

Is the pipeline really needed?

Lake Powell to St. George Pipeline
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The plan is to build a water line from Lake Powell to St. George, a city built smack dab in the middle of the desert. It will deliver around 70,000 acre feet of water annually to this growing area that developers hope will allow a city of 65,000 people to grow to nearly 500,000 people over the next 30 years. The pipeline is to be subsidized primarily by raising Utah Sales tax for all Utah residents. Developers are hopeful that the taxes will be raised soon, even though the project will likely not start for 15 years. The idea is to spread the raise over a long period of time so that the blow to tax payers will not be severe and will go unnoticed by taxpayers. In addition to this, Senator Bennett and Congressman Matheson from Utah have reintroduced the Washington County Growth and Conservation Bill to authorize the right-of-way for the pipeline as well as allowing for a massive land-swap for development. This bill was defeated in the last session of congress.

The need for water from Lake Powell is based on a report prepared in 1998 by Boyle Engineering, now referred to as the Boyle Report. It made a number of projections of population growth and water needs for St. George as well as for Washington County, Utah. To the glee of developers, the report predicted that St. George could reach a population close to 500,000 in 30 years. It concluded that the region would eventually run out of water using current sources. Therefore it was recommended that a Lake Powell to St. George pipeline be built as “the best solution to future water shortages.”

Water for the pipeline would come out of Utah’s allocation of Colorado River water. The water for the pipeline would be stored in Flaming Gorge Reservoir where 70,000 acre feet annually would be released down the Green River into Lake Powell. The pipeline would pump this water from Lake Powell, 7 miles north of Glen Canyon Dam, over 120 miles of land into the Sand Hollow Reservoir located 10 miles east of St. George. The pipeline is currently planned to follow Highways 89 and 59 as much as possible through Utah, avoiding wilderness areas, but crossing through a Native American reservation. However, the pipeline will largely fall under current highway right of ways.

Only 60,000 acre-feet would make it to St. George, the other 10,000 would go to the city of Kanab and other future developments along the 130 miles of pipeline. From Lake Powell the water would be pumped uphill for a small portion of the journey; gravity would then pull the water into St. George where it would fill a reservoir and power a hydroelectric plant. Sales of the electricity created would pay for part of the pumping costs. Kanab would have to pick up a share of the price.

But the costs of the water are staggering. Engineering studies commissioned by the Washington County Water Conservancy District (WCWCD), the Utah Division of Water Resources (DWR) show that the costs of the pipeline to be at least 1.5 billion dollars and are too high to begin construction at this point in time so raising the money will take some time.

But more revealing are recent studies that indicate that Lake Powell is going to be at dead pool for a significant part of its existence. The temperature of the Colorado River Basin has been 2.1 degrees above normal over the last several decades. The temperature is expected to raise another 2.4 degrees in the several decades. The Colorado River and its water resources are particularly susceptible to the effects of climate change due to global warming. The basin lies in a semi-arid region where it has an almost complete allocation of its stream flow to consumptive uses. This means that almost any stream flow

reduction has significant implications. Global warming alone is expected to decrease stream flow input to Lake Powell by at least 14 – 18%. Furthermore, consumptive use in the Upper Basin is expected to increase to 5.4 million acre feet per year. All of this will keep the level of Lake Powell at dead pool or near that level for most of its existence. There will simply not be enough water to “fill” the pipeline.

But, the WCWCD and the DWR don't seem to care and are not giving up. They are currently trying to lobby Congress and the Utah Legislature to appropriate funds for the project. As water in the region becomes an even scarcer resource the benefits of piping water in are predicted to outweigh the costs of construction. The WCWCD still predicts the project will be complete by 2030.

But, is the pipeline really needed? Do we really have to raise statewide sales taxes? Do we really need to take water from a river, where there really is no more water to be taken? Do we need to hurt the fragile ecosystem of the Colorado Plateau? Do the residents of St. George really want to see that city get that big so fast? Is growth in a desert a really good thing when conservation isn't the main priority?

To answer these questions, let's first look at the city. St. George Utah is the most rapidly growing city in the state of Utah, growing 73% from 1990 to 2000. And that is nothing compared to what some experts predict for the future. The problem is that it just happens to be located in the driest county in the second driest state in the country. More remarkably St. George already has the highest per capita water consumption rate for desert cities in the U.S. and quite possible the entire nation. Residents use a staggering 335 gallons per person per day. For comparison Phoenix uses only 170 gallons per person per day, 1/2 of that of St; George. This is because city ordinances designed to conserve water have proved invaluable in reducing water use. Similar ordinances in other cities such as Las Vegas, Tucson, and Los Angeles have proved invaluable as well. But neither St. George nor Washington County have ordinances in place for water conservation or landscaping, and apparently that does not bother the Washington County Water Conservancy District, for they are pressing on developing the pipeline without one word of conservation.

