

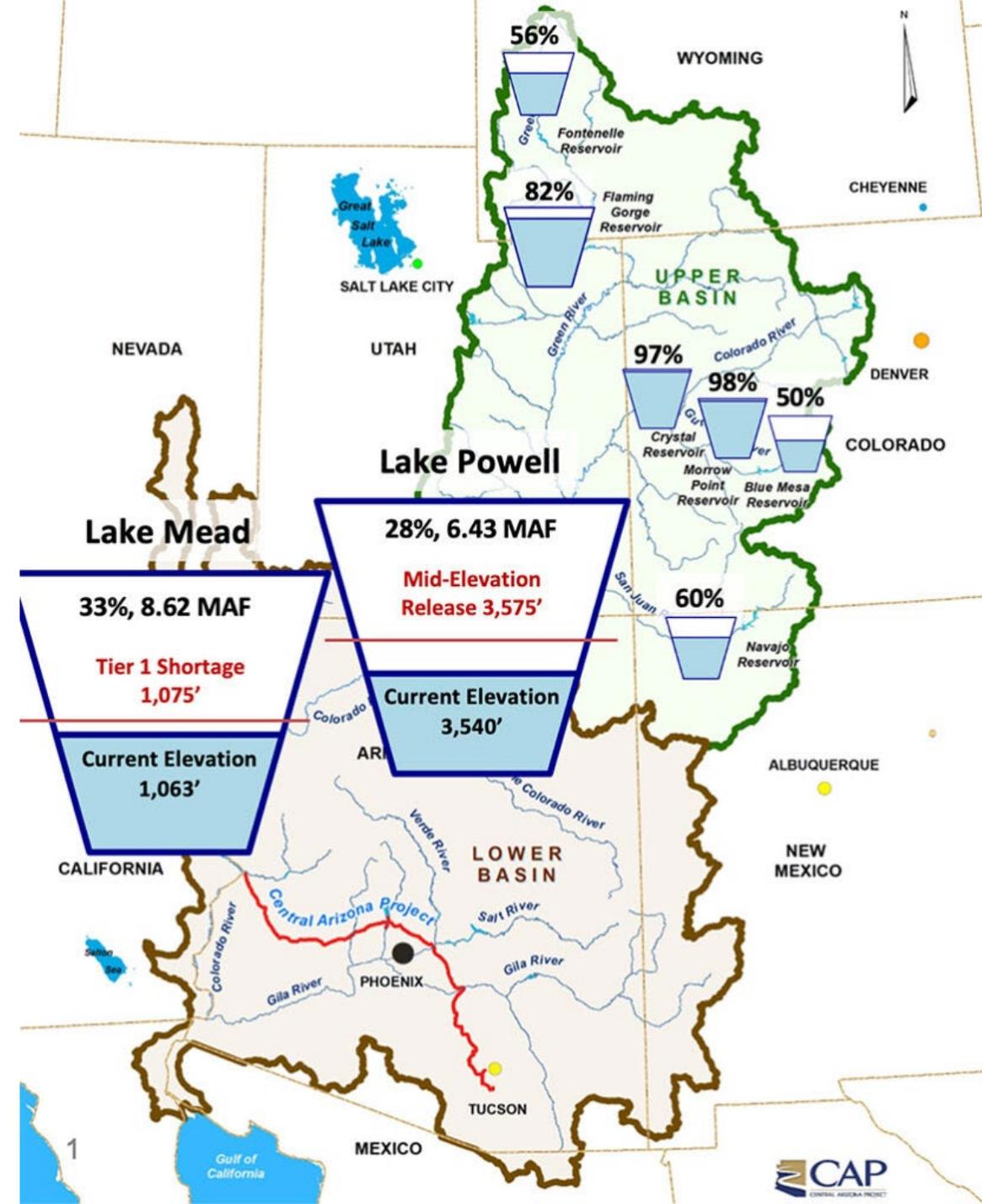


Mesa Water Resources

Presented by Chris Hassert

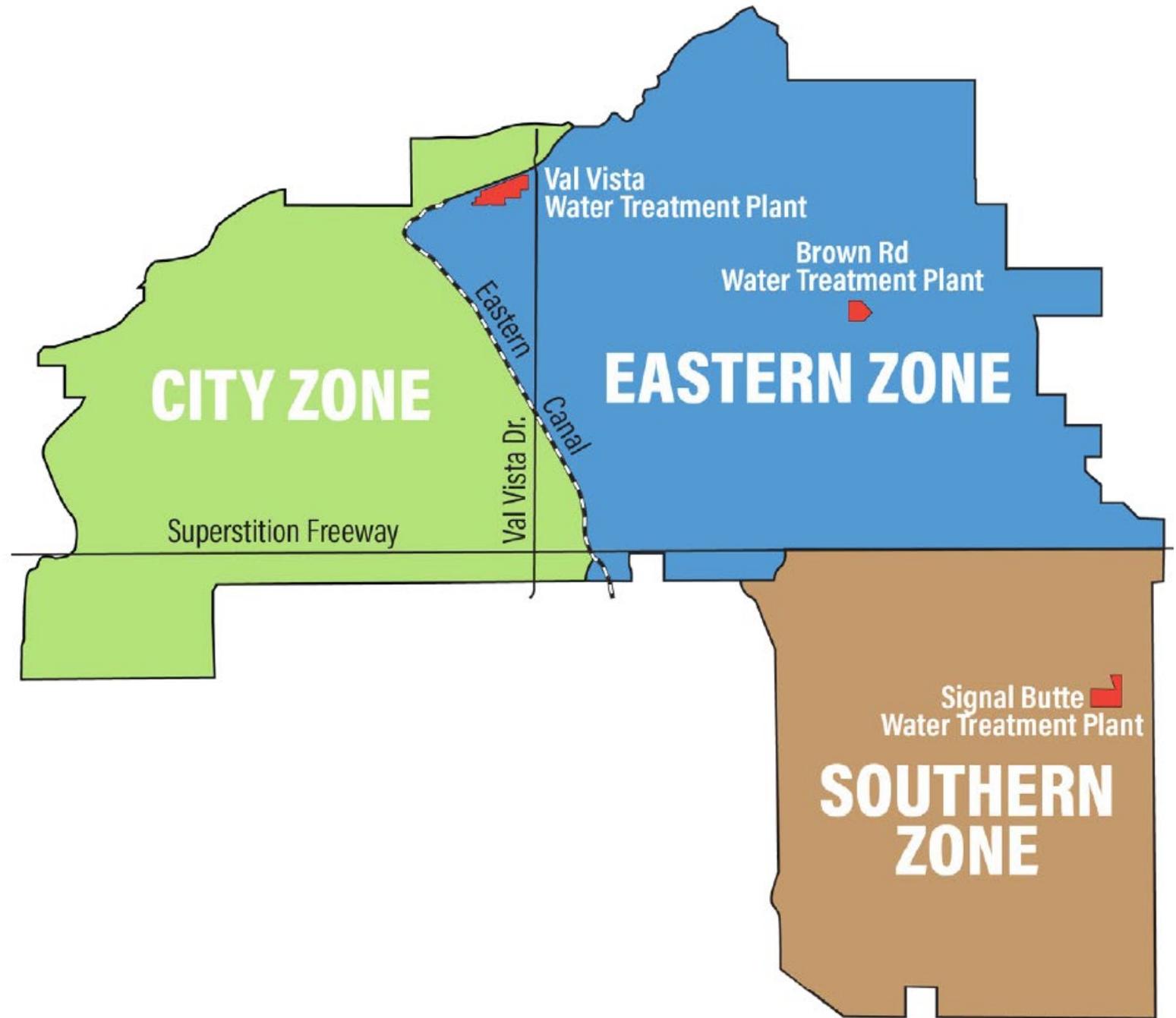
Introduction

- ▶ The 2007 Operating Guidelines for the Colorado River expire at the end of this year
- ▶ The Seven Basin States are working toward new Guidelines to start in 2027
- ▶ Arizona has already absorbed supply reductions
- ▶ Deeper cuts inevitable to address the supply-demand imbalance on the River System
- ▶ Prolonged drought and robust demand have contributed to falling reservoir levels
- ▶ Near term hydrologic projections are not encouraging
- ▶ Every Water Provider is unique and must address the challenges before them



