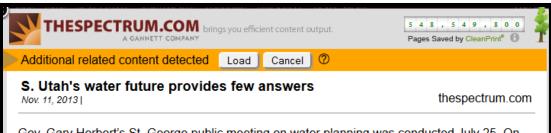


Setting the Record Straight





Gov. Gary Herbert's St. George public meeting on water planning was conducted July 25. On Oct. 30, the 20th annual Utah Water Summit was conducted in Provo to discuss the governor's water plan initiative and address funding for water projects — our tax money — along with other water-related topics. These are worthwhile efforts to gather public information for water-planning purposes. However, other water planning efforts at the local and state level seem flawed. Who has decisionmakers' ears: residents or advisers?

The local July meeting was standing room only with the majority of non-government citizens speaking out against the proposed Lake Powell pipeline. Perhaps to allay citizen concerns, the Washington County Water Conservancy District hired Jeremy Aguero of Applied Analysis to "analyze" the Lake Powell pipeline project and, apparently, serve as the district's spokesperson to sell the project.

Aguero, an attorney but not an economist, is a well-known analyst in Las Vegas. Does he provide an unbiased analysis? Well, in September 2013, Applied Analysis bought Sales Traq New Mexico, the premier real estate market research and new home listing information provider for real estate agents, homebuilders, appraisers and investors. Regarding the purchase, Applied Analysis was quoted as stating, "We believe that also provides a unique opportunity for growth." Is growth what they're selling here?

Then there's the April 5, 2009, article in the Las Vegas Sun: "How did so many experts get their forecasts so wrong?" A year earlier, Jeremy Aguero had issued a rosy picture about Las Vegas' economy due to "unprecedented amount of investment" under way. It was barely weeks after that assessment that Las Vegas saw a serious downturn. Although Aguero was not alone in missing the signs, he was their premier analyst, so one would expect better. Some local and outside economists saw major problems in Las Vegas while he did not. In fact, he's quoted as saying the recession was unforeseeable. Perhaps for him that was true. UNLV professor Tom Carroll alluded to the self-styled experts in Nevada who "find out what clients want to hear and then produce it." Is that what's happening in Washington County and in Utah's capitol?

OpEd by blogger Lisa Rutherford (Ivins resident)



November 14, 2013

House of Representatives Natural Resources, Agriculture and Environmental Interim Committee 350 North State, Suite 350 PO Box 145030 Salt Lake City, Utah 84114

Lisa Rutherford 173 Painted Hills Drive Ivins, Utah 84738

Dear Representative Noel,

I attended the October 16 meeting of the Natural Resource/Agriculture/Environmental Interim Committee, a committee on which you serve. After driving all the way from St. George and given my interest in the Lake Powell Pipeline project, I was disappointed to learn at the start of the meeting that agenda item 5 (State Water Development Commission Report) was removed from the meeting's agenda. Since I was unable to make a public comment at that time. I'm submitting this letter with my thoughts, and would very much like to have these included in the public record of public comments for the upcoming, November 2013 meeting,

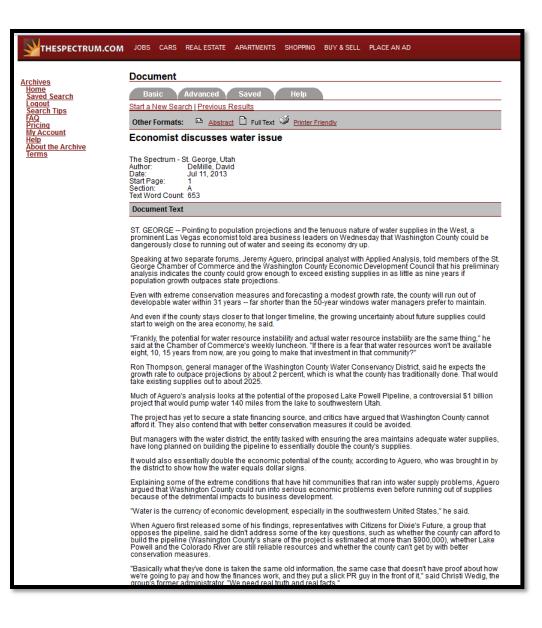
As a citizen of Washington County, Utah, I appreciate having the opportunity to turn to you. because the Utah Legislature is the only elected body overseeing this massive \$1+ billion water project. Part of why I am writing is because appointed government agencies which enjoy taxation powers over residents like myself have been using my tax funds to advocate for this expensive public works project without any concern for the many, many local residents who are opposed to this project. It is important that a democratic process is in place. State leaders outside our county where local leaders have been convinced this project is vital - can consider it a bit more critically and rationally. State legislators such as you serve to ensure a democratic process.

