



BUREAU OF RECLAMATION

Arkansas River Compact Administration 2022 Bureau of Reclamation Update

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WaterSMART Grants - Projects in the Ark Basin

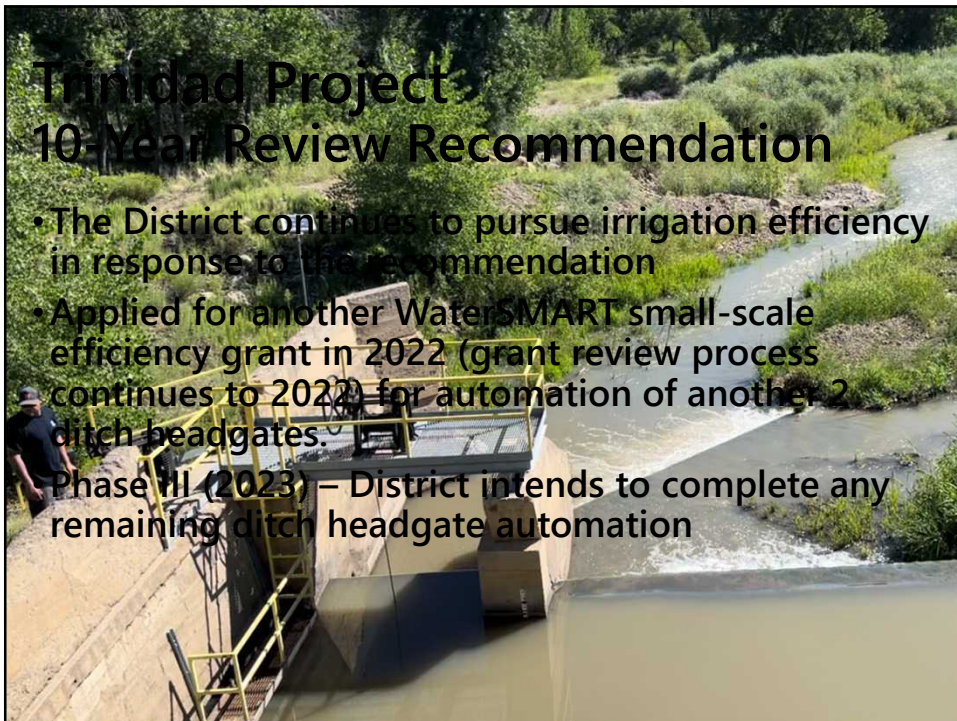
- Small-Scale Water Efficiency Project Grants:
- 3 Remote headgates in the District

Project Funding (Awarded August 2021)	
WaterSMART	\$ 74,322
PRWCD	\$ 50,000
Spanish Peaks-Purgatoire Conservation District	\$ 5,000
Enlarged Southside Ditch Company	\$ 6,877
Model Land & Irrigation Company	\$ 6,140
Hoehne Ditch Company	\$ 4,294
In-Kind Services	\$ 2,011
Total	\$ 148,644

