



LAKE POWELL PIPELINE

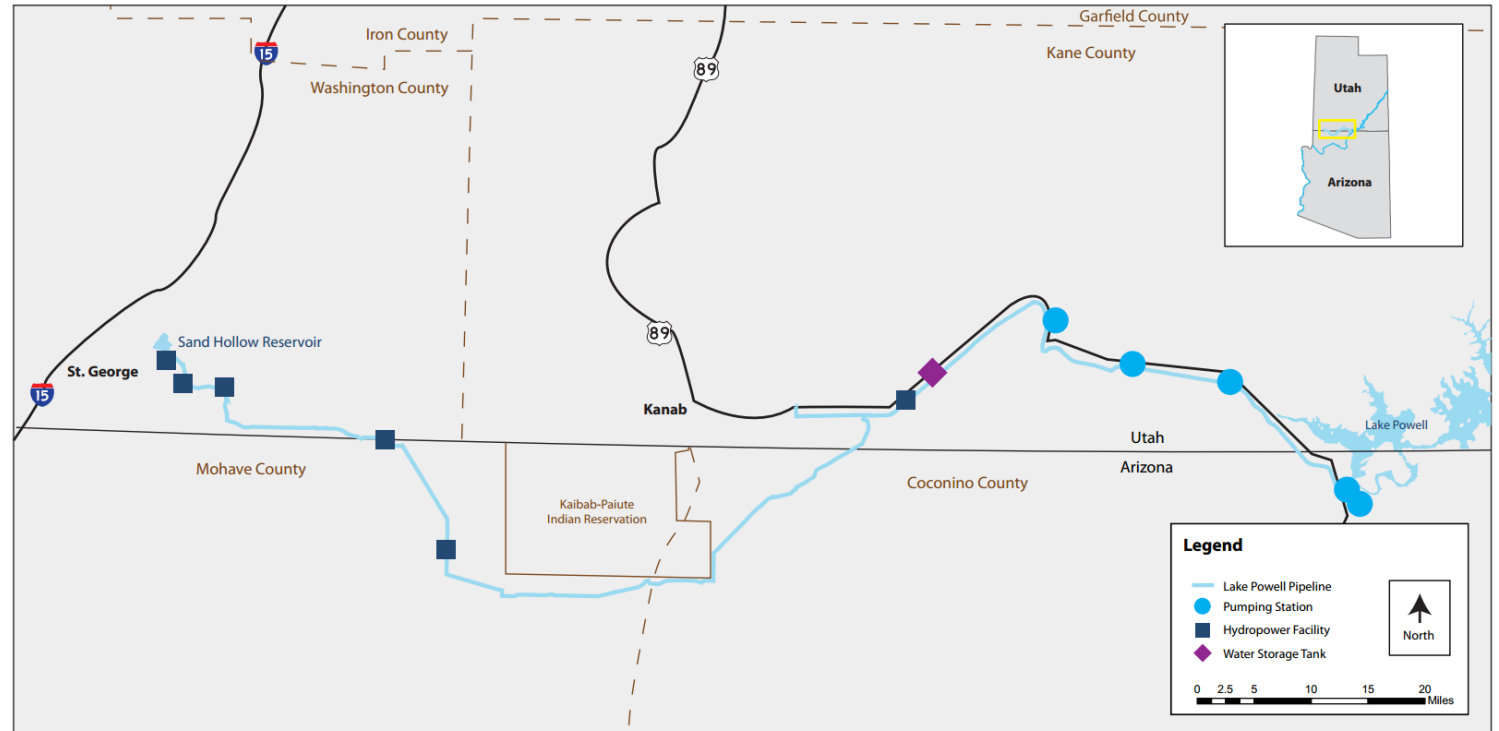
UCRC Work Meeting | August 7, 2020

Joel Williams | Utah Division of Water Resources



About the Lake Powell Pipeline (LPP)

- State of Utah project
- LPP Development Act 2006
- Delivers 86,000 AF of water
- Approximately 140 miles buried pipeline
- 5 pump stations
- 6 hydropower stations



