IS THE COLORADO RIVER A RELIABLE SOURCE FOR THE LAKE POWELL PIPELINE?

June 2019

Water for *today* and *tomorrow*

Don Ostler, former Executive Director and Secretary, Upper Colorado River Commission

Colorado River: Lifeline for the West

- Water for 40 million people
- 246,000 squares miles in drainage basin includes 7 states and Mexico
- Lakes Mead and Powell part of the Colorado River storage system
  - –Act as "bank" accounts

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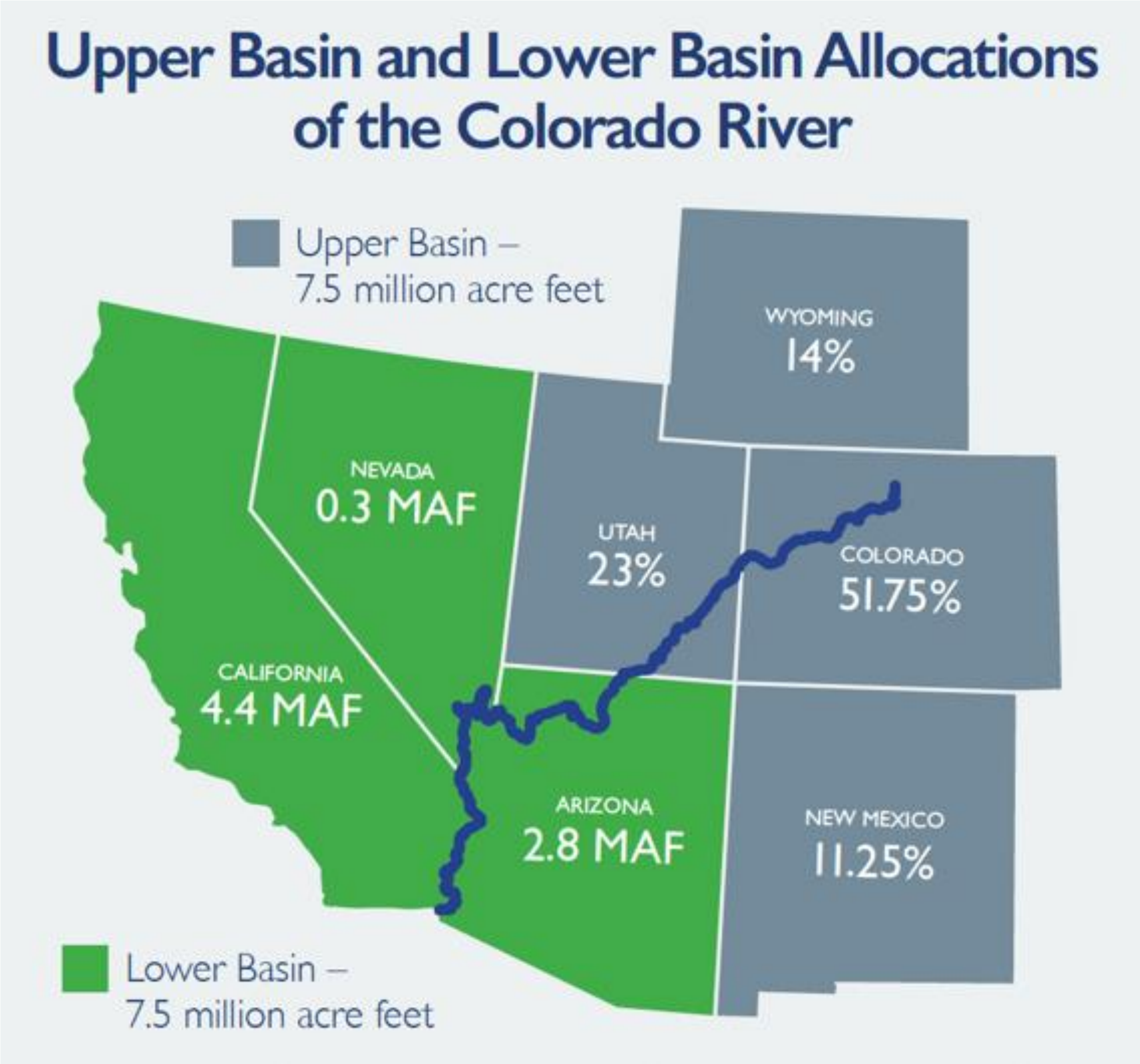
How is the Water Shared?