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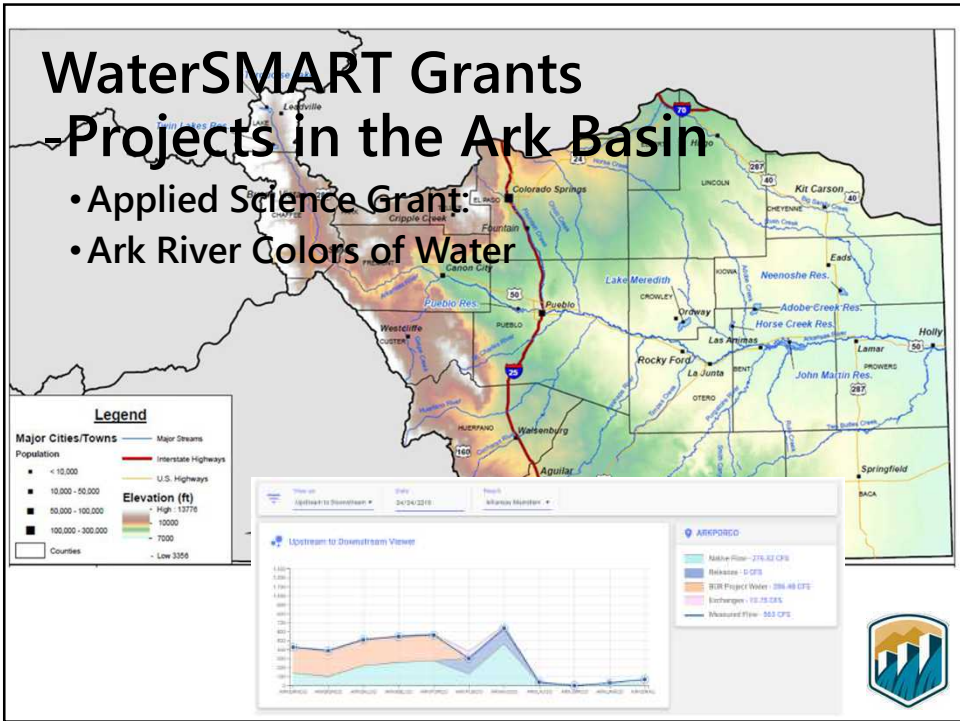
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WaterSMART Grants -Projects in the Ark Basin

- Cooperative Watershed Management Program:
- Ecology and Channel Process Restoration
- Purgatoire Watershed Partnership, Inc. (PWP)

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WaterSMART Grants
<https://www.usbr.gov/watersmart>

- Regional WaterSMART Program Coordinator
- Denis Kelsch, PE, CPE
 - Civil Engineer
 - Regional Planning Program Coordinator
 - Interior Region 5 - Missouri Basin
 - Interior Region 6 - Arkansas-Rio Grande-Texas Gulf
- dkelsch@usbr.gov

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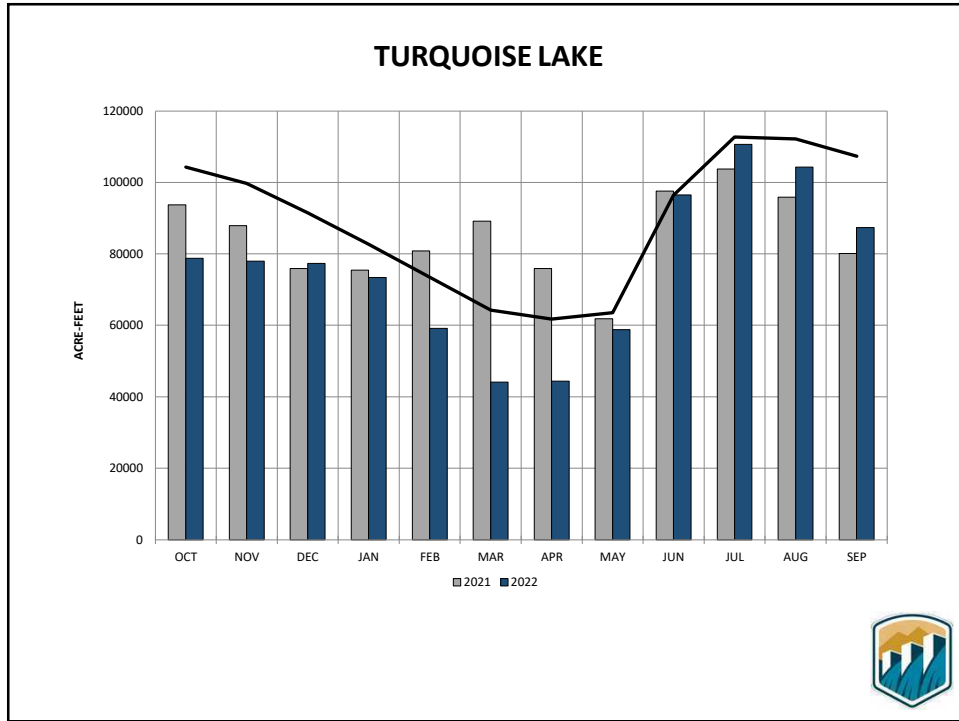


