

LPP: Setting the Record Straight

The Lake Powell Pipeline (LPP) is a water delivery project that will bring water to 13 communities in southern Utah in a cost-effective, dependable and environmentally responsible way.

Given the interest in the LPP, it is important that accurate and up-to-date project information is shared. Enclosed are key questions raised about the project and the relevant facts needed to inform decision making.

Population Growth

1. Will the LPP cause growth in the region?

The LPP is needed to serve the growth that is already occurring. Utah is the fastest-growing state in the nation and has the highest birth rate, lowest death rate and youngest population in the country.¹ It has been listed five times this decade in Forbes' annual "Best States for Business" list,² with nearly 1.5 million jobs and a \$148 billion annual economy. Washington County has averaged six percent growth annually from 1970-2015 and is now home to more than 160,000 residents.

The 2017 population forecast, prepared by the Gardner Policy Institute at the University of Utah in collaboration with the Utah Governor's Office of Management and Budget, projects Washington County to have the largest increase in population in Utah (229 percent); exceeding 500,000 people by 2065.

Water providers have an obligation to ensure that there will be a reliable, long-term water supply to meet existing and

future demands. Local municipalities, not water providers, establish growth policies.

2. If population growth slows, do we still need the project?

The 2016 Water Needs Assessment estimated the LPP would be needed by approximately 2028. Small fluctuations in population projections and water use will not change the need for the project.

Water system reliability is equally as important as meeting future demand. The LPP is critical to diversifying water resources because most of southern Utah is dependent on a single water source of variable quality and quantity – the Virgin River basin. Residents in other parts of the state benefit from the availability of multiple water sources. Southern Utah seeks this same benefit.

Water projects take decades to permit, plan and build. The LPP must move forward to meet demand and reliability.

1. Census: Utah is nation's fastest-growing state, Deseret News, Dec 20, 2016
2. The Best and Worst States for Business 2016, Forbes.com





Current and Future Water Use

1. What are Washington and Kane counties doing to conserve water?

Residents in Washington and Kane counties have made great progress in reducing water use. Washington County was the first in the state to surpass the Governor's 25 percent water conservation goal. This progress is significant given this region's outdoor irrigation season is four months longer than northern Utah.

Conservation, rebate and education programs include:

- Universal secondary water metering projects
- 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 partners
- 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
- Smart controller irrigation technology
- 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 and participating in local and statewide ("Slow the Flow") media campaigns

2. Would conservation and a tiered water rate billing structure incentivize sufficient conservation to eliminate the need for the LPP?

The Washington County Water Conservancy District (WCWCD) requires each of its municipal partners to have a conservation plan, tiered water rate billing structure, landscape ordinances and time-of-day watering regulations to purchase water. Municipalities determine their respective water rates.

Conservation is an essential component of southern Utah's long-term water supply plan. WCWCD and its municipal partners have invested more than \$60 million in recent water conservation efforts. This has resulted in a per capita water use reduction of more than 30 percent between 2000 and 2015. Increased water conservation efforts are underway and further reductions are expected. Water use reduction lowers demand and extends current resources.

Approximately 13 percent of Washington and Kane counties' future demand will be met from water conservation and reuse. While conservation is important for reducing demand, the region can't meet future water needs without increasing supply. Agricultural water conversion and additional projects, such as the LPP, will be needed to supply the rest.

3. Does Utah and Washington County have some of the cheapest water rates in the U.S.?

Utah water providers are not-for-profit organizations that determine water rates based on the actual expense of securing, treating, storing and transporting water. Water rates throughout Utah are lower than those in neighboring states because costs are currently lower, but rates will increase to cover rising service and delivery costs.



Existing and Future Water Supplies

1. Can future water needs be met by using existing, local water sources?

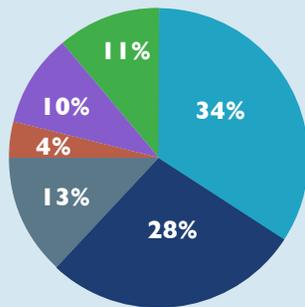
Washington and Kane counties currently have approximately 70,000 acre feet of annual reliable water supplies and most local resources are developed. Studies estimate an additional 135,000 acre feet of water will be needed in these counties annually by 2060. The quantity of water needed to meet this demand is not available locally. LPP will supply 45 percent of the water needed to meet demand through 2060.

2. Can Washington and Kane counties rely on surplus agricultural water for future water needs?

Both counties assume some agricultural water will be transferred to municipal use over time, as is noted in their respective water plans. But, it is not the state or water providers' intention to force farmers to give up their water and dry up their farms. Agriculture is part of Utah's heritage and a major contributor to the state's economy. Some other important things to consider:

- Farmers own water rights, property rights that are respected by the government agencies that provide water in Washington and Kane counties. When farmers want to sell their water rights, they can be sold on a free market basis.
- Due to the amount of high dissolved solids in agricultural water in Washington County, an expensive treatment process would be required to bring it to safe drinking standards.
- Only the consumptive portion of agricultural water -- the water consumed by the crops -- can be changed to municipal use; therefore, the available agricultural water is often significantly overstated.

