


South Platte Summary

September 2011



Boyd Lake Spillway
Photo by: Jason Smith

Compiled by Lee Cunning, P.E.



**COLORADO DIVISION OF
WATER RESOURCES**

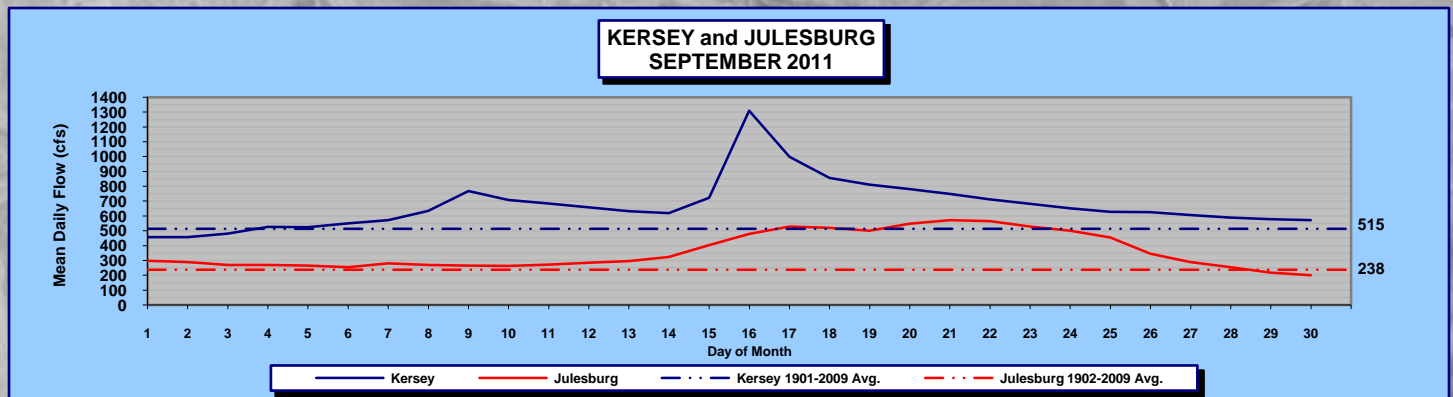
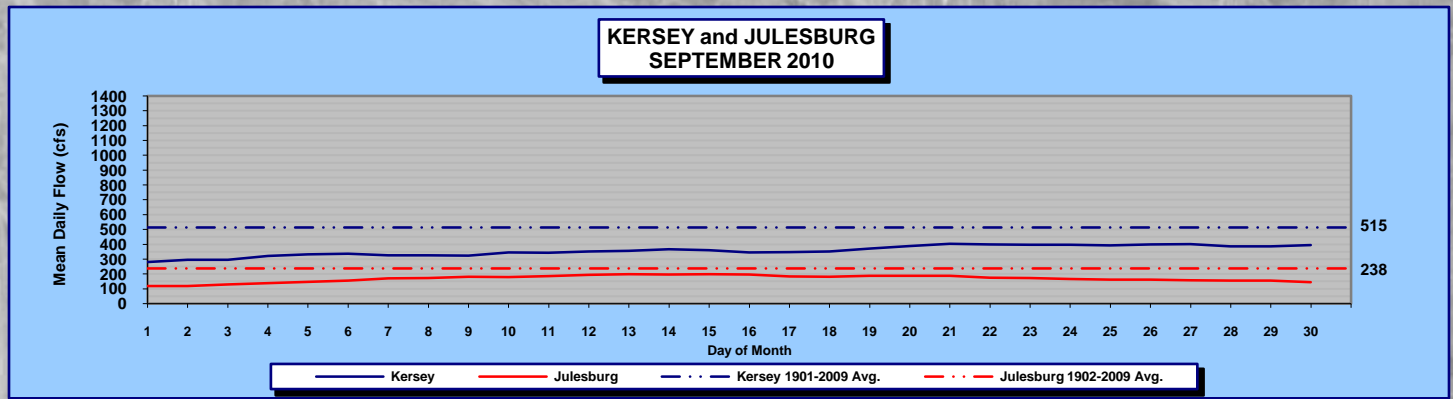
DEPARTMENT OF NATURAL RESOURCES

COLORADO DIVISION OF WATER RESOURCES, DIVISION 1

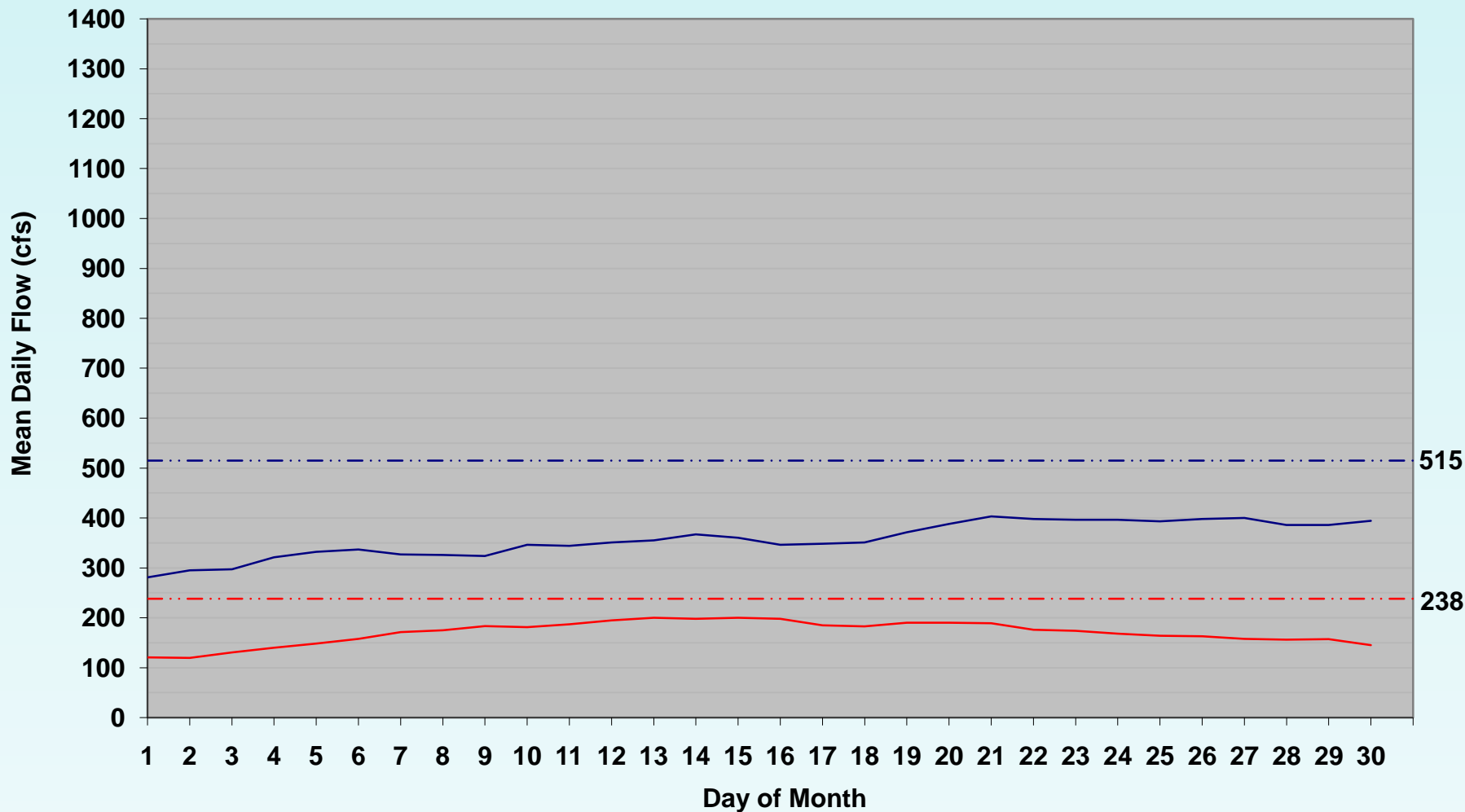
MONTH OF SEPTEMBER 2011

| 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 | 11,872 | 14,096 | 64 | 2,224 | 19% | 62% | 38% | 0 |
| N STERLING | 73,730 | 36,029 | 30,740 | 64 | -5,289 | -15% | 42% | 21% | 0 |
| PREWITT | 28,500 | 20,972 | 19,104 | 64 | -1,868 | -9% | 67% | 74% | 0 |
| JACKSON | 27,257 | 24,389 | 21,845 | 1 | -2,544 | -10% | 80% | 57% | 0 |
| EMPIRE | 37,700 | 16,490 | 12,138 | 1 | -4,352 | -26% | 32% | 22% | 0 |
| RIVERSIDE | 63,113 | 30,543 | 23,160 | 1 | -7,383 | -24% | 37% | 35% | 0 |
| BARR LAKE | 32,152 | 18,530 | 14,067 | 2 | -4,463 | -24% | 44% | 20% | 0 |
| CHEESMAN | 79,064 | 75,855 | 70,091 | 80 | -5,764 | -8% | 89% | 98% | 0 |
| ELEVEN MILE | 97,779 | 98,562 | 99,040 | 23 | 478 | 0% | 100% | 100% | 1,261 |
| SPINNEY | 53,651 | 51,206 | 48,612 | 23 | -2,594 | -5% | 91% | 82% | 0 |
| ANTERO | 20,015 | 15,839 | 15,780 | 23 | -59 | 0% | 79% | 96% | 0 |

| RIVER GAGES | MEAN DAILY FLOW (CFS) |
|-----------------------------------|-----------------------|
| KERSEY | 671 |
| JULESBURG | 361 |
| THIS MONTH LAST YEAR | |
| KERSEY | 357 |
| JULESBURG | 170 |
| MEAN FOR PERIOD OF RECORD* | |
| KERSEY | 515 |
| JULESBURG | 238 |
| * 1901-2010 | |
| 1902-2010 | |

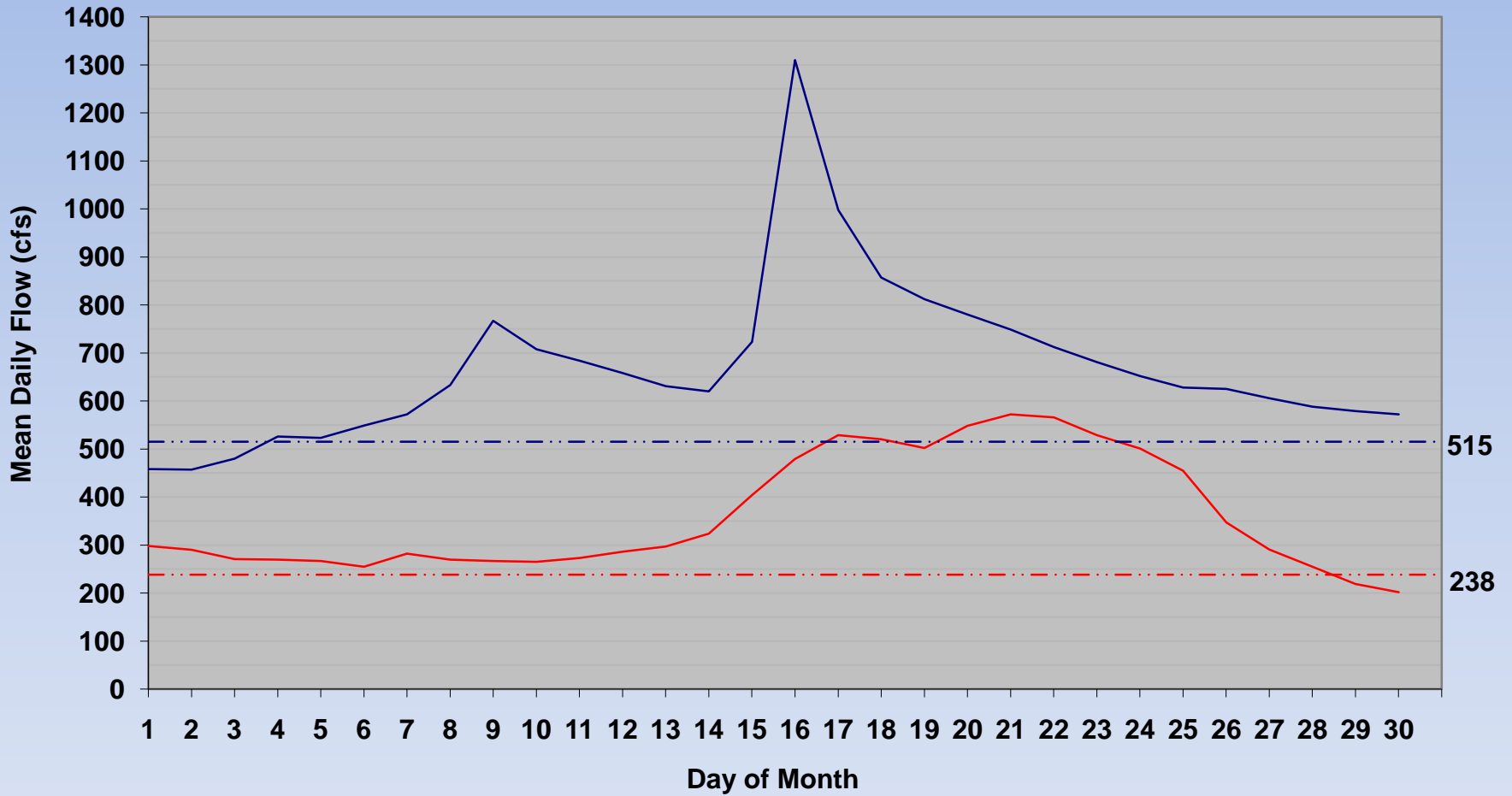


KERSEY and JULESBURG SEPTEMBER 2010



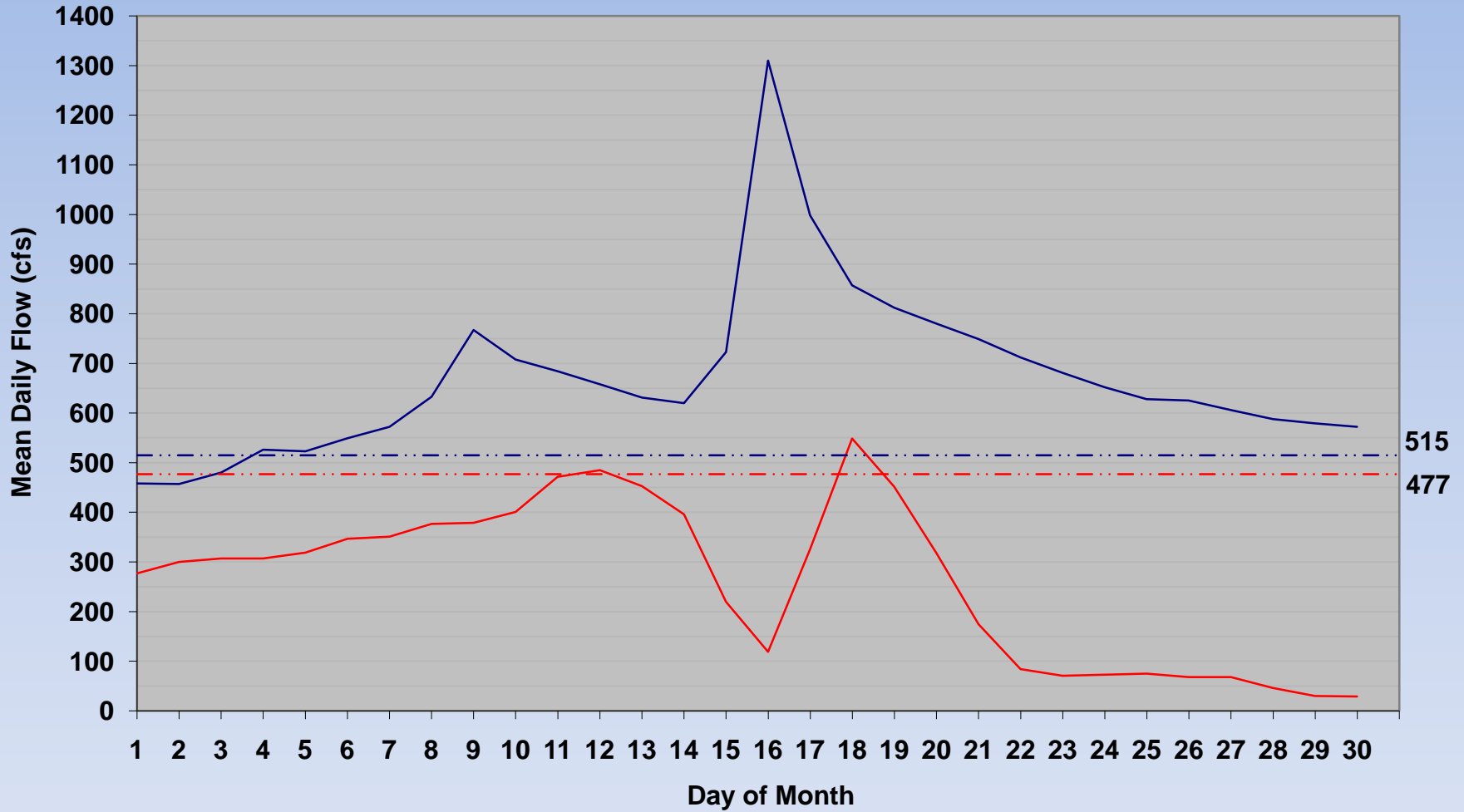
— Kersey — Julesburg - · - Kersey 1901-2009 Avg. - · - Julesburg 1902-2009 Avg.