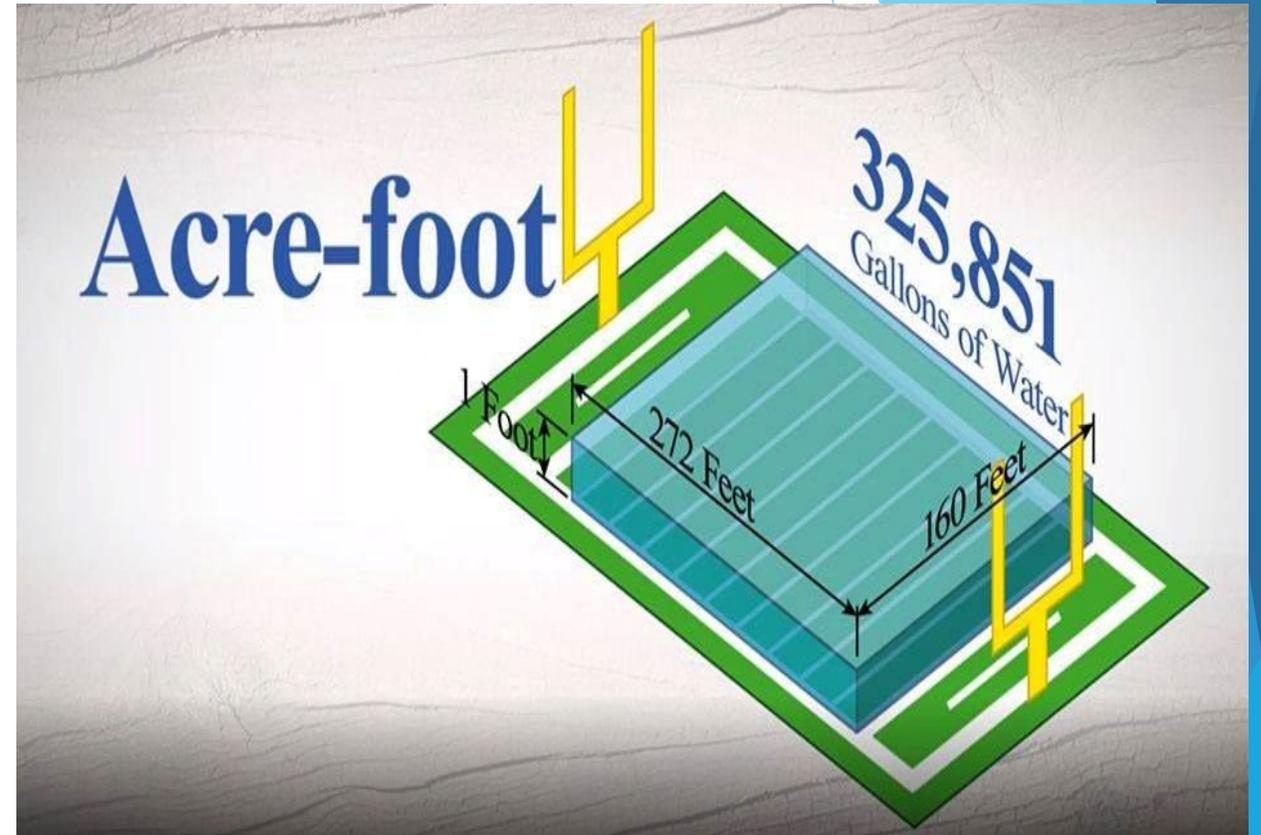
On-Project vs. Off-Project

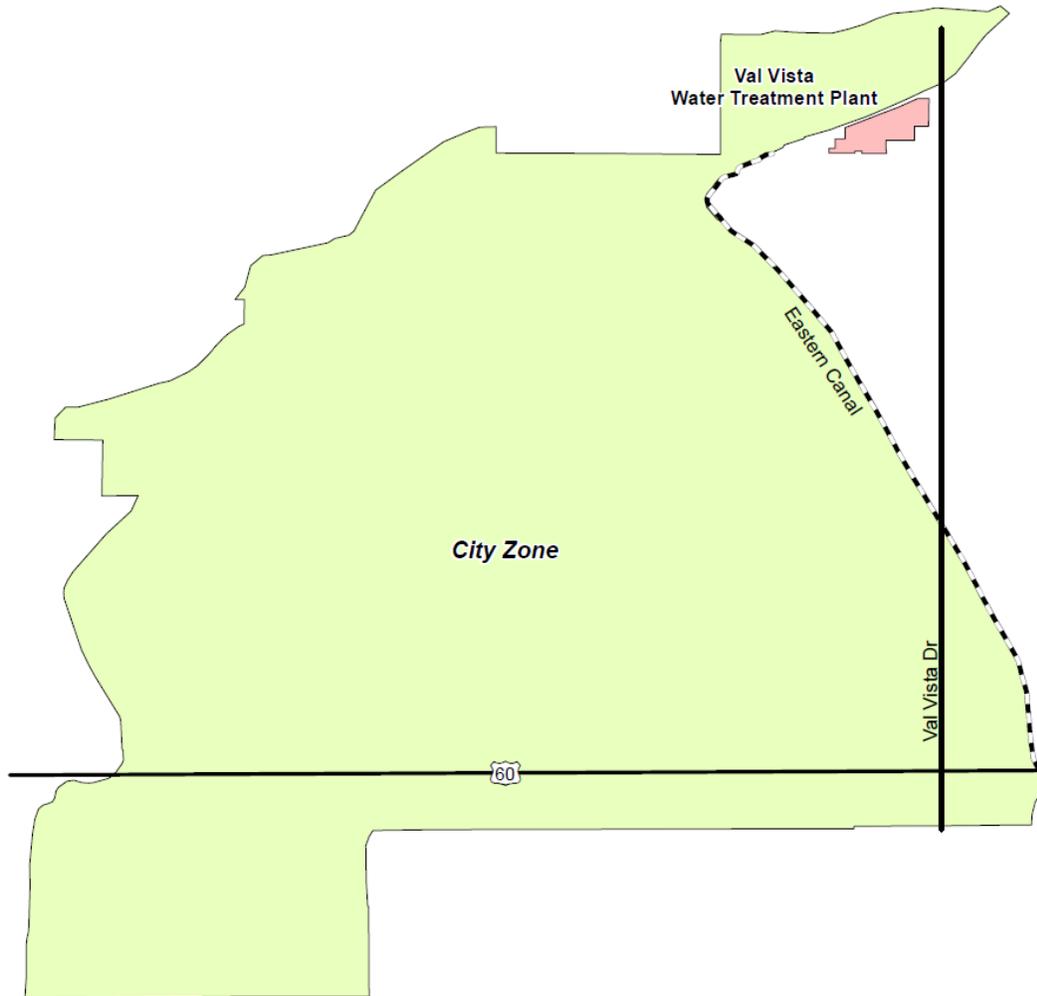
- ▶ "On-Project" area is the City Zone and served by SRP
- ▶ "Off-Project" area is comprised of the Eastern & Southern Zones and served by Colorado River Water
- ▶ All areas can be supplied with Groundwater



Water Units Refresher

- ▶ Water usage for a Mesa median residential customer
 - ▶ 6,000 gallons per month
 - ▶ 72,000 gallons per year or 0.22 acre-feet/year
 - ▶ 1 acre-foot serves 4.5 median residential households for 1 year
- ▶ 1,000 acre-feet serves 4,500 median residential customers (households)
- ▶ 1,000 acre-feet serves 3,000 households consuming the average demand of 9kgal per month