Meeting Future Water Demand in Washington and Kane Counties² through 2060



2. Lake Powell Pipeline Project, Water Needs Assessment, April 2016



Cost and Financing

1. What is the final cost of the LPP?

According to MWH, now part of Stantec, a global water and natural resources firm consulting on the project, the estimate for LPP is between \$1.1 billion and \$1.8 billion based on preliminary designs and engineering. An updated cost estimate will be prepared once an alignment is selected through the federal environmental process, a final design is approved and construction estimates are secured.

2. Who will pay for the LPP?

As specified in the 2006 Lake Powell Pipeline Development Act, the state of Utah plans to fund the project and water users in Washington and Kane counties will repay the state as water is used. The terms in the act follow the well-established funding model used by the Bureau of Reclamation. Water users will have several decades to repay the state, ensuring project costs are shared by the multiple generations who benefit from the water.

The state has funded more than a thousand regional water projects using the same financing mechanism—all of them have been repaid.

3. How will water users repay the state for the LPP?

The water conservancy districts in Washington and Kane counties have multiple revenue sources to repay the project, including impact fees, water rates and property taxes. The combination of revenue sources shows a clear ability of the districts to repay the state. The projected growth in Washington County, 350,000 new residents by 2065, spreads and minimizes impacts on current citizens.

4. Will the LPP significantly increase impact fees, property taxes and water rates?

These fees are expected to increase to cover the rising costs of securing, treating, storing and delivering water – with or without the LPP. Studies performed by MWH determined LPP was the most cost-effective of all considered alternatives to meet future water demand in southern Utah. In 2018, WCWCD's impact fees are scheduled to increase \$1,000 annually through 2026 to assist with the costs of facilities needed to serve growth, including the LPP. Every \$1,000 increase in fees yields approximately \$145 million in revenue through 2065.

5. How much will fees and rates increase?

The anticipated increase resulting from the LPP will be estimated after the determination of project costs, financing terms and repayment plans. This information will be available to the public well before construction begins on the project.

6. Is treating local water sources with reverse osmosis a cheaper alternative to the LPP?

Water treated with reverse osmosis would be more expensive and have more environmental impacts than the LPP. Reverse osmosis treats water with a high salt content by forcing it through a filter to remove salts and other wastes that must be disposed of in a landfill. The technology is currently very expensive to build and operate and uses a significant amount of energy. As technology improves and costs decrease, reverse osmosis will become a more viable option in southern Utah's future.



Impacts to Lake Powell and the Colorado River

1. Will the LPP significantly lower Lake Powell water levels?

Operating at full capacity, the LPP will deliver less than 0.5 percent of the average annual amount of water in Lake Powell according to Bureau of Reclamation statistics. Any impact will therefore be minimal.

2. Will LPP harm the Colorado River and fish?

Currently the state of Utah has the right to take its water from the Green River immediately below Flaming Gorge Dam. Under the LPP, the state proposes to take its water just above Glen Canyon Dam, ensuring that more than 86,000 acre feet of water will continue to flow more than 400 river miles in the Colorado River system, according to the Bureau of Reclamation. The environment, including endangered fish in the affected river reaches, will continue to benefit from these flows in the Green and Colorado rivers.

3. Is the Colorado River a reliable water source for Utah?

Each of the seven basin states, including those located in the upper basin (Wyoming, Colorado, New Mexico and Utah) and in the lower basin (Arizona, Nevada and California) has the right to develop and beneficially use water allocated to it under the Law of the River. Utah currently does not use all the water available to it under this law. The LPP will use only 6 percent of Utah's annual average reliable supply from the Colorado River.

While some individuals have expressed concern over the impacts of climate change on future Colorado River water availability, the basin states and the federal government have taken this concern into account in conducting their water supply planning. Though certain Colorado River flow models demonstrate that during severe and prolonged droughts a shortage declaration is possible, the states are actively identifying and implementing measures to manage that risk.

Even though the last 15-year period has been one of the driest on record, the lower basin states have received all of the water to which they are entitled. During the last 10 years, the upper basin states have delivered to the lower basin states approximately 91 million acre feet of water – 16 million acre feet more than the required 75 million acre feet.¹ Accordingly, the delivery of 86,249 acre feet needed for the LPP is small in comparison and should be consistently available for the people of southern Utah.

The Utah Board of Water Resources holds the water right for the LPP. Lake Powell, which is the primary storage facility for all upper basin water, is “one of the most firm water supplies in Utah’s allocation of the Upper Colorado River Basin,” according to Kent Jones, P.E., State Engineer, Utah Division of Water Rights.

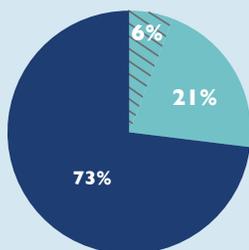
4. Has Utah “over allocated” its share of the Colorado River?

Utah’s allocation is 23 percent of the available water in the Upper Colorado River Basin, which is more than the state is currently using. Future plans to settle reserved water right claims with Native American tribes and to develop the LPP and other smaller municipal and agricultural projects will be accomplished within Utah’s annual reliable supply.

Utah’s Colorado River Water Use

- Average Supply Currently in Use
- Average Unused Supply
- LPP

Percentages based on the state’s 1.4 million acre foot average annual reliable supply



1. USGS gage records for Colorado River at Lees Ferry