There is great pressure by these appointed government water agencies to ensure the Lake Powell Pipeline is completed. After all, \$25 million has already been spent so we need to forge ahead, right? I'm sure that even at the state level legislators are getting much pressure from entities wishing to profit from this project. Many Washington County citizens have spoken against the pipeline. At the Governor's July water meeting in St. George, a standing-room-only affair, most citizens, those not associated with government entities, spoke against the project. Many citizens fear the whole process is tainted. I'm more optimistic about legislators actually wanting information to aid their decision making.

"So, what we get, rather than paying attention to our own Utah economists is a Las Vegas attorney hired by the appointed **Washington County** Water District for \$10,000 per month, to be their spokesperson to argue their case

essentially."

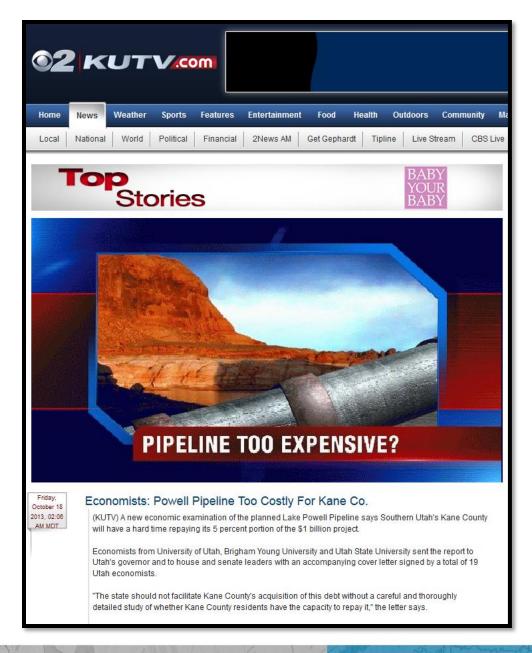
"Basically what they've done is taken the same old information, the same case that doesn't have proof about how we're going to pay and how the finances work, and they put a slick PR guy in the front of it,"





"9. Jeremy Aguero, principal of Applied Analysis, is the Justin Timberlake of Las Vegas economic forecasting events,"





Economist: Powell Pipeline Too Costly for Kane County

http://www.kutv.com/news/topstories/stories/vid 7545.shtml



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

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

Honorable Senator Curtis S. Bramble, Chair Honorable Representative Patrick Painter, Chair Revenue and Taxation Interim Committee

October 16, 2012

Dear Speaker Lockhart, President Waddoups, and Senator Bramble,

We are writing with some concern about the repayment claims made with respect to financing the proposed Lake Powell Pipeline. Our preliminary analysis raises important questions regarding the ability of the Washington County Water Conservancy District to repay debt issued by the State of Utah for this project. Our analysis is based on four points described below and summarized on page 3.

As you are no doubt aware, the Lake Powell Pipeline Act includes language mandating that the project cost will be repaid to the State of Utah with interest. The accompanying reference pages includes Utah Code 73-28-402 Agreement for delivery – Period for repayment of costs from the Lake Powell Pipeline Development Act.