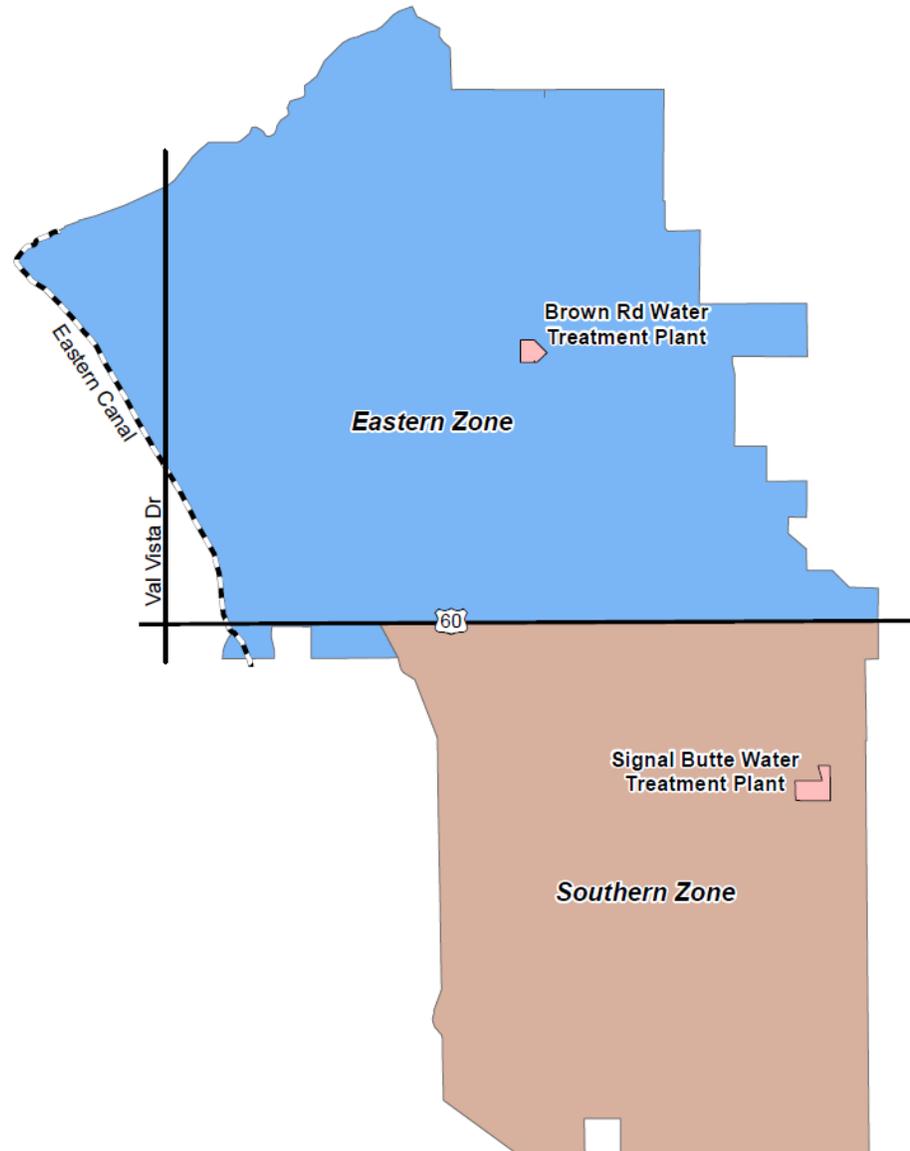




Salt River Project (SRP) “On-Project”

SRP Resources	Annual af/yr
<i>SRP Cutover Land (Acres)⁽¹⁾</i>	21,194
<i>Surface Water Allocation (af/ac/yr)⁽¹⁾</i>	2.27
Allocation Water Availability =	48,110
Normal Flow Water Availability	14,000
TOTAL SRP Water=	62,110

Central Arizona Project "Off-Project"



CAP Resources (AF/YR)	Full Portfolio
MESA Municipal (M&I)	43,503
M&I Total	43,503
SRPMIC Lease (IP)	1,669
IP Total	1,669
Wellton-Mohawk (P3)	2,622
P3 Total	2,622
RWCD (NIA)	627
Hohokam (NIA)	4,924
NIA Total	5,551
Available Allocation	53,345

Mesa's Additional Water Supplies

- ▶ Gila River Indian Community (GRIC) Water Exchange
- ▶ New Conservation Space (NCS) Water
- ▶ Groundwater Pumping
- ▶ Underground Long-Term Storage Credits (LTSC)



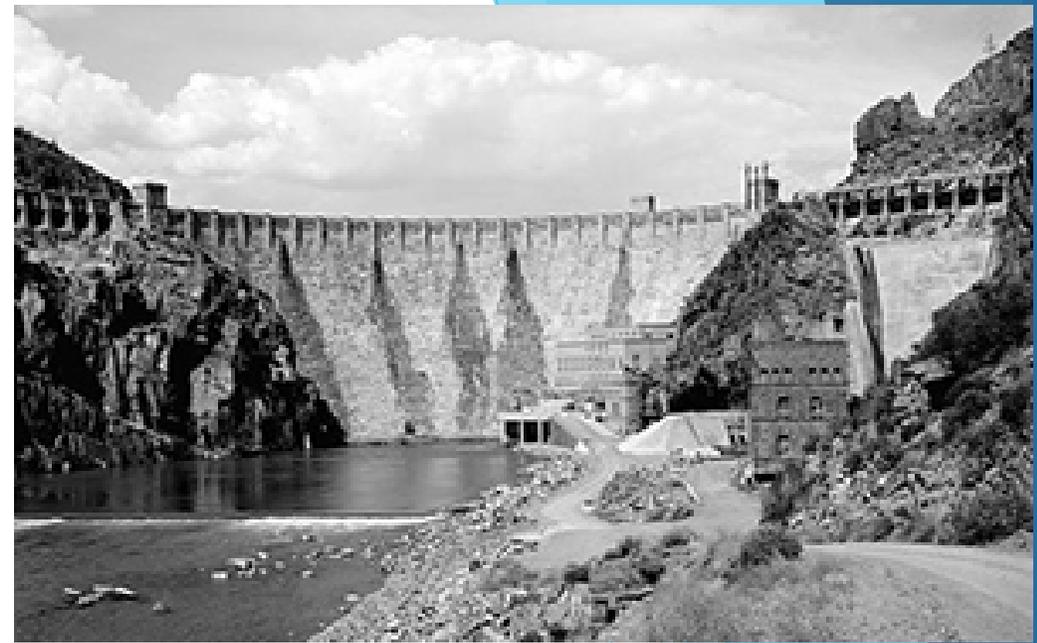
Gila River Indian Community Water Exchange

- ▶ 5:4 exchange of Reuse Water from NWWRP, SEWRP & GWRP for CAP water delivered at SBWTP or BRWTP
- ▶ Water obtained through the exchange charged at the CAP pumping charge (\$85/AF) opposed to M&I CAP rate of (\$365/AF)
- ▶ Agreement allows Mesa to deliver up to 29,400 AF of Reuse water to be exchanged for 23,520 AF of CAP water
- ▶ For CY 2026, Mesa's CAP Order accounts for 8,128 AF of water through the Exchange
- ▶ Reuse water that will be delivered through the CMRP doubles the volume above



New Conservation Space (NCS)

- ▶ Roosevelt Dam, completed in 1911
- ▶ In 1996, a \$430M project raised the dam by 77 feet to increase storage in Lake Roosevelt
- ▶ Storage increased by 304,729 acre-feet
- ▶ Mesa's share of increased storage is 41,000 acre-feet
- ▶ In the City's 100-year AWS, ADWR recognizes an annual usage of 12,500 acre-feet
- ▶ This water can be used anywhere in Mesa's service area



Groundwater Pumping

- ▶ Two types of Groundwater
 - ▶ Assured Water Supply Groundwater Allowance
 - ▶ Incidental Recharge
- ▶ Groundwater can be pumped in all parts of the service area
- ▶ Mesa has 35 active groundwater wells
- ▶ Pumping could be focused in the Eastern and Southern Zones during CAP supply reductions

