Honorable Governor Herbert
Utah State Capitol Complex
350 North State Street, Suite 200
PO Box 142220
Salt Lake City, Utah 84114

Honorable President Niederhauser
Utah State Senate
320 State Capitol
PO Box 145115
Salt Lake City, Utah 84114

Honorable Speaker Hughes
Utah House of Representatives
350 North State, Suite 350
PO Box 145030
Salt Lake City, Utah 84114

September 12, 2016

Dear Governor Hebert, President Niederhauser, and Speaker Hughes:

Over the last several years, an ad-hoc group of economists working in Utah universities have written to you regarding the Utah Division of Water Resources' proposed Lake Powell Pipeline ("LPP") and the subsequent repayment obligations of the taxpayers of Washington County. Based on this lengthy pro-bono financial analysis conducted over many months, we wrote to you in October 2015 that "we have major concerns about the debt and increased water rates and/or increased impact fees that will be caused by this proposal."

As you may recall, we outlined the required increases in water rate, impact fee and property tax revenues that will be needed to repay the Utah taxpayer for the cost of construction and financing for the Lake Powell Pipeline. Our findings were that, with an interest rate of 4%, the District could raise the needed funds by raising impact fees more than 120 percent, to an average of approximately $14,000 per connection, together with raising water rates by more than 570 percent. These estimated increases were based on a projected construction cost of $1.3 billion and included revenue increases due to the population growth forecasts prepared by the Governor's Office of Management and Budget.

In response, the Washington County Water Conservancy District ("WCWCD") and the State Division of Water Resources disputed our findings, based upon a financial analysis done by the WCWCD's consultant, Applied Analysis, Inc. of Las Vegas, Nevada ("the WCWCD model"). In June, this analysis became publicly available.

Two of us (Lozada and Blattenberger) prepared a detailed report investigating the WCWCD's model and all of us agree with its findings, which we summarize briefly.

The WCWCD model underestimates the cost of the LPP and its impacts on water rates and impact fees in several important ways:

- The WCWCD model includes no payments from the WCWCD reimbursing the Utah taxpayer for the interest the State has to pay on the bonds the State issues to pay for the project, despite Utah Code 73-28-402 (4) (part of the Lake Powell Pipeline Development Act) stating: "The board shall establish and charge a reasonable interest rate for the unpaid balance of reimbursable preconstruction and construction costs."

  This amounts to the State paying 72% of the true financial cost of the project (its "net present value") and the WCWCD paying only 28% of it. We question whether such a repayment ratio constitutes compliance with the Code above. Certainly a private bank would never agree to lend money to a borrower while only being repaid 28% of the loan's net present value.

- The WCWCD model takes the default cost of the pipeline to be $969 million, whereas the 2012 FERC low-cost and high-cost estimates were $1.328 billion and $1.751 billion, respectively. Were one to use these higher costs, it would dramatically change the required revenue increases needed to repay Utah taxpayers.

- The WCWCD model also omits LPP operations and maintenance costs, which are substantial, varying between $23 and $63 million each year the pipeline is in operation (in 2014 dollars), according to the documents prepared by the State.

The WCWCD model has another flaw which is serious and merits further consideration. Consumers typically buy more of a product if its price falls. Conversely, the higher a product's price, the lower its total consumption. This link between a product's price and its total quantity sold is sometimes called the "Law of Demand." Most Americans are familiar with this concept and laymen think of it simply as a part of 'market economics.'

The WCWCD model, by contrast, assumes there is no such link, and that instead, the price of water has no relationship to the quantity of water used or purchased by the consumer. This makes the WCWCD model inconsistent with the Law of Demand, invalidating its analysis of water prices. The fact that this inconsistency has not been corrected by anyone working for the Division of Water Resources or for the WCWCD raises the possibility that these institutions may currently lack the ability to handle even the most elementary principles of economic analysis. Alternatively, these institutions may understand this concept yet choose to ignore it because the required increases in water rates and reduction of water use could negate the need for the LPP.

There are also elementary errors in the spreadsheet computer coding, giving rise to an incorrect number of repayment periods in several instances, and to incorrect treatment of the final year of the repayment plan.

Given the flaws of the WCWCD model, we stand by the model in our 2015 analysis, warning of significant water rate and impact fee increases. However, that model should only be a starting point for a comprehensive analysis of southwest Utah's water needs, including not only more sophisticated economic analysis but also geographical study of changing land use patterns, demographic modeling and its implications for real estate development, close study of future water use in agriculture, and reconsideration of using property taxes to partially fund water districts.

Thank you for the opportunity to participate in this discussion.

Sincerely,

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