- 1. Water Conservancy District Existing Net Revenues. According to our initial review of the 2011 Audited Financial Statement of the Washington County Water Conservancy District, the agency reported a \$10.275 million change in Net Assets in 2011. In a business this would be considered as Net Income. This data is based on the Financial Analysis of the District's Funds Change in Net Assets statement, which is attached.
- 2. 50 Year Repayment Obligation to State Taxpayers. We prepared a calculation of total annual debt service assuming the portion of the project cost subject to repayment by the Washington County Water Conservancy District is \$969 million. This figure was selected because it was presented to the Legislative Water Issues Task Force on November 14, 2011; many people believe the actual project cost will be higher. Assuming a 50 year repayment period, the annual debt service varies by interest rate as follows:

Assuming 50-year straight-line debt repayment, the fully amortized cost of the project would be between \$37.6 million per year and \$70.2 million per year, more than the \$10.3 million reported in the District's 2011 net revenues...

1

"If this initial analysis is correct, Washington County Water Conservancy District would have to increase its net revenues by roughly 370 percent..."

Summary of Total Projected Debt Service and Revenue Shortfalls. Based upon this information, future anticipated annual debt service to the Washington County Water Conservancy District due to this project could be \$47 million.

As stated above, the current net annual revenues of this agency are currently \$10.275 million, which is far less than \$47 million. To put this concept into stark terms, if this initial analysis is correct, it would require the Washington County Water Conservancy District to increase its net annual revenues by roughly 370 percent ((47-10)/10).

Given the observed decline in growth rates compared to those predicted in 2006, we wonder where the significant increase in revenues required to repay this project will come from. We could find no information to indicate how the Washington County Water Conservancy District can raise this revenue.

Although there has been testimony these revenues could come from real estate impact fees on new homes and presumably commercial buildings, we could not find any projections indicating total annual revenues expected as a result of impact fee increases. The 2011 Washington County Water Conservancy District Audited Financial statement indicates that existing impact fee collections totaled a mere \$4.62 million in 2011, and are already accounted for in the district's net revenues. In order for impact fees to pay the additional debt service level of \$47 million, this amount in new impact fees would have to be collected every year during this repayment period. This corresponds to a roughly 10-fold (900 percent) increase in impact fee revenues, which is problematic. Since impact fees are paid only once by new residents and businesses, it is important to determine exactly what rate of growth would be required to raise this large revenue stream and over what period of time.

Accordingly, we suspect that at least some of the increase in revenues would have to come from raising water rates in order to generate an increase in water rate revenues from residents. Depending upon how large these water rate increases would be, they could lead to a significant reduction in total water use. It would be appropriate to ask how a 370 percent increase in net revenues would impact water rates and ratepayers.

Given these facts, the only financially prudent way forward is for the State to carefully study whether Washington County residents have the capacity to actually repay these debt obligations before the State indebts itself with this project. Since this debt service is significantly higher than currently practiced commercial lending standards, we also seek to understand what would occur if this agency defaults on its repayment obligations.



In order for impact fees to pay for the additional debt service of \$47 million...they would have to increase by 900 percent...which is problematic.

Summary of Total Projected Debt Service and Revenue Shortfalls. Based upon this information, future anticipated annual debt service to the Washington County Water Conservancy District due to this project could be \$47 million.

As stated above, the current net annual revenues of this agency are currently \$10.275 million, which is far less than \$47 million. To put this concept into stark terms, if this initial analysis is correct, it would require the Washington County Water Conservancy District to increase its net annual revenues by roughly 370 percent ([47-10]/10].

Given the observed decline in growth rates compared to those predicted in 2006, we wonder where the significant increase in revenues required to repay this project will come from. We could find no information to indicate how the Washington County Water Conservancy District can raise this revenue.

Although there has been testimony these revenues could come from real estate impact fees on new homes and presumably commercial buildings, we could not find any projections indicating total annual revenues expected as a result of impact fee increases. The 2011 Washington County Water Conservancy District Audited Financial statement indicates that existing impact fee collections totaled a mere \$4.62 million in 2011, and are already accounted for in the district's net revenues. In order for impact fees to pay the additional debt service level of \$47 million, this amount in new impact fees would have to be collected every year during this repayment period. This corresponds to a roughly 10-fold (900 percent) increase in impact fee revenues, which is problematic. Since impact fees are paid only once by new residents and businesses, it is important to determine exactly what rate of growth would be required to raise this large revenue stream and over what period of time.

