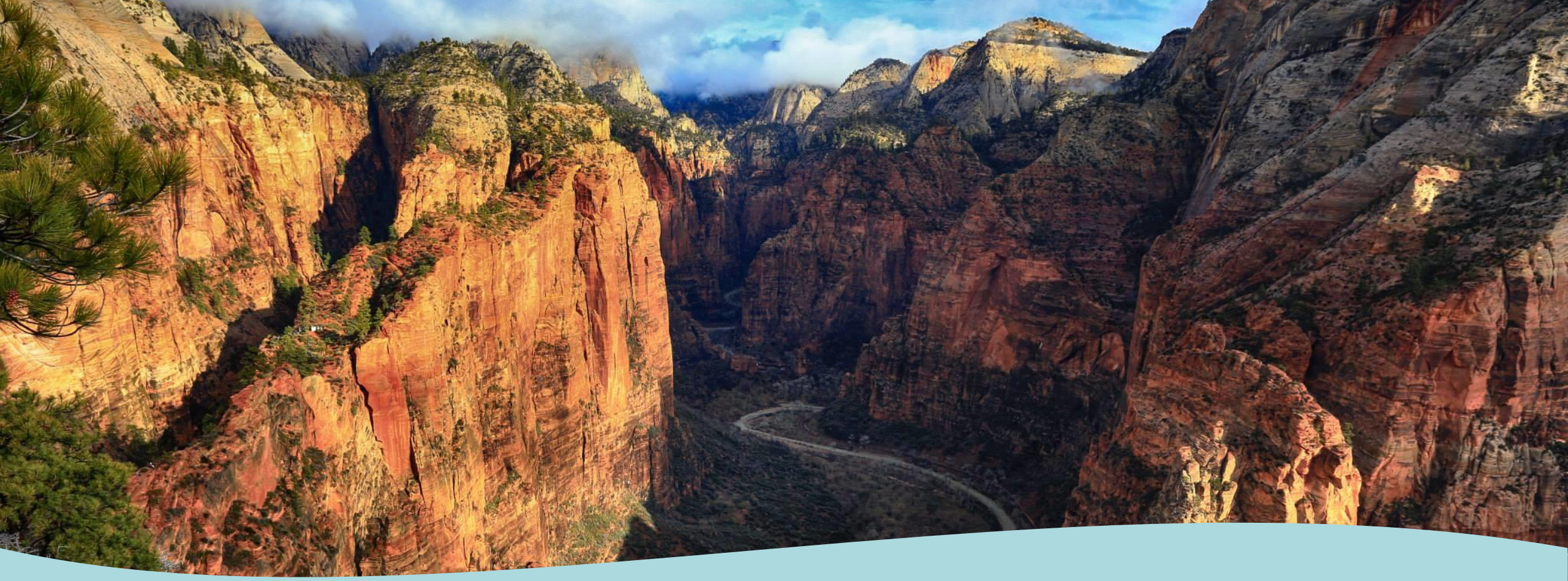


SOUTHERN UTAH'S COMPREHENSIVE WATER PLAN

Executive Water Finance Board Pubic Meeting | March 22, 2018

John Fredell, Lake Powell Pipeline Program Director

The Cape Town Dilemma

The city's Department of Water Director from 1997-2005 said the "city's water conservation strategy, without finding new sources [of water], has been a major contributor to Cape Town's troubles."

New York Times, January 30, 2018

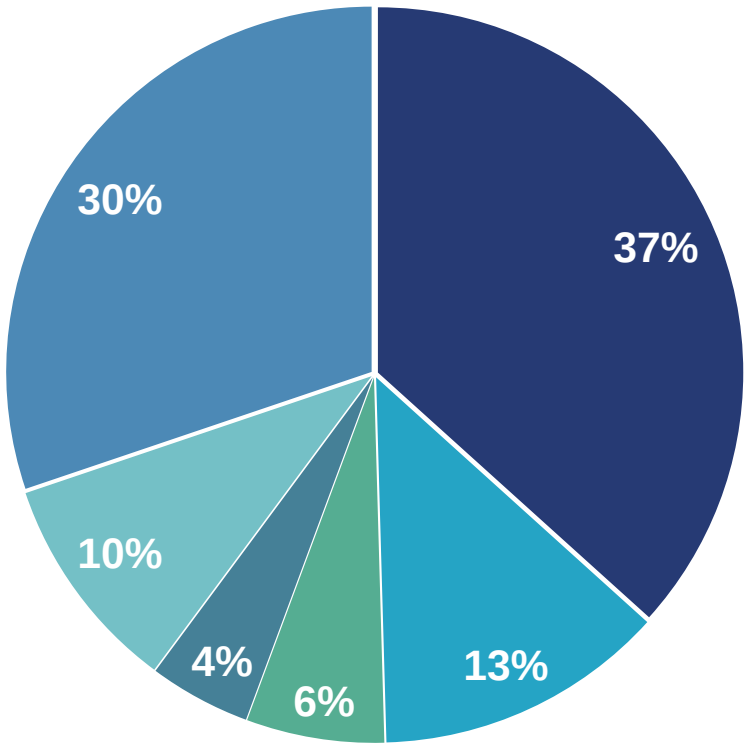
Southern Utah's Comprehensive Water Plan