- Law of the River defines apportionment of the Colorado River
- 1922 Colorado River Compact defined the upper and lower basins and allocated 7.5 million acre feet (maf) of river water to each basin annually
- 1928 Boulder Canyon Act apportioned the lower basin’s water among Arizona, California and Nevada
- 1948 Upper Colorado River Basin project appropriated the upper basin’s water to Colorado, New Mexico, Utah and Wyoming



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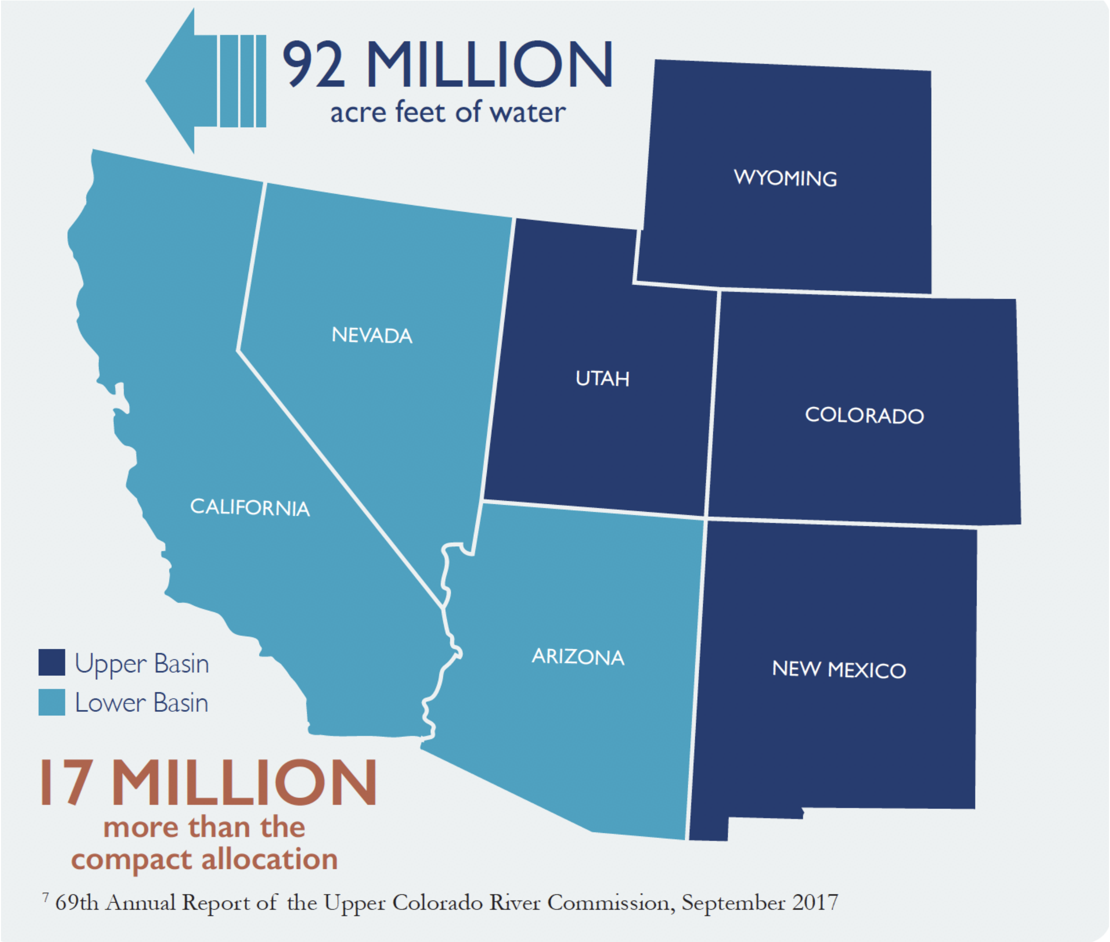
What is the River's Track Record?