LPP Diversion and Terminal Storage

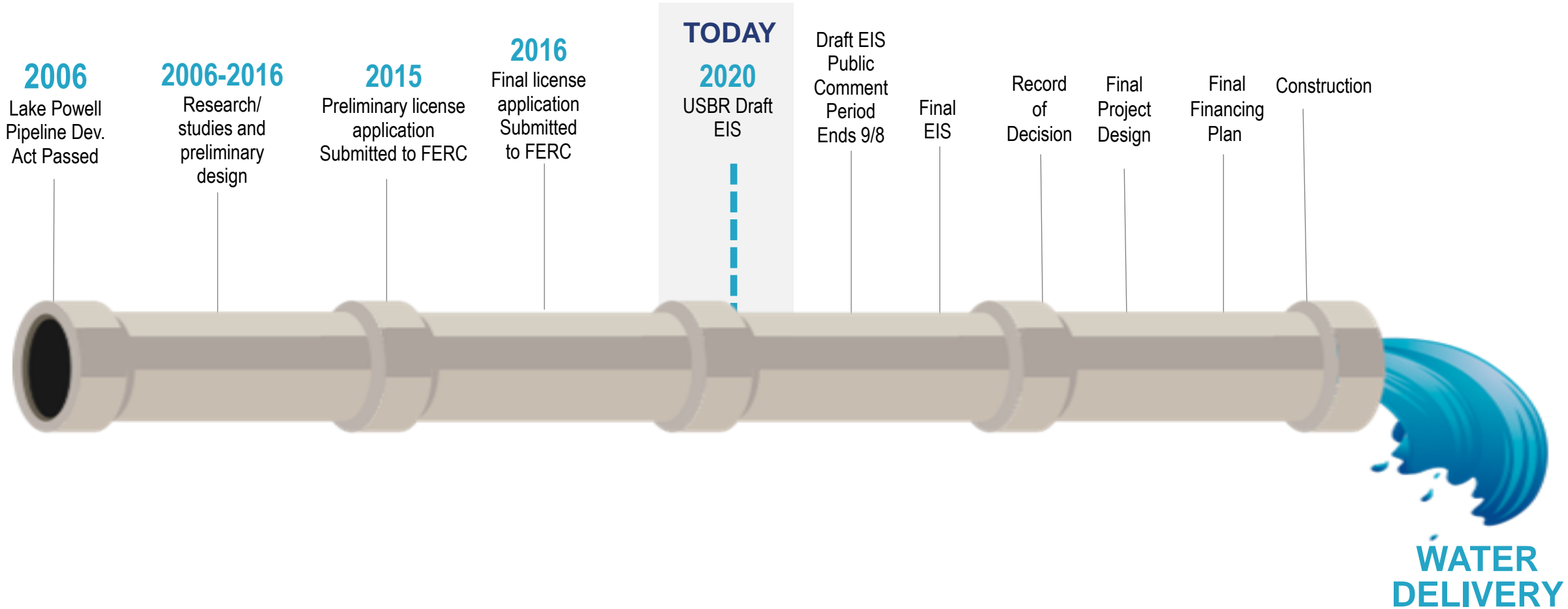
- Diversion immediately upstream of Glen Canyon Dam on west side of Lake Powell
- Terminal Storage in Sand Hollow Reservoir near St. George
- Raw water, conveyed through existing pipeline to Quail Creek Water Treatment Plant



Recent Project Modifications

- Eliminated two reservoirs proposed to generate hydropower at times of peak demand; LPP will still be able to produce hydropower using inline facilities
 - Conduit exemption expanded by congress in 2018
- Modifications reduce project costs more than \$100 million, align with regulatory changes and reduce environmental impacts
- Lead Federal Agency changed from FERC to US Bureau of Reclamation
- Kane County Water Conservancy District recently withdrew from NEPA process