- Lake Powell Pipeline (LPP)
- LPP Reuse
- Local Projects
- Conservation and Reuse
- Existing Sources
- Ag Conversion

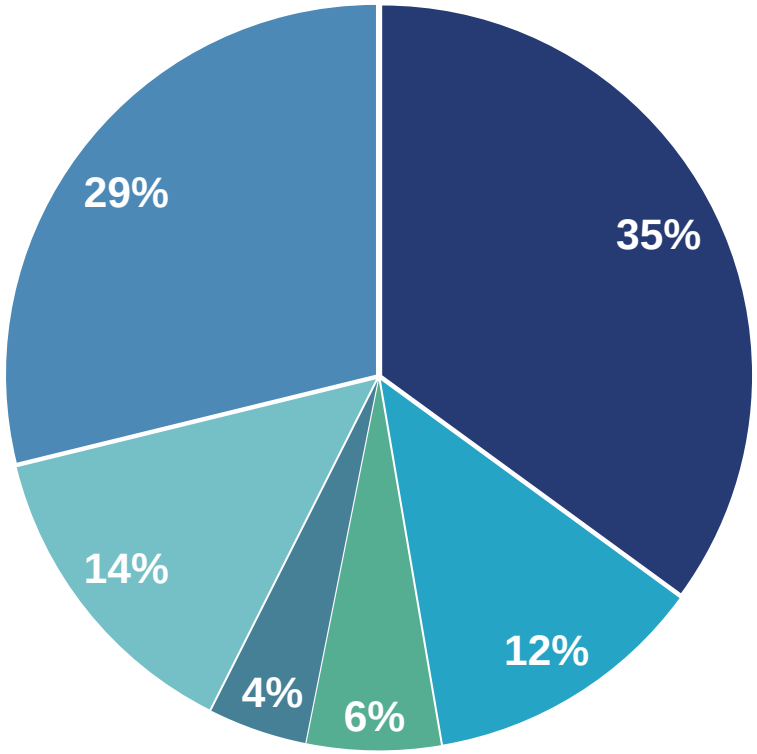
Water for *today* and *tomorrow*

Water Resources Plan through 2060 (preliminary)

Washington County



40% Conservation Rate under
High Population Projection



45% Conservation Rate under
Baseline Population Projection

- LPP
- LPP Reuse
- Virgin River Planned Local Projects
- Virgin River Ag Conversion
- Conservation & Reuse
- Virgin River Existing Sources

Water for *today* and *tomorrow*

Water Conservation

- Comprehensive water plan requires increased conservation
- Washington County decreased water use more than 30 percent from 2000 to 2015
- First county to meet governor’s statewide water conservation goal
- More than $60 million invested in recent conservation efforts


