

RECLAMATION

Managing Water in the West

As of November 6, 2017

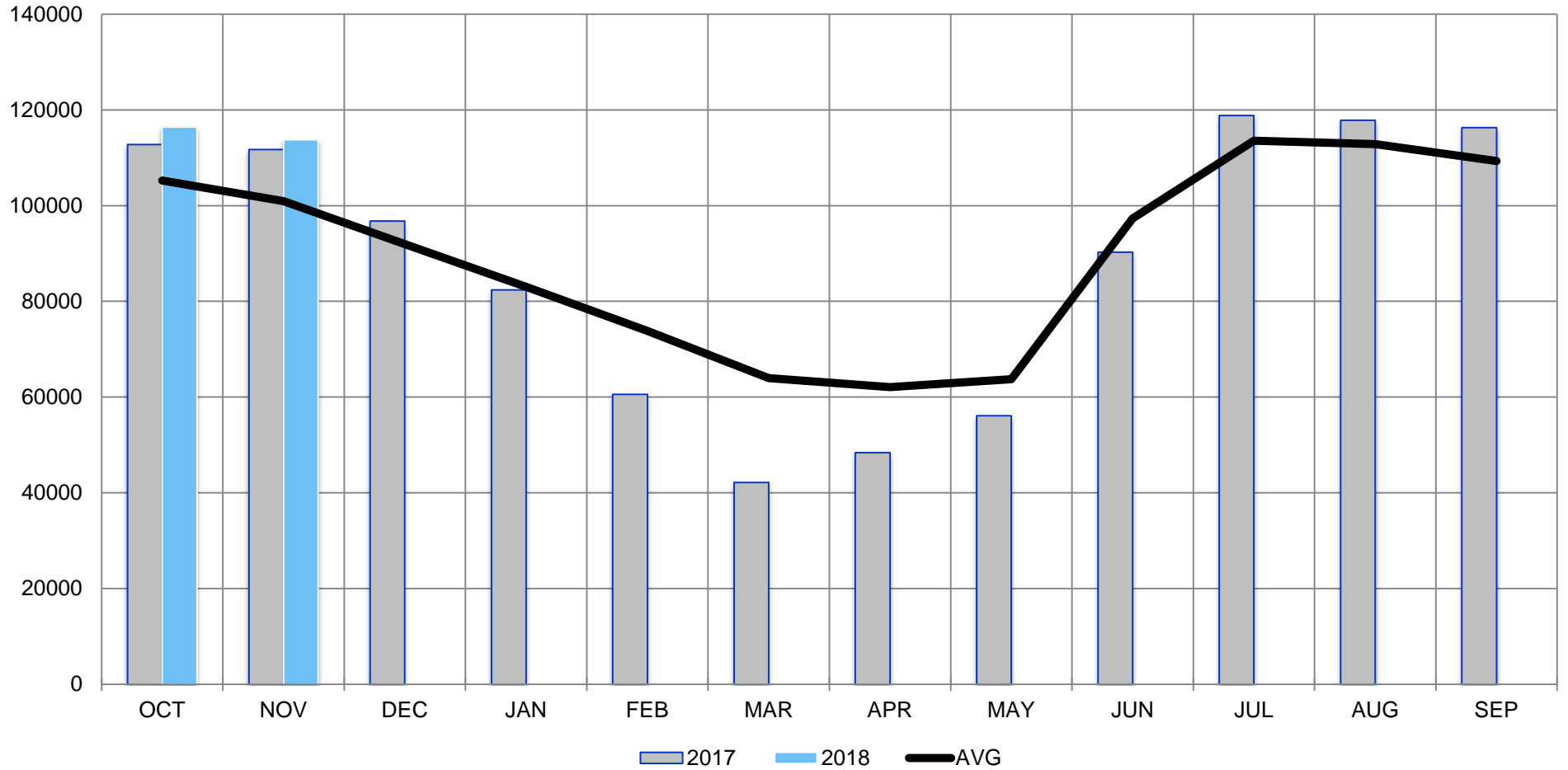
- 212,017 a/f stored in Pueblo
- 126,970 a/f of Project water
- 55,167 a/f of excess capacity water
- 29,485 a/f of winter water
- 118,403 a/f of Project space in Pueblo
- 21,736 a/f of Project space in Twin & Turquoise