Assured Water Supply Groundwater Allowance	AF
<i>2025 Total Demand</i>	98,799
<i>Annual Incidental Recharge 5.35%</i>	5,286
<i>Groundwater Allowance</i>	467,895
<i>Annual Amount</i>	4,679
<i>Total Annual Groundwater Allowance + Incidental Recharge</i>	9,965

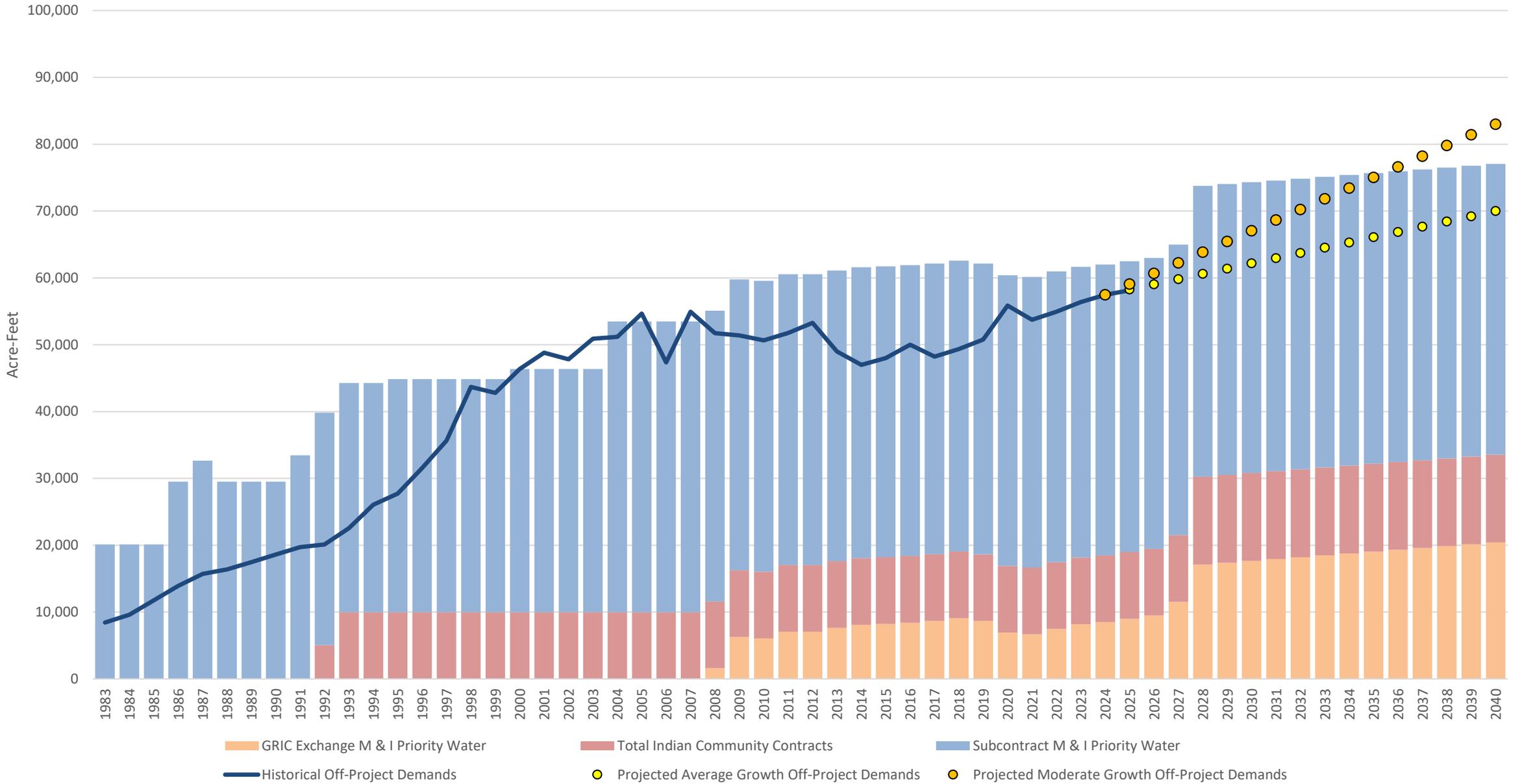
Long-Term Storage Credits (LTSCs)

- ▶ Mesa has over 550,000 acre-feet of LTSCs banked underground
- ▶ Three quarters of the stored credits are in the Roosevelt Water Conservation District (RWCD) Groundwater Savings Facility (GSF)
- ▶ Granite Reef Underground Storage Project (GRUSP) operated by SRP was completed in 1994
- ▶ Since 2000, Mesa has banked nearly 90,000 acre-feet of Reclaimed and NCS water at GRUSP
- ▶ LTSCs are recovered through Mesa's groundwater pumping wells