Red Hills Desert Garden


Housing development

LPP Water for *today* and *tomorrow*

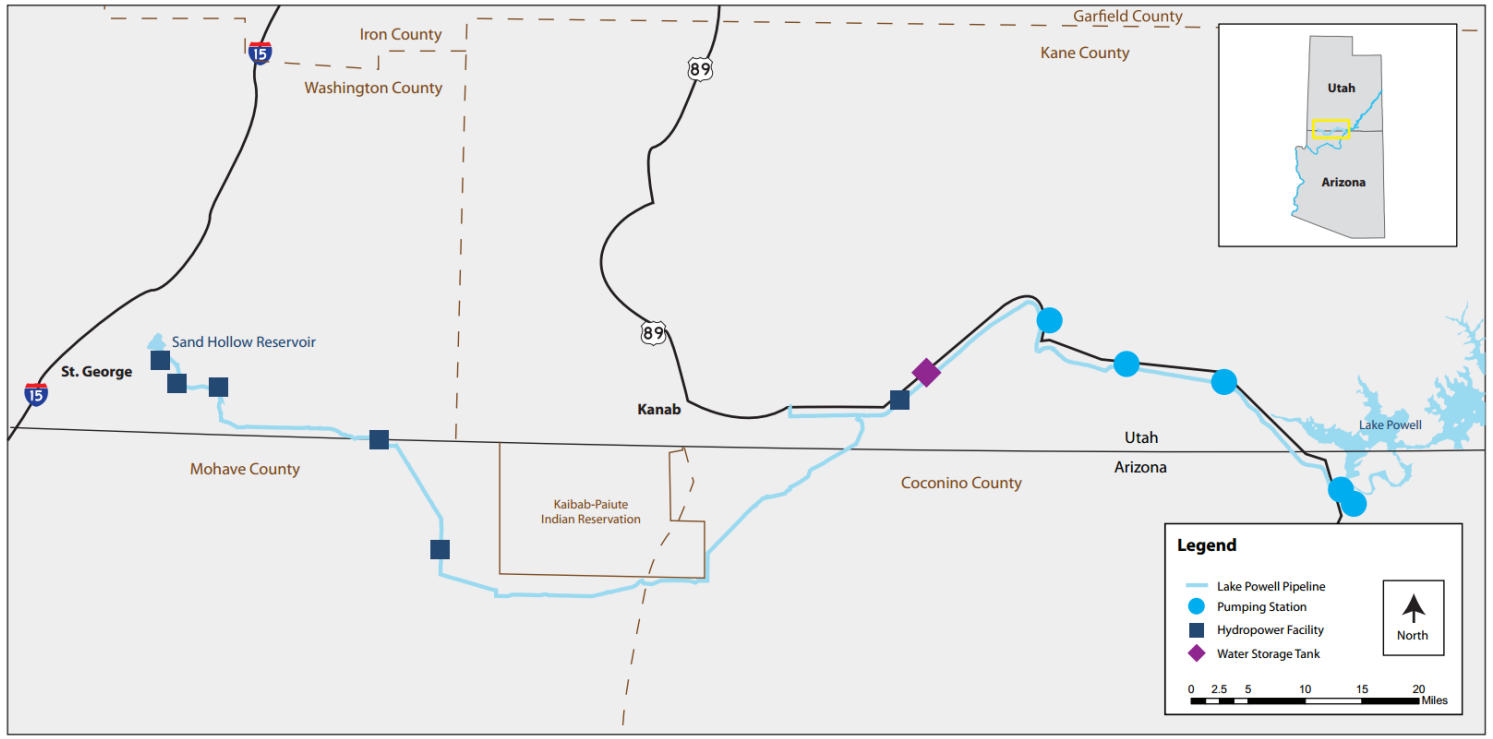
Conservation, Rebate and Education Programs

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

The Lake Powell Pipeline (LPP)