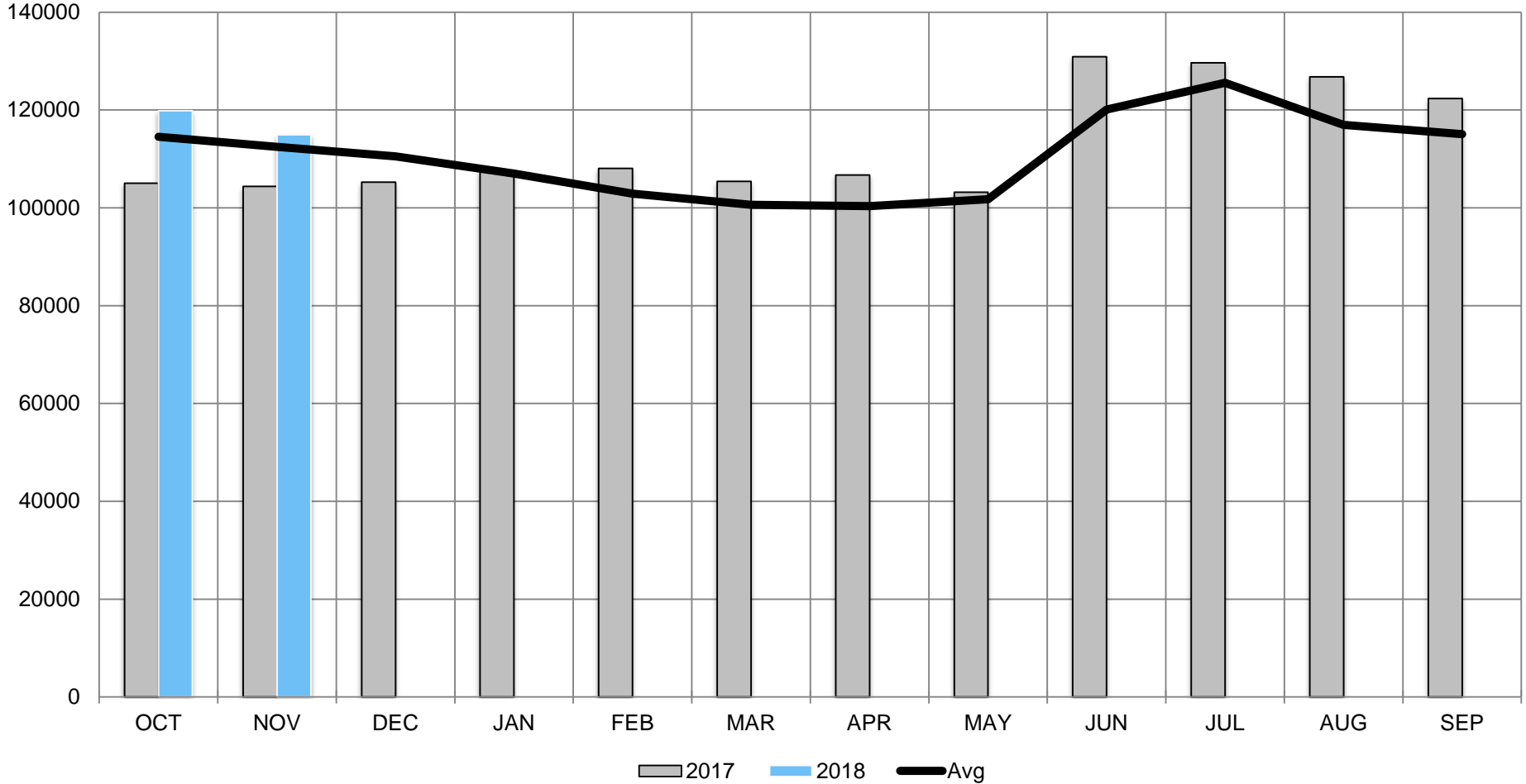
U.S. Department of the Interior
Bureau of Reclamation



