

Lake Powell Pipeline Remains THE BEST SOLUTION FOR SOUTHERN UTAH



Western Resource Advocates (WRA) a Boulder, Colorado-based environmental group, published an updated Local Waters Alternative 2.0 (LWA 2.0) proposal in July 2021 as its solution for meeting Washington County, Utah's future water needs. Similar to a previous version, the updated proposal does not address critical risks to Washington County's water supply, nor does it quantify the costs and the environmental implications of implementing LWA 2.0.

The following reveals unanswered questions about LWA 2.0 and explains why the Lake Powell Pipeline (LPP) remains the best solution for Washington County.

1 WRA purports that “optimizing” water from the Virgin River and other local water sources could meet Washington County's future water needs. LWA 2.0 represents a crucial misunderstanding of the Virgin River system by WRA.

FACTS: The LWA 2.0 report:

Drastically over-estimated the amount of water reliably available from the Washington County Water Conservancy District's (district) water rights in the Virgin River basin.

Failed to consider normal variations in the actual hydrology and projected climate change impacts in the Virgin River basin when reporting available water.

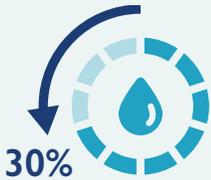
Failed to explain how and where to store any available excess Virgin River flows, which likely would require damming the river for storage or diversion with tremendous environmental impacts.

Proposed treatment technologies that will not treat the water to meet drinking water standards.

LPP adds a critical second water source from the Colorado River, which gives Washington County far greater flexibility in adapting to climate change than sole reliance on the Virgin River basin.

2 LWA 2.0 suggests that better water demand management in Washington County would eliminate the need for the LPP.

FACTS:



A number of the LWA 2.0's suggested conservation measures are already in place. **Washington County's per capita water use has decreased 30% since 2000** and there are plans to reduce it an additional 25%. Additional measures are being added to the district's more aggressive water conservation plan, currently underway.



A 2018 audit of the district's conservation program reported "**WCWCD's water efficiency program is on par with other notable programs in the western United States and exceeds those of other entities of a similar size and customer base.**"¹



WRA knows but fails to mention that **water use comparisons to other western cities are misleading.** The same organization previously reported "the probability for comparison error in the system-wide per capita variable is relatively high, **resulting in an "apples-to-oranges" comparison...**[GPCD] should be considered individually, instead of comparatively, to avoid erroneous conclusions on water consumption."²

Utah's comprehensive water reporting practices include all potable, secondary and reuse water; use by all industries; use by temporary residents and visitors; and does not subtract the water returned to streams (frequently reported as "return flow credits"). Other cities/states that don't use the same methodology may simply report lower water use than Utah.

Utah is the fastest growing state in the U.S. and Washington County is one of the fastest-growing counties in the country. The LPP is part of a comprehensive long-term water supply plan for southern Utah that includes increased conservation, reuse and new water development. LPP water will be reused, stretching the use of Colorado River water.

¹ Maddaus Water Management Inc., "Washington County Water Conservancy District Water Conservation Programs: A Comparative Evaluation," December 17, 2018.

² Western Resource Advocates, "Smart Water, A comparative Study of Urban Water Use Efficiency Across the Southwest," December 2003.

Lake Powell Pipeline Remains The Best Solution for Southern Utah

3 LWA 2.0 does not disclose a cost estimate to implement nor was it provided upon request. Cost estimates of required treatment, infrastructure and added conservation are not included in WRA’s report.

FACTS:



UPTO
\$700
MILLION

Reverse Osmosis Treatment —

The high salt content of Washington County’s agricultural water, secondary water and wastewater effluent necessitates a higher level of treatment to meet drinking water standards than the options proposed in LWA 2.0. The treatment would require building and operating one of the largest reverse osmosis and brine disposal evaporation pond facilities in the country at an **estimated cost of up to \$700 million**. This operation would create large quantities of brine waste that is expensive to dispose of and environmentally harmful.



APPROXIMATELY
\$300
MILLION

Conservation —

The level of conservation suggested by LWA 2.0 will require elimination of most outdoor landscaping, without the increased reliability of adding a second source of water through the LPP. The **estimated cost of additional conservation recommended by LWA 2.0 was not provided in the report**. WCWCD has estimated that the cost to implement the conservation measures recommended in LWA 2.0, beyond the district’s existing conservation efforts and budget, would add approximately \$300 million in additional costs.



UPTO
\$150
MILLION

Apple Valley Pipeline —

The LPP would install a turnout west of Hildale, Utah, for future water delivery to Apple Valley. LWA 2.0 would need to provide a similar level of service by building a **water supply pump station and pipeline to those areas at a cost of up to \$150 million**.



HUNDREDS OF
MILLIONS
OF DOLLARS

Additional Storage —

The district’s existing and planned reservoirs do not have the infrastructure or capacity necessary for “storing excess Virgin River water in high flows years” proposed under LWA 2.0. Additional dams, storage facilities and associated **infrastructure needed to capture available excess flows from the Virgin River would cost hundreds of millions of dollars and could harm critically endangered species habitat, impact thousands of homes and businesses, and operations at Zion National Park.**

The LPP is considered an affordable option for Washington County as confirmed by the Environmental Protection Agency’s affordability index, the Bureau of Reclamation’s Draft Environmental Impact Statement and a Utah Office of the Legislative General audit. The legislative audit reports, “By relying on several funding sources, the financial risks of the LPP would be spread out, decreasing the state’s outlays and financing costs.”³

³ Office of the Utah Legislative General, “A Performance Audit of Repayment Feasibility of the Lake Powell Pipeline,” August 2019.

4 LWA 2.0 claims that Utah's use of the Colorado River would compromise the ability of others to use the river.

FACTS:



All seven Colorado River Basin states have the right to develop and beneficially use their Colorado River water allocation. The Lower Basin states have fully developed their respective allocations while the Upper Basin states, including Utah, have not. All Upper Basin states are currently planning additional use of Colorado River water under their respective allocations.

 < 1%

Utah respects the right of each basin state to use its apportionment of the Colorado River pursuant to the Law of the River. **Utah plans to use a small portion of its unused allocation for the LPP which would be less than 1% of the Colorado River's average annual natural flows.**⁴ At the same time, the state and district are expanding water conservation programs. Utah's Colorado River Authority is participating in discussions with the other basin states examining the severe drought and plans to sustain the river.

Bottomline:

The LPP provides the ability to manage risks imposed by drought and climate change impacts in the Virgin River basin; balances environmental water needs; allows agricultural conversion to occur organically; and pushes costly, technically difficult water treatment strategies into the future.

Extensive study and analysis have shown that the LPP is the only option that brings a second source of water to Washington County and the flexibility to adapt to climate change while meeting the demands of projected growth. It remains the most reasonable, cost effective and environmentally sustainable way to meet the needs of southern Utah.

⁴ The Seventy-First Annual Report of the Upper Colorado River Commission. September 30, 2019.