Anticipated Timeline



Why Utah Needs the LPP

UTAH'S 13 SOUTHERN COMMUNITIES DEPEND ON IT



**SYSTEM
RELIABILITY**



**DROUGHT
PROTECTION**



**ECONOMIC
VITALITY**



**GROWING
COMMUNITIES**

Provides the Region Another Water Source

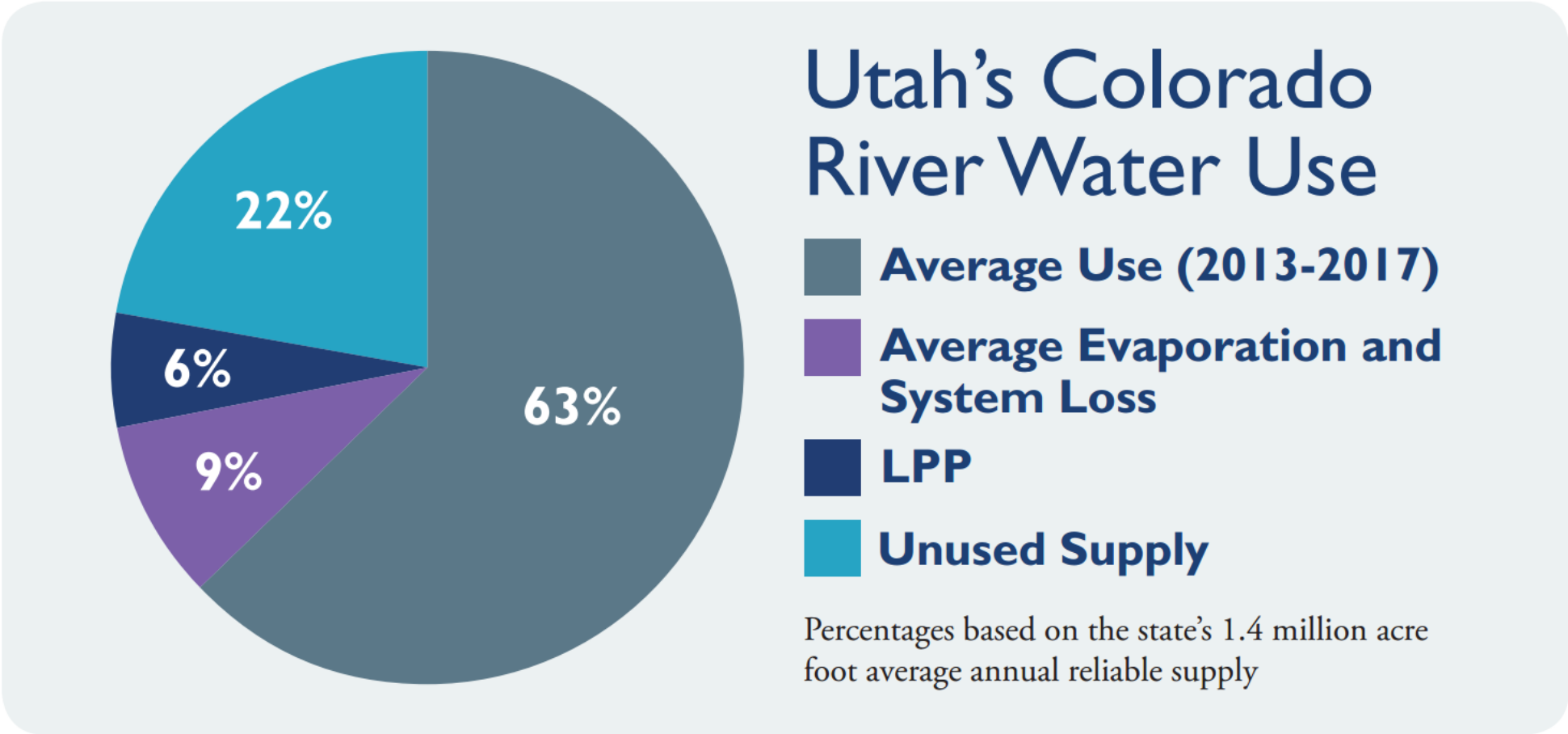


**THE VIRGIN RIVER
BASIN**



**LAKE POWELL/
COLORADO RIVER WATER**

Colorado River is a Reliable Source for the LPP



Provides Drought Protection

- Southern Utah has experienced drought 12 out of the 20 past years
- Climate variability
- Stores water in Sand Hollow Reservoir, closer to local communities



Complements Water Conservation



- Washington was the first county to meet the statewide water conservation goal
- More than \$60 million invested in recent conservation efforts

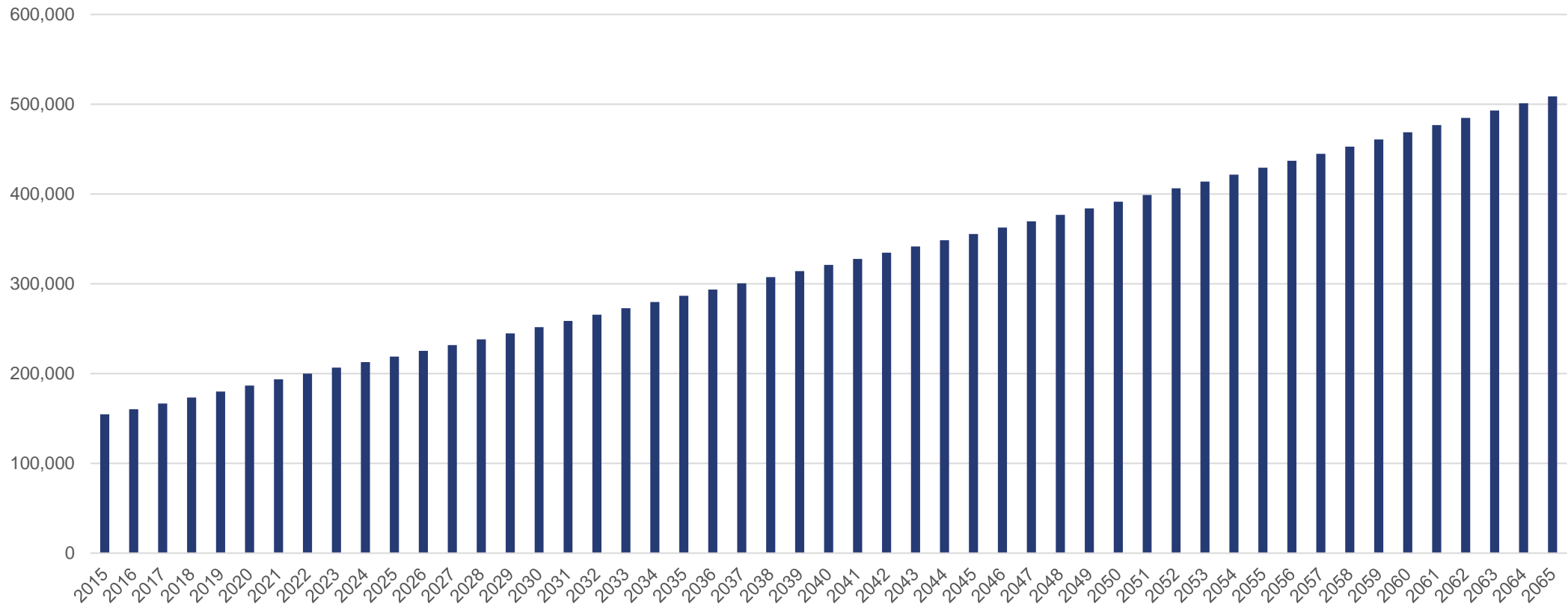
Conservation, Rebate and Education Programs