KERSEY and JULESBURG SEPTEMBER 2011



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

KERSEY and BALZAC SEPTEMBER 2011



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

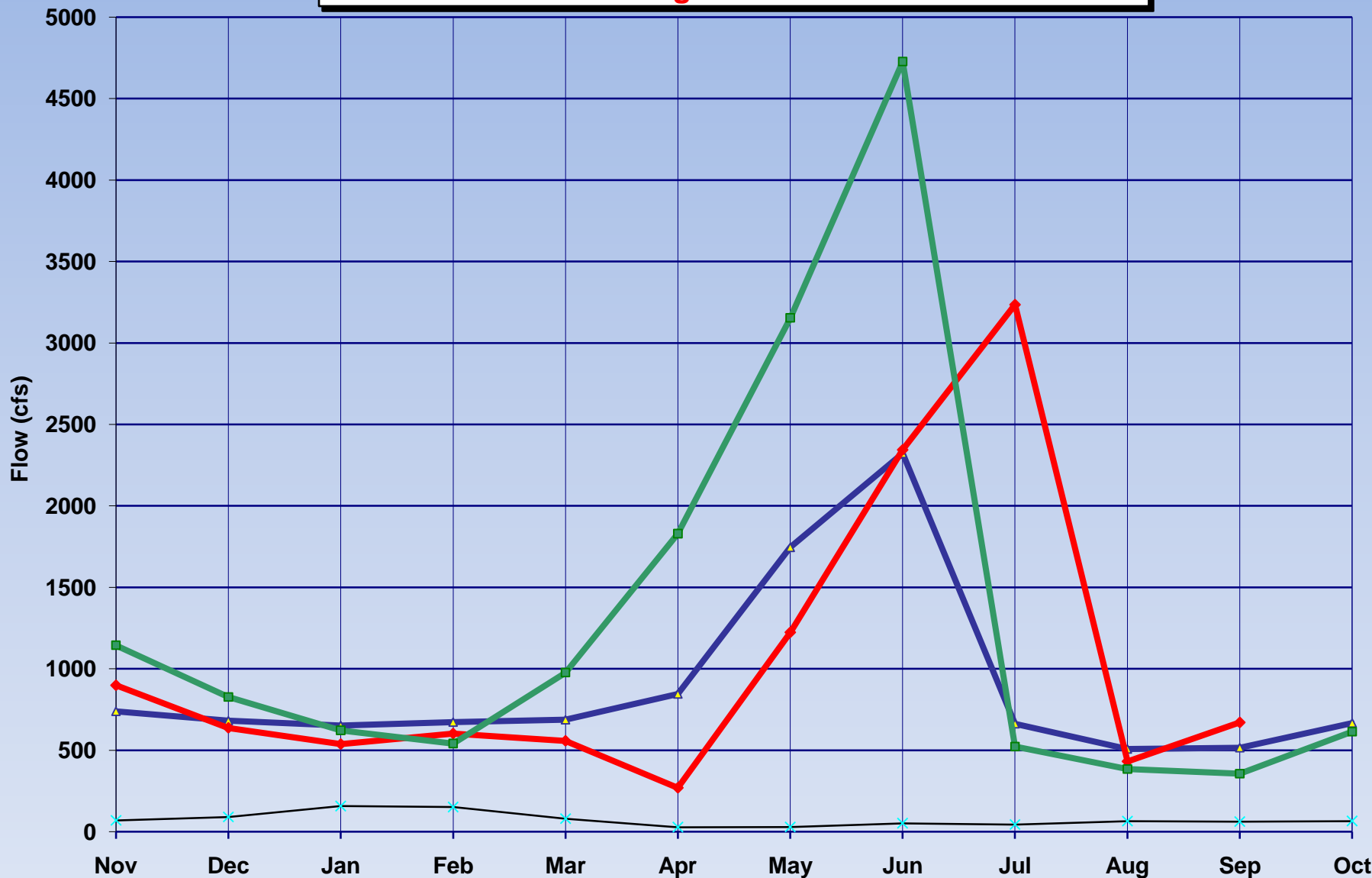
South Platte River Monthly Stream Flow (cfs) Statistics

| South Platte River at Kersey | | | | | | | South Platte River at Julesburg | | | | | | |
|------------------------------|---------------------------|--------------------------|------|--------------------------|------|------------------------------------|---------------------------------|---------------------------|--------------------------|------|--------------------------|------|------------------------------------|
| Month | Historic* Mean Flow | Historic* Max Flow | Year | Historic* Min Flow | Year | IY 2011 Mean Monthly Flow | Month | Historic* Mean Flow | Historic* Max Flow | Year | Historic* Min Flow | Year | IY 2011 Mean Monthly Flow |
| Nov | 740 | 3650 | 1984 | 70 | 1934 | 888 | Nov | 335 | 2900 | 1984 | 4.2 | 1903 | 186 |
| Dec | 682 | 1890 | 1961 | 91 | 1934 | 638 | Dec | 397 | 1820 | 1984 | 13 | 2002 | 249 |
| Jan | 652 | 2160 | 1974 | 158 | 1935 | 538 | Jan | 509 | 2510 | 1970 | 21 | 2003 | 404 |
| Feb | 674 | 3060 | 1914 | 152 | 1935 | 603 | Feb | 582 | 3220 | 1930 | 29 | 2005 | 500 |
| Mar | 688 | 3470 | 1983 | 80 | 1935 | 558 | Mar | 522 | 12900 | 1910 | 15 | 1904 | 205 |
| Apr | 846 | 18100 | 1942 | 28 | 1955 | 270 | Apr | 523 | 14400 | 1942 | 4.0 | 1904 | 157 |
| May | 1746 | 26100 | 1973 | 29 | 1955 | 1224 | May | 1003 | 18100 | 1973 | 12 | 1911 | 550 |
| Jun | 2323 | 31000 | 1921 | 52 | 1954 | 2717 | Jun | 1430 | 30800 | 1921 | 2.0 | 1910 | 1141 |
| Jul | 664 | 12600 | 1983 | 44 | 1955 | 3235 | Jul | 295 | 12600 | 1983 | 0.0 | 1903 | 2410 |
| Aug | 509 | 9690 | 1951 | 65 | 1934 | 432 | Aug | 180 | 8920 | 1968 | 0.0 | 1903 | 284 |
| Sep | 517 | 14200 | 1938 | 62 | 1940 | 671 | Sep | 239 | 7130 | 1938 | 2.0 | 1902 | 361 |
| Oct | 668 | 6180 | 1984 | 66 | 1954 | | Oct | 301 | 3130 | 1984 | 4.2 | 1903 | |
| *Period of record 1902-2010 | | | | | | | *Period of record 1902-2010 | | | | | | |



South Platte River at Kersey

Irrigation Year

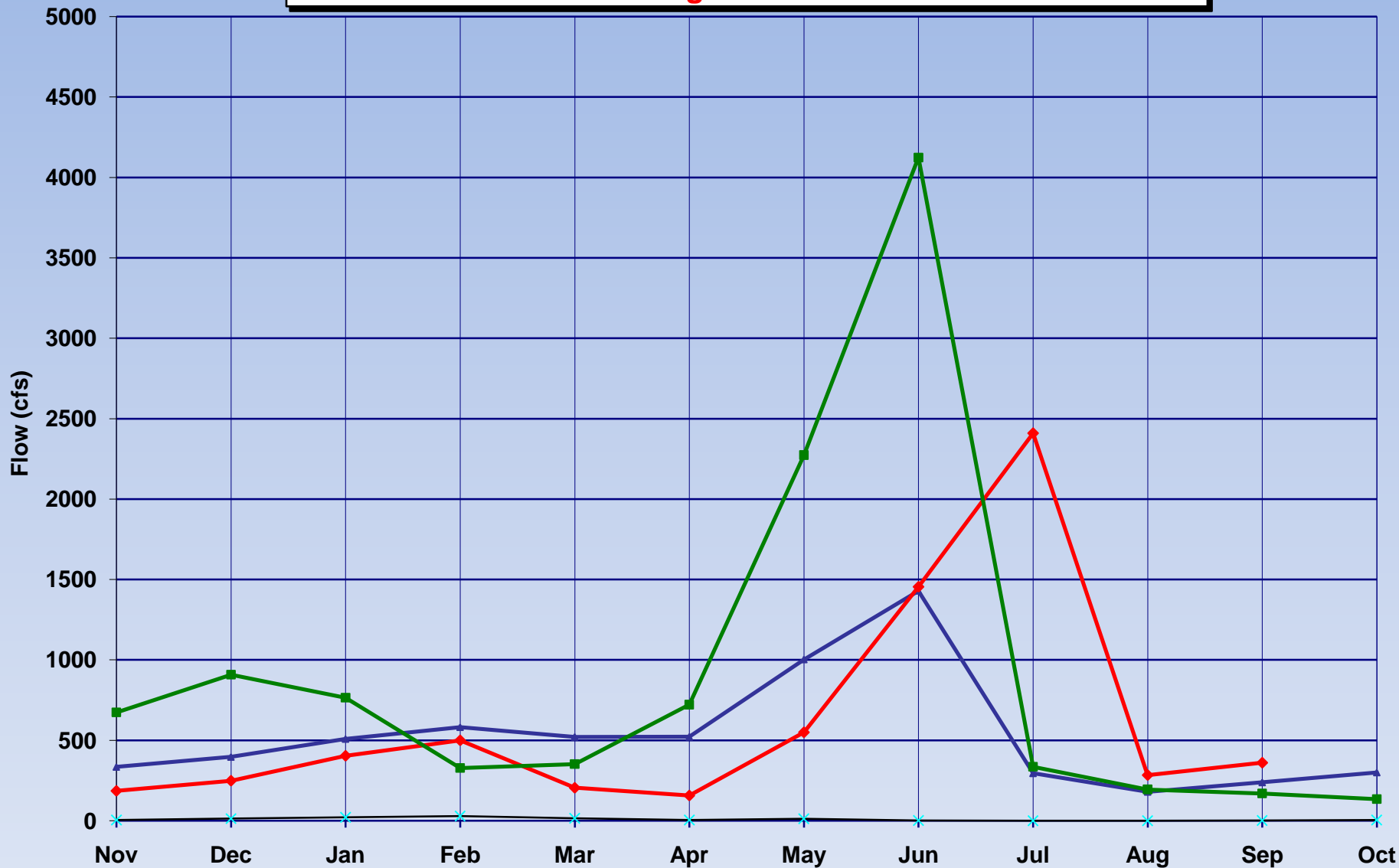


Historic* Mean Flow Historic* Min Flow 2010-2011 Mean Flow 2009-2010 Mean Flow

*1901-2010

South Platte River at Julesburg

Irrigation Year



Historic* Mean Flow

Historic* Min Flow

2010-2011 Mean Flow

2009-2010 Mean Flow

*1902-2010

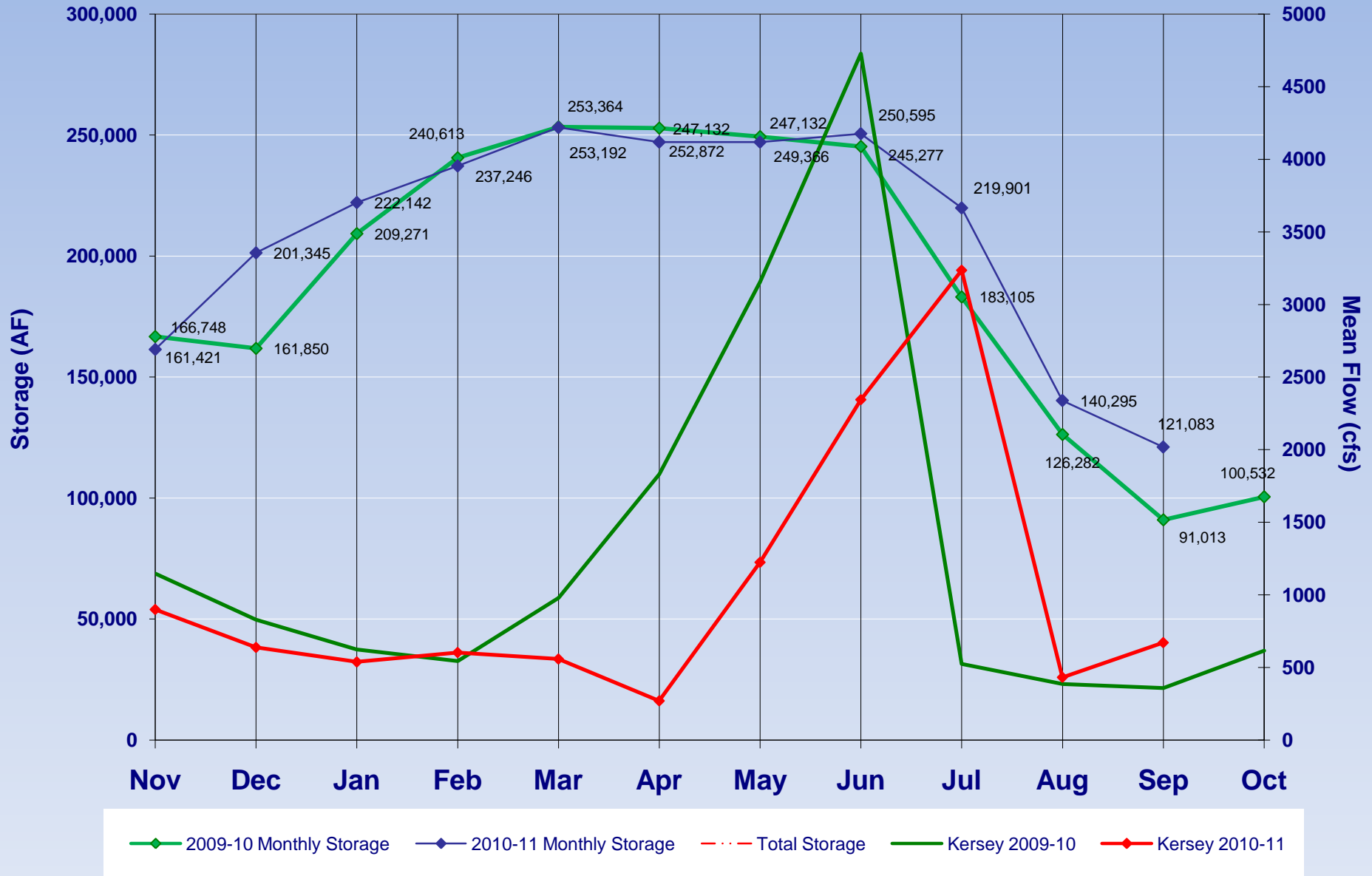
**Next four slides show Reservoir
Storage above and below Kersey**