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



LPP
Water for *today* and *tomorrow*

Why Utah Needs the LPP

UTAH'S 13 SOUTHERN COMMUNITIES DEPEND ON IT

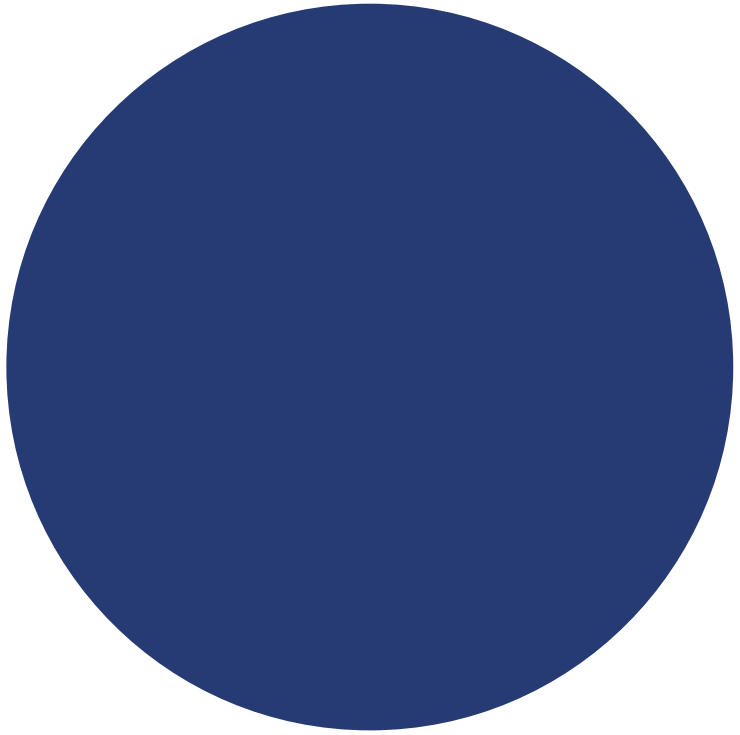
SYSTEM RELIABILITY

DROUGHT PROTECTION

ECONOMIC VITALITY/ GROWING COMMUNITIES

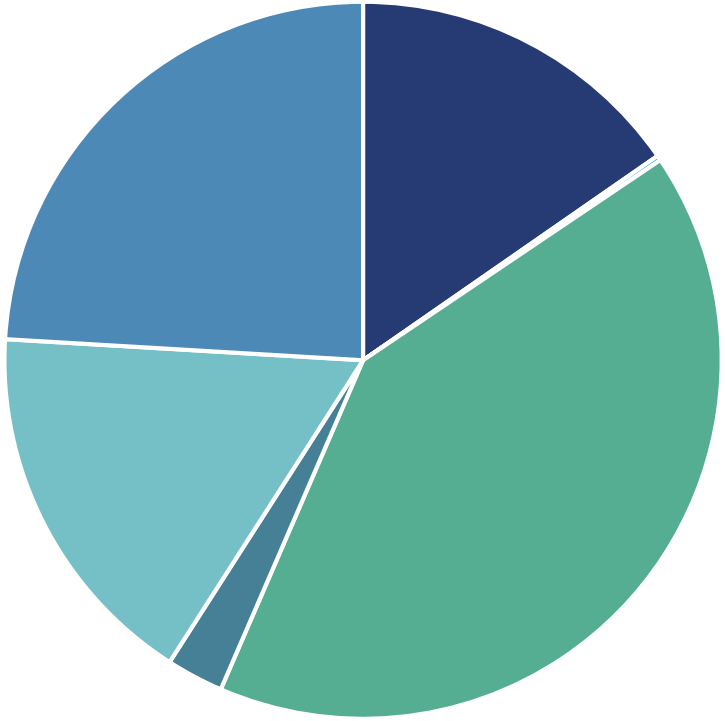
Need for Source Diversity

Washington County



Virgin River Basin

Salt Lake City



- Little Cottonwood Canyon
- Bell Canyon
- Provo River Project
- Ontario Drain Tunnel
- Central Utah Project
- Exchange Water Agreements