Accordingly, we suspect that at least some of the increase in revenues would have to come from raising water rates in order to generate an increase in water rate revenues from residents. Depending upon how large these water rate increases would be, they could lead to a significant reduction in total water use. It would be appropriate to ask how a 370 percent increase in net revenues would impact water rates and ratepayers.

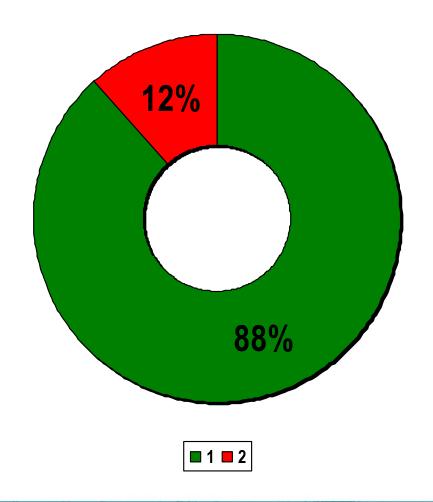
Given these facts, the only financially prudent way forward is for the State to carefully study whether Washington County residents have the capacity to actually repay these debt obligations before the State indebts itself with this project. Since this debt service is significantly higher than currently practiced commercial lending standards, we also seek to understand what would occur if this agency defaults on its repayment obligations.



Using TurningPoint

Do You Generally Understand How TurningPoint Works?

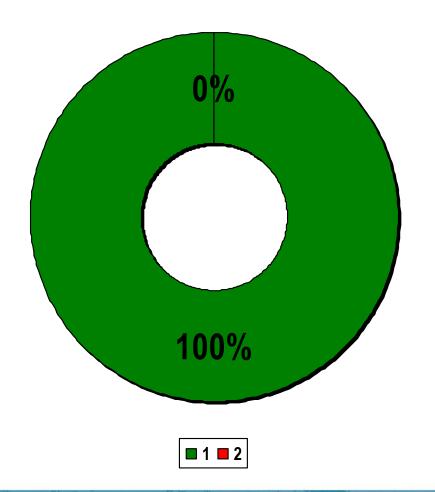
- 1. Yes, I Understand
- 2. No, I Do Not Understand





Generally speaking, is Utah's economy headed in the right direction?

- 1. Yes, It Is Headed in the Right Direction
- 2. No, It Is Not Headed in the Right Direction





Financing Water Infrastructure in Utah



LAKE POWELL PIPELINE DEVELOPMENT ACT

Passed by 2006 Utah State Legislature

73-28-101. Title.

This chapter is known as the "Lake Powell Pipeline Development Act."

73-28-102. Scope.

Nothing in this chapter may be construed to prevent any person, subject to other provisions of law, from developing the waters of the Colorado River.

73-28-103. Definitions.

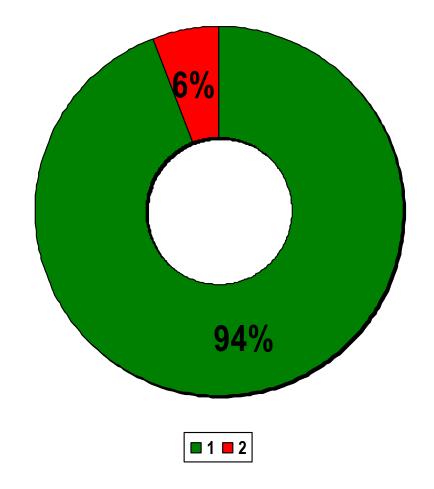
As used in this chapter:

- (1) "Board" means the Board of Water Resources.
- "Committee" means the Project Management Committee created in <u>Section 73-28-</u> 105.
- (3) (a) "Construction costs" means all costs related to the construction of the project, including the environmental mitigation costs.
- (b) Construction costs include:
- (i) acquisition of land and rights-of-way;
- (ii) board and division expenses related to the project;
- (iii) compensation for impairment of existing water rights;
- (iv) construction of the project;
- (v) design;
- (vi) engineering;
- (vii) environmental studies;
- (viii) legal work;
- (ix) permitting;
- (x) planning; and
- (xi) rebuilding and relocating highways or other facilities affected by the project.
- (4) "Developed water" means surface water developed by the project.
- (5) "District" means:

Lake Powell Pipeline Act

Do You Agree that the Lake Powell Pipeline Act Generally Controls How the Pipeline Will Be Developed and Financed?