Submerged Flume
*not in District 4

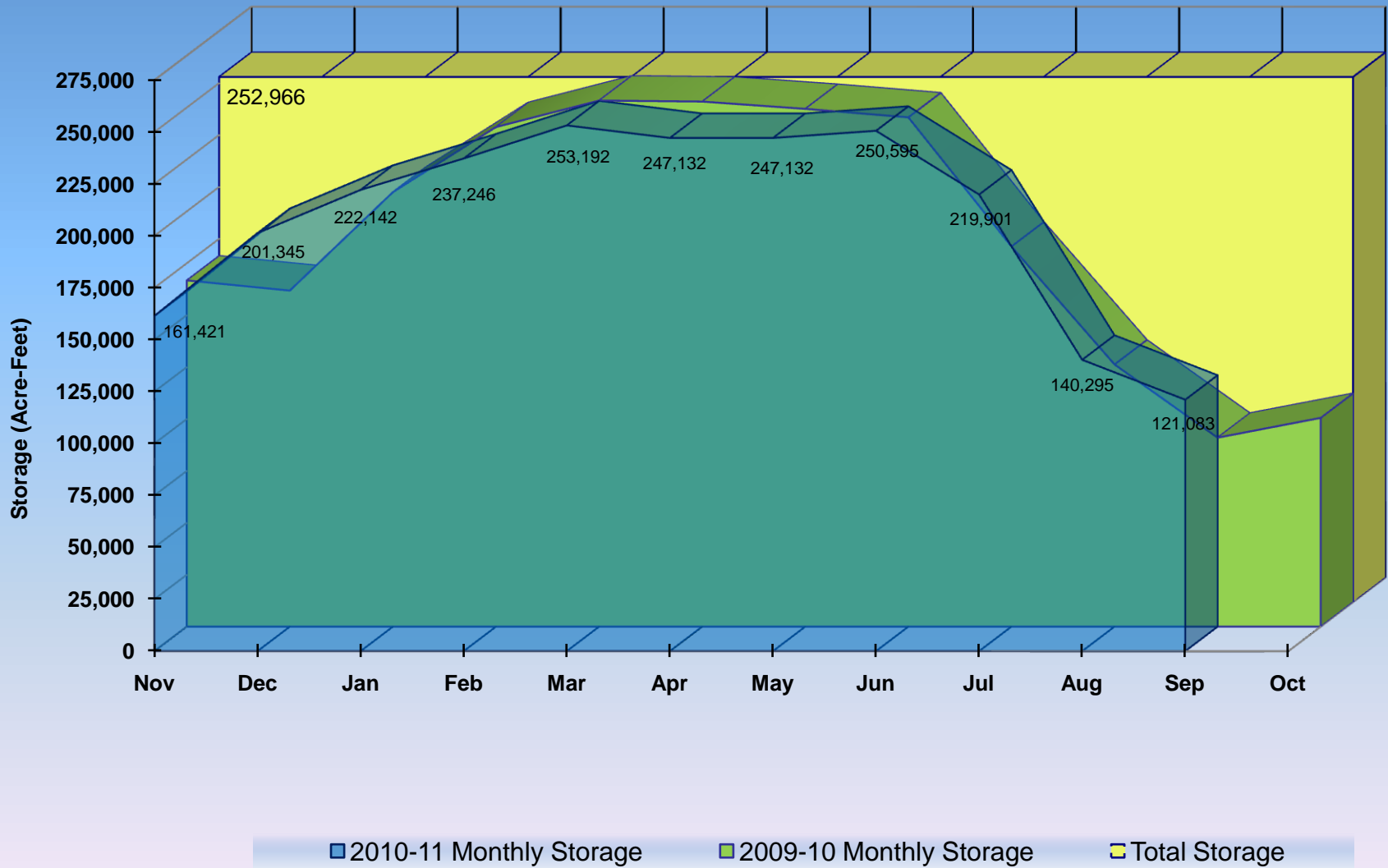
Reservoir Storage below Kersey

Selected Reservoirs*



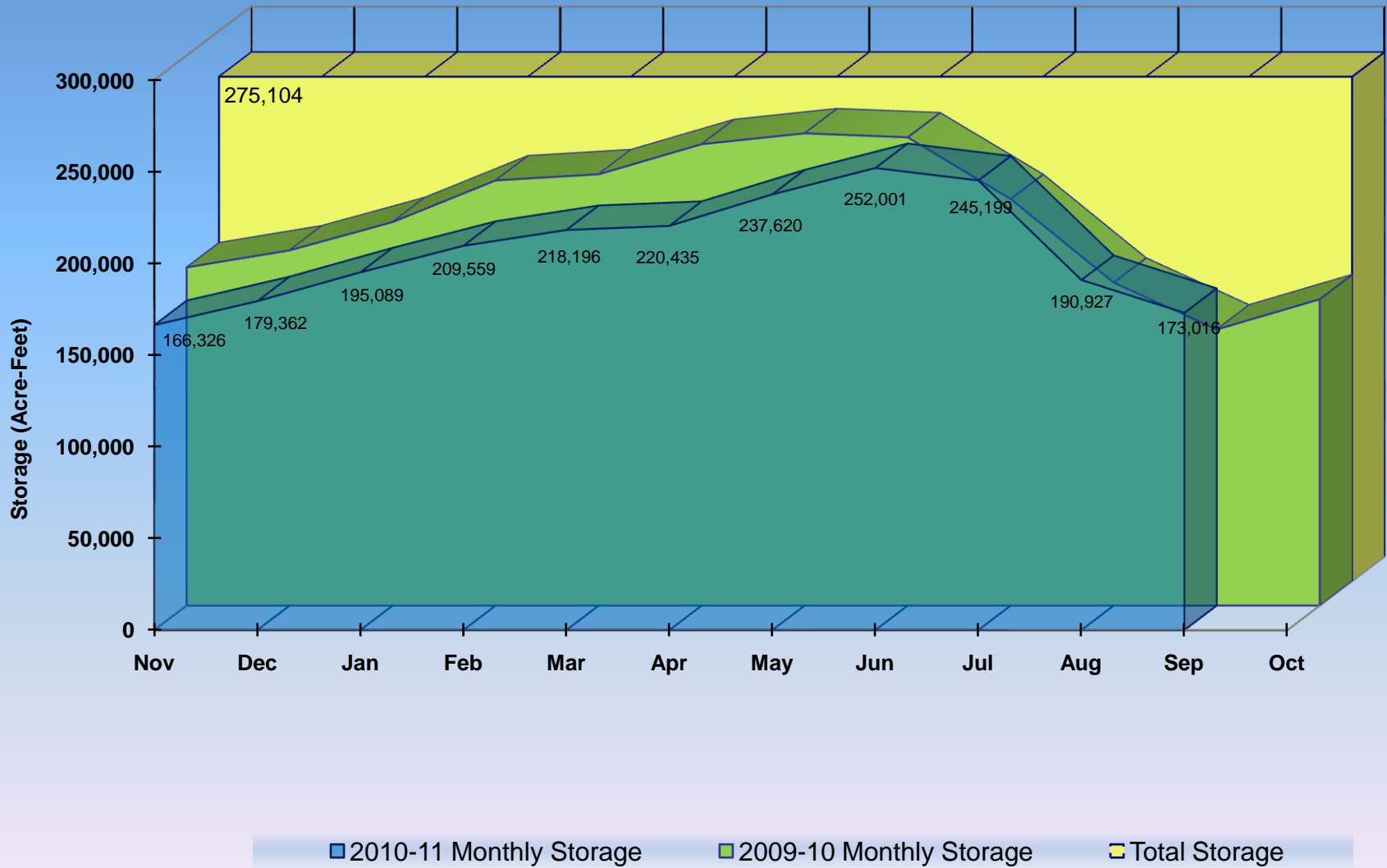
*Empire, Riverside, Jackson, Prewitt, North Sterling, & Julesburg

South Platte Reservoir Storage below Kersey*



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

South Platte Reservoir Storage above Kersey*

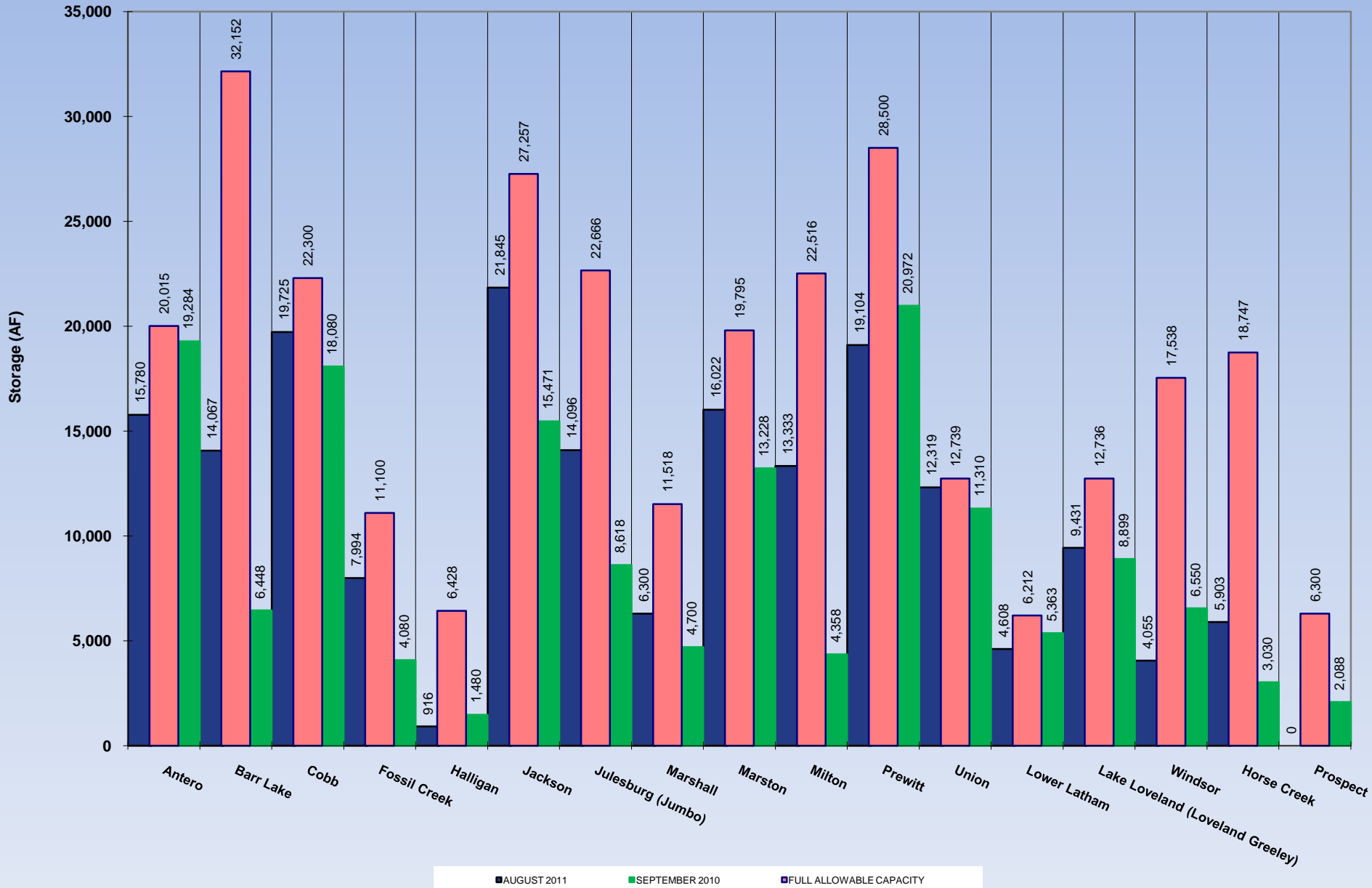


*Barr, Cobb, Fossil Crk, Halligan, Marshall, Milton, Union, Standley, Lower Latham, Boyd, Loveland, Windsor, Horse Crk, & Prospect

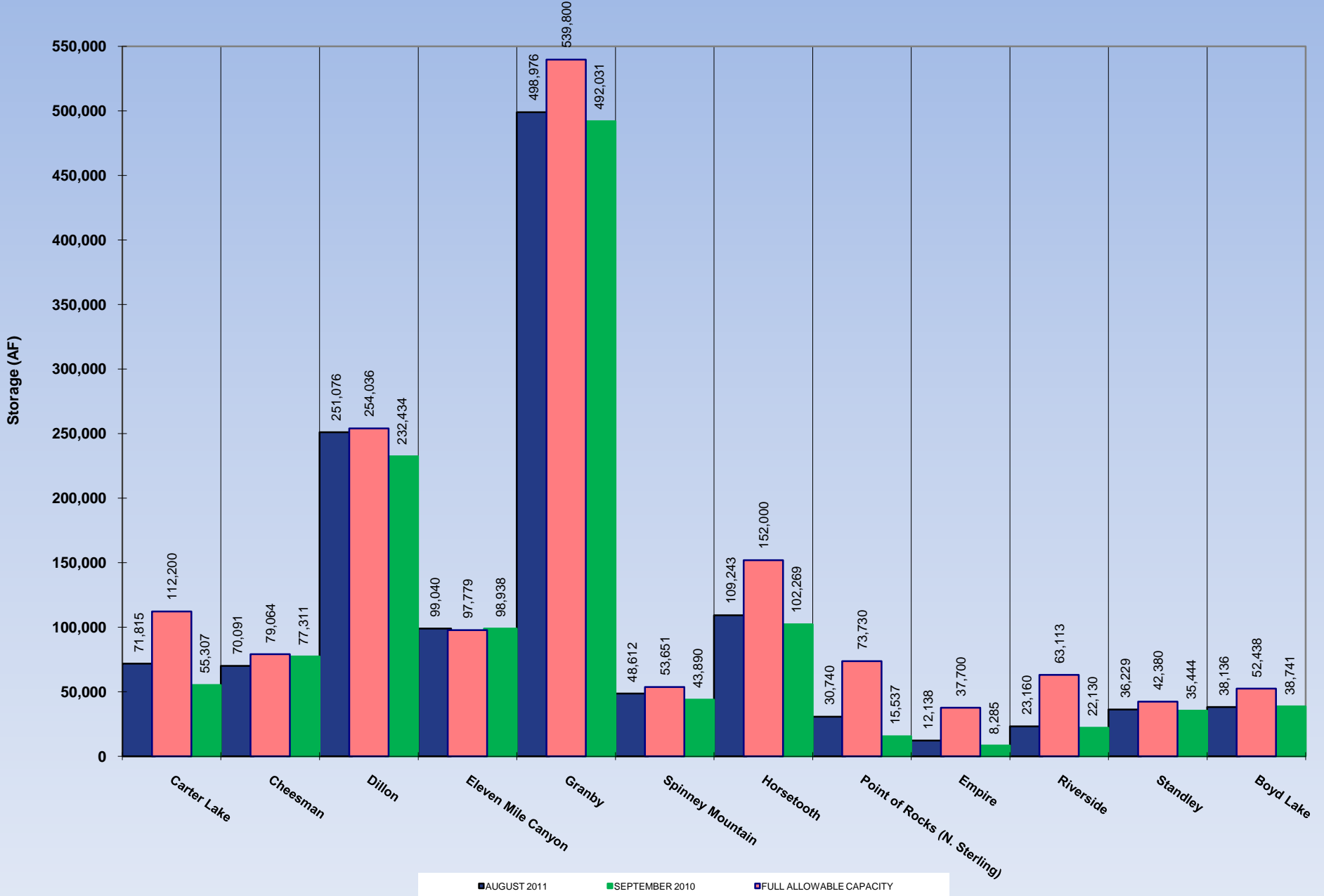
Individual Reservoir Storage Follows



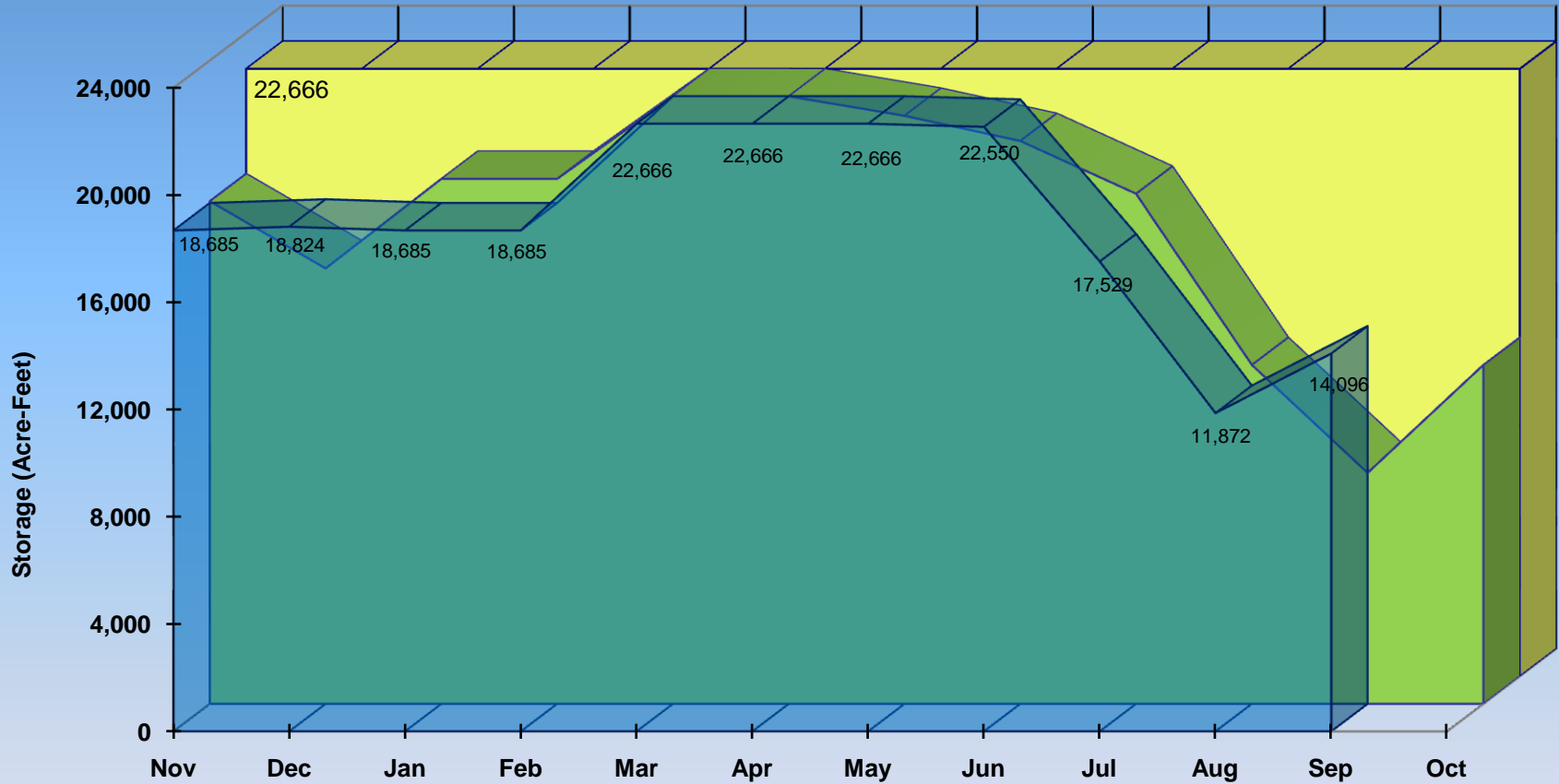
September Reservoir Change in Storage 2010 versus 2011



September Reservoir Change in Storage 2010 versus 2011



Julesburg Reservoir (District 64 - Agricultural)

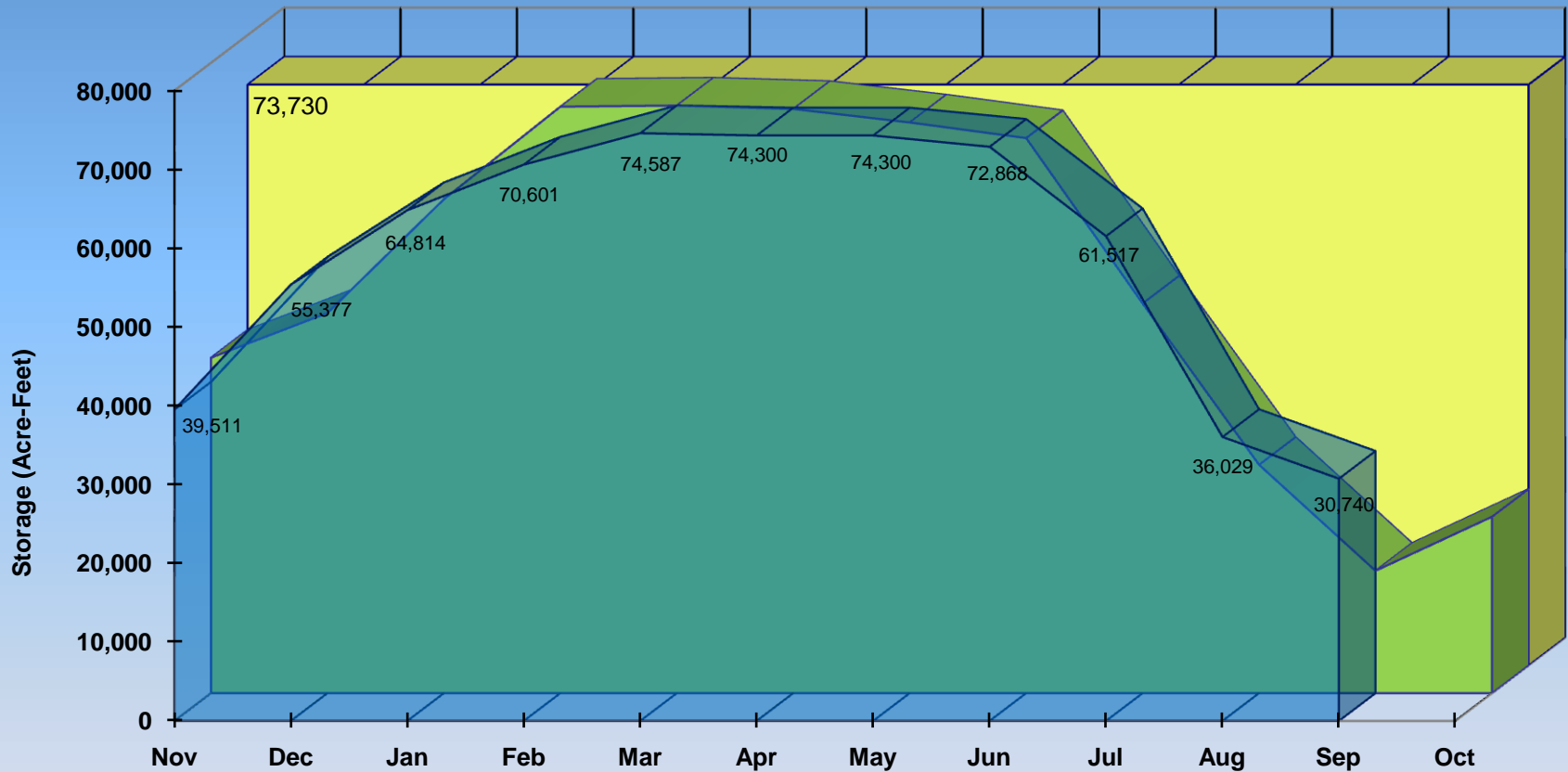


2010-11 Monthly Storage

2009-10 Monthly Storage

Total Storage

North Sterling Reservoir (District 64- Agricultural)