Several years ago, the Grand Canyon Trust, a Flagstaff based environmental organization commissioned a study by Hydrosphere Resource Consultants to explore solutions to the inevitable growth of St. George and surrounding areas. The study concluded that Washington County can accommodate projected water use needs for the next 50 years using water conservation measures, and that the proposed pipeline from Lake Powell to St. George is not needed.

The Hydrosphere Study questioned the two basic assumptions of the Boyle Report. They made a more conservative population estimate of 340,000 by 2050. The report claimed that Boyle had overestimated population growth based on consolidated development plans in 12 municipalities in Washington County. Population projections of the Boyle Report were based on 1988 data prepared by the Utah Governor's Office of Planning and Budget, and did not account for factors such as the availability of developable land, land use, and zoning. Per capita water use in the Boyle Report was also somewhat miscalculated according to Hydrosphere, as all classes of water use were included in the estimate with the underlying assumption that all sectors, commercial, industrial and residential, would grow in direct proportion to population growth. The Hydrosphere Study found the Boyle Report's used outdated and flawed data, therefore future water demand figures were overestimations as well.

Hydrosphere concludes that water use rates will be significantly lower than those reported by the Boyle Report and that in order to satisfy realistic water needs of the region in the future, no imported water will be required. In addition, the study suggests environmental concerns must be addressed, particularly the potential impact of exotic fish species on native species in the Upper Virgin River basin which are listed as threatened and endangered. In fact, the Study shows that “based on the Governor's Office of Planning

and Budget 1999 population growth scenarios in Washington County, few additional water supply projects would be needed to meet future water needs.”

The Hydrosphere study also found that Boyle had grossly overestimated future water use. Hydrosphere used an economic/financial model for determining future water use. The model took into account economic factors like price elasticity, as new water supplies are tapped prices go up and people conserve more and per capita water use goes down. The Boyle Report didn't take these factors into account. Based on the new population growth and water use estimates, the Hydrosphere Report concluded that no new water sources would have to be developed. The current water sources would be more than enough if cost effective conservation methods are employed.

Utah has had a history of 50% government subsidized water use and today it has the cheapest consumer water prices in the country. These cheap prices have encouraged over-consumption. Utah is the second driest state in the country (Nevada is the driest) yet it has the highest per-capita water consumption, between 300 - 320 gallons per person per day compared to an average of 245 gallons per day for other western states and 180 for the nation. The political pressure to maintain the current water consumption system is high and each time there is a water shortage politicians and planners jump to increase supply rather than conserve water.

Water conservation is viewed as a bad thing by Utah politicians. When it comes to education, health care, and social services, many legislators are eager to cut budgets and make agencies prove they need more money. When it comes to water development, they can't seem to throw tax money at it fast enough. There are adequate supplies of water for current Utahans' and future generations with a renewed emphasis on conservation. But amazingly state legislators have rejected proposals to establish a task force to look into increasing water conservation. Even a simple bill to change the name of the Utah Division of Water Resources to the Utah Division of Water Resources and Conservation never made it out of committee.

In Utah the lack of financial conservation incentives goes beyond the consumer. County water boards have a *disincentive* to conserve water in their districts. Water board revenue is based largely on how much water they deliver. The more water they deliver the more money they receive. This provides financial disincentives for water conservation; County boards that spend money on conservation efforts find that the more successful they are the smaller their budget becomes. The result is most counties in Utah increase supply as water becomes scarce.

How big can a city get in the desert? Las Vegas is a good model to look at. This is a city that is growing at a faster rate than St. George. But in its 2007 water budget planners have declared that there are no new sources of water and that Las Vegas will have to become a “mature” city unless stronger water conservation will work or other sources of water can be found.

The WCWCD still plans to complete construction on the pipeline by 2030. So far the only hold up is funding for the project. There is strong backing from Utah politicians and state government agencies like the DWR. The last session of the Utah legislature produced a bill that was immediately signed into law by Governor Huntsman that moves the process forward of raising statewide taxes to pay for the project. There is still hope that saner heads will prevail and that the project will be defeated. But the planning process has begun and major decisions will have to be made and water is always controversial and complex, with the outcome of development and reclamation proposals unpredictable.

Contact your legislature. Don't let them pass the Washington County Growth and Conservation act with the pipeline provision. Don't let them raise your taxes to pay for a wasteful and needless water project to

be drawn from a reservoir with an uncertain future. Support the organization Citizen's for Dixie's Future. www.citizensfordixie.org This organization is devoted to stopping his horrible project.

Remember we live in a desert surrounded by a fragile ecosystem and that other living things rely on water from the Colorado River. The best solution calls for conservation of the already existing water in the southern Utah desert areas so that it is line with everyone else in the West. Cheap water in St. George has already led to over consumption. Bringing in more water only fuels the problem. Conservation incentives, including making water users pay a higher percentage of the costs, city and county ordinances designed to reduce water consumption that will allow for wise growth.