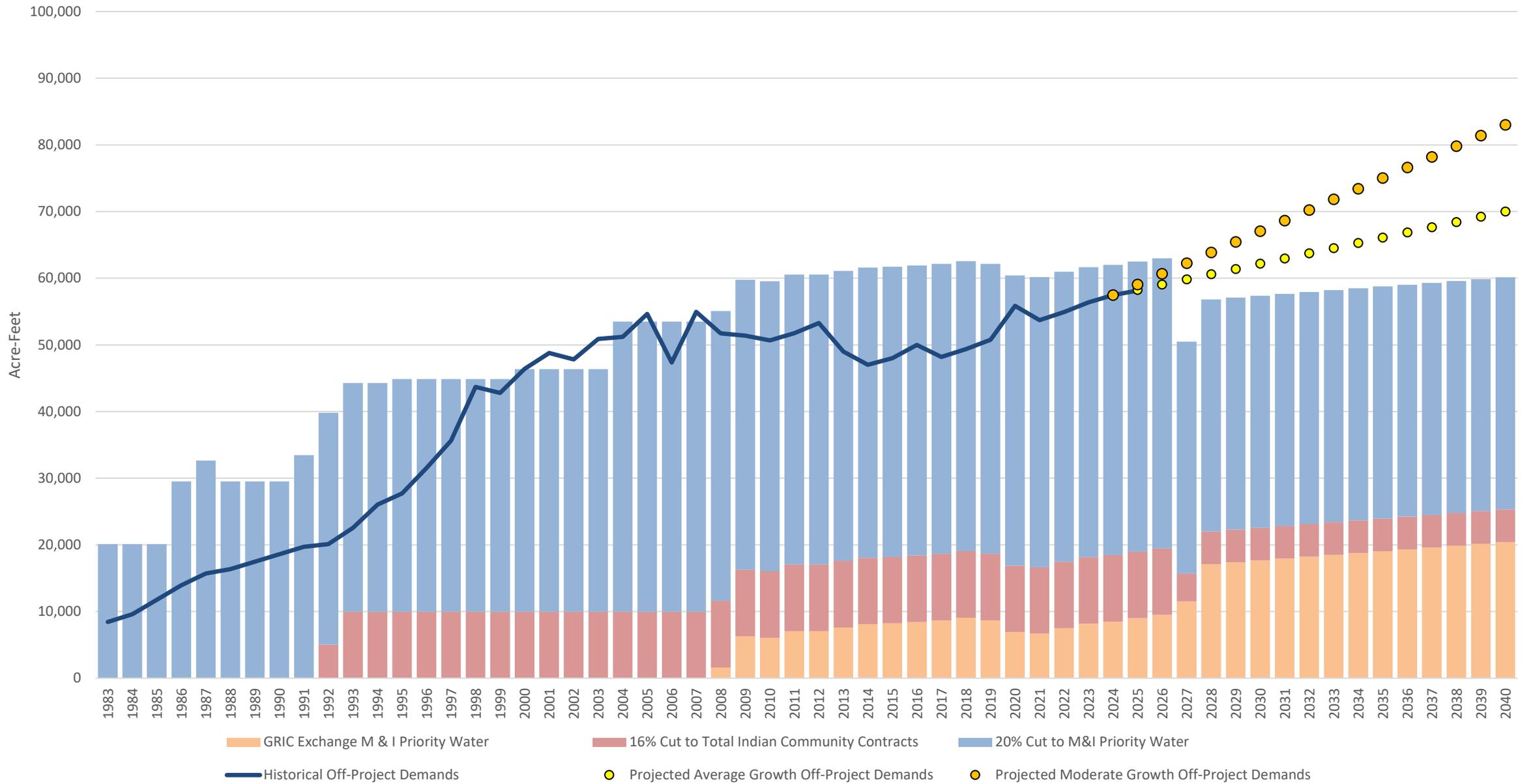


Long Term Storage Credits	af
<i>GRUSP</i>	88,228
<i>NWUSF</i>	49,710
<i>RWCD GSF</i>	413,033
<i>SRP GSF</i>	4,642
<i>Red Mtn USF</i>	1,470
Total Stored Credits	557,084
Total Annual LTSCs	5,571

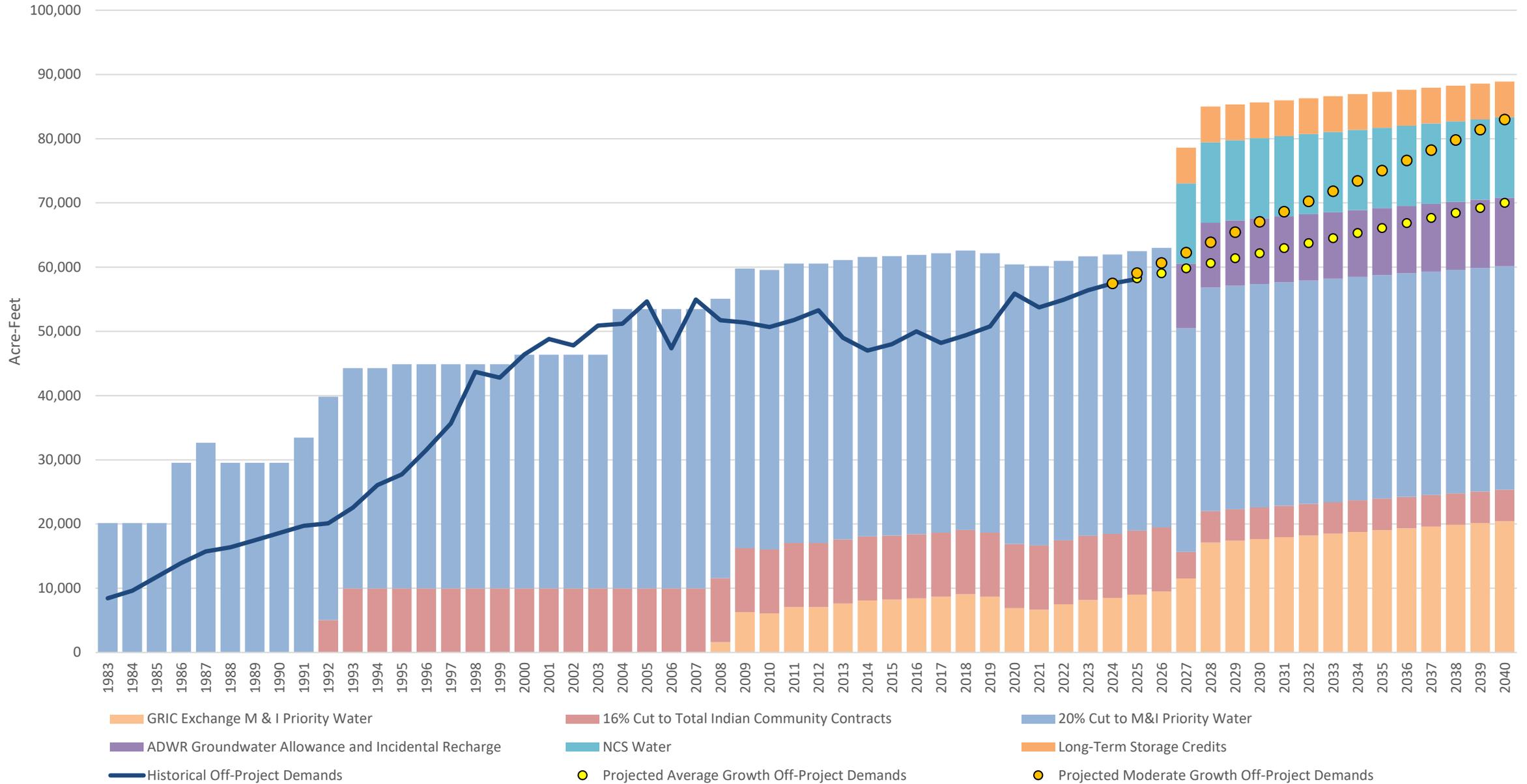
Off-Project Surface Water Supply vs Demand