Washington County

- Universal metering
- Secondary water meters
- Smart controller irrigation technology
- Discounted impact fees for water wise landscapes
- Tiered water rates
- Landscape ordinances
- Time of day watering ordinances
- Requirement of a water conservation plan for municipal customers
- Water efficient landscape workshops
- Public information programs/school education
- System water audits, leak detection and repair
- Free outdoor irrigation efficiency audits for residences and businesses
- Water Smart irrigation rebate program
- Water Smart commercial upgrades equipment rebate
- Training and certification of landscape training professionals
- Financial incentives for irrigation upgrades
- Large landscape conservation programs and incentives
- EPA WaterSense appliance rebates
- Statewide water-wise plant list and tagging program
- Public athletic fields conversion to artificial turf grant program
- WaterSense toilet/urinal rebates
- Multi-family high-efficiency washer rebate program
- Funding for local and statewide media campaigns

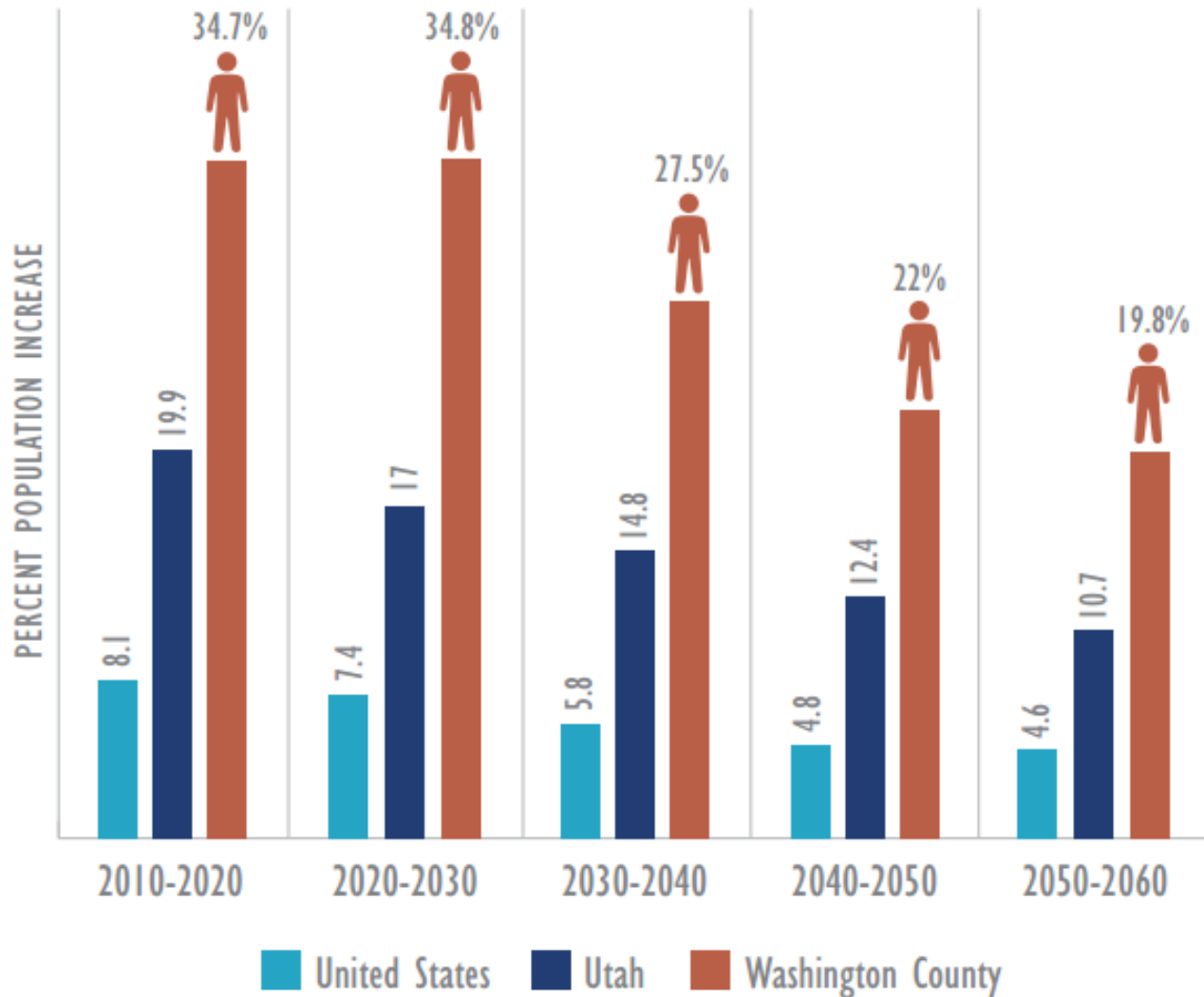
Supplies Water to Meet Future Demand

