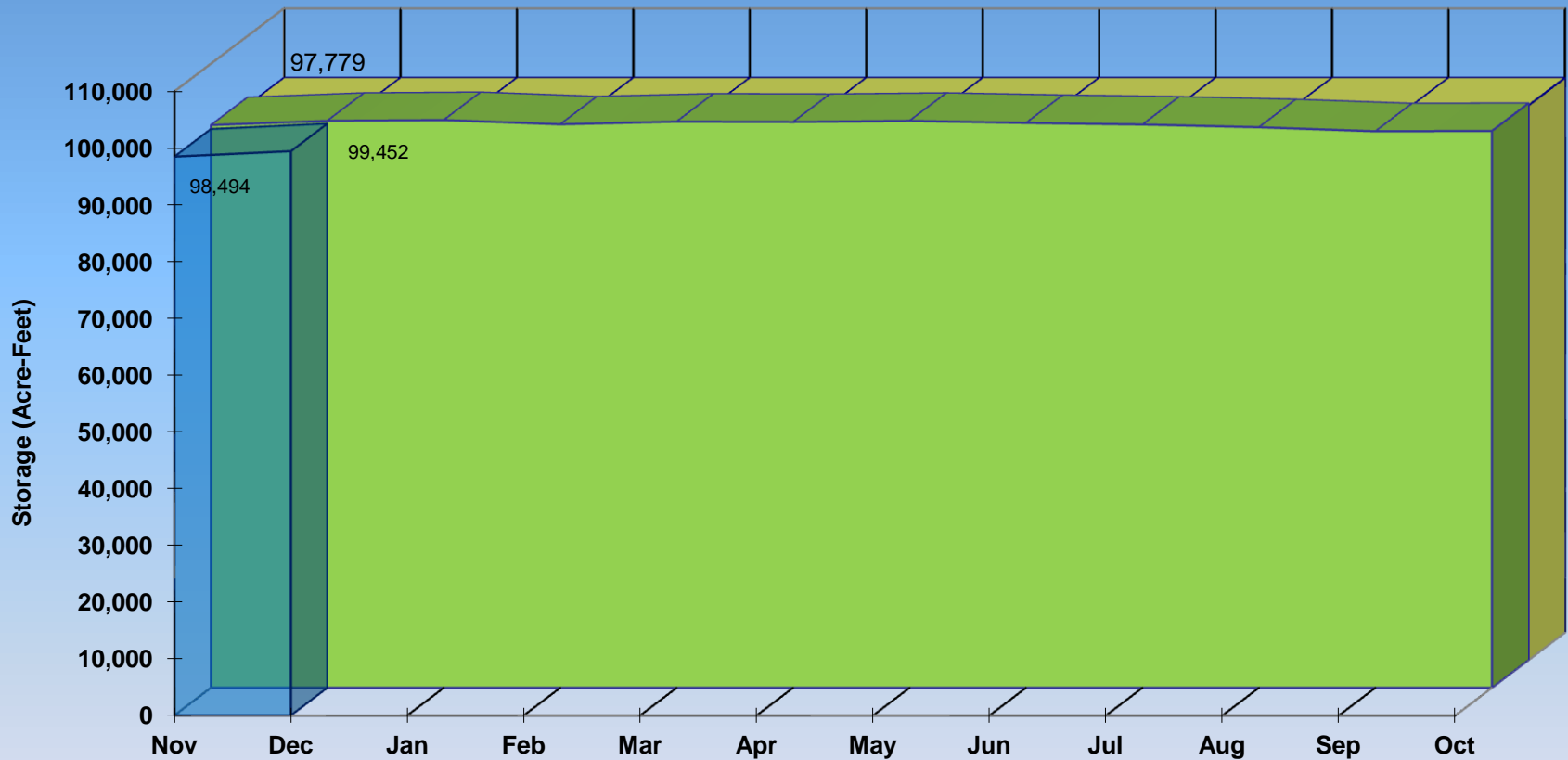


■ 2012-13 Monthly Storage    ■ 2011-12 Monthly Storage    ■ Total Storage

# Spinney Mountain Reservoir (District 23 - Municipal)



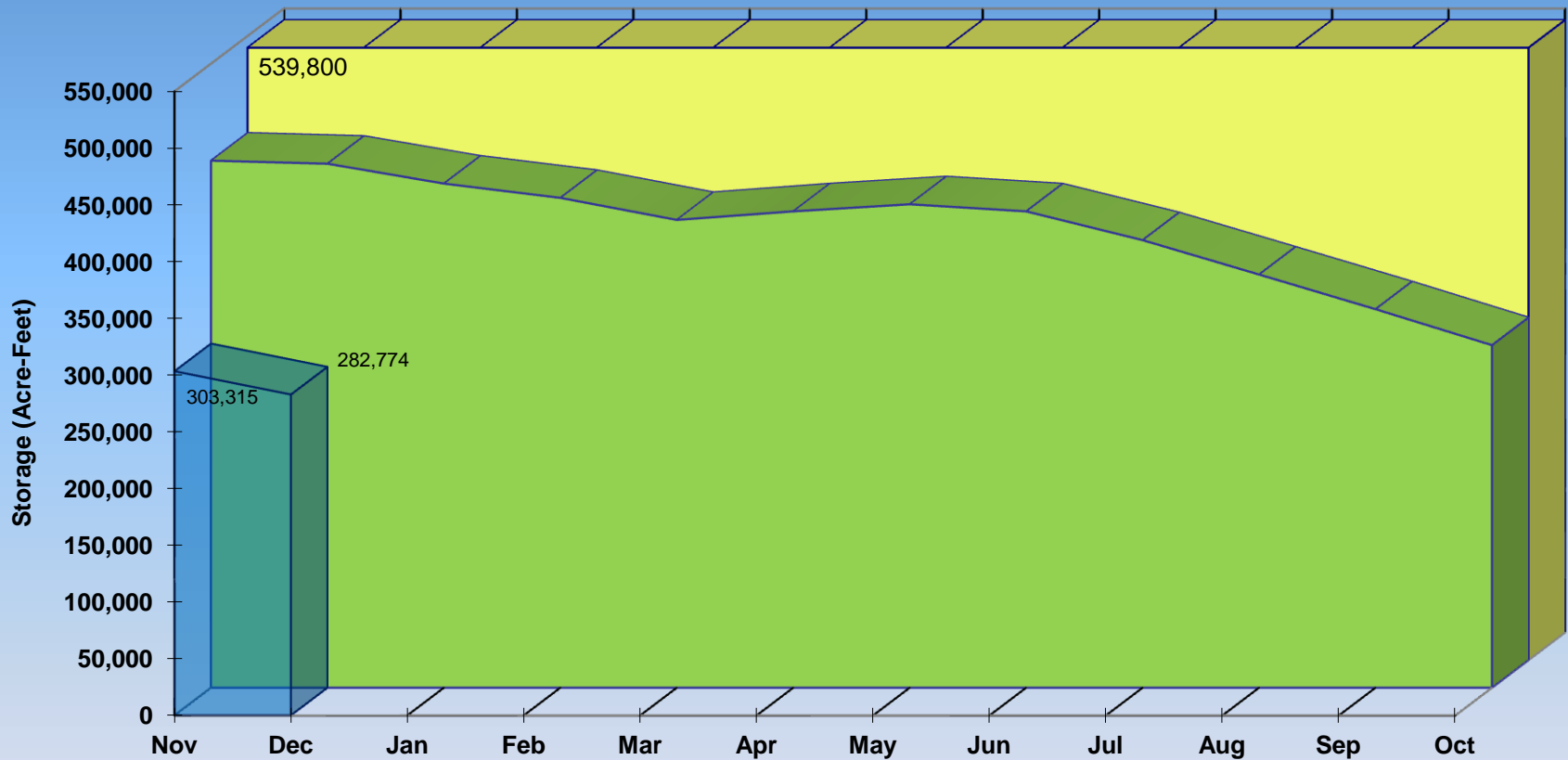
# Eleven Mile Reservoir (District 23 - Municipal)



■ 2012-13 Monthly Storage    ■ 2011-12 Monthly Storage    ■ Total Storage



# Lake Granby



■ 2012-13 Monthly Storage    ■ 2011-12 Monthly Storage    ■ Total Storage

**All data is collected by the personnel of  
Division 1 and is subject to revision.**