Fry-Ark Reservoirs as of November 29, 2022:

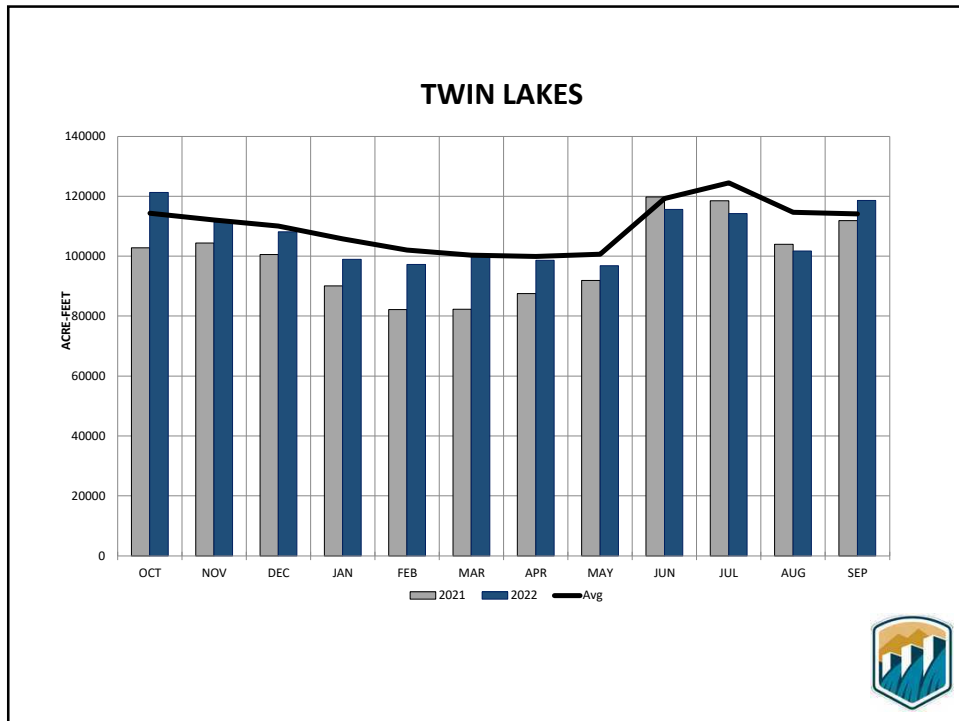
Turquoise Lake: 89% of average
Twin Lakes: 104% of average
Pueblo Reservoir: 109% of average

- 183,743 a/f stored in Pueblo
- 46,371 a/f of excess capacity water
- 9,912 a/f of winter water and winter carryover
- 119,980 a/f of Project water system wide
- 125,393 a/f of Project space in Pueblo
- 35,664 a/f of Project space in Twin & Turquoise