Water for *today* and *tomorrow*

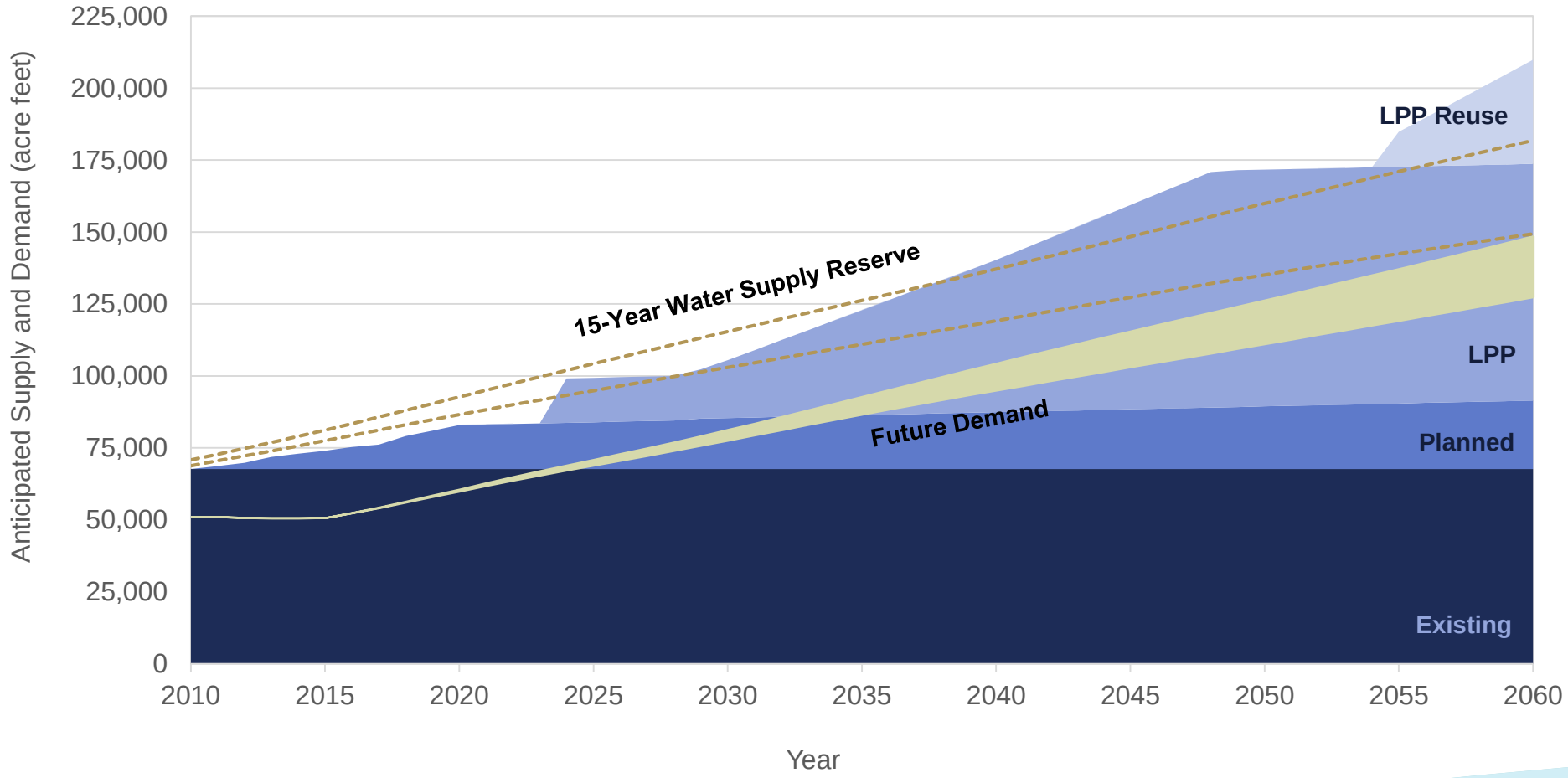
Provides a Second Water Source

THE VIRGIN RIVER BASIN

LAKE POWELL/ COLORADO RIVER WATER