- 1. Yes, I Agree
- 2. No, I Do Not Agree





August 2008 Letter from Ron Thompson to Utah Division of Water Resources

Ronald W. Thompson General Manager

> Roberta McMullin Secretary-Treasurer

Barbara G. Hjelle Assistant General Manager Counsel



BOARD OF TRUSTEES

Morgan S. Jensen, Chair Dennis Iverson, Vice-Chair Daniel D. McArthur Edward Bowler Jim Lemmon Howard Bracken

August 14, 2008

Mr. Dennis Strong Division of Water Resources P.O. Box 146201 Salt Lake City, UT 84114-6201

RE: Lake Powell Pipeline Financing

Dear Dennis:

We are grateful for the partnership and help offered by the state of Utah in the Lake Powell Pipeline Project. I am writing this letter to ensure that, as we move forward, we are on the same page with regard to our expectations for financing of the Lake Powell Pipeline Project. Based upon our prior discussion, I understand that the long term financing plans for the Project would follow the Bear River Project model, which would have the following elements:

- The Districts commit to purchase 70% of the project water prior to commencement of construction.
- The Districts have 10 years from the date of completion of the project to sign up for blocks of that 70%, with each block financed over 50 years from the date we sign up, at 4% interest with annual payments.
- If we sign up for any of the first 70% after the initial 10 year period, the time to pay back is reduced by each year past 10 that we delay.
- For the remaining 30%, the Districts have 50 years from the date of purchasing the water to pay it
 off at 4% interest.
- No interest would be charged until such time as the actual contract to take the water occurs.
- The Districts would be responsible to pay all Operation & Maintenance and Repair & Replacements
 costs for the project.

To make sure I understand the arrangement, it means, for example:

 If in year one, our District were to sign up for 15,000 a.f. of water, we would have 50 years from that date to pay for that block.

136 North 100 East ◆ St. George, Utah 84770 ◆ Office: (435) 673-3617 Fax: (435) 673-4971 E-Mail: wcwcd@utah.gov ◆ Home Page: wcwcd.state.ut.us



Key Points Outlined in the August 2008 Thompson Letter

- The Districts commit to purchase 70 percent of the project water prior to commencement of construction.
- The Districts have 10 years from the date of completion of the project to sign up for blocks of that 70 percent, with each block financed over 50 years from the date they sign up, at 4% interest with annual payments.
- If the Districts sign up for any of the first 70 percent after the initial year period, the time to pay back is reduced by each year past 10 that we delay.



Key Points Outlined in the August 2008 Thompson Letter (cont.)

- For the remaining 30 percent, the Districts have 50 years from the date of purchasing the water to pay it off at 4 percent interest.
- No interest would be charged until such time as the actual contract to take the water occurs.
- The Districts would be responsible to pay all operation and maintenance and repair and replacements costs for the project.





State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER

Division of Water Resources DENNIS J. STRONG



October 14, 2008

Ron Thompson Washington County Water Conservancy District 136 North 100 East #1 St. George, Utah 84770

Ron:

Way back in August you sent me a letter concerning Lake Powell Pipeline financing. In that letter you set forth your understanding of our conversations concerning how the pipeline water would be contracted and the project financed.

Let me make a few observations to the letter you sent. In your first set of bullets you talk about a 4% interest rate. The interest rate has not been set. The statute requires the Board of Water Resources to set that interest rate. Your third bullet discusses water that's part of the 70% of the initial portion that is not taken until after ten years. I believe the concept is that if you do not take water initially contracted (water that is of part of the 70%) until after the tenth year you have 50 years to pay for the water minus the amount of time that's elapsed since construction was complete. The example you cite follows the method of repayment as outlined in the statute.