- Colorado River system has experienced many cycles of drought and recovery
- River has always provided enough water to meet established uses and compact requirements
- Reliability documented in 69th Annual Report of the Upper Colorado River Commission
  - Upper basin states (Colorado, Wyoming, New Mexico and Utah) delivered more than 92 maf of water to the lower basin states
  - 17 million more than the compact allocation



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Water Budget at Lake Mead

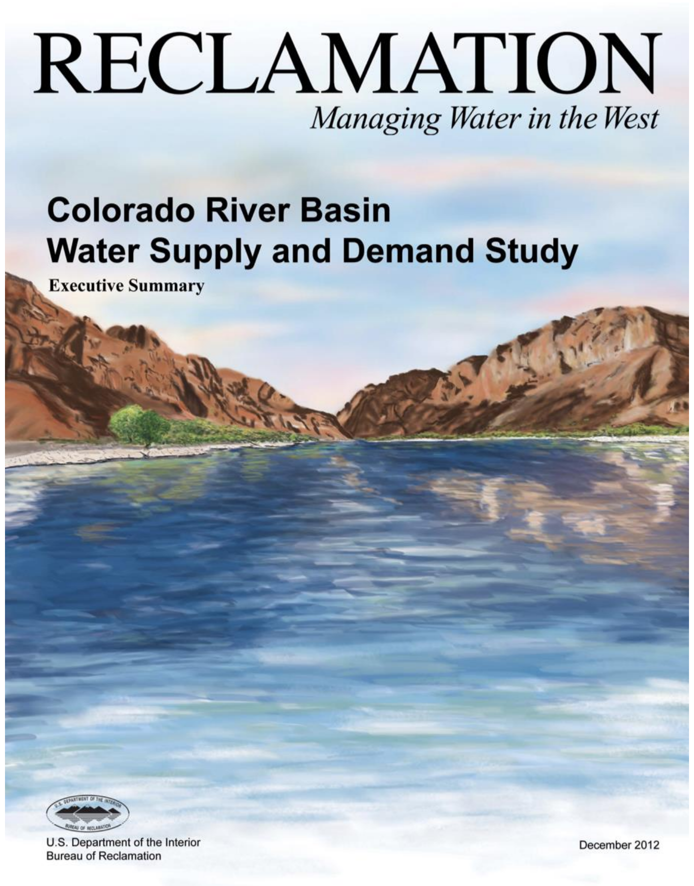
- Inflow = 9.0 maf
  - (release from Lake Powell and side flows)
- Outflow = -9.6 maf
  - (AZ, CA, NV and Mexico delivery + downstream regulation & gains/losses)
- Lake Mead Evaporative Losses = -0.6 maf
- Balance = -1.2 maf

Given basic apportionments in the Lower Basin, the allocation to Mexico and an 8.23 maf release from Lake Powell, Lake Mead storage declines about 12 feet each year

Source: U.S. Bureau of Reclamation

What does Climate Variability Mean for the Colorado River?

- 2012 Basin Study
  - –Mean natural flow decrease of 9% over the next 50 years
- BOR 2018 Modeling
  - –Future uses including LPP indicates near 0% chance of a compact shortage through 2050
  - –Hotter, drier outlook: Compact shortage rises to less than 13% through 2050
  - –Shortage does NOT equate to NO Colorado River deliveries



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How are the States Preparing for Drought?