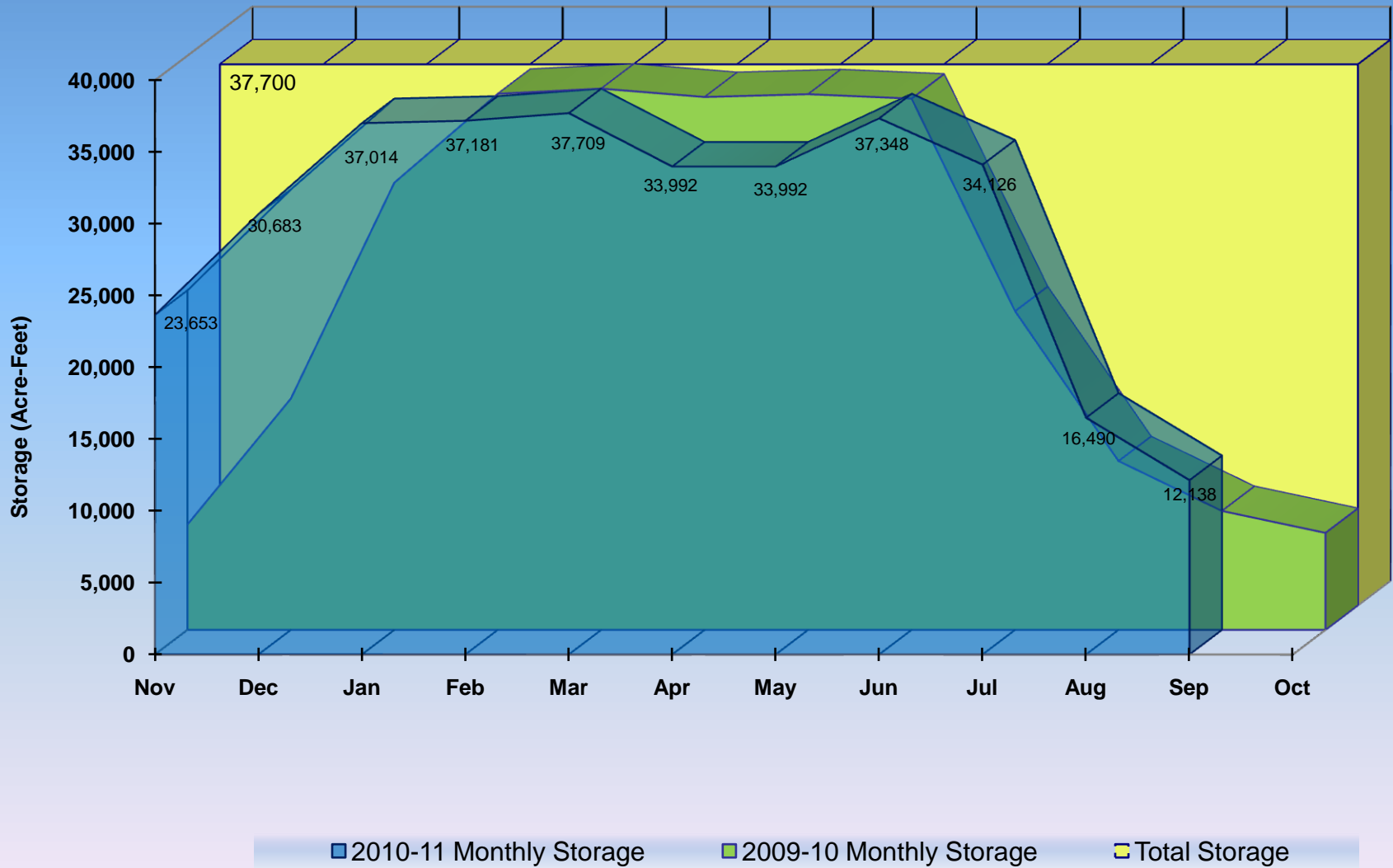


■ 2010-11 Monthly Storage

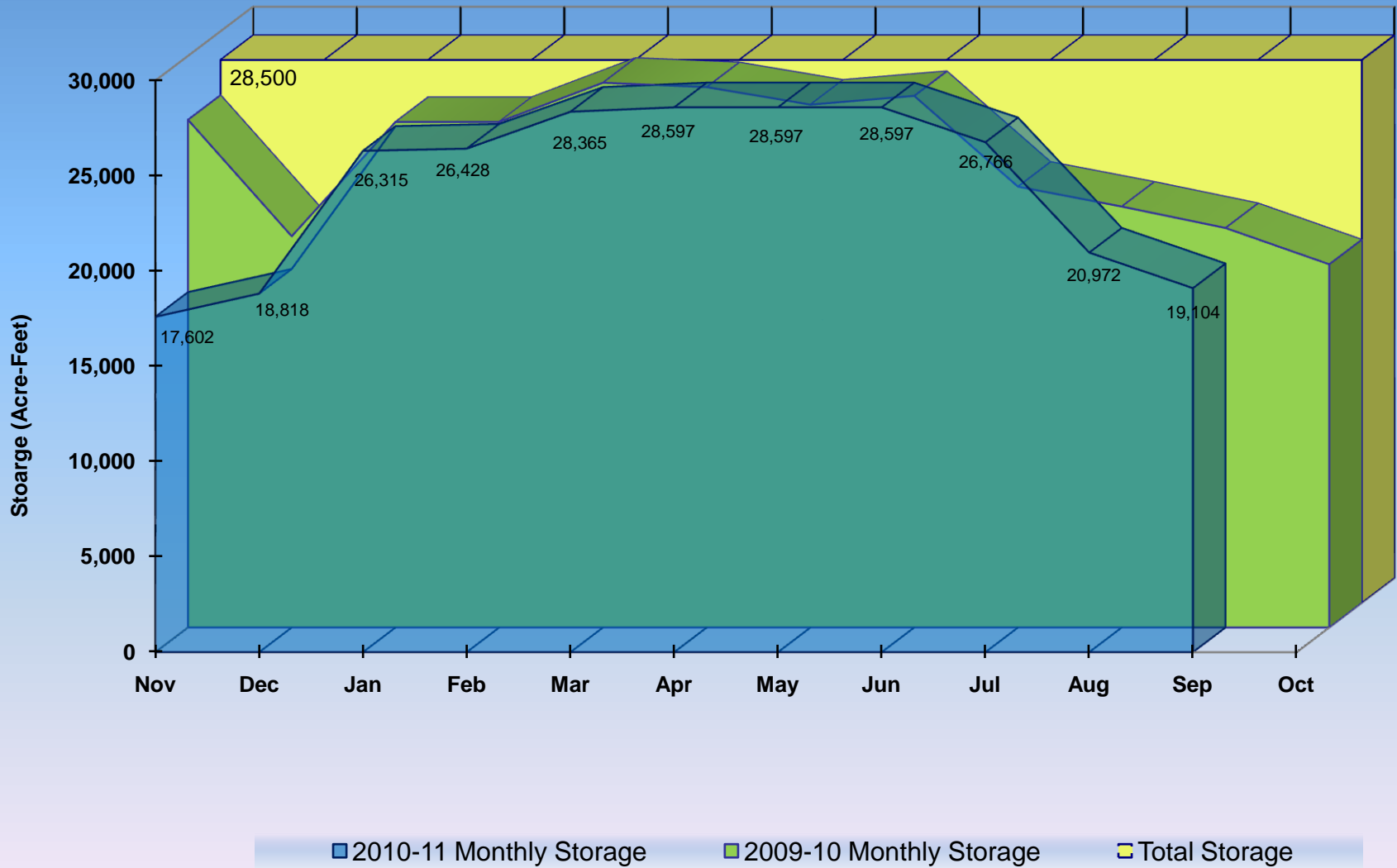
■ 2009-10 Monthly Storage

■ Total Storage

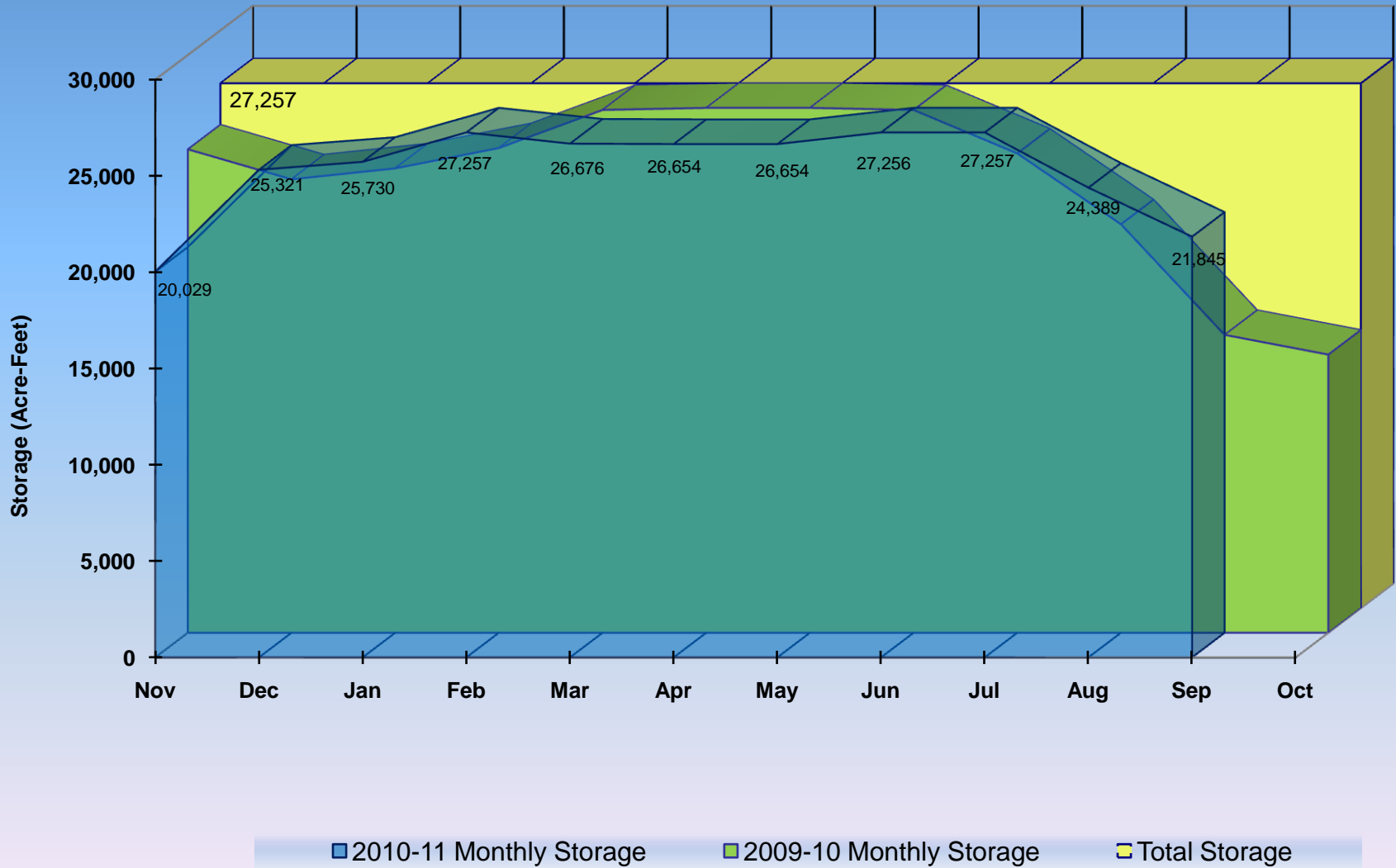
Empire Reservoir (District 1- Agricultural)



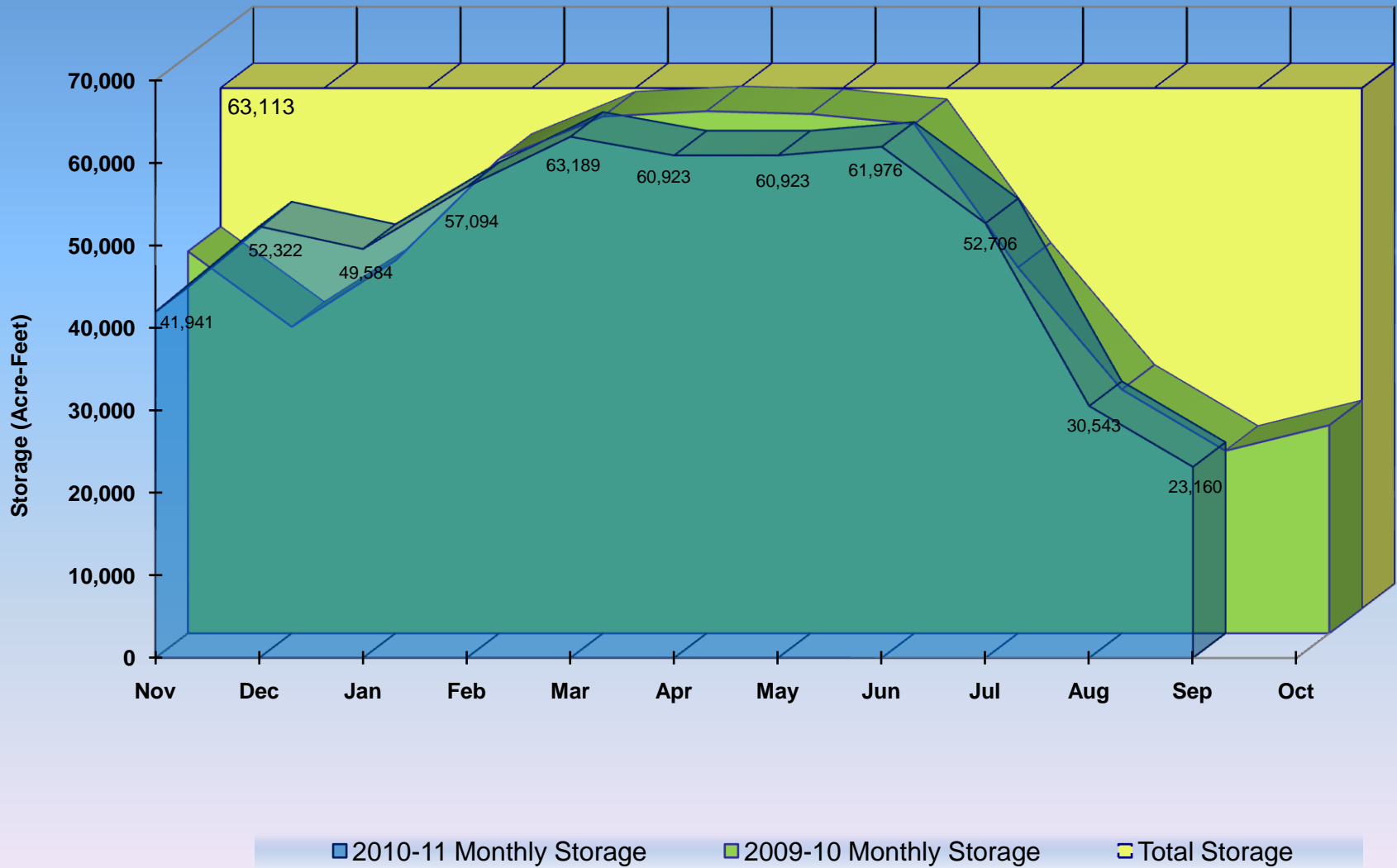
Prewitt Reservoir (District 64- Agricultural)



Jackson Reservoir (District 1- Agricultural)

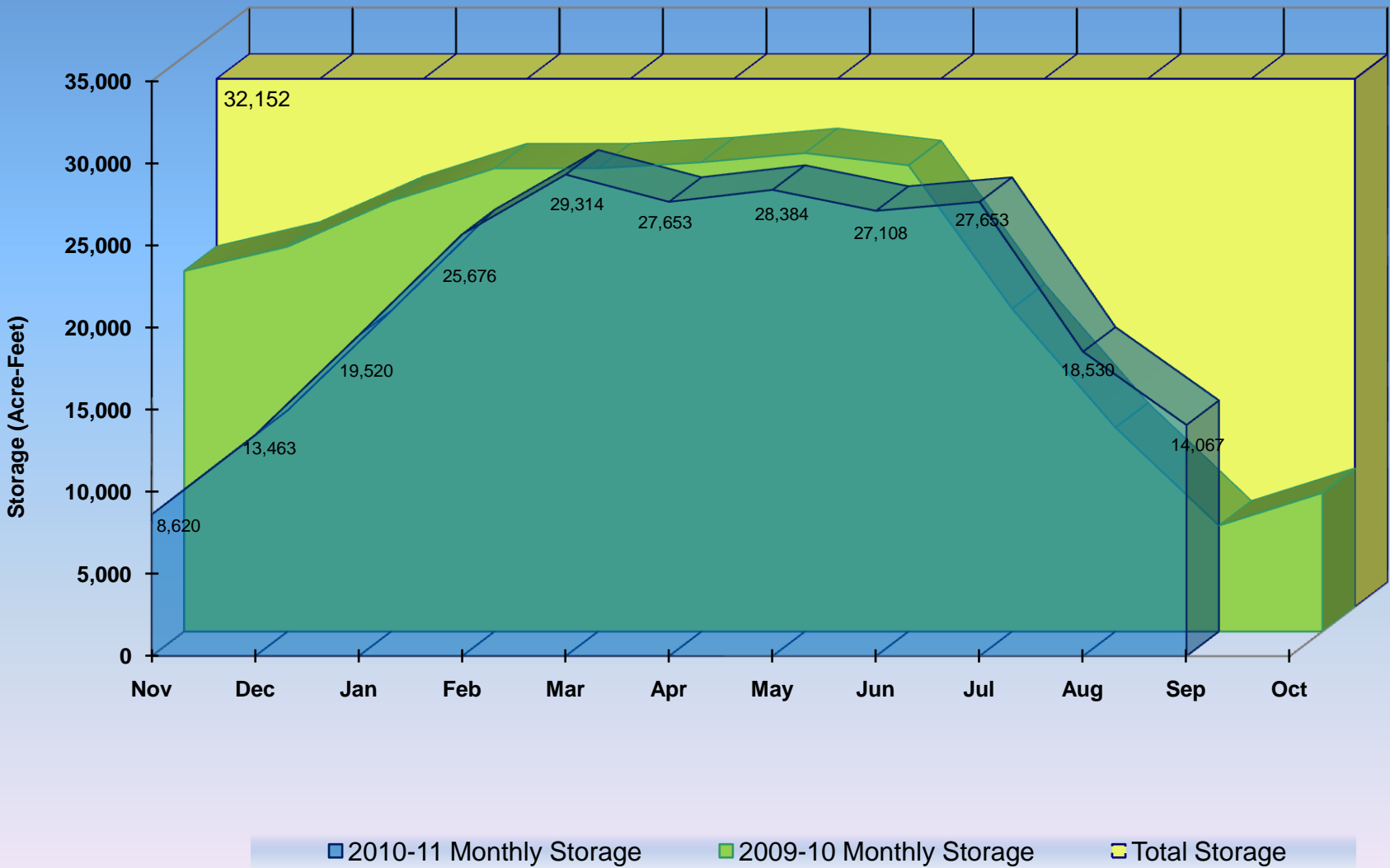


Riverside Reservoir (District 1 - Agricultural)