You put forward the possibility of Washington County being required and perhaps able to cover the initial 70% of the project for all three districts. To do this you state, you may want the 'right of first refusal''. I believe the law (73-28-302) provides broad flexibility and agree with the concepts you put forth, but believe the process needs to be discussed with the other districts.

Your next item concerns financing of the project and a reference to my general statement of the project being funded 1/3 by the district, 1/3 by the state and 1/3 by the Board. You are right, this will not work. I do not believe either the districts or the Board will have the ability to fund 1/3. I do believe that each of us will be required to commit to fund a portion of the project and the more the districts and the Board can fund, the easier it will be to get the Legislature to participate.

Related to funding I believe we need to have discussions on our views of pump storage and hydroelectric generation. Because I believe the districts will own the project eventually I suggest funding and the final decision concerning hydroelectric generation is principally the responsibility of the districts. I am concerned that taking a very large cost for hydroelectric generation to the Legislature as part of the funding package could be non-starter.

1594 West North Temple, Suite 310, PO Box 146201, Salt Lake City, UT 84114-6201 telephone (801) 538-7230 • facsimile (801) 538-7279 • TTY (801) 538-7458 • www.water.atah.gov

October 2008 Letter from the Utah Department of Natural Resources Generally Confirming Mr. Thompson's Understanding



November 2012
letter from the Utah
Department of
Natural Resources,
Expressing Concern
Regarding the
Economists' Analysis



State of Utah DEPARTMENT OF NATURAL RESOURCE

MICHAEL R. STYLER
Executive Director

Division of Water Resources

DENNIS J. STRONG

Division Director

November 30, 2012

Sen. Michael G. Waddoups President of the Senate, Utah

Rep. Rebecca D. Lockhart Speaker of the House, Utah

Sen. Curtis S. Bramble, Chair Rep. Patrick Painter, Chair Revenue and Taxation Interim Committee

To All:

Water resources development is of fundamental importance to the economic and social well-being of Utah's citizens, businesses, and institutions. The Utah Division of Water Resources (DWRe) would like to address misconceptions surrounding the Lake Powell Pipeline (LPP) project recently voiced by some faculty members with the University of Utah and others (letter dated October 16, 2012, attached).

- 1. The LPP project has received extensive and well-reviewed economic analyses under the supervision of the DWRe, as required by state statute and federal requirements. These analyses, conducted by senior resource economists relying on an open review of the methodology and assumptions a dopted, concluded that the LPP project's benefits exceeded the project's costs. The project would clearly yield net benefits to Utah citizens and the state's economy. The October 16 comments expressed by the faculty members do not refer to the completed economic analyses; nor did the faculty members offer any comments on those analyses during the formal comment period conducted by the DWRe as part of the federal licensing and permitting process. Their comments are predicated on a brief review of the Washington County Water Conservancy District's (WCWCD) 2011 financial profile.
- 2. A key problem is that the faculty members have over-simplified the repayment of the project by the water conservancy districts. Project financing will not be a simple "straight line" amortization schedule, as they have implied. The Lake Powell Pipeline Development Act explains the repayment plan that was put forthby the Legislature: it requires that state financing of the project will be repaid, including interest, by the water conservancy districts over a 50-year period commensurate with community growth.
- Another key factor that appears diminished within the faculty member comments is an adequate appreciation for the future water demandgrowth within the WCWCD. It is this growth that will fund the basic project



1594 West North Temple, Suite 310, PO Box 146201, Salt Lake City, UT 84114-6201 telephone (801) 538-7230 • facsimile (801) 538-7279 • TTY (801) 538-7458 • www.water.utah.gov



"A key problem is that the faculty members have over-simplified the repayment of the project by the water conservancy districts. **Project financing will** not be a simple 'straight line' amortization schedule, as they have implied."



