

Drought Impacts on Hydropower in Arizona

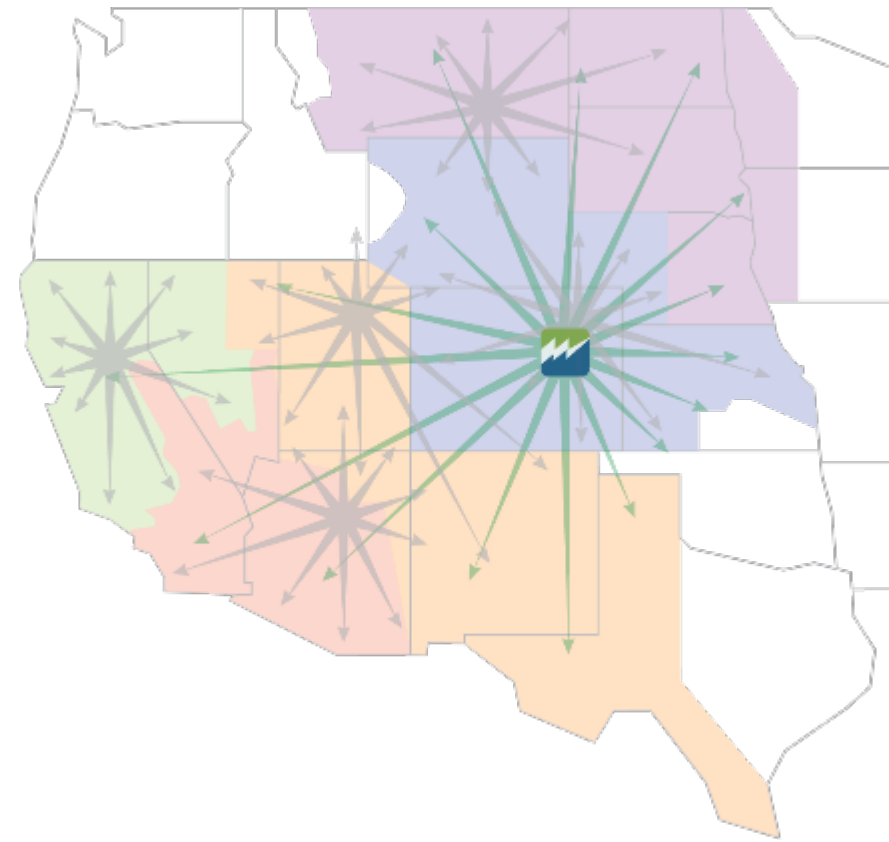
Drought Interagency Coordinating Group

Scott Lund
May 21, 2024



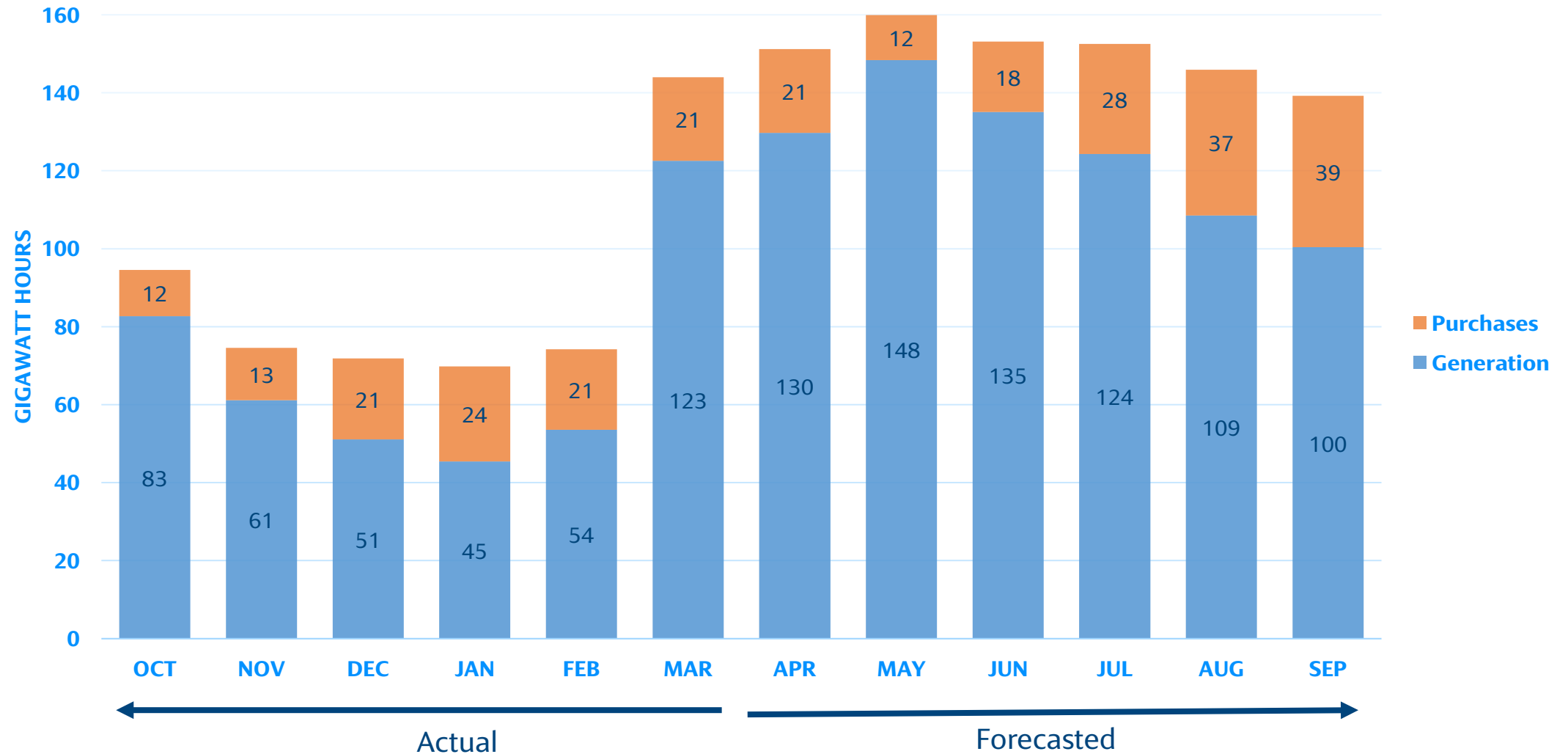
What is WAPA?

- Power Marketing Administration under Department of Energy
- Wholesale electricity supplier
- 15-state footprint
- 17,000 miles of transmission lines
- 700 customers who, in turn, serve 40 million Americans
- Power from Glen Canyon, Hoover, Davis, and Parker dams