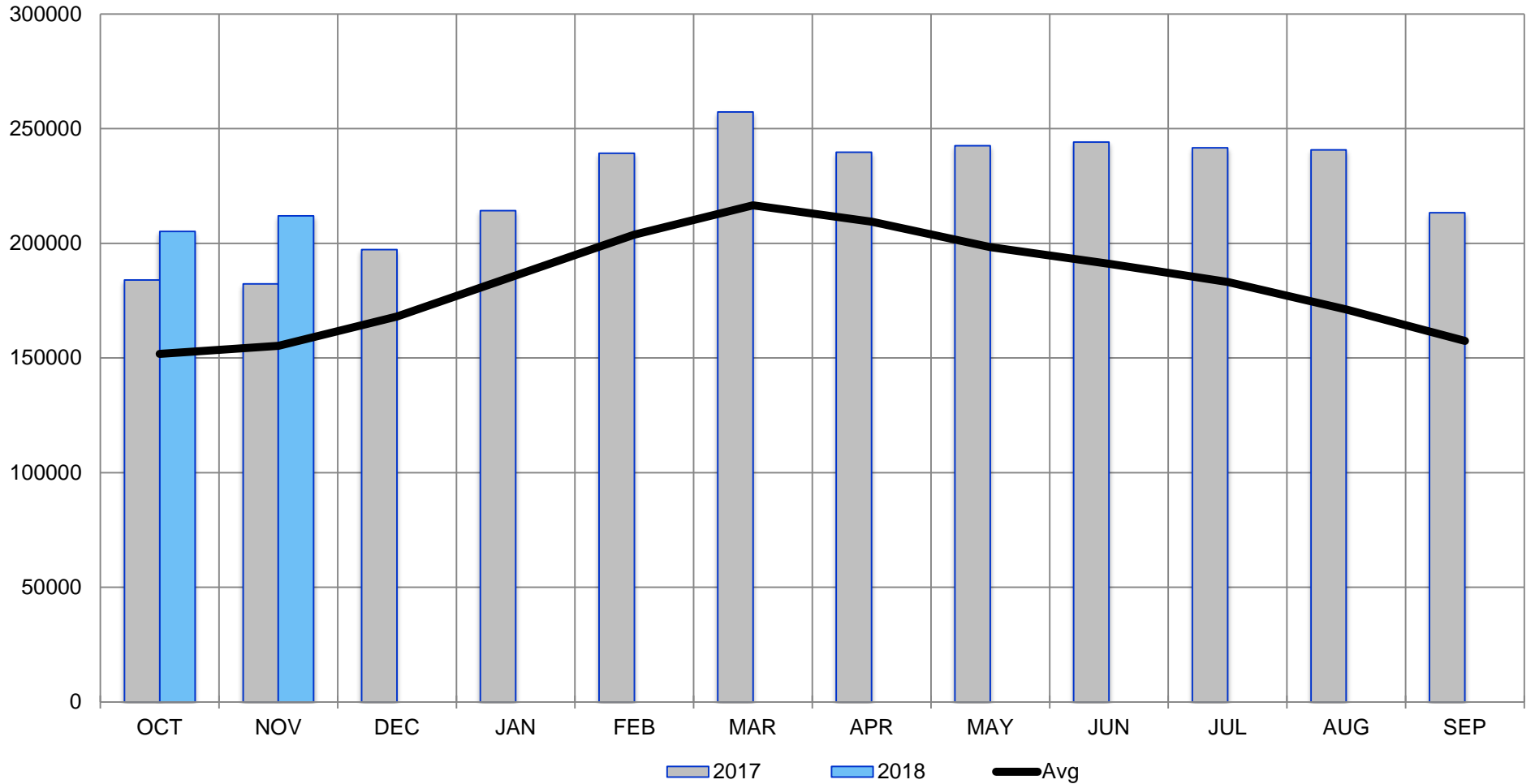
TURQUOISE LAKE



TWIN LAKES



PUEBLO RESERVOIR



As of November 6, 2017

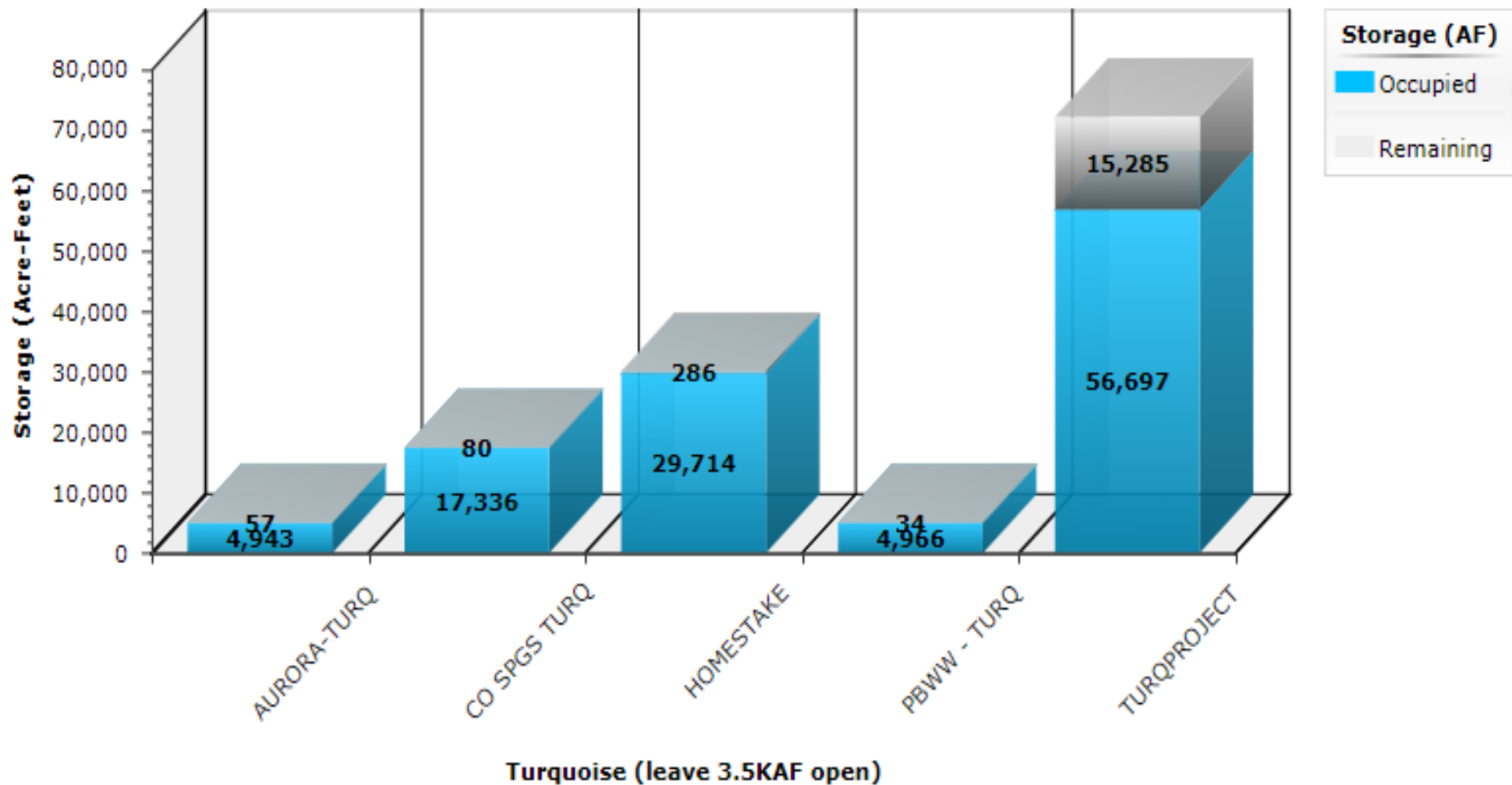
Project Reservoirs

Turquoise 115%

Twin Lakes 102%

Pueblo 149%





TURQUOISE RESERVOIR

Total Capacity 129,398 Acre Feet

Bottom of the Boat ramp for Turquoise is elevation 9830.00 65,233 a/f

**FRYINGPAN – ARKANSAS PROJECT
63,062 ACRE FEET OF USEABLE SPACE**

**CF&I - COLORADO SPRINGS UTILITIES
17,416 ACRE FEET**

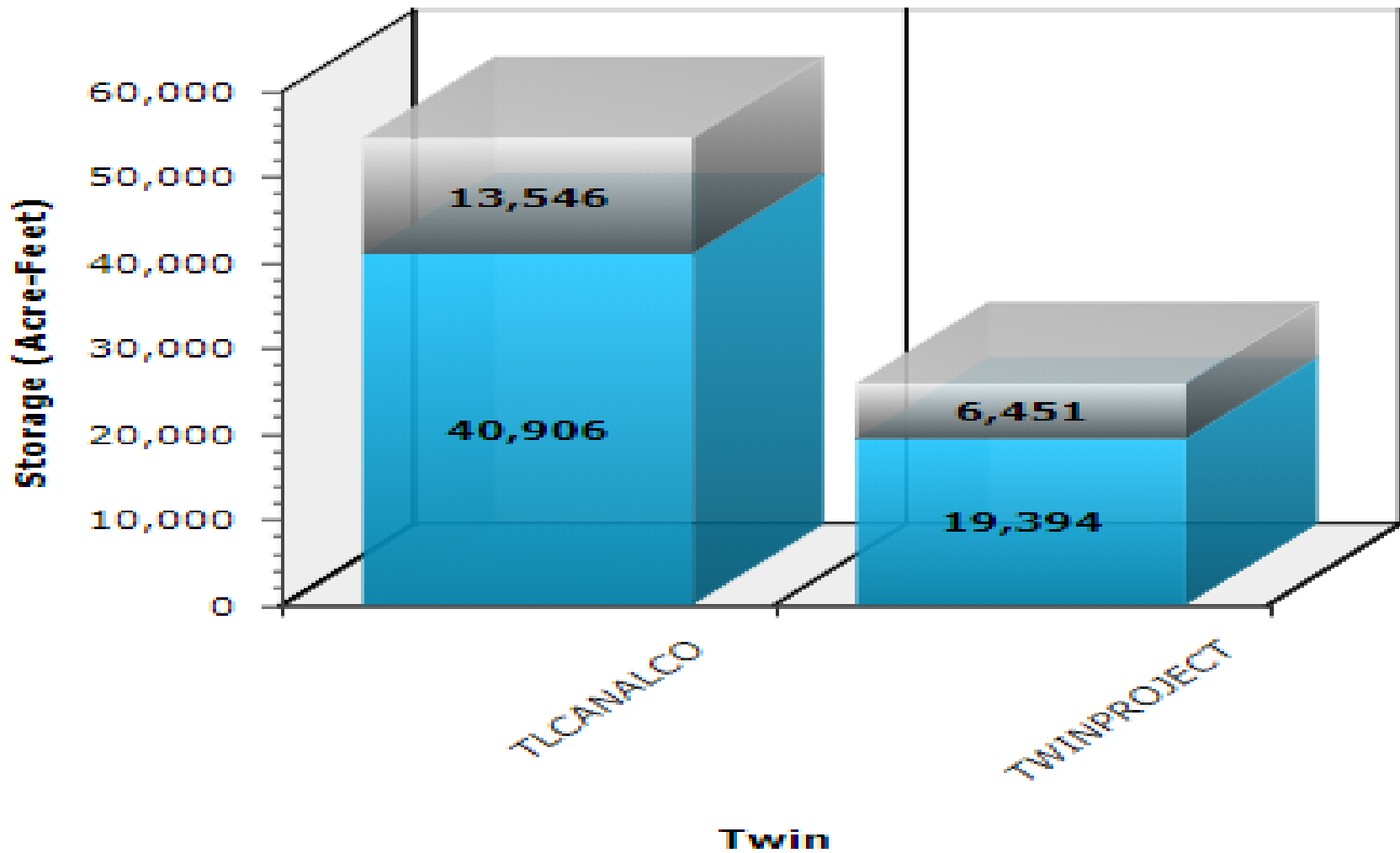
**HOMESTAKE – COLORADO SPRINGS UTILITIES
15,000 ACRE FEET**

**HOMESTAKE – AURORA
15,000 ACRE FEET**

**CF&I – AURORA
5,000 ACRE FEET**