State of Utah DEPARTMENT OF NATURAL RESOUR

MICHAEL R. STYLER
Executive Director

Division of Water Resources

DENNIS J. STRONG

Division Director

November 30, 2012

Sen. Michael G. Waddoups President of the Senate, Utah

Rep. Rebecca D. Lockhart Speaker of the House, Utah

Sen. Curtis S. Bramble, Chair Rep. Patrick Painter, Chair Revenue and Taxation Interim Committee

To All:

Water resources development is of fundamental importance to the economic and social well-being of Utah's citizens, businesses, and institutions. The Utah Division of Water Resources (DWRe) would like to a ddress misconceptions surrounding the Lake Powell Pipeline (LPP) project recently voiced by some faculty members with the University of Utah and others (letter dated October 16, 2012, attached).

- 1. The LPP project has received extensive and well-reviewed economic analyses under the supervision of the DWRe, as required by state statute and federal requirements. These analyses, conducted by senior resource economists relying on an open review of the methodology and assumptions a dopted, concluded that the LPP project's benefits exceeded the project's costs. The project would clearly yield net benefits to Utah citizens and the state's economy. The October 16 comments expressed by the faculty members do not refer to the completed economic analyses; nor did the faculty members offer any comments on those analyses during the formal comment period conducted by the DWRe as part of the federal licensing and permitting process. Their comments are predicated on a brief review of the Washington County Water Conservancy District's (WCWCD) 2011 financial profile.
- 2. A key problem is that the faculty members have over-simplified the repayment of the project by the water conservancy districts. Project financing will not be a simple "straight line" amortization schedule, as they have implied. The Lake Powell Pipeline Development Act explains the repayment plan that was put forthby the Legislature: it requires that state financing of the project will be repaid, including interest, by the water conservancy districts over a 50-year period commensurate with community growth.
- Another key factor that appears diminished within the faculty member comments is an adequate appreciation for the future water demand growth within the WCWCD. It is this growth that will fund the basic project



1594 West North Temple, Suite 310, PO Box 146201, Salt Lake City, UT 84114-6201 telephone (801) 538-7230 • facsimile (801) 538-7279 • TTY (801) 538-7458 • www.water.utah.gov



Final Amended 10/17/06



REGIONAL WATER CAPITAL FACILITIES PLAN AND IMPACT FEE ANALYSIS

FOR

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT
WASHINGTON COUNTY, UTAH

OCTOBER 2006

Submitted by:

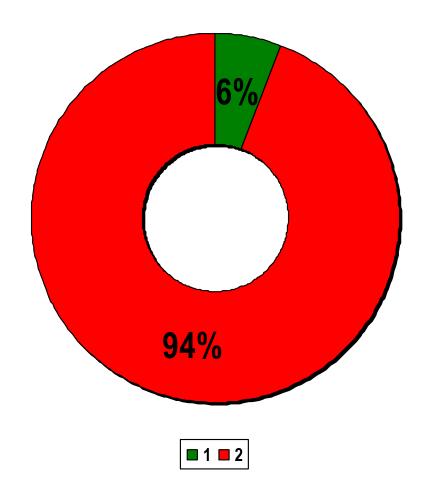
LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.

Washington **County** is estimated to have a buildout population of approximately 607,334



Does Washington County Currently Have Sufficient Water Resources to Service its Buildout Population?

- 1. Yes, It Does Have Sufficient Resources
- 2. No, It Does Not Have Sufficient Resources





Time Period	Additional Supply Required (Af/Yr)	Projected Water Project Cost	
2011-2020	20,000	\$434.5MM	
2021-2030	28,000	\$667.0MM	
2031-2040	30,000	\$804.9MM	
2041-2050	32,000	\$883.1MM	
2051-2060	33,000	\$968.5MM	
TOTAL	143,000	\$3,758MM	