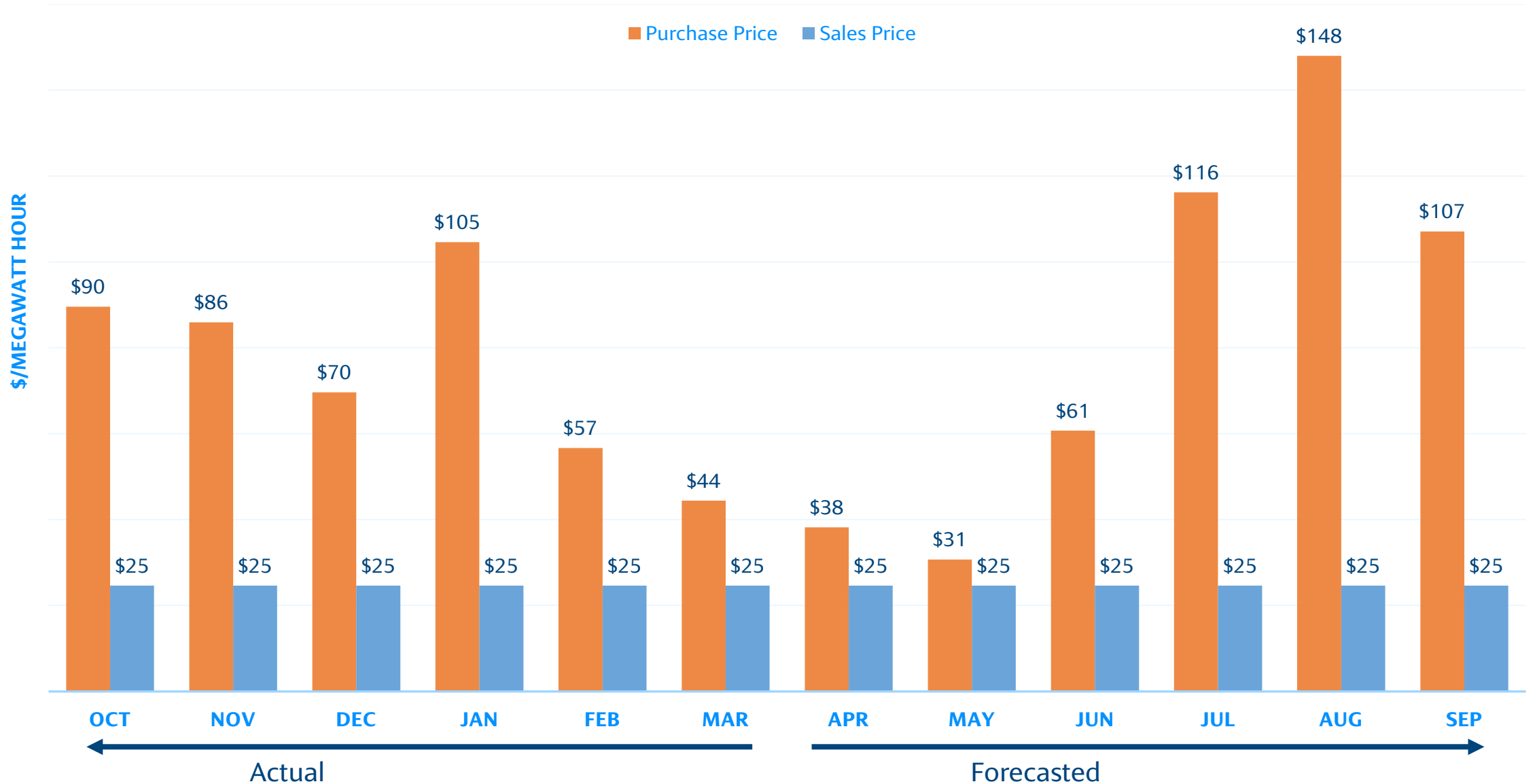


Parker-Davis Project – FY 2024

1,163 GWh of Generation, 268 GWh of Purchases



Price of Purchases



Cost of Purchases

Year	GWh	Purchase Cost (millions)	% of Typical Operating Cost
2024	268	\$24.0	129%
2025	266	\$14.5	78%
2026	145	\$8.9	48%
2027	166	\$9.9	54%
2028	177	\$10.3	56%
2029	178	\$10.2	55%
2030	174	\$9.9	54%

Decreasing
Price
Certainty



Drought Cost Estimate (2025 – 2030)

Boulder Canyon Project (Hoover)	Millions
Direct Rate Impact	\$168
Replacement Power	\$405
Renewable Energy Certificates	\$16
Green House Gas (CA)	\$24
Ancillary Services	\$108
Resource Adequacy (CA)	\$11
Total	\$732

Parker-Davis Project	Millions
Replacement Power	\$64
Renewable Energy Certificates	\$3
Total	\$67



Directly Affected Arizona Customers

Arizona Electric Power Cooperative

Arizona Power Authority

City of Mesa

City of Williams

Colorado River Agency

Electrical District No. 3

Fort Mohave Indian Tribe

Hohokam Irrigation and Drainage District

Luke Air Force Base

Marine Corps Air Station Yuma

Salt River Project

San Carlos Irrigation and Drainage District

Tohono O'odham Utility Authority

Town of Fredonia

Town of Gilbert

Town of Marana

Town of Thatcher

Town of Wickenburg

Wellton-Mohawk Irrigation and Drainage District

Yuma County Water Users Association

Yuma Irrigation District

Yuma Proving Grounds



Scott Lund
602.605.2442
slund@wapa.gov



www.wapa.gov