**CF&I – PUEBLO BOARD OF
WATER WORKS
5,000 ACRE FEET**

**FRYINGPAN-ARKANSAS
PROJECT
DEAD/INACTIVE
8,920 ACRE FEET**



TWIN LAKES RESERVOIR & FOREBAY

Provisional 5-8-15: Total Capacity 151,998 Acre Feet – 498 a/f because of tilted glory hole at Twin Lakes = 151,500 a/f with 22,581 being useable Project space if TLCC has at least 11,205 a/f of their water in storage.

Forebay

Useable project space if required (would affect power production) 7,318

Dead 3.825 = 11,143 Acre feet

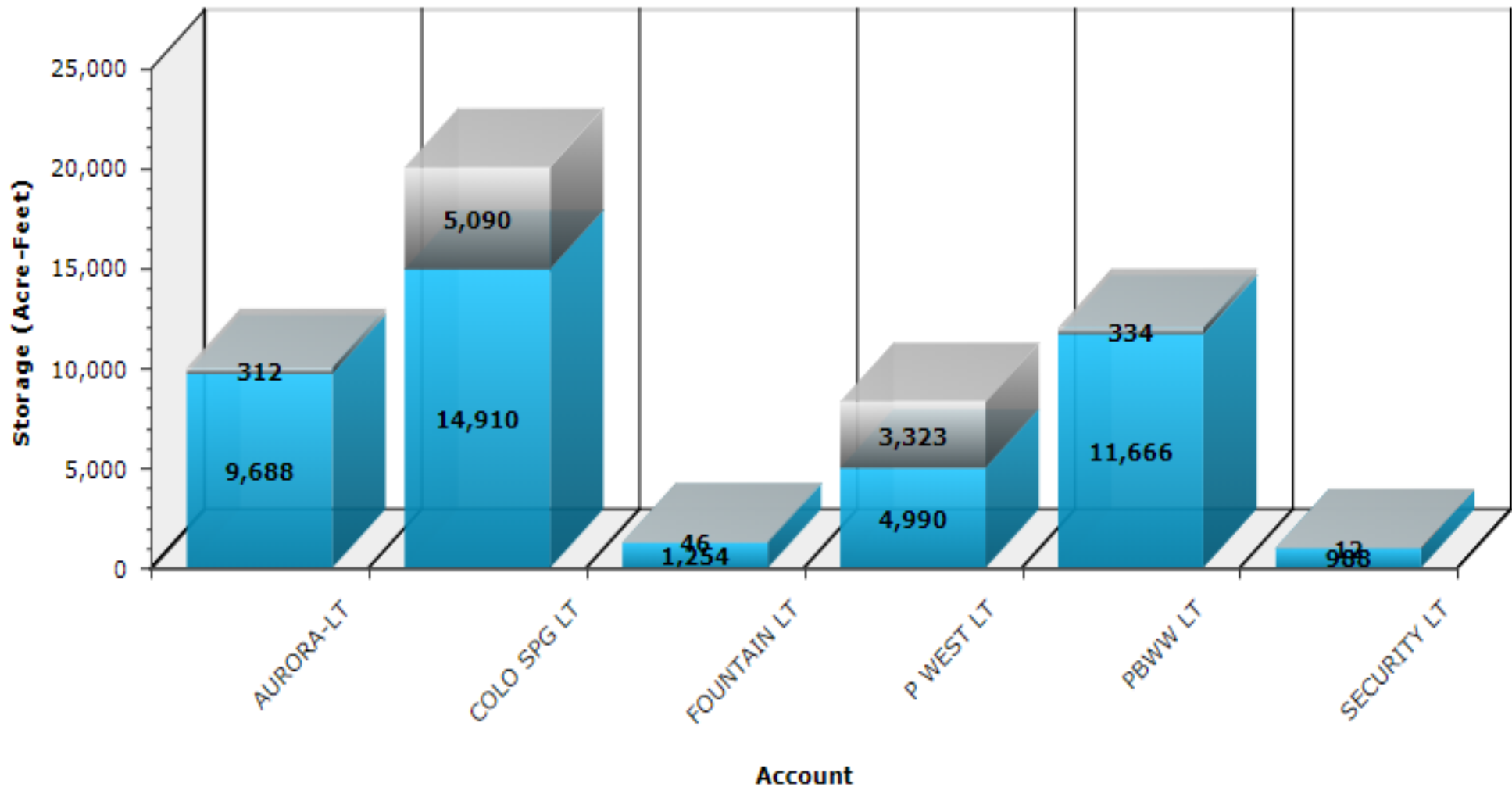
12,967 a/f of usable Project space + inactive (9,614) = 22,581 if there is at least 11,205 a/f of TLCC water in storage so that the Power Plant remains operable.