- DOI, the states and Mexico developed Drought Contingency Plans (DCPs)
- Affirm rights of the states to develop their water
- Plans protect water levels at Lakes Powell and Mead

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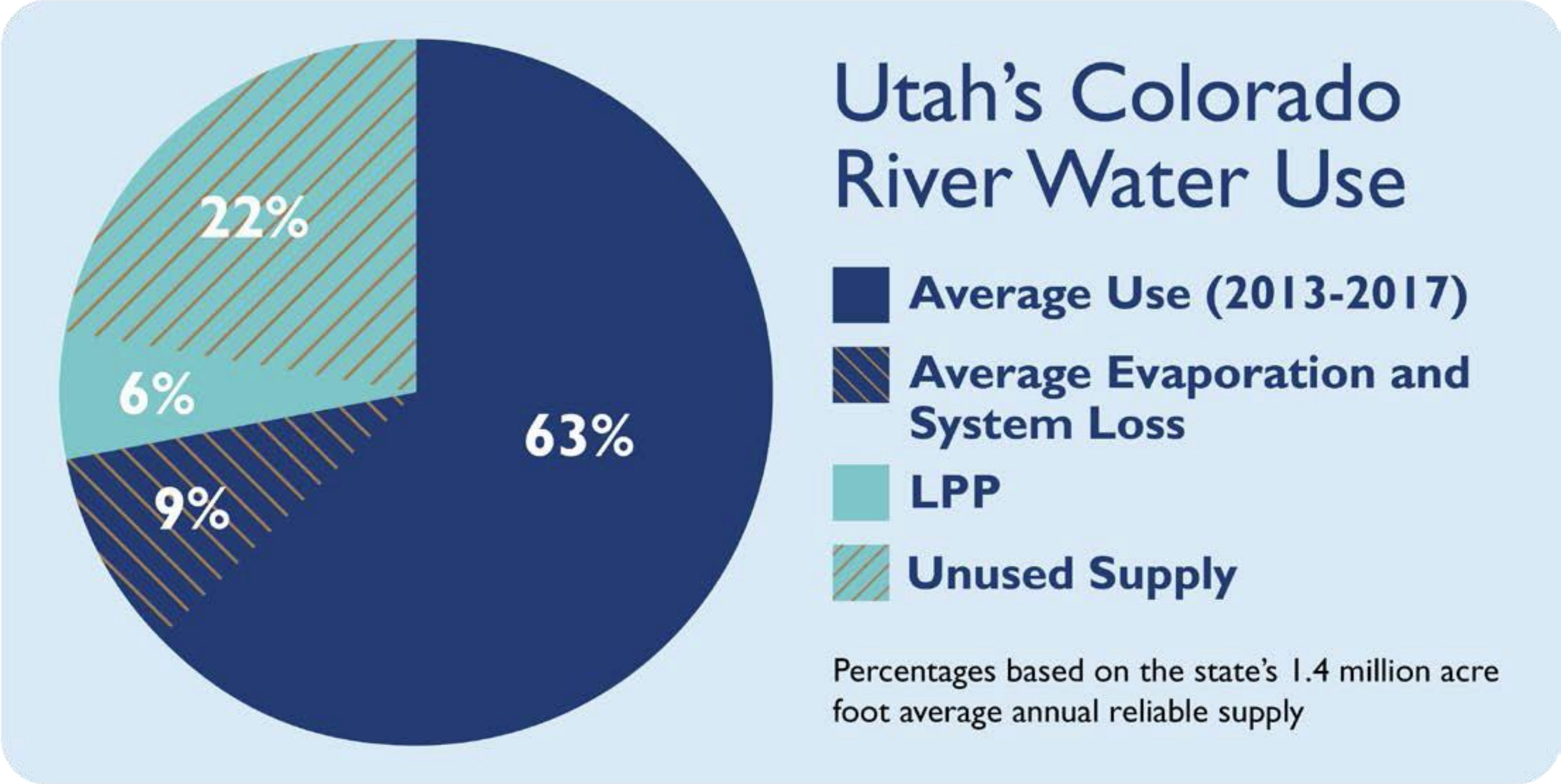
Eric Millis, Director, Utah Division of Water Resources

Utah’s Colorado River Water



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The Law of the River

- Water not allocated on “first in time, first in right” basis
- Utah has the right to use its Colorado River Water
- Utah is currently not using all its apportionment
- Upper Colorado River Commission and the upper basin states would allocate basin water equitably