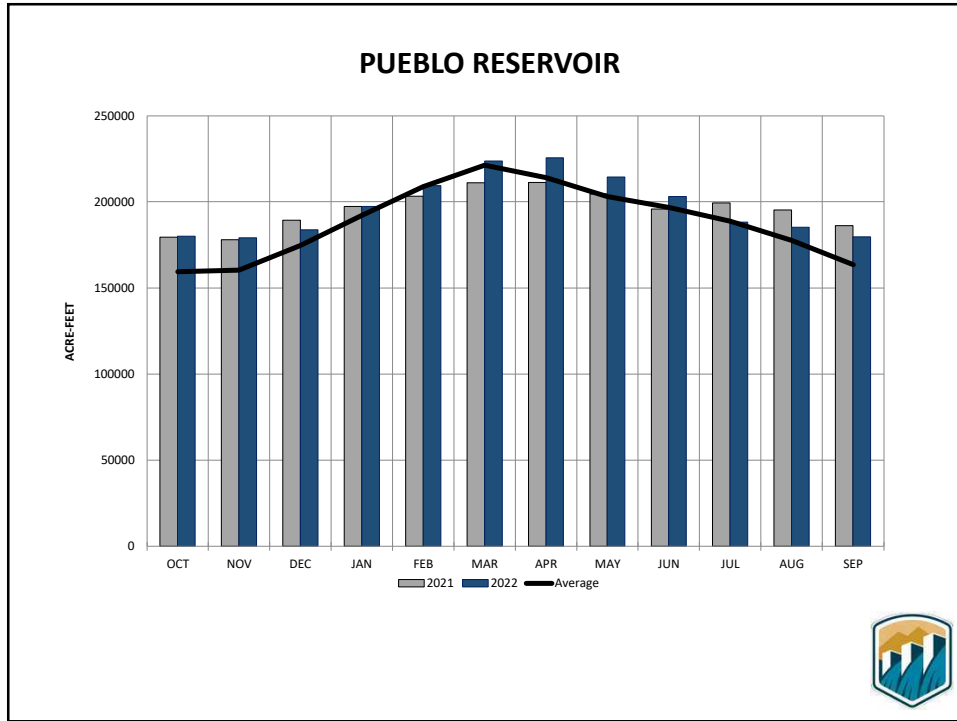
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2022 FRY-ARK-FORECASTS

February 1: 59.1 KAF
 March 1: 47.4 KAF
 April 1: 42.3 KAF

May 1:

- 10% - 59.5 KAF
- 25% - 52.7 KAF
- 50% - 45.3 KAF
- 75% - 37.8 KAF
- 90% - 31.1 KAF

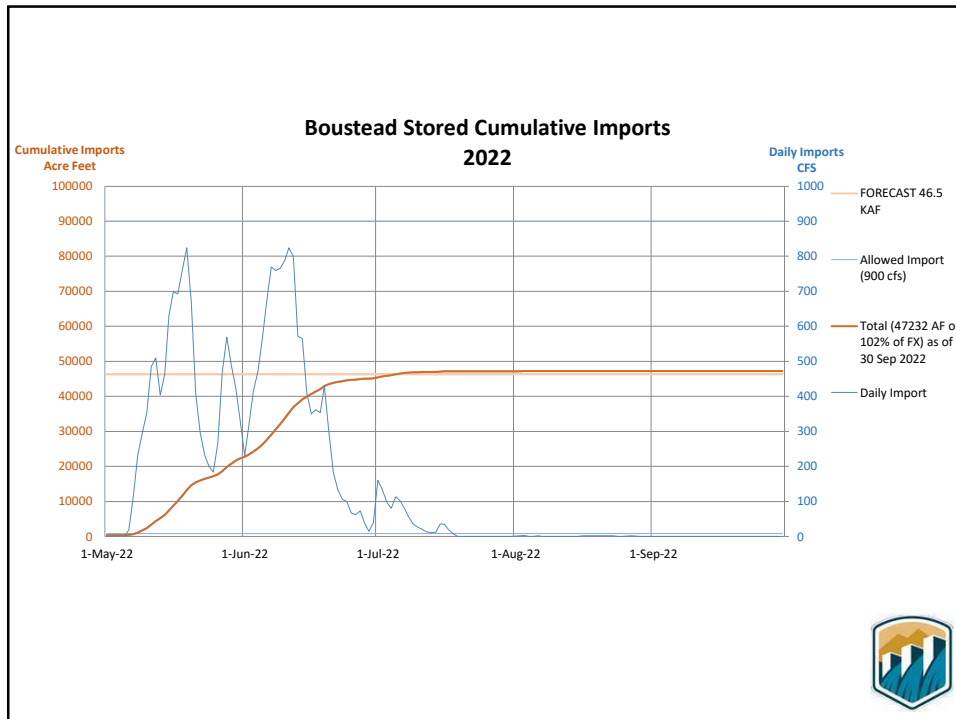
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2022 Fry-Ark Imports