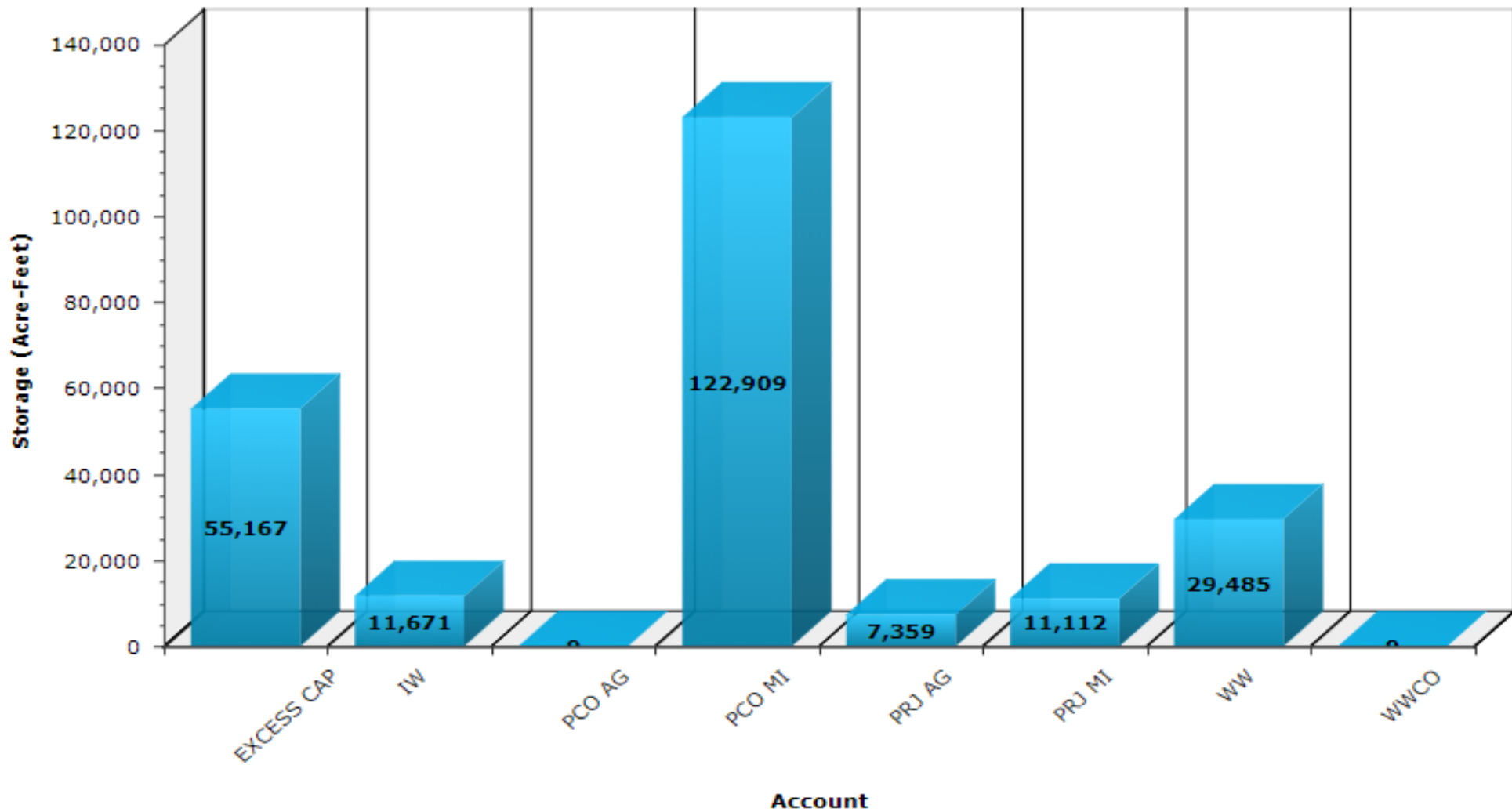
Twin Lakes Co. permanent space 54,452 a/f