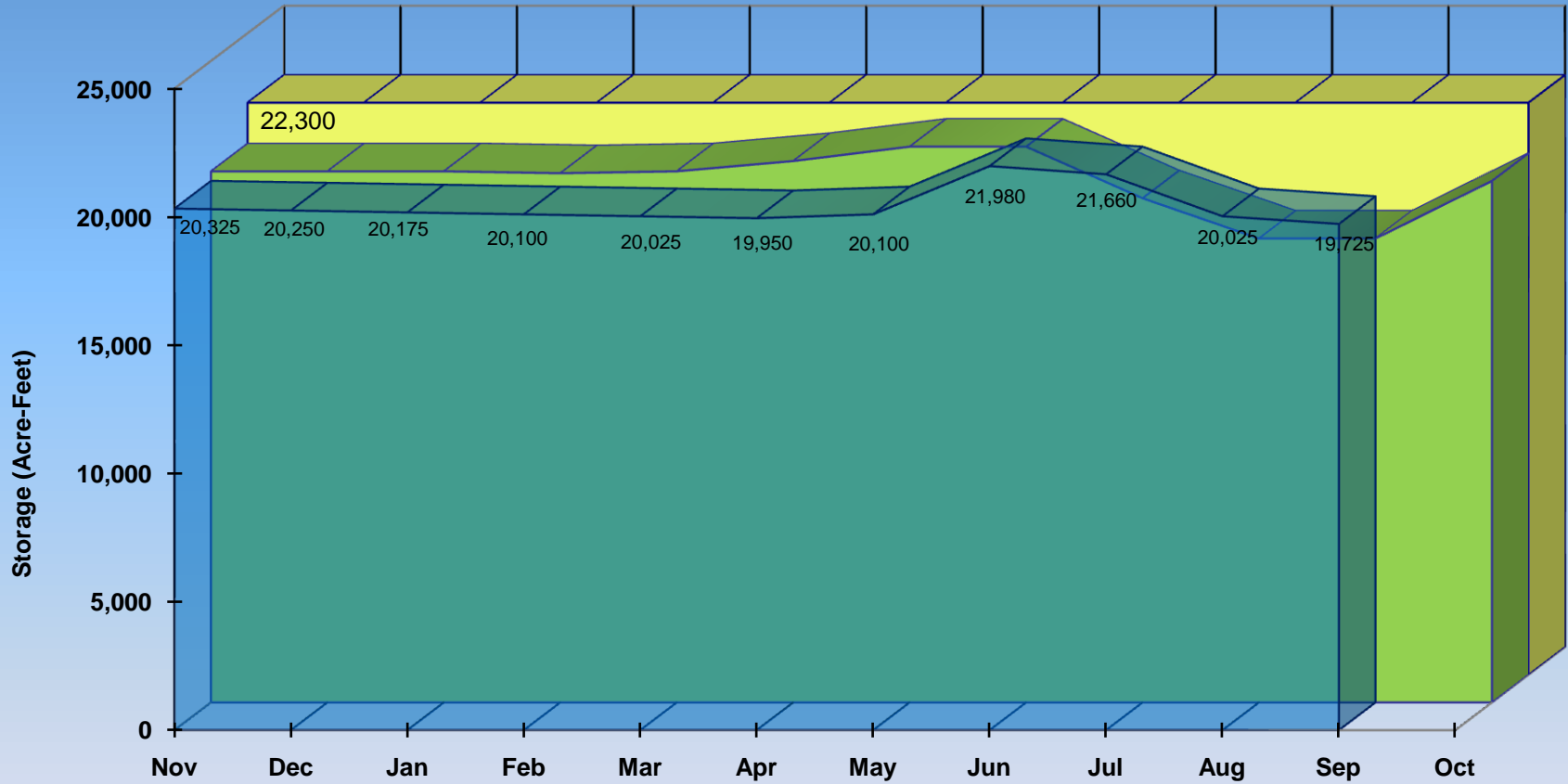


Barr Lake

(District 2 - Agricultural)

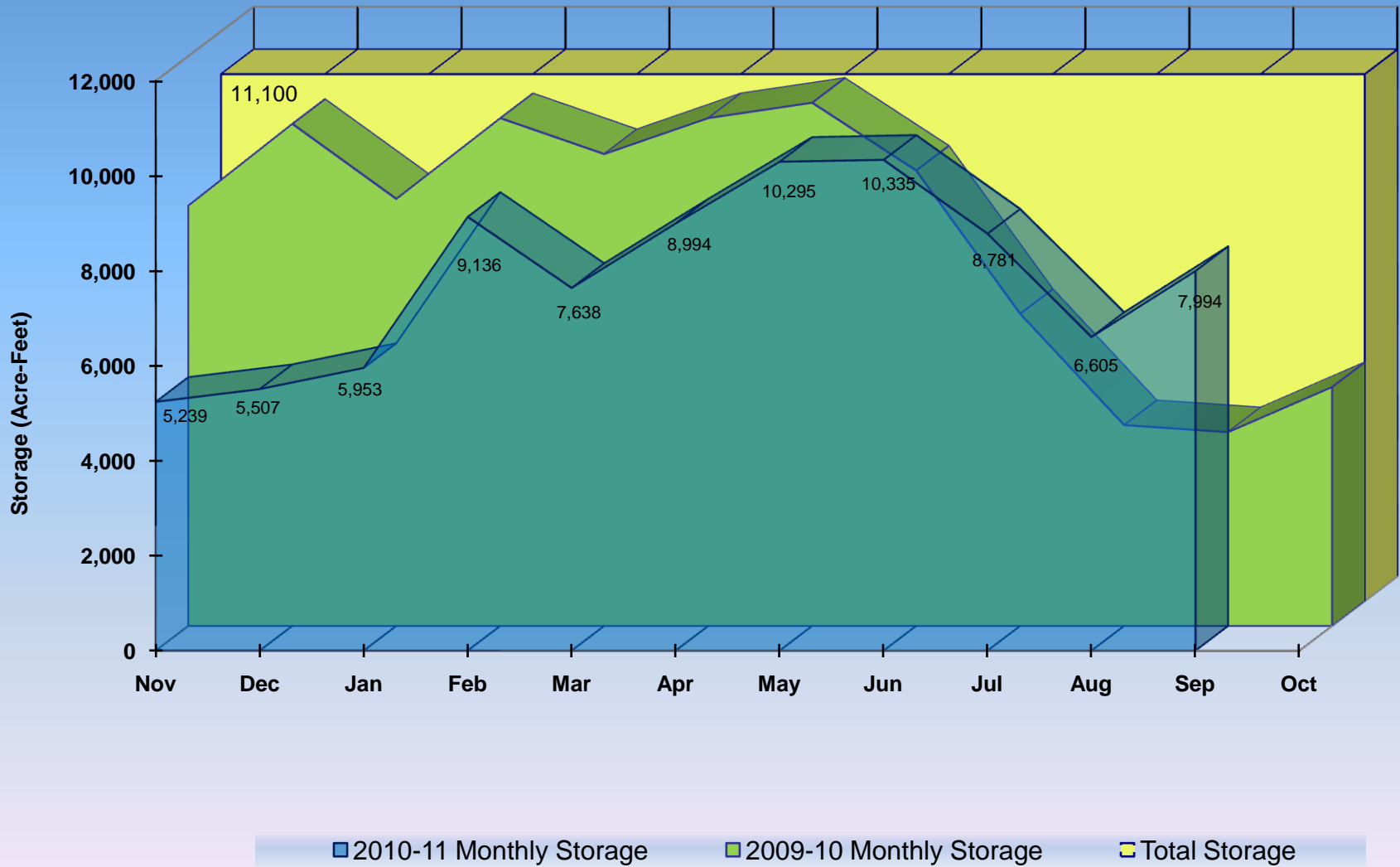


Cobb Lake (District 3, Poudre River - Agricultural)

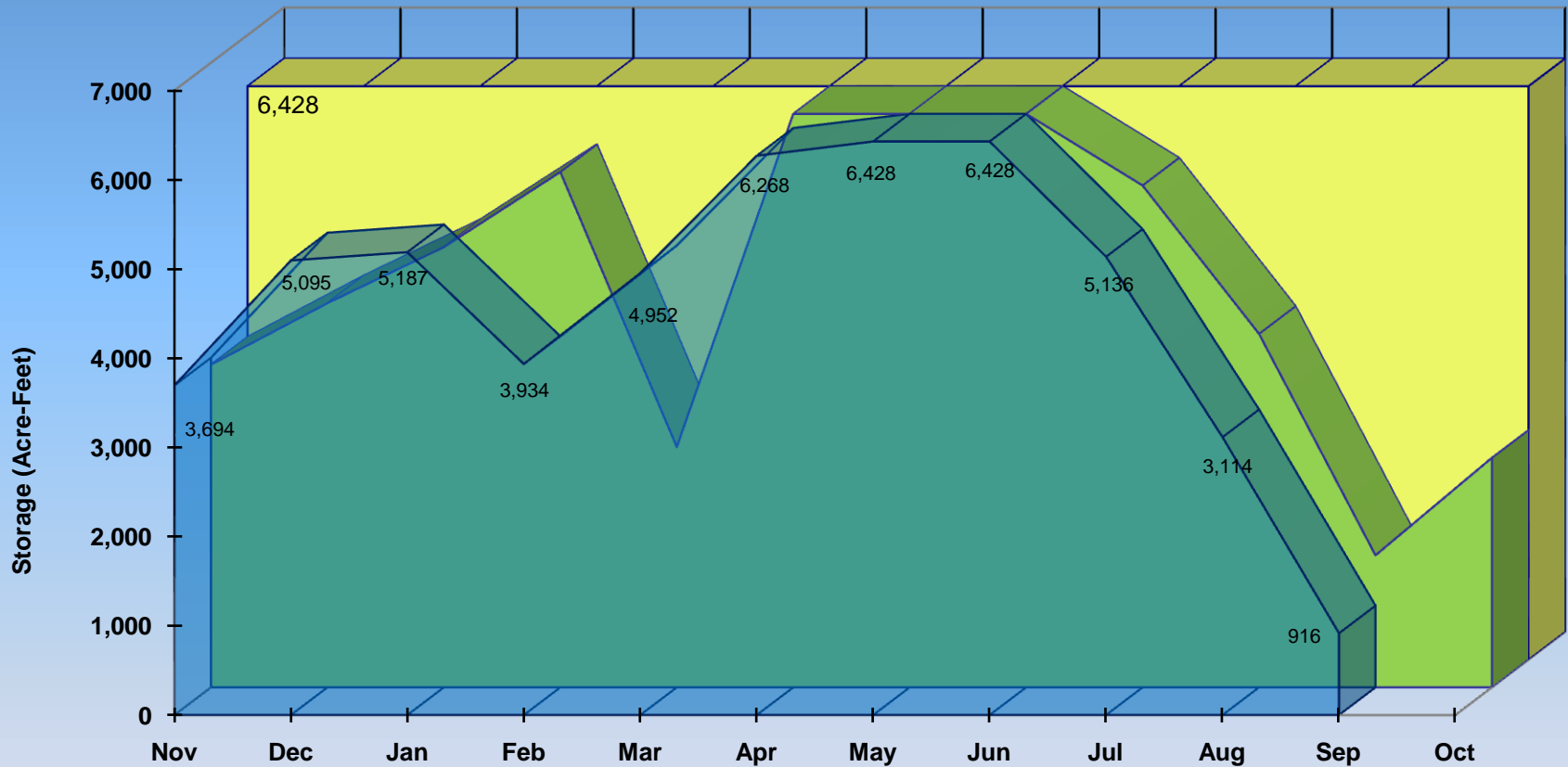


■ 2010-11 Monthly Storage
 ■ 2009-10 Monthly Storage
 ■ Total Storage

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

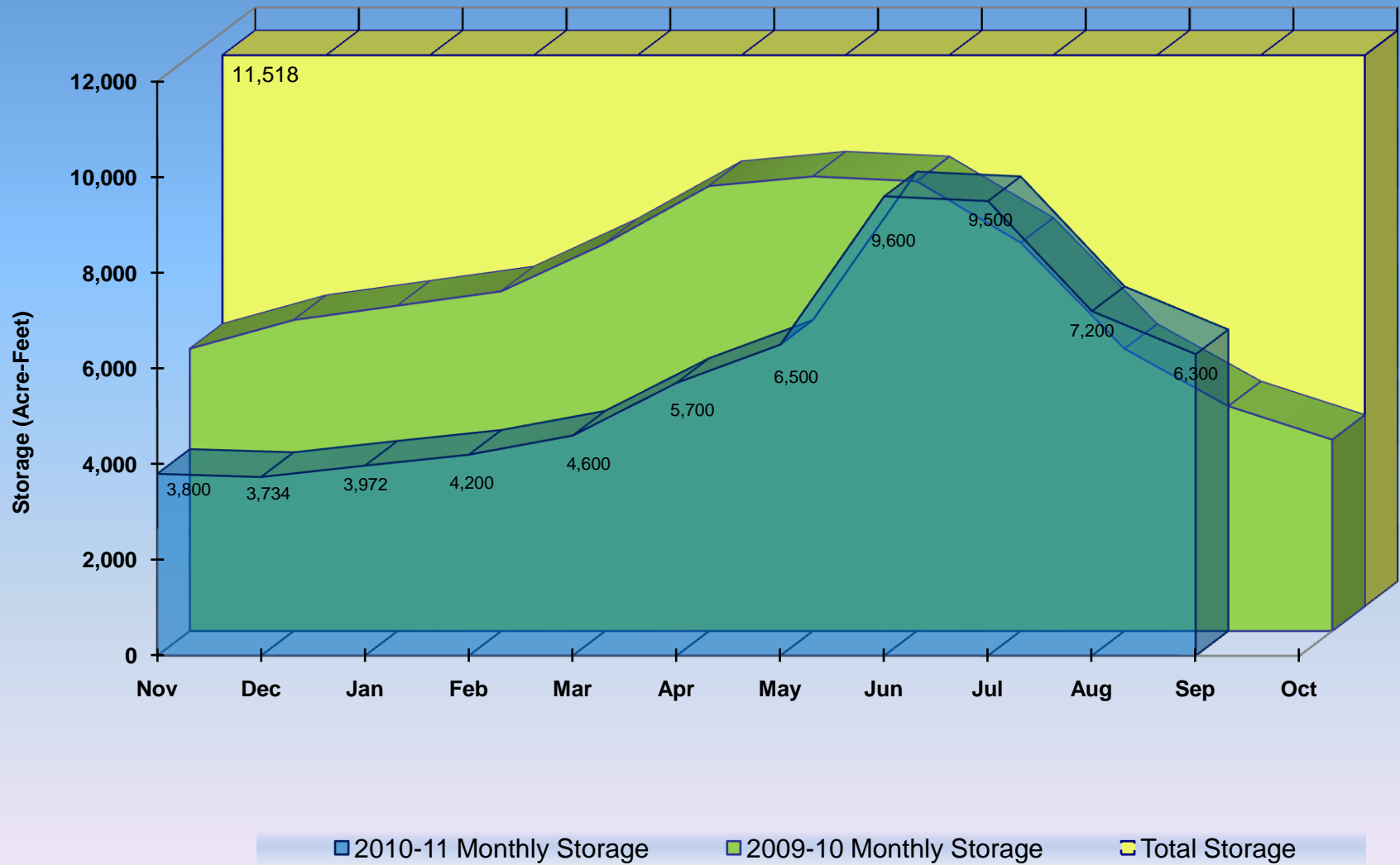


Halligan Reservoir (District 3, Poudre River - Agricultural)