Washington County's population is projected to increase of 229%

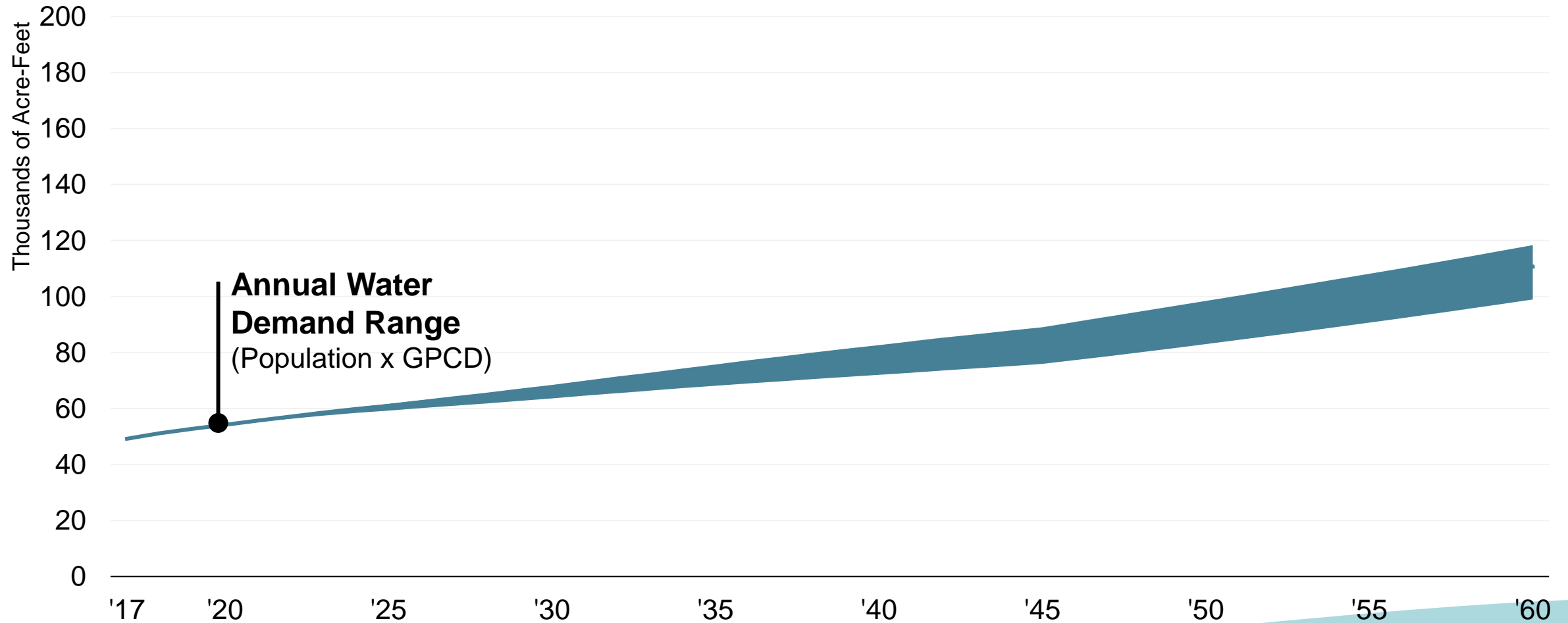


Source: Kem C Gardner Policy Institute at the University of Utah, 2017

Projected Population Growth by Decade

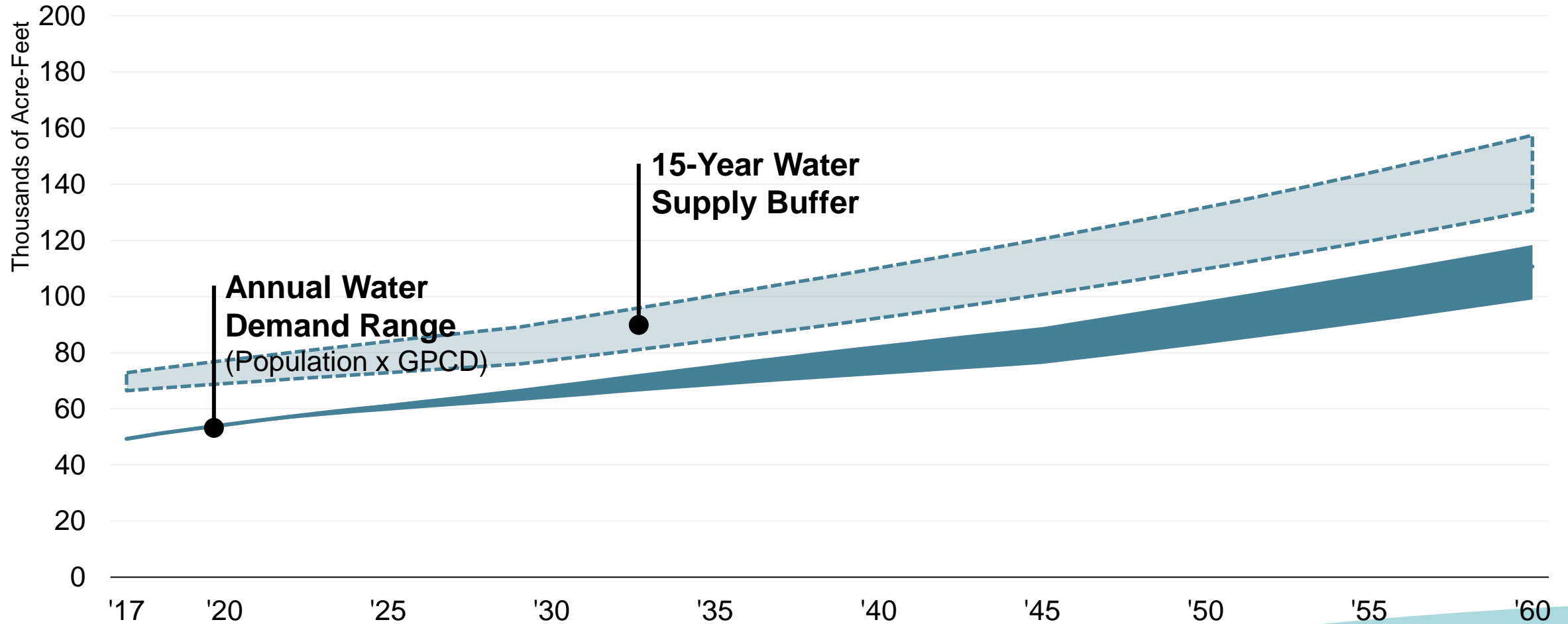


Washington County Water* Supply-Demand Balance



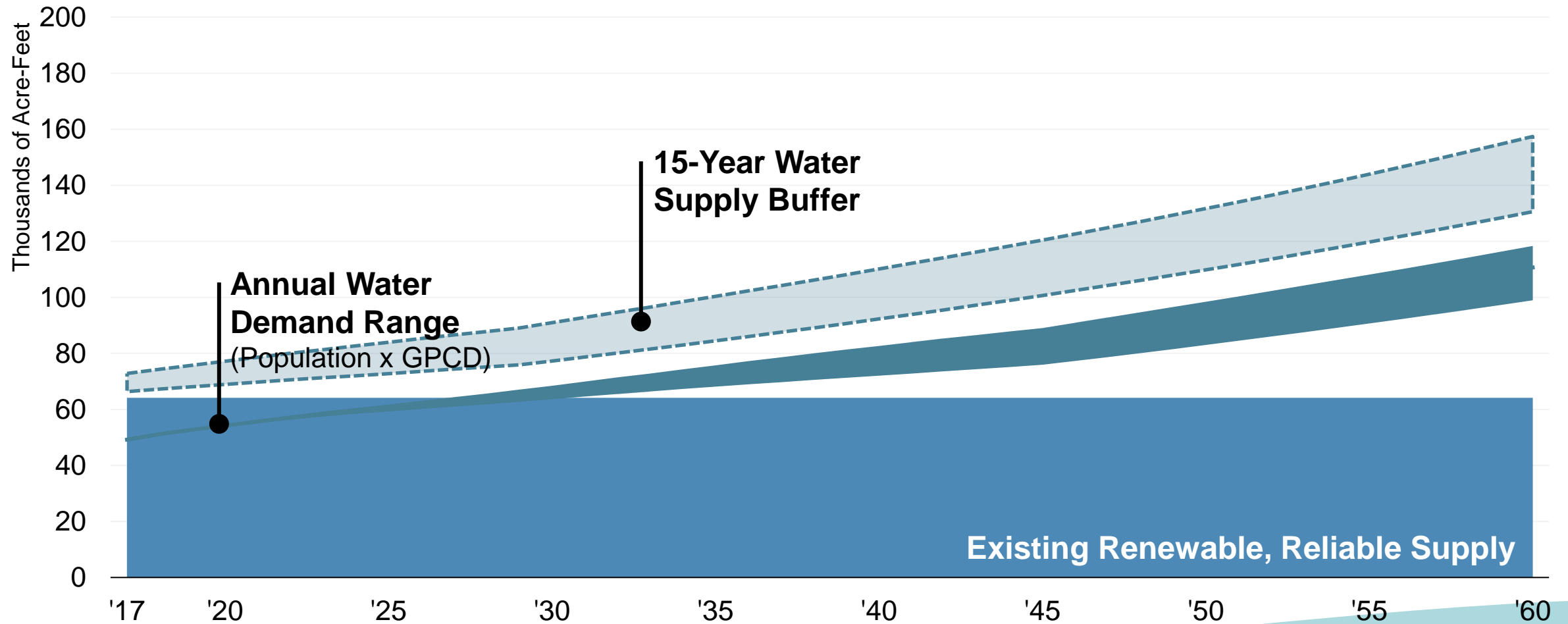
*Potable water

Washington County Water* Supply-Demand Balance



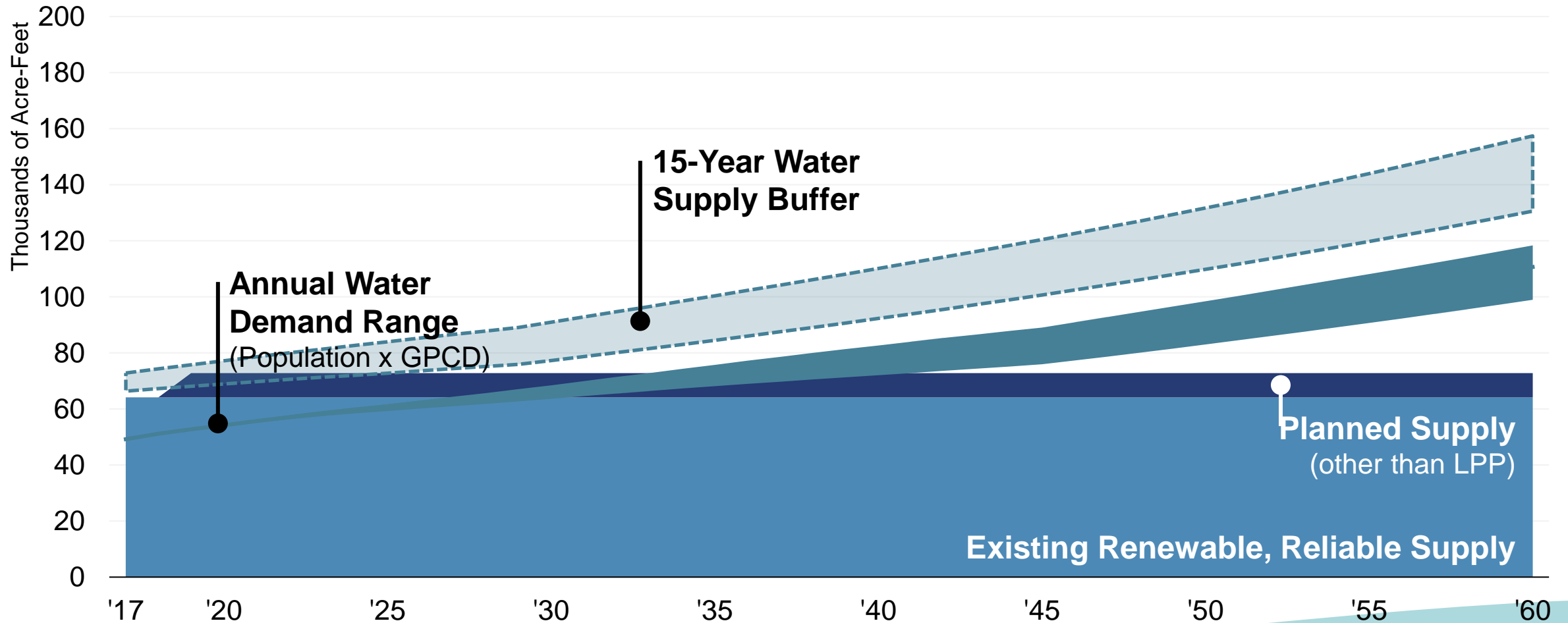
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Washington County Water* Supply-Demand Balance