9,614 a/f of Project water required to get to the top of inactive pool

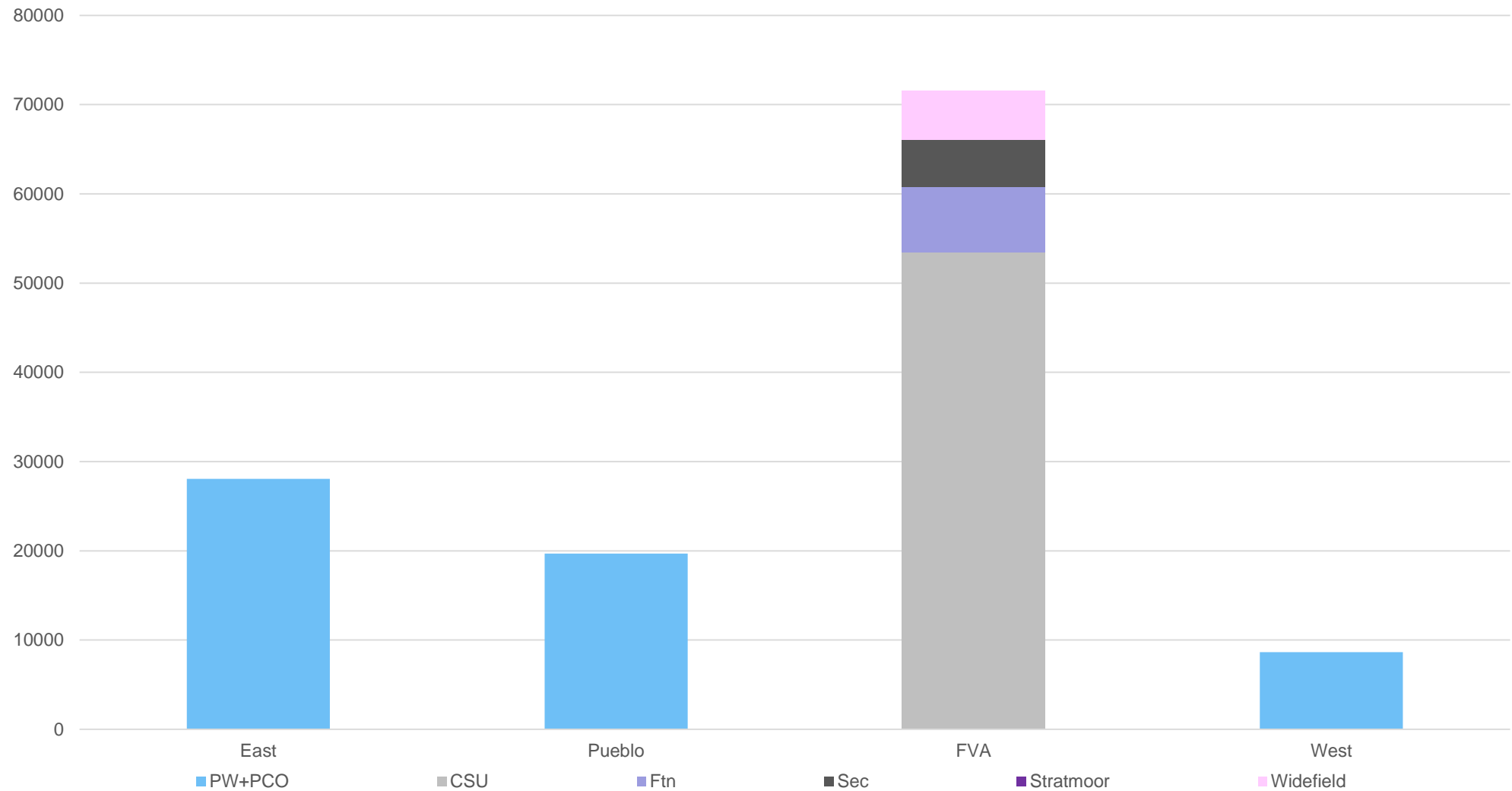
Dead Pool

63,324 Acre Feet





First Use Project + PCO Municipal Water



October 30, 2017

Total M&I PW in the system = 135,085

- **EAST = 28,218**
- **WEST = 8,757**
- **PUEBLO = 19,808**
- **OTHER = 4,215**
- **FVA = 74,087**
 - **CSU = 58,683**
 - **Fountain = 7,374**
 - **Security = 5,503**
 - **Stratmoor = 2,004**
 - **Widefield = 5,523**



RECLAMATION

Fall Operations

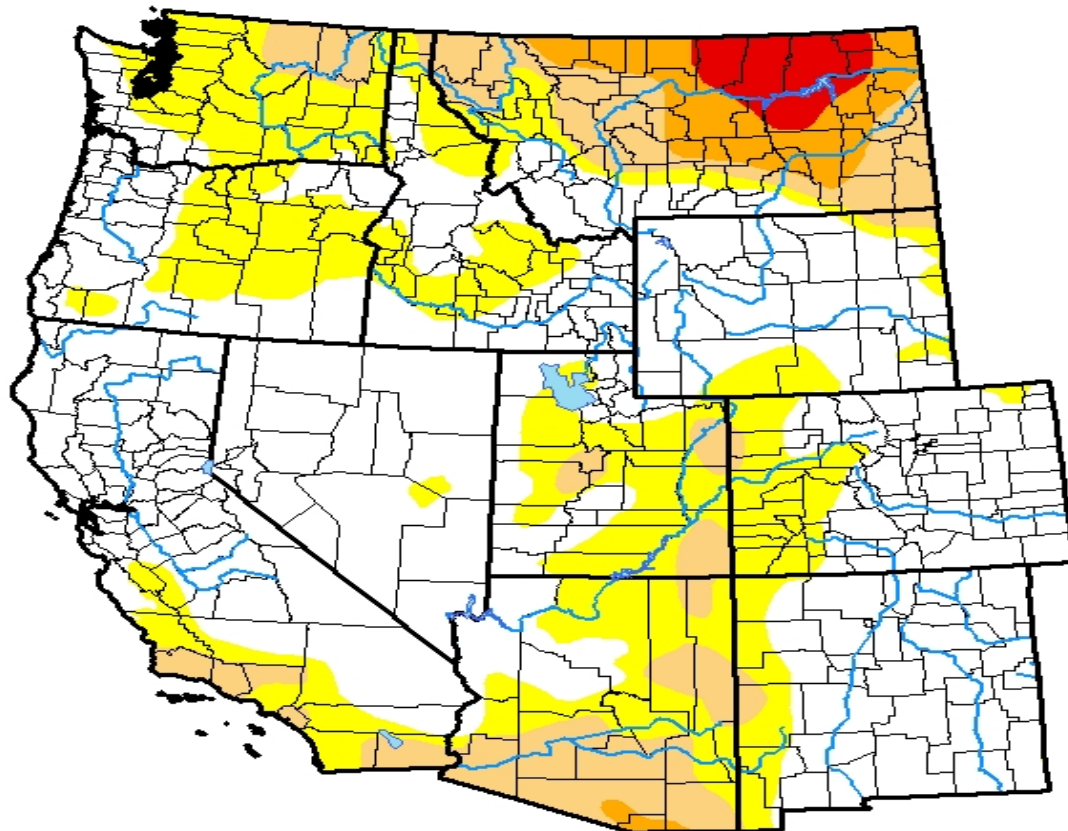
- The collection system has been winterized.
- Mt Elbert conduit is currently running 375 cfs.
- At present we are moving 260 cfs of Project water from Twin to Pueblo
- Plan on moving an additional ~42,000 a/f from the upper reservoirs.
- Movement of water will be adjusted according to the forecast and customers needs.