LPP
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LPP is a reliable water right under Utah Law

- The mainstem water right being used by LPP carries a priority that has never been curtailed or “called out”
- Each state would determine how water users could partially rely on the state’s portion
  - Domestic needs can take priority
  - LPP interruptions would be temporary
  - LPP would rely on other measures in interim
  - No imminent threat to LPP water supplies

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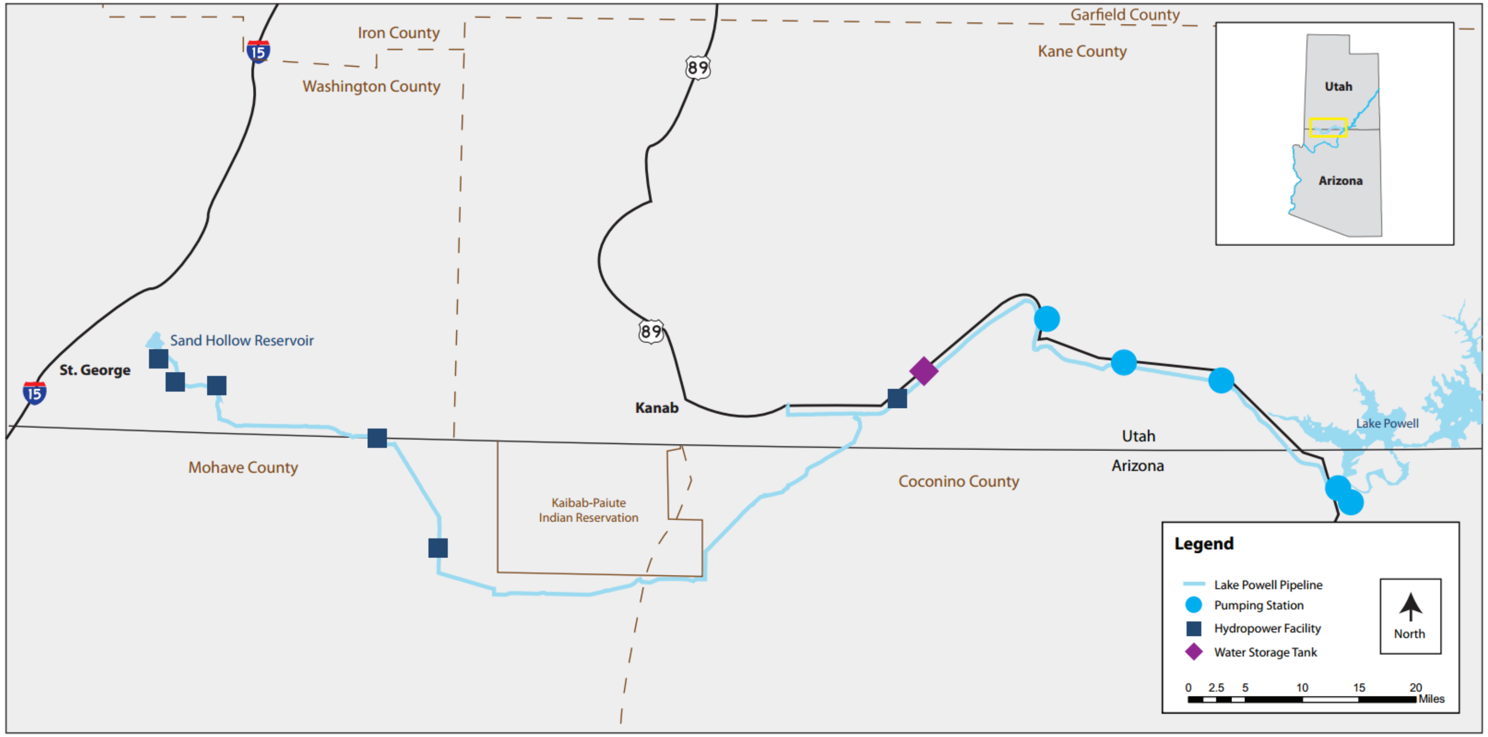
Ron Thompson, General Manager, Washington County Water Conservancy District