20% Cut to Colorado River Supplies vs Demand Scenarios



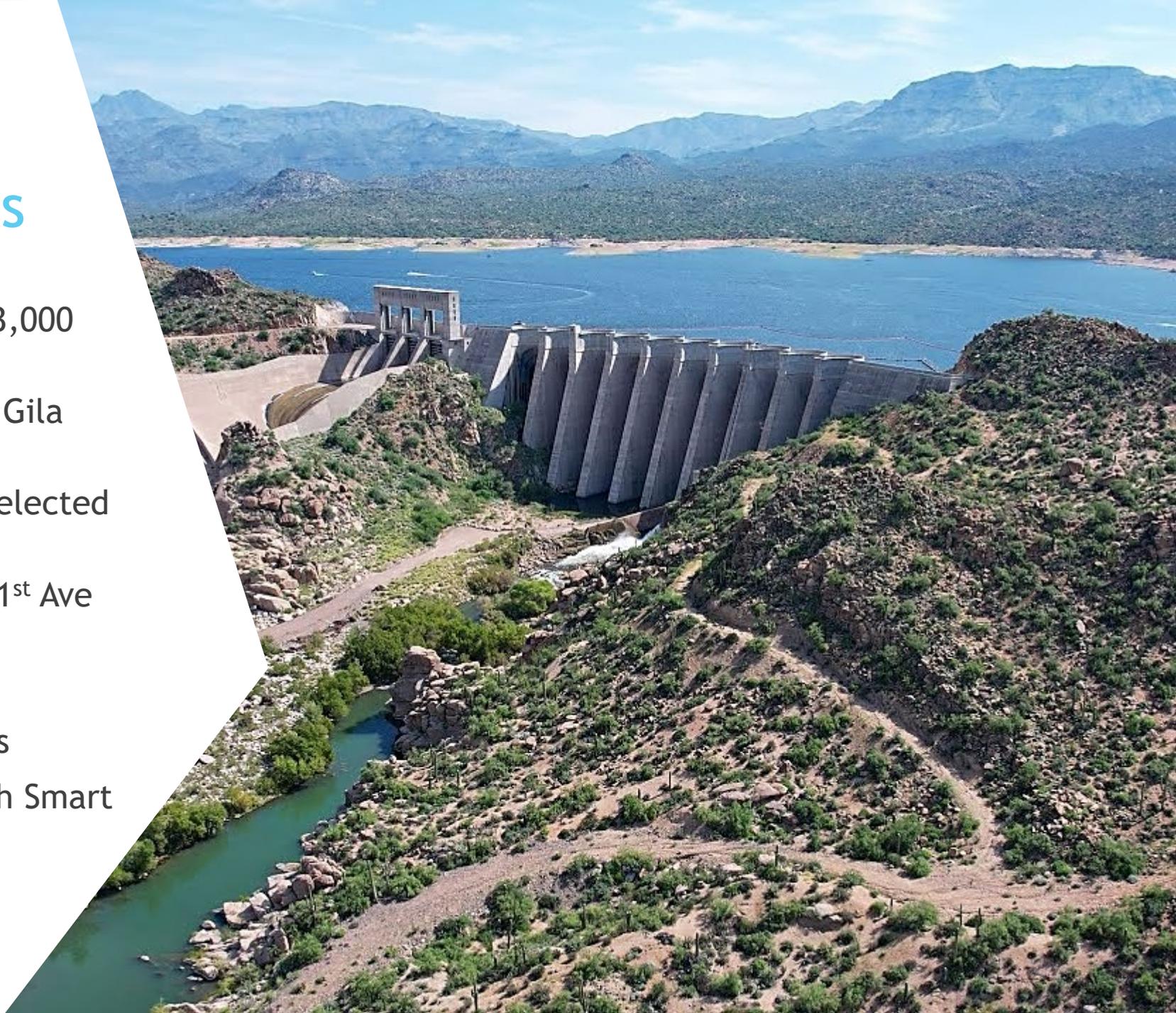
20% Cut to Colorado River Supplies vs Demand Scenarios