- Collection system opens each year around the 3rd week in April
- Imports peak during peak runoff, usually between mid-May and mid-June
- Usually done around late July
- WY22 a total of 47,232 AF was imported through the Boustead Tunnel

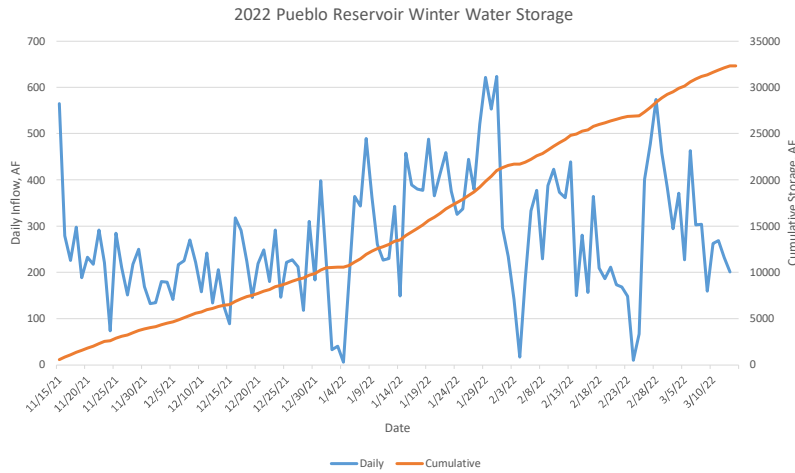


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2022 Winter Water – 32,313 AF stored in Pueblo Reservoir



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WY 2023 Winter Operations

- Currently releasing 15 cfs from Twin Lakes and 3 cfs from Turquoise Lake
- Need to move ~25,000 AF down from upper reservoirs to Pueblo
- Plan to begin moving water after January 1
- Movement of water will be adjusted based on snowpack and customer needs
- Sugarloaf powerplant



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Pueblo Dam Fixed Cone Valve

- The fixed cone valve was installed as part of the SDS project on the North Outlet Works.
- Carrying capacity of ~1,100 cfs
- Currently acts as the bypass for the SDS pipeline as well as the James W. Broderick Powerplant
- Also is the main release mechanism during lower-flow conditions



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Fixed!

- Outage lasted almost exactly a month
- Manufacturer turnaround time was over 2 months just for fabrication
- Cone valve and power plant were back in service on August 29th



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Pueblo Reservoir Recovery of Storage Project

- Estimated that Pueblo Reservoir is losing 0.27% of useable storage annually, about 7% every 25 years
- SECWCD obtained \$1M to fund a sedimentation study from the Bipartisan Infrastructure Law (BIL)
- Current phase of the study aims to quantify the sedimentation, identify sources upstream, explore options for mitigation and recovery
 - Lidar
 - GPS Surveys
 - Sediment Core Sampling
 - Feasibility Studies



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Next Generation Snow Observation

- ECAO is collaborating with USGS
- Real-time snow measurement and observation
- Ground truthing
- Benefits
 - Better water supply forecasting
 - Better import forecasting



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NEPA Reviews

- Completed NEPA (EA and FONSI) and contract with Tri-View District for 999 AF of excess capacity storage space in Pueblo Reservoir (December 2021)
- Working on a Temporary Excess Capacity Contract (1 year) in Pueblo for CY23, no new contractors this year
- Region is working on the draft contract to allow Reclamation to fund the sedimentation study, NEPA is not complete
- Reclamation has an MOU in place with Pitkin County and the City of Aurora for Reclamation to complete an Environmental Assessment reviewing a potential Excess Capacity Contract for storage in Ruedi Reservoir
- For more information contact Traci Robb at 970-461-5461 or TRobb@usbr.gov



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