Need for Additional Water Supply

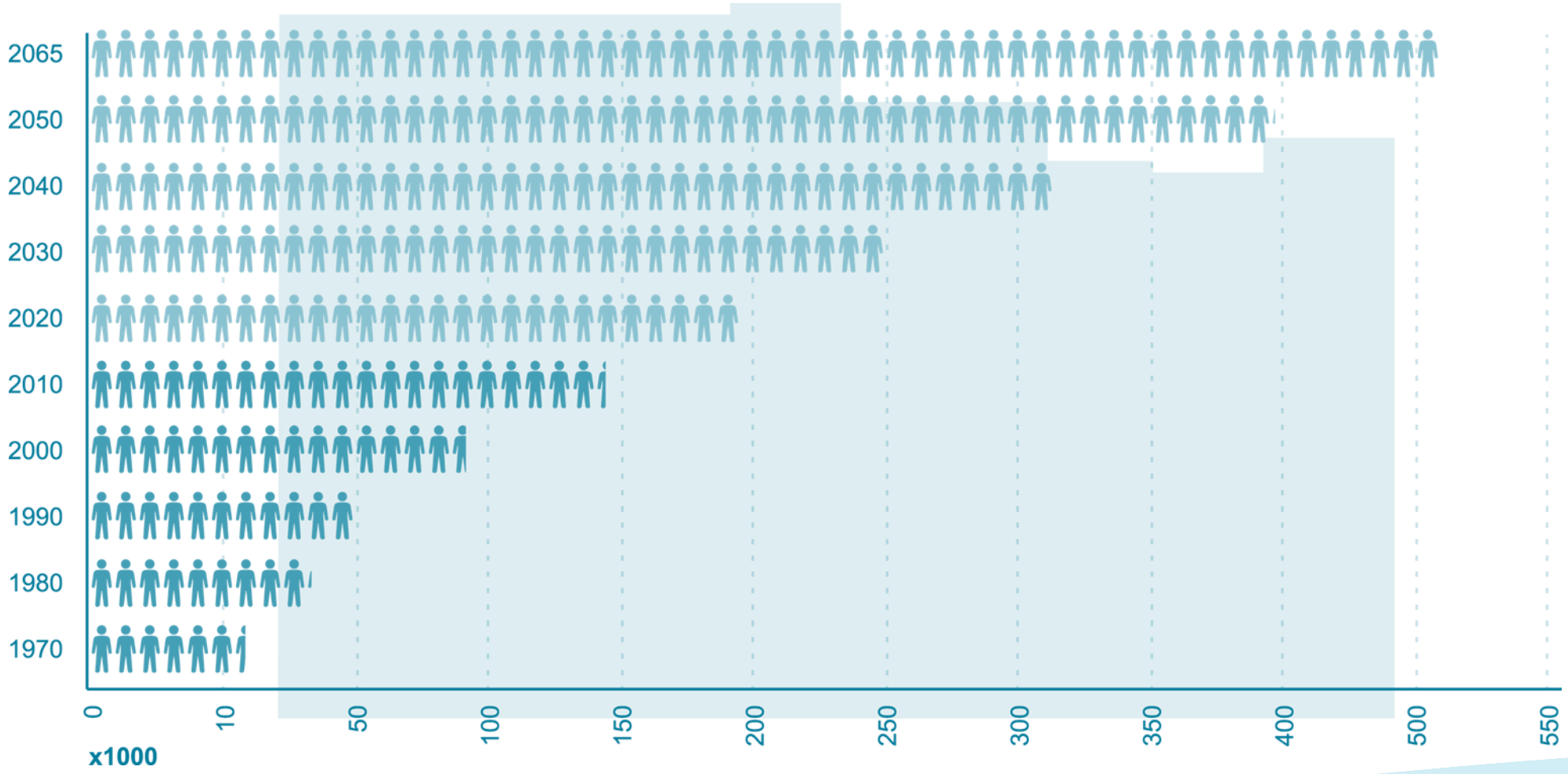
Anticipated Water Supply and Demand for Washington County