About the Lake Powell Pipeline (LPP)

- Deliver 86,249 AF of water
- Approximately 140 miles buried pipeline
- 5 pump stations
- 6 hydropower stations



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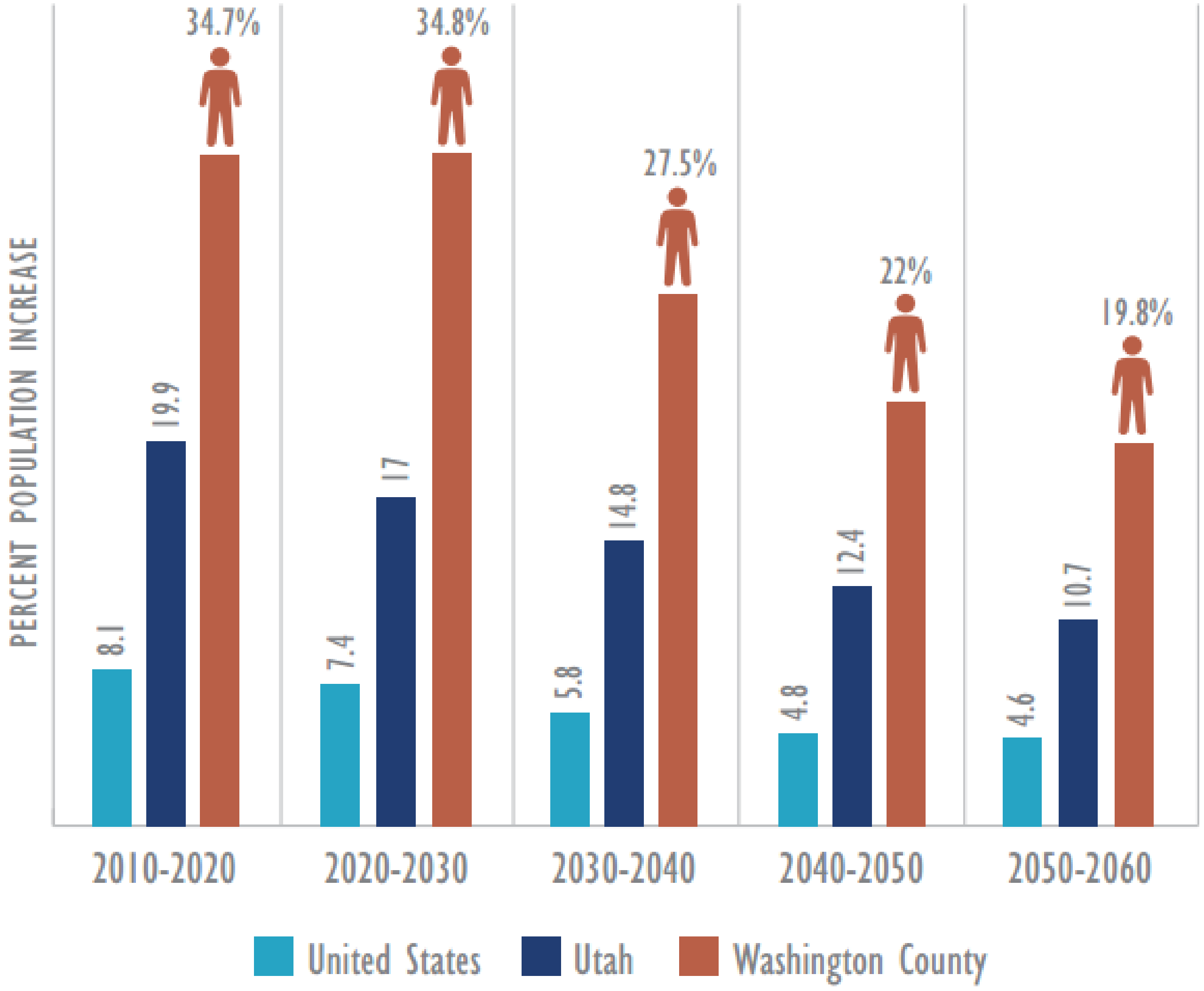
Projected Population Growth by Decade



Washington County's population is projected to grow more than 200 percent by 2060.