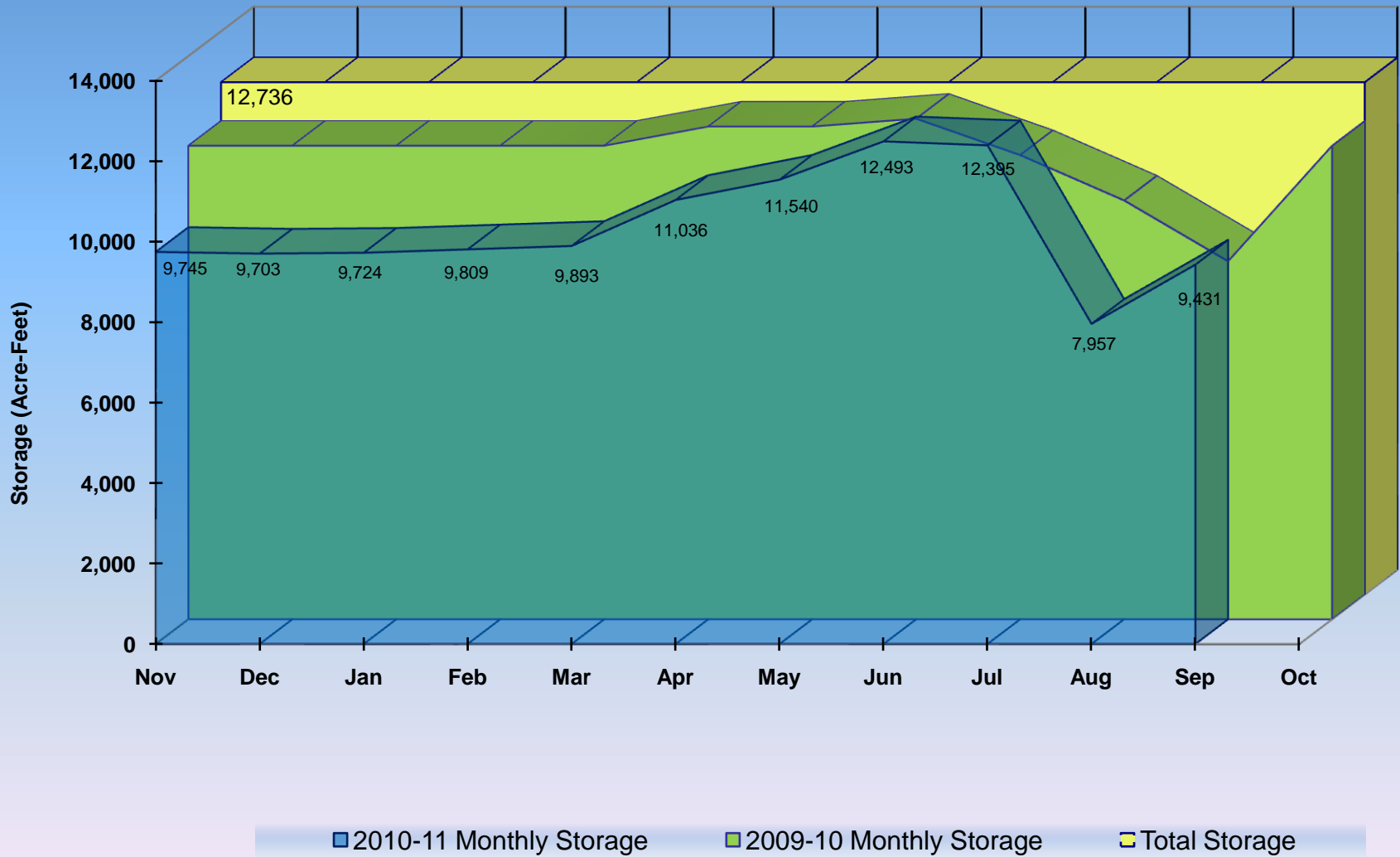


■ 2010-11 Monthly Storage
 ■ 2009-10 Monthly Storage
 ■ Total Storage

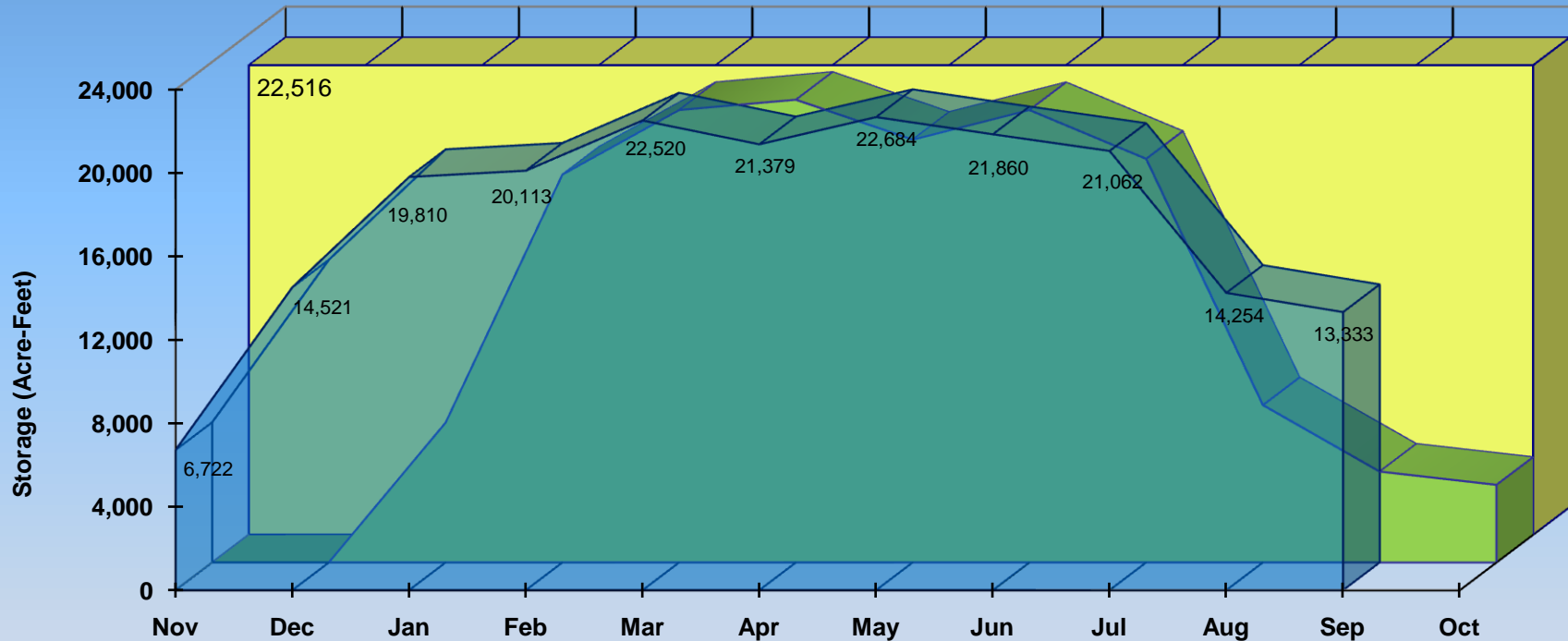
Marshall Lake (District 6, Boulder Creek - Agricultural)



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

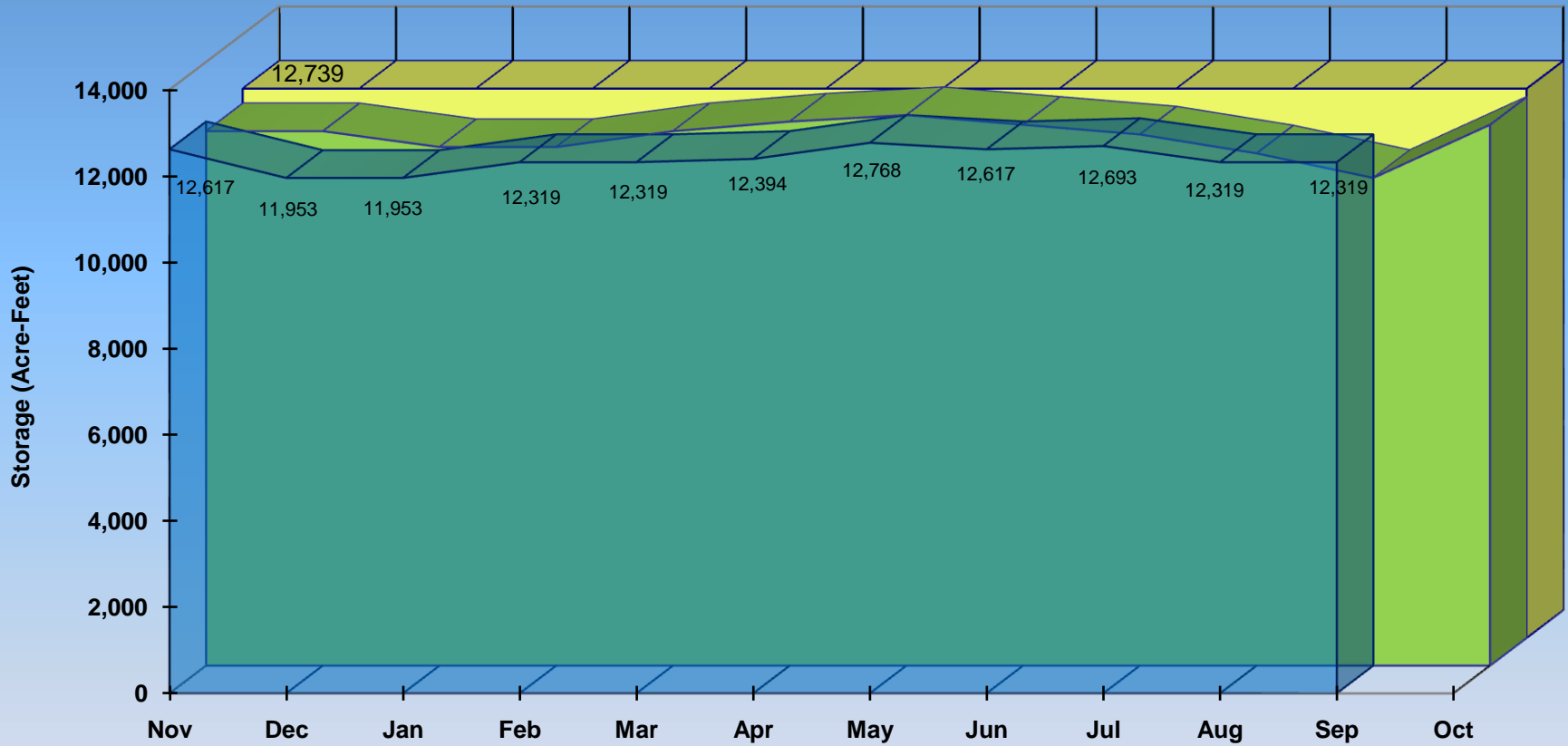


Milton Reservoir (District 2 - Agricultural)



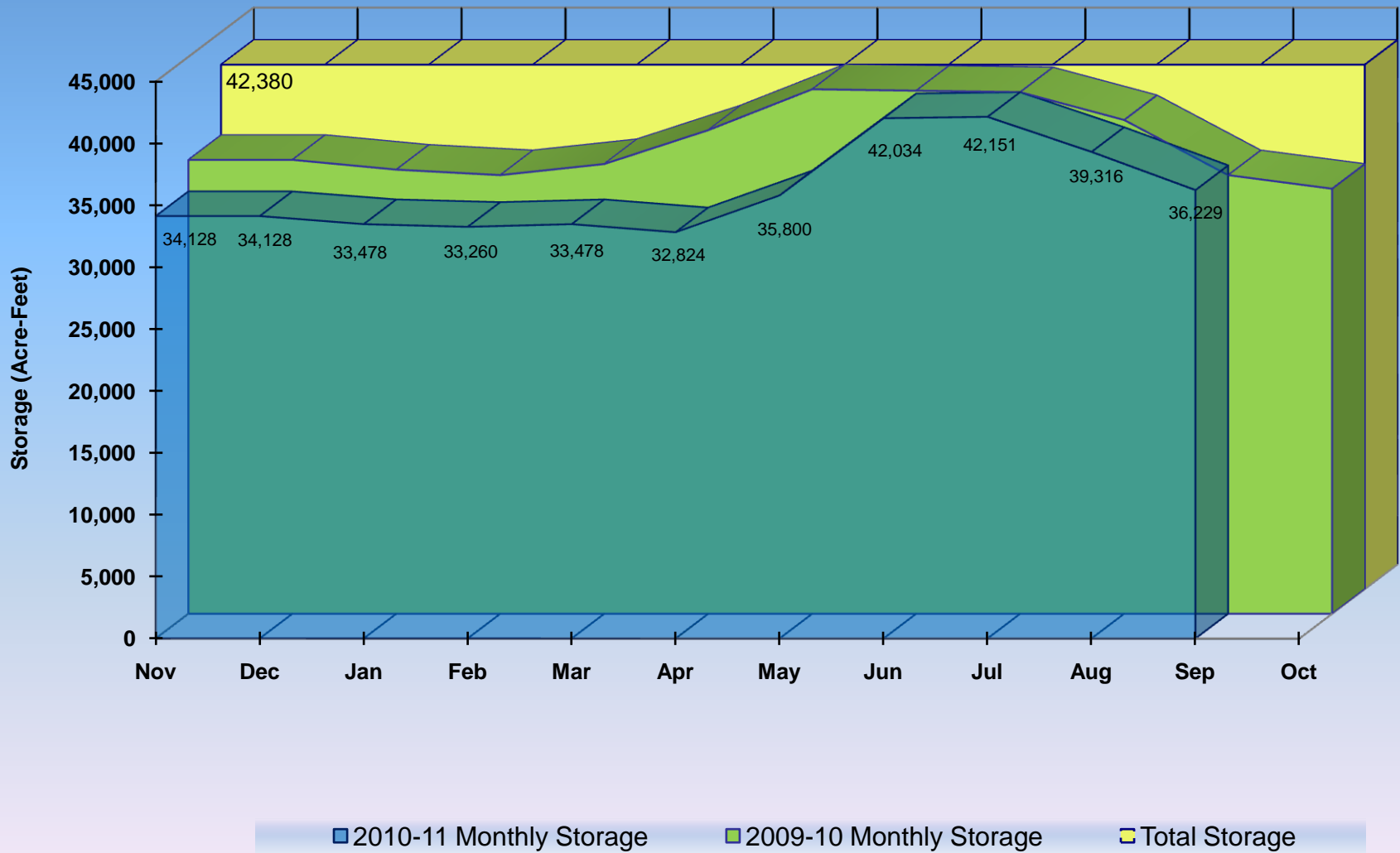
■ 2010-11 Monthly Storage
 ■ 2009-10 Monthly Storage
 ■ Total Storage

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

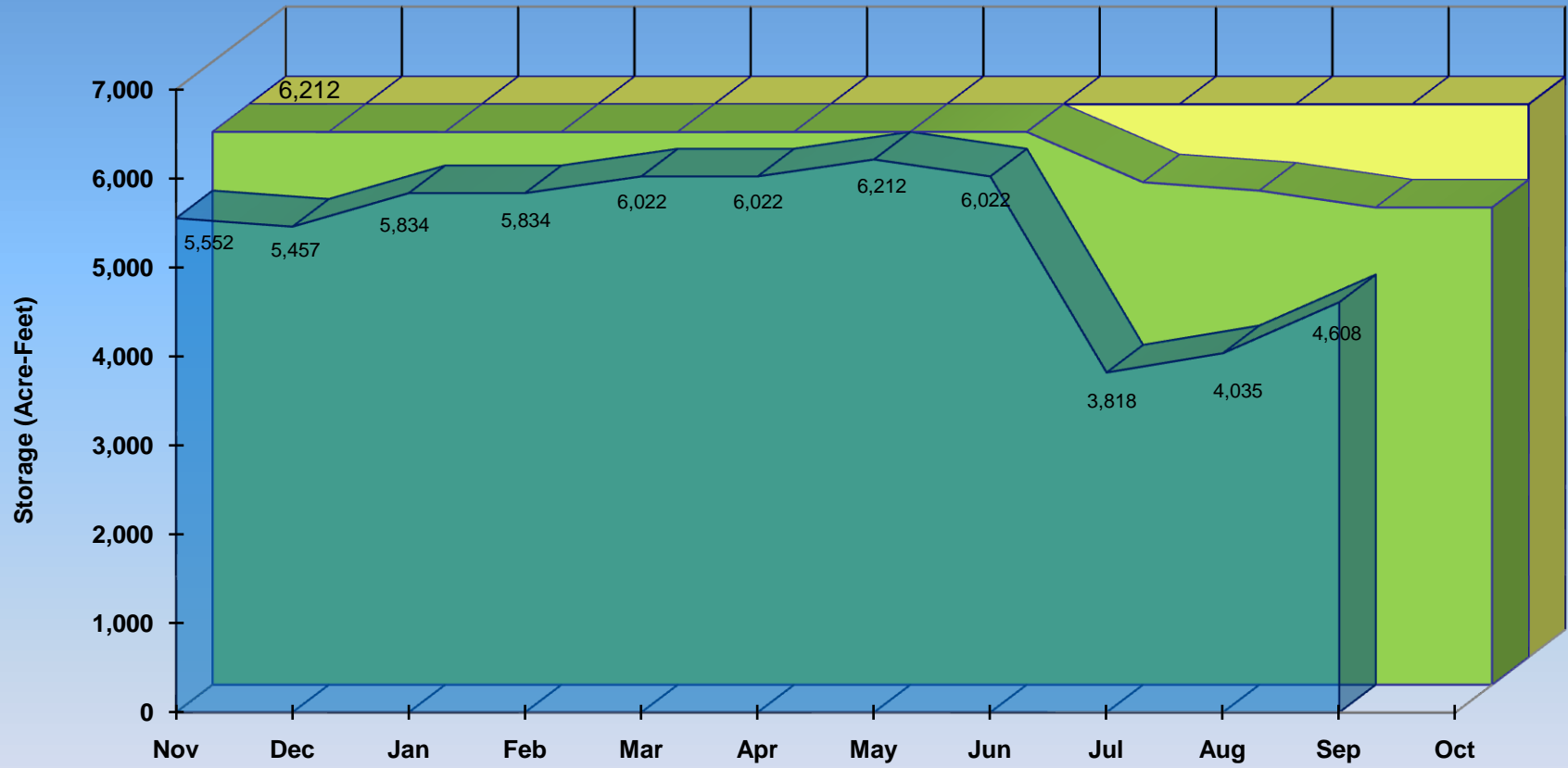


■ 2010-11 Monthly Storage
 ■ 2009-10 Monthly Storage
 ■ Total Storage

Standley Lake (Agricultural)