Future Supplies

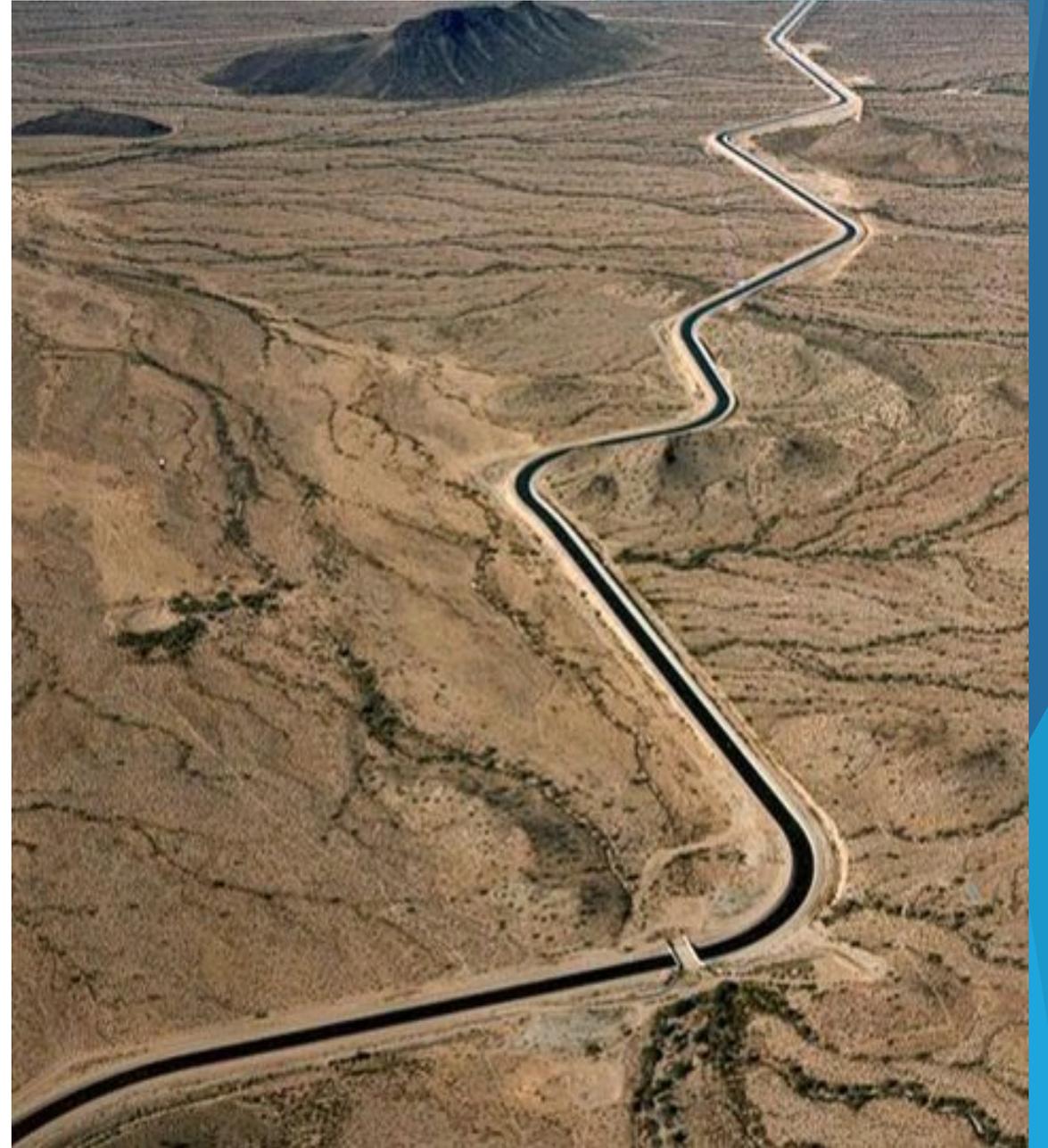
Long-Term Solutions

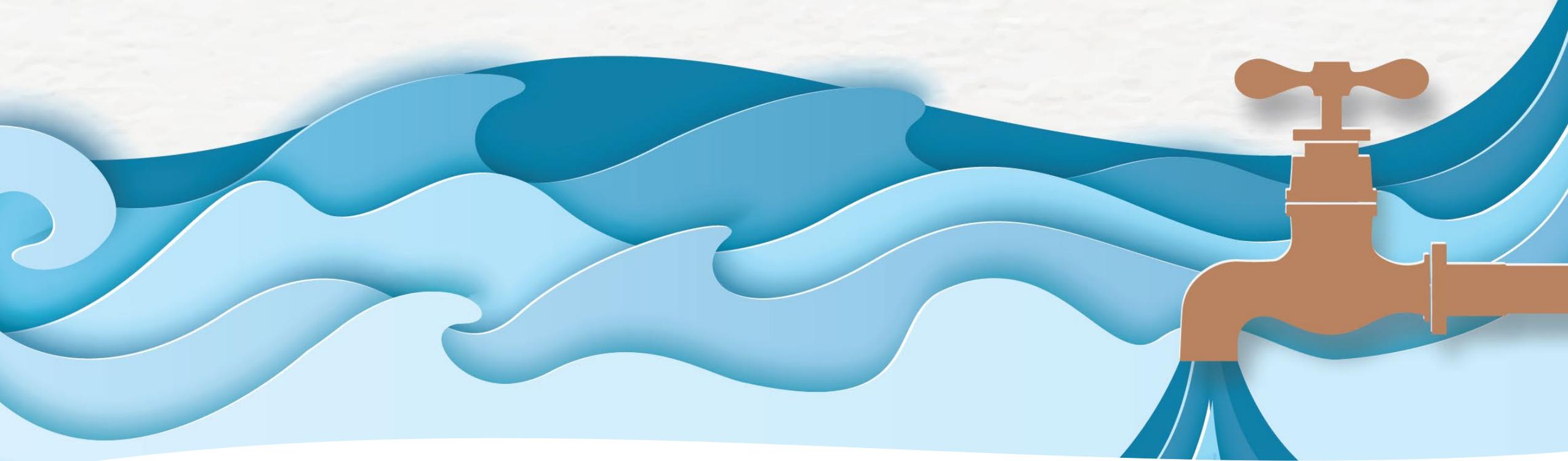
- ▶ Raise Bartlett Dam - \$150M for 3,000 acre-feet per year average
- ▶ Divert more Reuse Water to the Gila River Indian Community
- ▶ State led Importation Projects selected by WIFA
- ▶ Advanced Water Treatment at 91st Ave WWTP - Exchange Water
- ▶ Septic to Sewer
- ▶ Continue finding and fixing leaks
- ▶ Real time leak detection through Smart metering



Key Takeaways

- ▶ The current 20-year Operating Plan for the Colorado River expires at the end of this year
- ▶ Additional Supply reductions will be inevitable starting in 2027
- ▶ Reductions may be introduced in phases
- ▶ Mesa began building a resilient water portfolio a half century ago and continues to add to our supplies
- ▶ Future supplies will be expensive as options become more scarce
- ▶ Water Conservation is a tool that can temper future demand





Find fact sheets and more resources online at
mesaaz.gov/water