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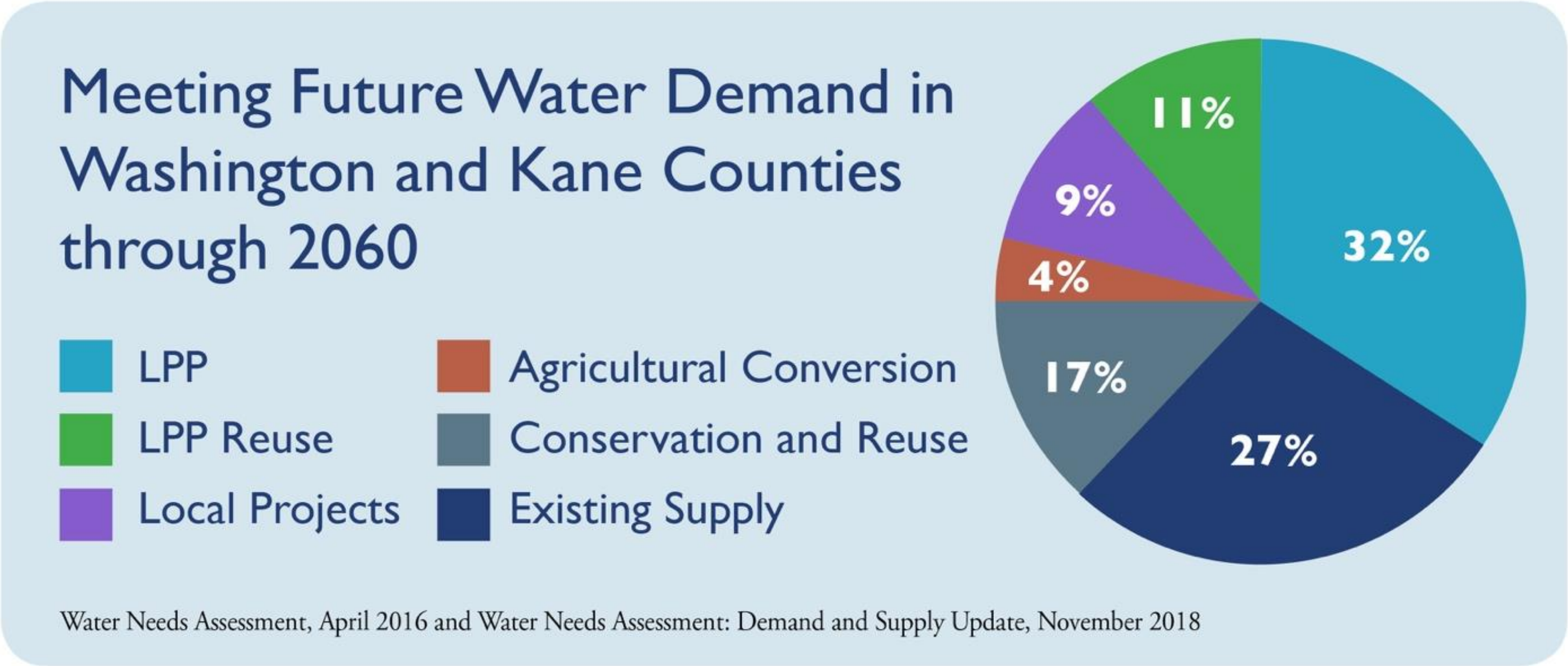
LPP Helps Meet Anticipated Water Demand



Colorado River Provides Region Another Water Source

THE VIRGIN RIVER BASIN

LAKE POWELL/ COLORADO RIVER WATER

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More Information at www.LPPUtah.org