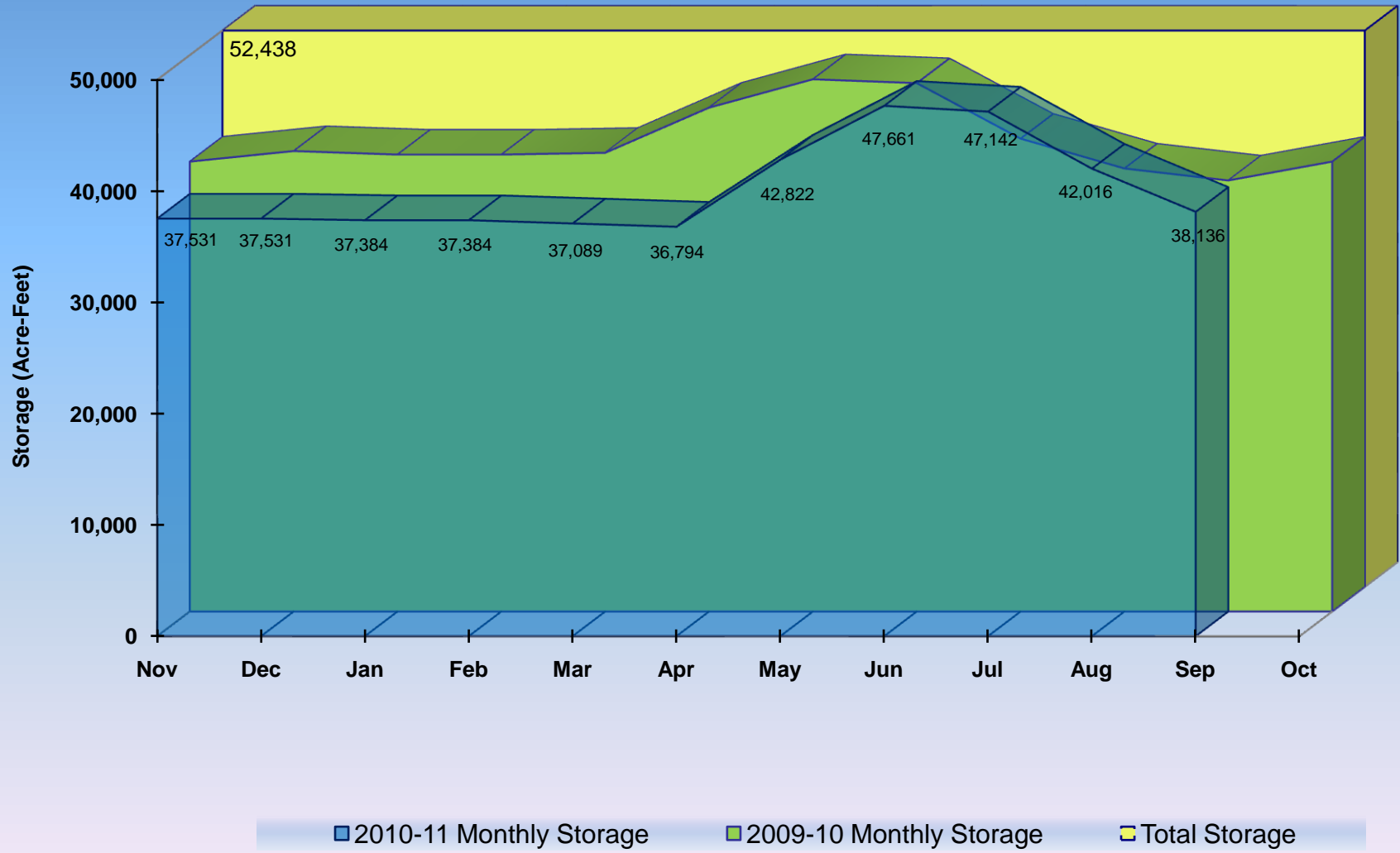


Lower Latham Reservoir (District 2 - Agricultural)

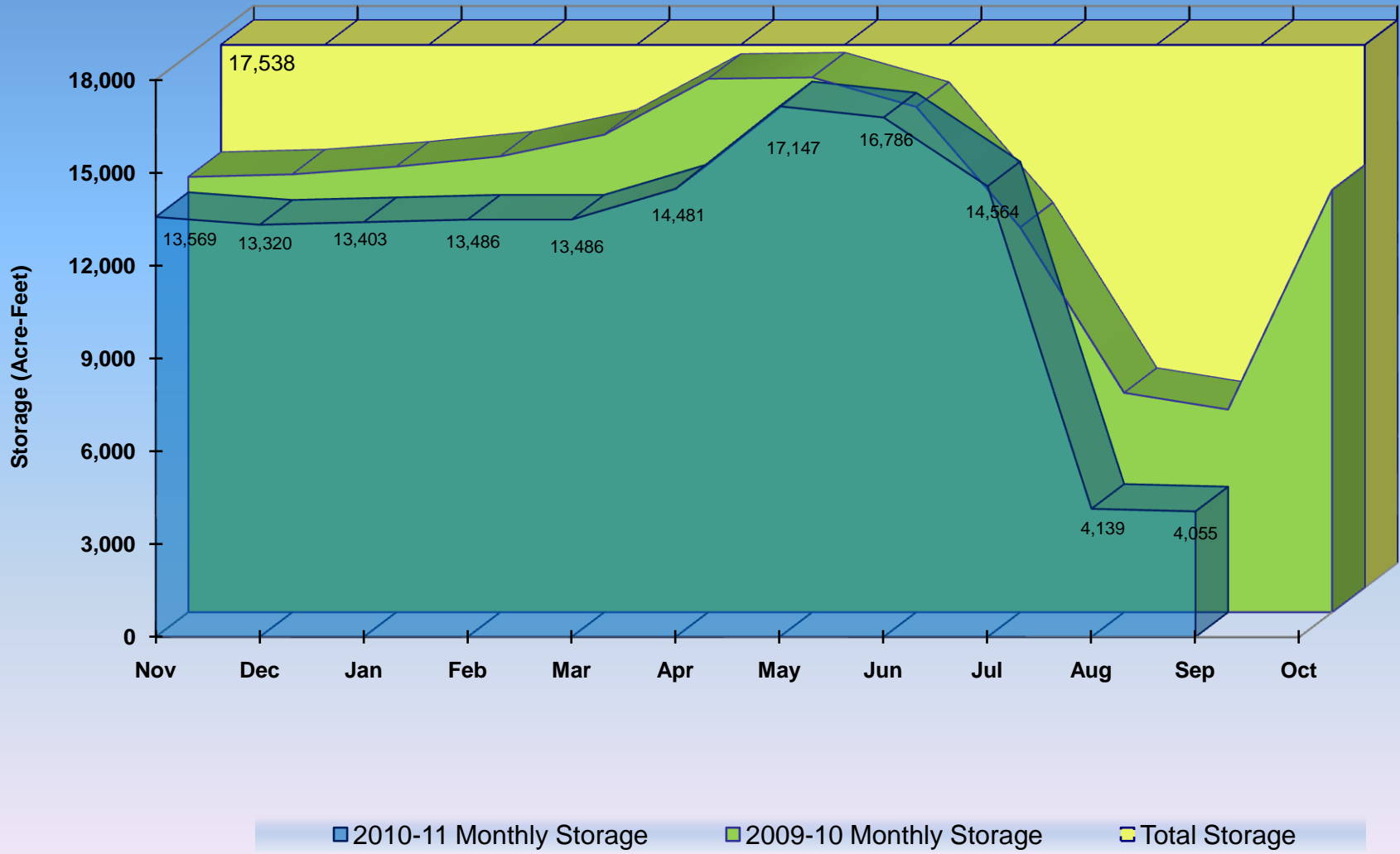


■ 2010-11 Monthly Storage
 ■ 2009-10 Monthly Storage
 ■ Total Storage

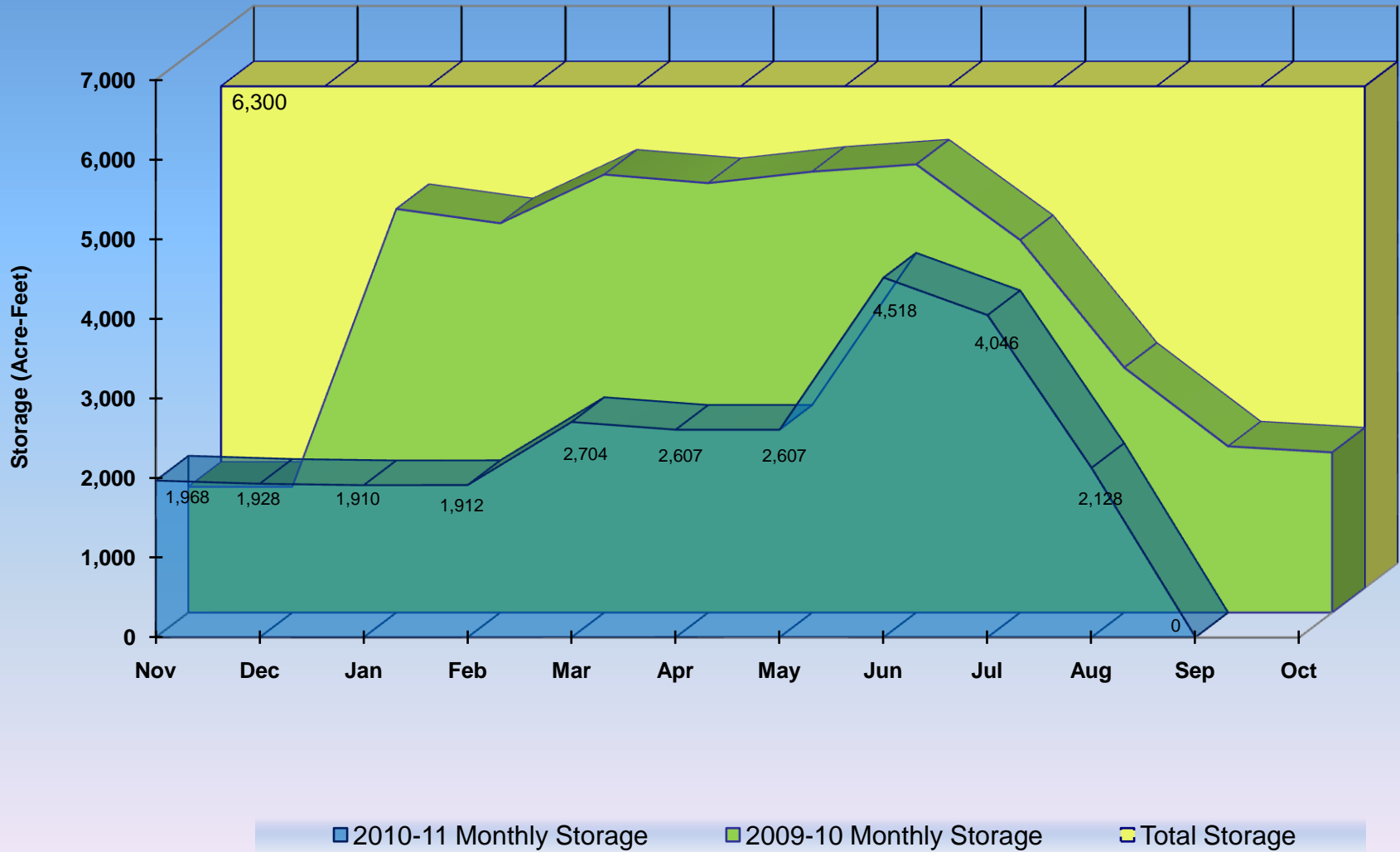
Boyd Lake (District 4, Big Thompson River - Agricultural)



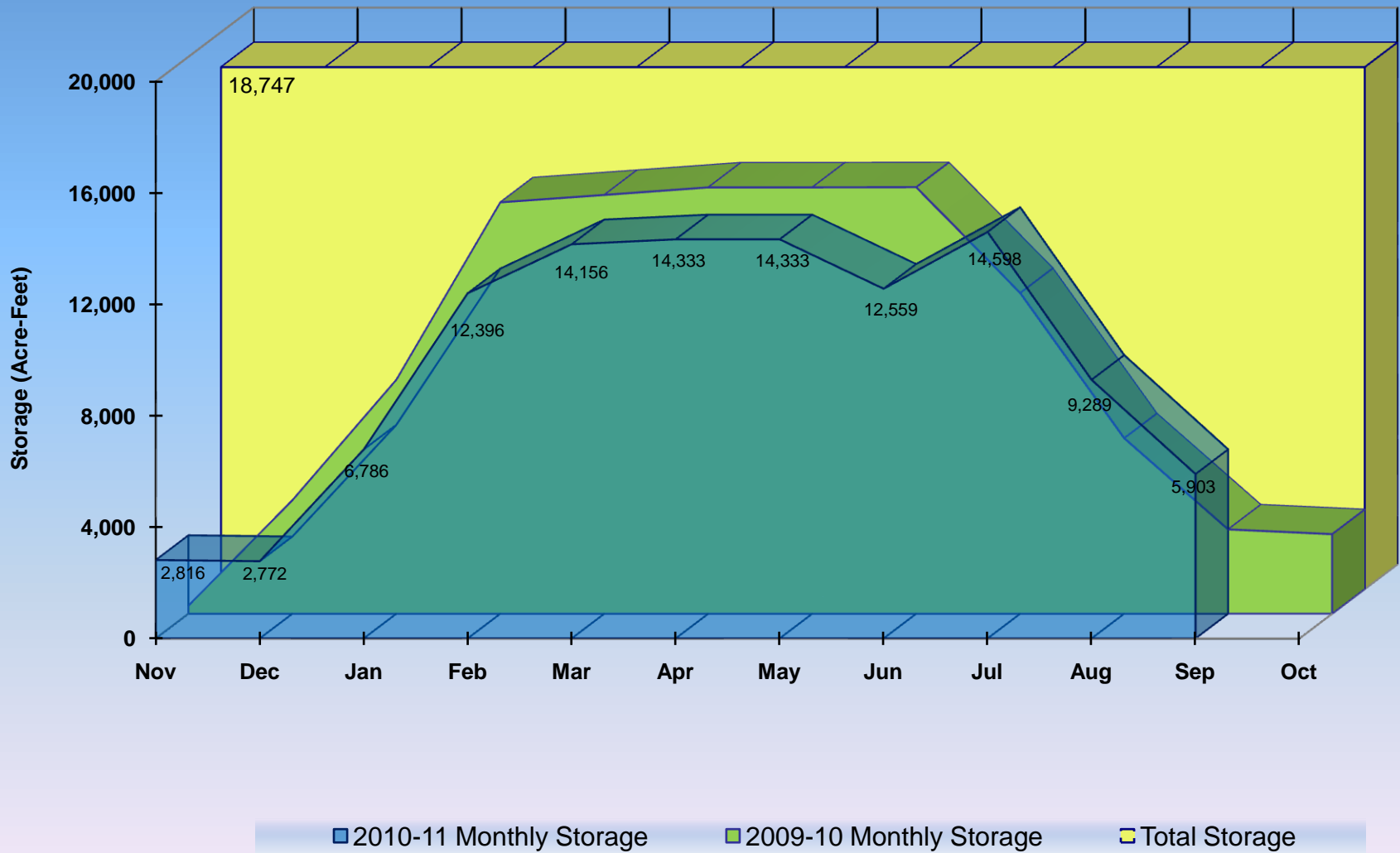
Windsor Reservoir (District 3, Poudre River - Agricultural)



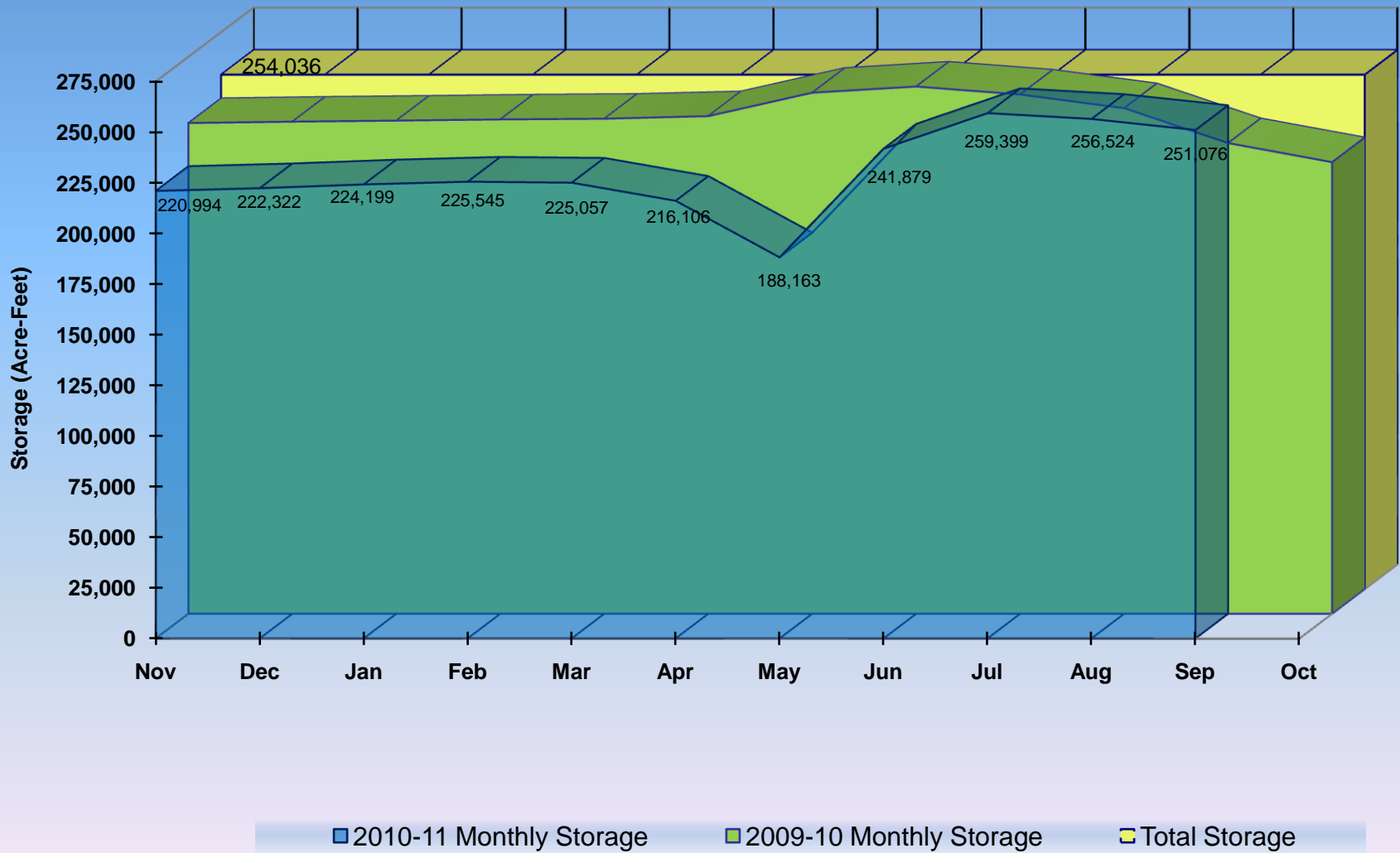
Prospect Reservoir (District 1- Agricultural)