RECLAMATION

U.S. Drought Monitor West

October 31, 2017
(Released Thursday, Nov. 2, 2017)
Valid 8 a.m. EDT



Intensity:

-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

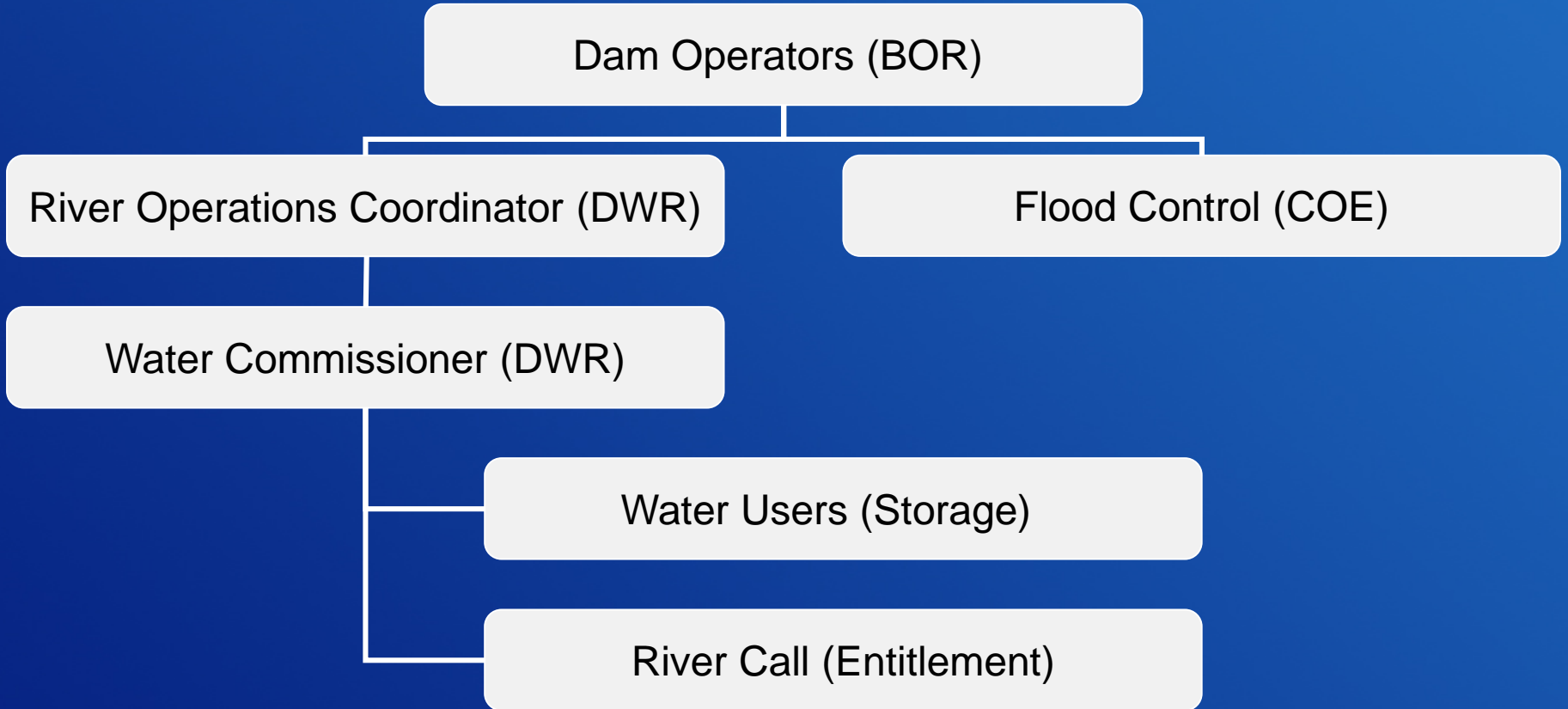
Author:

David Miskus
NOAA/NWS/NCEP/CPC



<http://droughtmonitor.unl.edu/>

Water operations from Pueblo Dam



RESERVOIR SPILLS

- 1984 30,580 acre-feet of 82-83 winter water 74,641 acre-feet of 84 winter water
- 1985 46,163 acre-feet of winter water
- 1987 20,179 acre-feet of winter water
- 1995 (July) 53,949 acre-feet of winter water; 24,244.84 acre-feet of If and When.