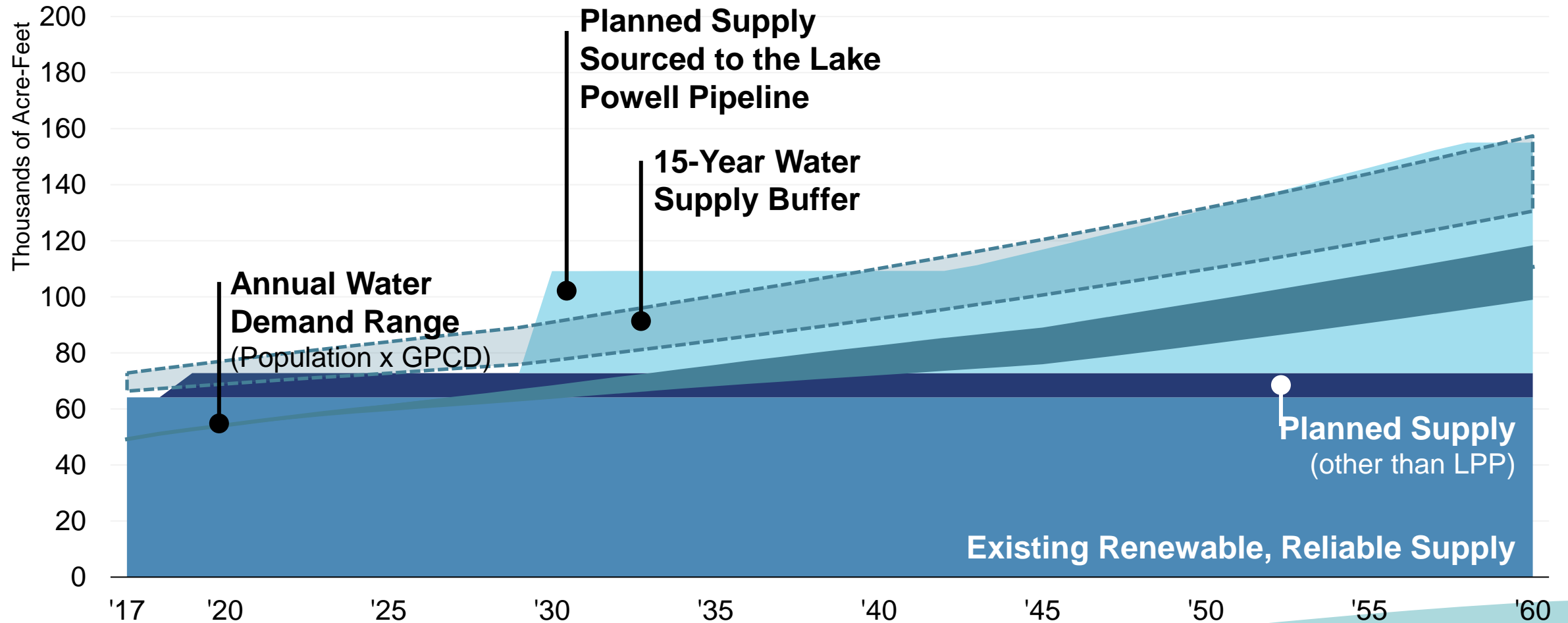
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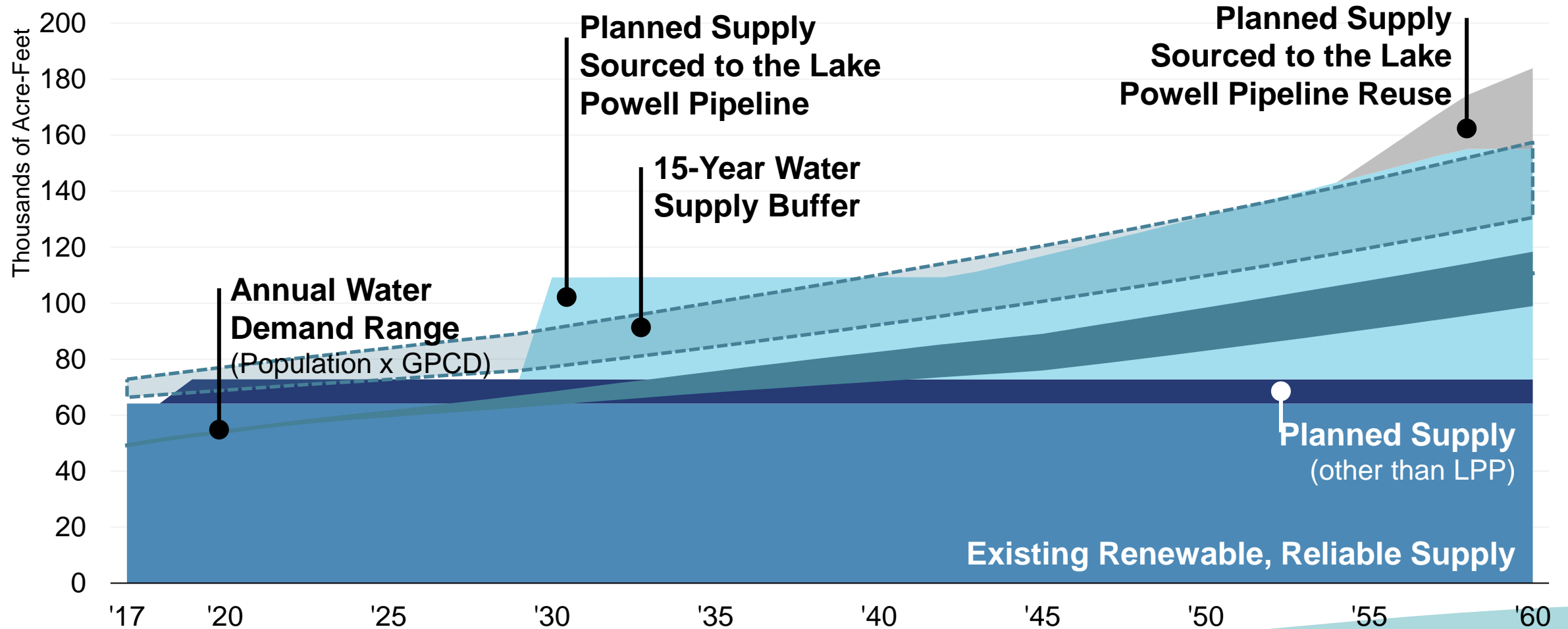
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Washington County Water Supply-Demand Balance



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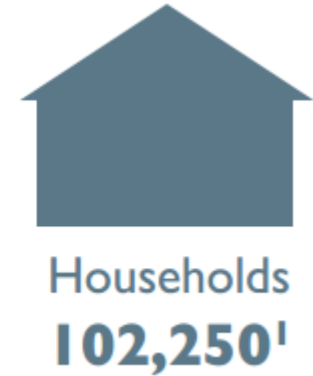
Washington County Water Supply-Demand Balance



*Potable water

Need for Economic Stability

Assuming Washington County yields the same economic activity from every new acre foot of water as it does from each current one, the LPP would support:



1. Kem C. Gardner Policy Institute 2. U.S. Bureau of Labor Statistics 3. U.S. Bureau of Economic Analysis 4. St. George Metropolitan Statistical Area, coterminous to Washington County, UT

Southern Utah's Comprehensive Water Plan



Existing Sources



Conservation and Reuse



Local Projects



Ag Conversion



Lake Powell Pipeline (LPP)



LPP Reuse

Costs and Financing

District Revenue Sources



WATER
RATES



PROPERTY
TAXES



IMPACT
FEES

- 2006 Lake Powell Pipeline Development Act reads the state will finance the project and water users will repay the state
- Preliminary cost estimate \$1.1-1.9 billion

Water for Generations

- Provides water for economic vitality/current and future generations
- Protects against drought
- Reduces the risks of single water source reliance



More Information at www.LPPUtah.org