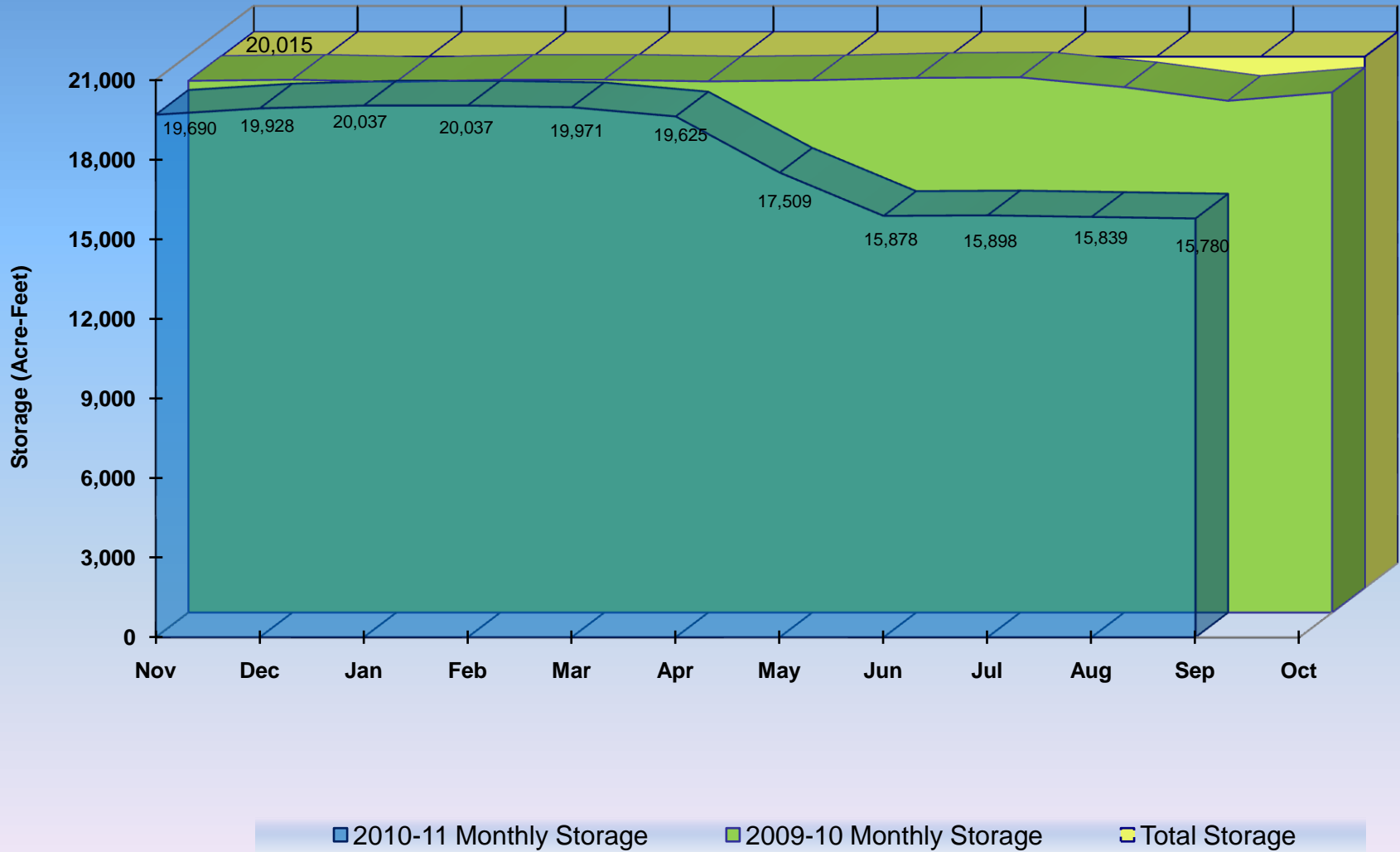
Horse Creek Reservoir (District 1 - Agricultural)



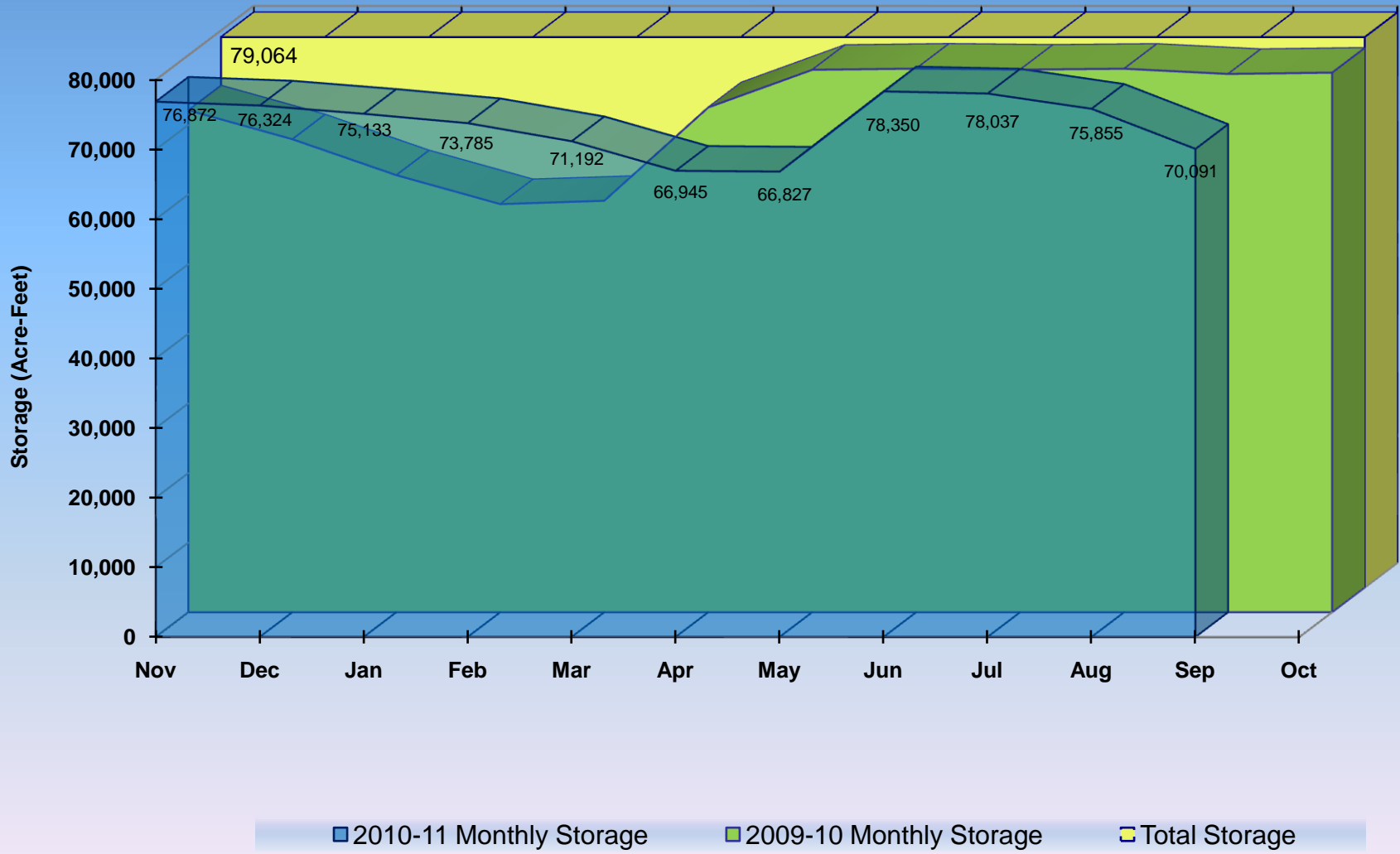
Dillon Reservoir (Municipal)



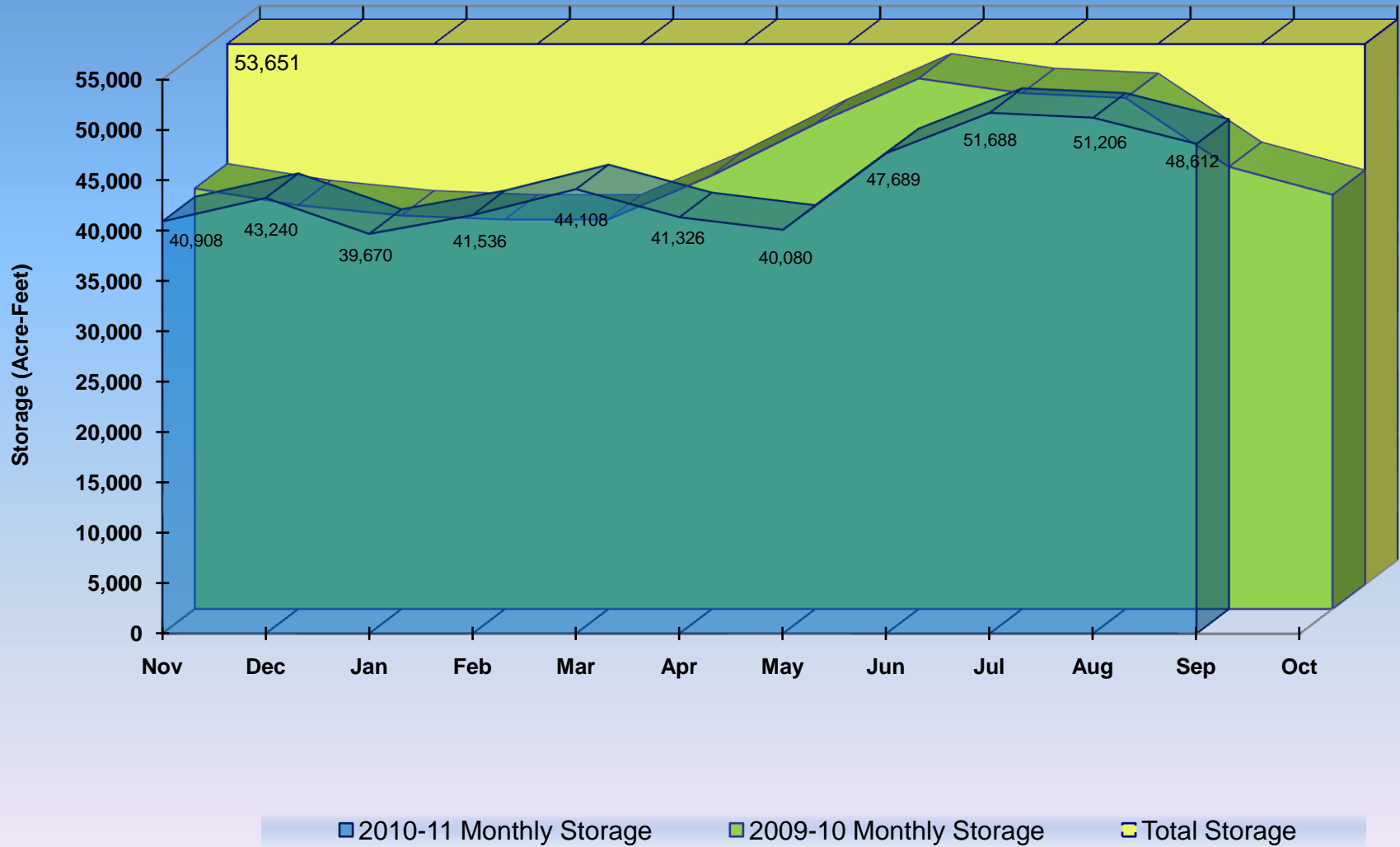
Antero Reservoir (District 23 - Municipal)



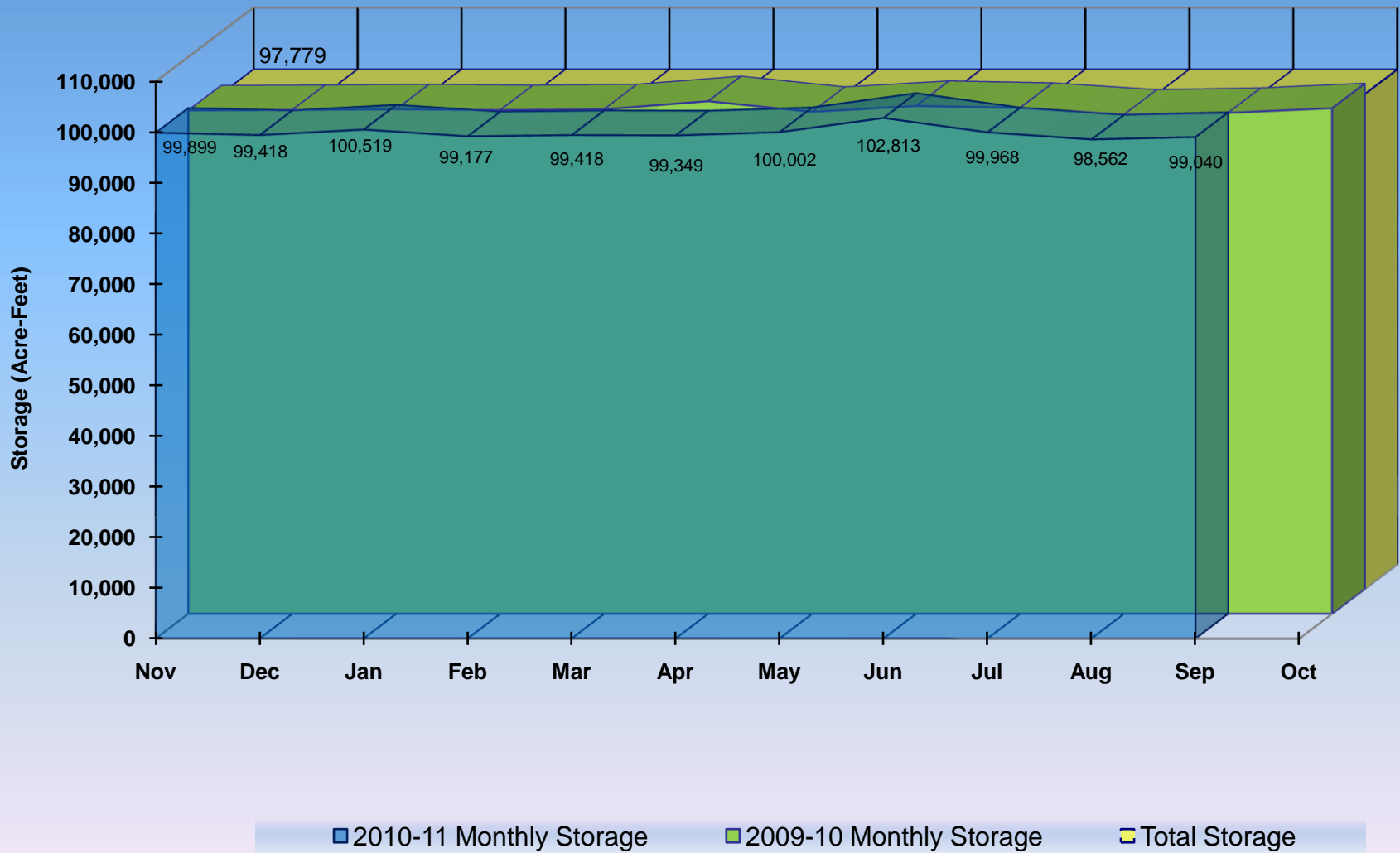
Cheesman Reservoir (District 80 - Municipal)



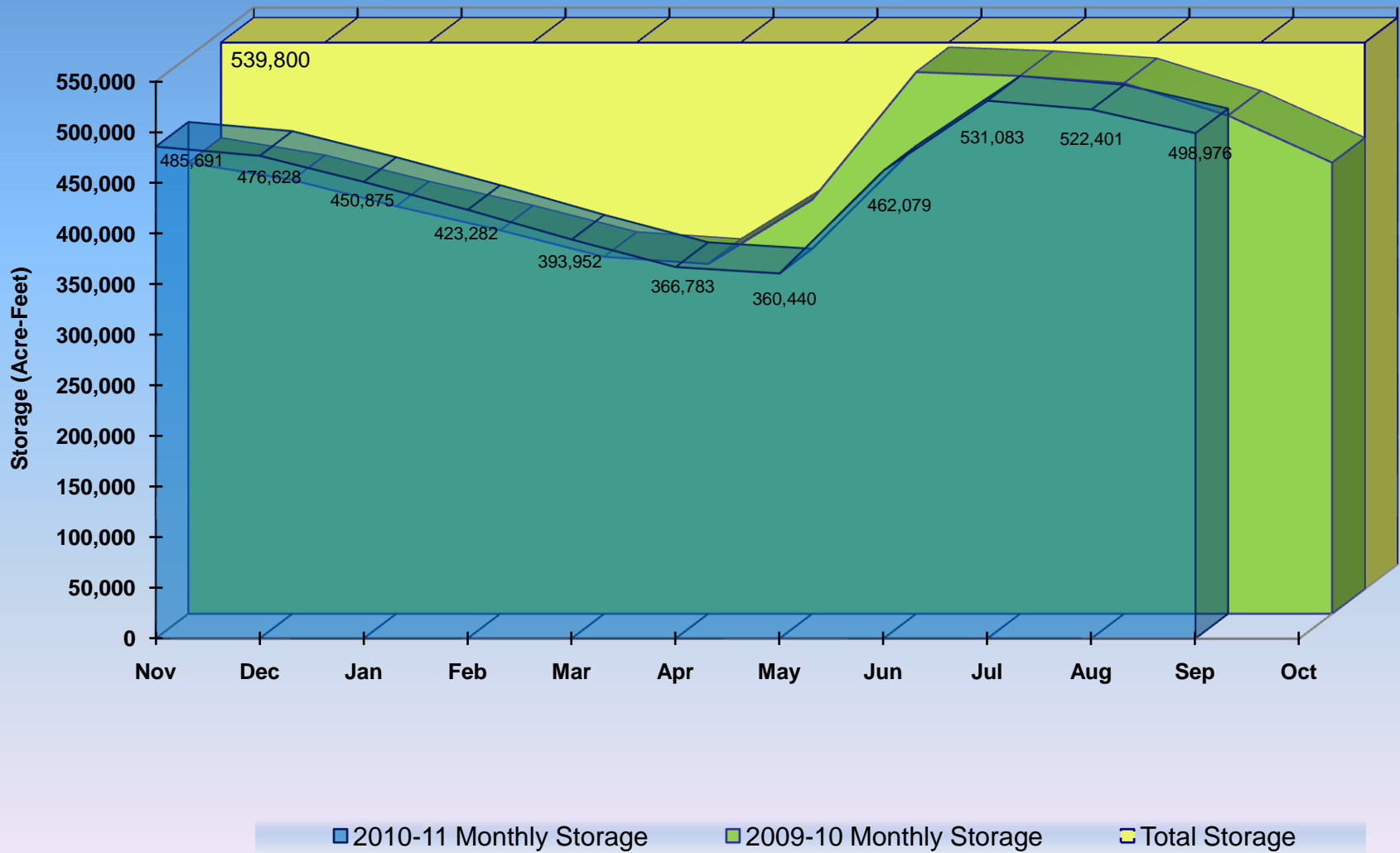
Spinney Mountain Reservoir (District 23 - Municipal)



Eleven Mile Reservoir (District 23 - Municipal)



Lake Granby



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



**Big Thompson River at
the Canyon Mouth**

Photo by: Jason Smith