Water for *today* and *tomorrow*

Supplies Water to Meet Future Demand

Actual & Projected Population Growth in Washington County



LPP
Water for *today* and *tomorrow*

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:

Population
282,400[1]

Employment
106,000[2]

Households
102,250[1]

Annual personal income
$9.3 billion[3]

Private businesses
9,200[2]

Annual wages and salaries
$3.6 billion[2]

Annual gross metropolitan product
$9 billion[3,4]

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

LPP Water for *today* and *tomorrow*

Costs and Financing

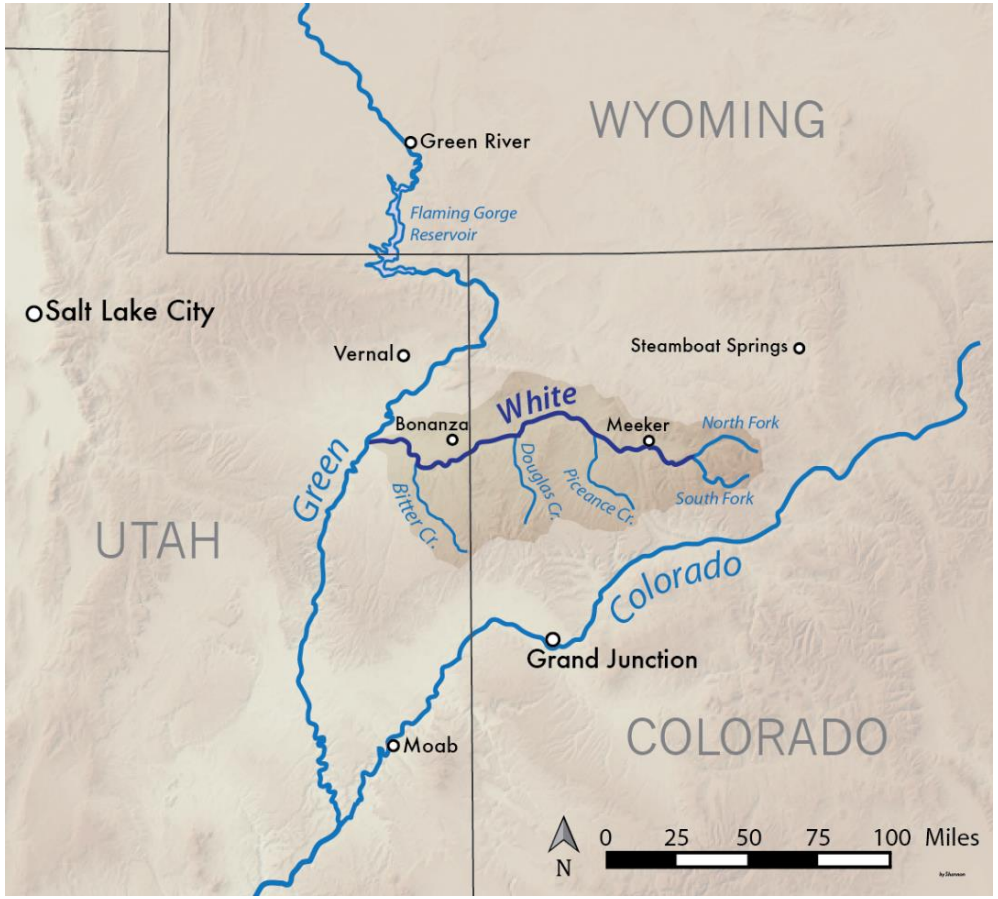
Revenue Sources

- 2006 Lake Powell Pipeline Development Act addresses project financing
- Preliminary cost estimate $1.1-1.8 billion
- Water users will repay costs