Aurora-Busk-Ivanhoe 281.36

Pueblo Board 3,607.38

Alvin Carter 332.83

Dept of Parks & Rec 3,482.70

Upper Ark Cons Dis 149.14

Catlin 969.35

Aurora In Pueblo 1,725.82

Holbrook 3,361.25

Dept of Corrections 209.65

Bessemer 9,877.00

Orville Tomky 248.36

- 1998 (April) 23,123 acre-feet of winter water; 7,205.46 acre-feet of If and When, (Safety of Dams restriction).

Aurora 13.69

Colorado Springs 7,188.84

Pueblo Board 2.93

RECLAMATION

Where does the water come from?

- The average trans-mountain diversions are 139,748 acre-feet.
- The average annual flow of the Arkansas River, as measured at the Wellsville gage is 518,700 acre-feet.
- Reclamation only controls approximately 11 % of the total water passing by the Wellsville gage.



RECLAMATION

Trans-Mountain Diversions

• Tunnel Boustead	55,000	<i>Reclamation/SECWCD</i>
• Homestake Tunnel	24,878	<i>Colorado Springs and Aurora 50/50</i>
• Busk-Ivanhoe	5,726	<i>Pueblo Board of Water Works/Aurora</i>
• Twin Lakes Tunnel	38,371	<i>Twin Lakes Reservoir and Canal</i>
• Columbine Ditch	1,597	<i>Aurora</i>
• Ewing Ditch	1,011	<i>Pueblo Board of Water Works</i>
• Wurtz Ditch	2,957	<i>Pueblo Board of Water Works</i>
• Blue River Project	10,000	<i>Colorado Springs Utilities</i>
• Larkspur Ditch	208	<i>LAVWCD</i>
TOTAL	139,748 a.f.	

Hydro Project

















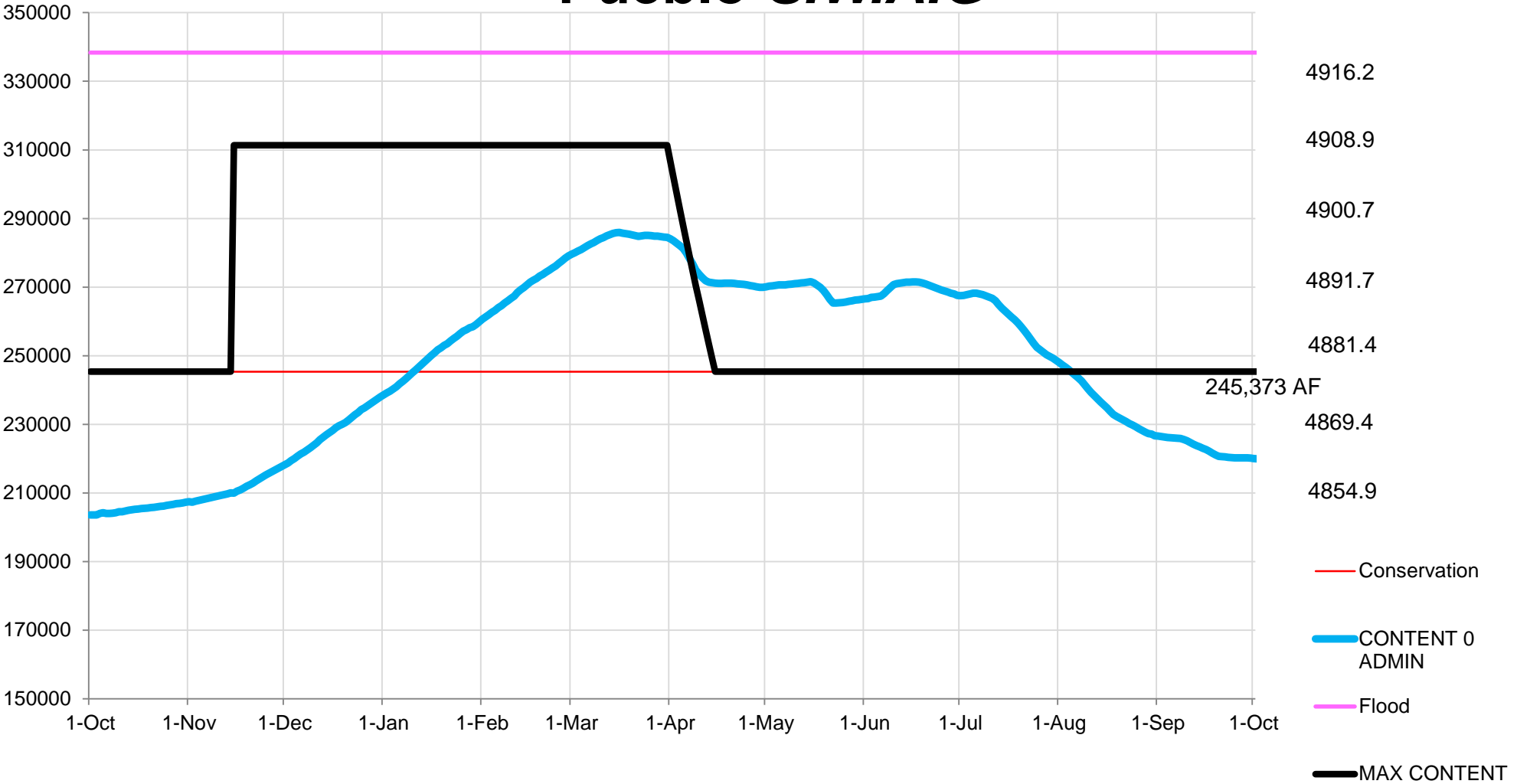




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Pueblo S.W.A.G



Current Content	205,178	
+ New WW	43,000	
+ Project Water	47,200	
+ M&I Inflow	24,500	
- Total Releases	17,150	(no releases in anticipation of a spill included)
- Evap	<u>3,000</u>	
April 15 th	299,728	– 245,373 = 54,355

- 2016 W.W.	29,643	
- 2016 Ag. Proj. W.	<u>7,552</u>	
	262,533	– 245,373 = 17,160

Boustead Imports to Date 67,009 a/f