LPP Water for *today* and *tomorrow*

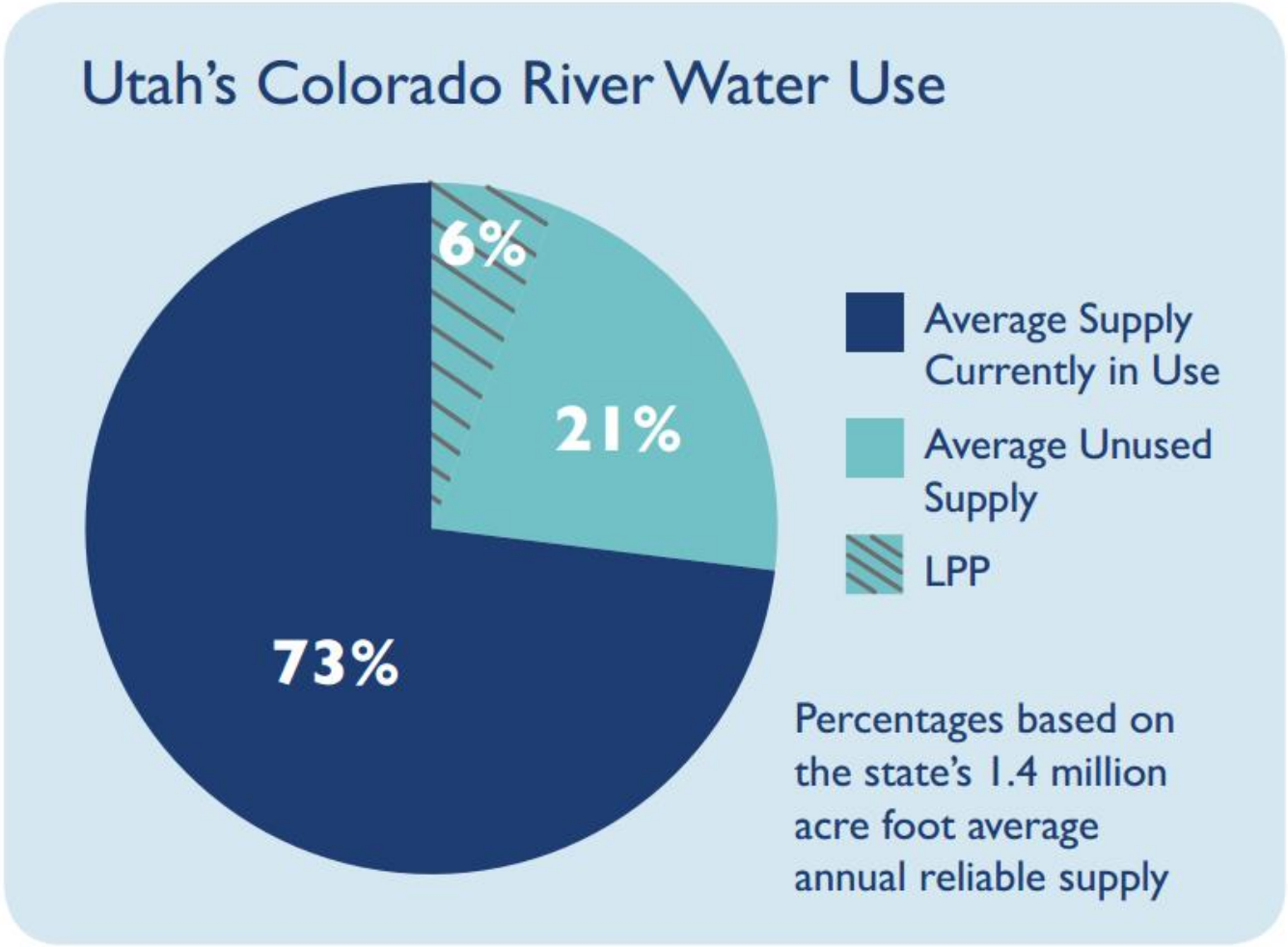
Need for Environmental Stewardship

- Benefits Utah's watersheds
- Preserves agriculture
- Allows for water-efficient landscapes
- Protects quality of life



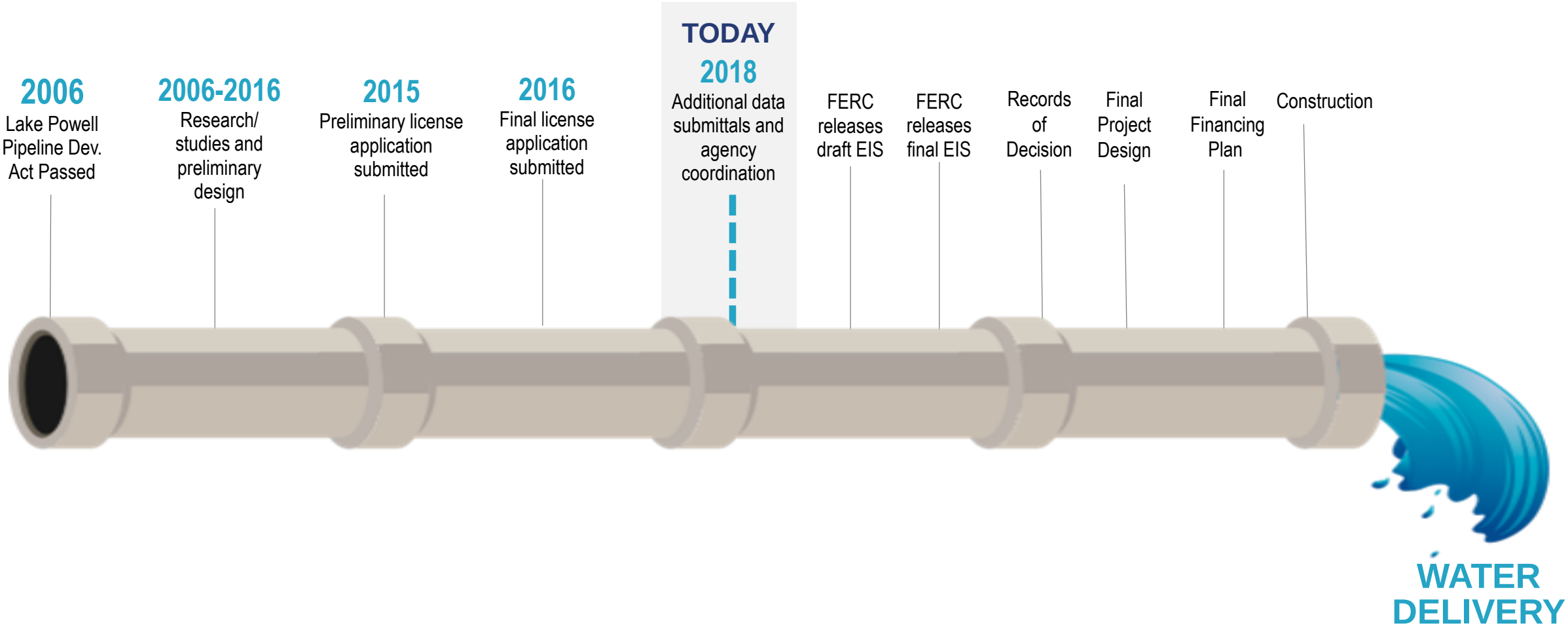
LPP Water for *today* and *tomorrow*

Beneficially Uses Utah's Water Allocation



LPP
Water for *today* and *tomorrow*

Anticipated Timeline



Why the LPP?

- Only option that introduces a second water source
- Largest available water supply to meet future demand
- Protects the economy
- Lower cost per acre foot than other options
- Most environmentally responsible
- Uses existing water rights

More Information at www.LPPUtah.org

LPP
Water for today and tomorrow