Roadmap of Utah's Future Water Development and Infrastructure

Prepared at the Request of Governor Gary R. Herbert

b

Utah Division of Water Resources

Central Utah Water Conservancy District

Jordan Valley Water Conservancy District

Washington County Water Conservancy District

Weber Basin Water Conservancy District

Bear River Water Conservancy District

Bear River Association of Governments

Cache County Water Department



Kanab Creek/Virgin River Basin Water Plan

	Donal del	Comment!	Per Capita Use (GPCD) ³	M&I Water Use (AF/yr) ³	Additional Supply Needed	Projected Water Project Costs ⁵		Actions Needed (by)	
Decade	Population (ending) ¹	Conservation Goal ²				(millions ⁶) Supply & Repair &			
					(AF/yr) ⁴	Infrastructure	Replacement		
20007	85,540	0%	73 219 449	7,000 21,000 43,000					
2001-2010	146,060	26%	63 161 330	10,000 26,000 54,000					
2011-2020	206,208	28%	58 157 320	13,000 36,000 74,000	20,000	\$434.5	\$83.4	Repair and Replacement (cities, districts) Growth-Related Infrastructure (cities, districts) Ash Creek Project - 3,080 af (WCWCD) Ash Creek Project - 3,080 af (WCWCD) Warner Valley Reservoir - 10,080 af (WCWCD) Lake Powell Pipeline-Planning/Permitting (UDWR, WCWCD, KCWCD) Water Rights, Stock Acquisitions & Ag Water Conversion (WCWCD, KCWCD) Water Rights, Stock Acquisitions & Ag Water Conversion (WCWCD, KCWCD) Washer Rights, Stock Acquisitions & Ag Water Conversion (WCWCD, KCWCD)	
2021-2030	292,284	30%	55 153 312	18,000 50,000 102,000	28,000	\$667.0	\$162.1	Repair and Replacement (cities, districts) Growth-Related Infrastructure (cities, districts) Lake Powell Pipeline Project - 86,000 af (UDWR, WCWCD, KCWCD) Water Rights, Stock Acquisitions & Ag Water Conversion (WCWCD, KCWCD) Conservation & Watershed Protection (WCWCD, KCWCD)	
2031-2040	386,220	32%	55 150 305	24,000 65,000 132,000	30,000	\$804.9	\$274.1	Repair and Replacement (cities, districts) Growth-Related Infrastructure (cities, districts) Water Rights, Stock Acquisitions & Ag Water Conversion (WCWCD, KCWCD) Wastewater Reuse - 7,230 af (WCWCD) Conservation & Watershed Protection (WCWCD, KCWCD)	
2041-2050	490,223	33%	55 146 299	30,000 80,000 164,000	32,000	\$883.1	\$388.1	Repair and Replacement (cities, districts) Growth-Related Infrastructure (cities, districts) Water Rights, Stock Acquisitions & Ag Water Conversion (WCWCD, KCWCD) Conservation & Watershed Protection (WCWCD, KCWCD)	
2051-2060	603,176	35%	55 142 292	37,000 96,000 197,000	33,000	\$968.5	\$509.3	Repair and Replacement (cities, districts) Growth-Related Infrastructure (cities, districts) Water Rights, Stock Acquisitions & Ag Water Conversion (WCWCD, KCWCD) Conservation & Watershed Protection (WCWCD, KCWCD)	
								Development of Additional Colorado River Water from Lake Powell	
					143,000	\$3,758.0	\$1,417.1		

¹⁾ Population ending data from Governor's Office of Management and Budget

5) Cap all costs are projected using average unit costs of cities and districts. Transmission and storage is estimated at \$1,300 per ERU; treatment plant at \$2.5

²⁾ Percentage reduction from 2000 per capita use, at end of decade, per state goal of 25% by 2025.

³⁾ Gallons per capita per day calculated by DWR; first number is residential indoor use; second number is residential indoor and outdoor use (including secondary); third number is residential indoor and outdoor plus commercial, industrial, and institutional (CI&I).

⁴⁾ The aggregate water supply needed in addition to previous decade to meet demands of the decade for the basin as a whole; conditions may exist where shortages in one area of the basin cannot be met by the surpluses in another.

per gpd; source development at \$10,700 per AF/yr; and conservation at \$14,600 per AF. The total community cost of conservation is estimated using data from a 2010 Maddaus study. Repair and replacement costs are based on 2% of current asset value (auditor reports) and anticipated capital projects of cities and districts. Assets with an expected life greate rthan 50 yrs are excluded from repair and replacement.

^{7) 2000} is the baseline year, 2000 and 2010 data are current approximations for those decades; 2011-2060 data is projected.

Population Growth...

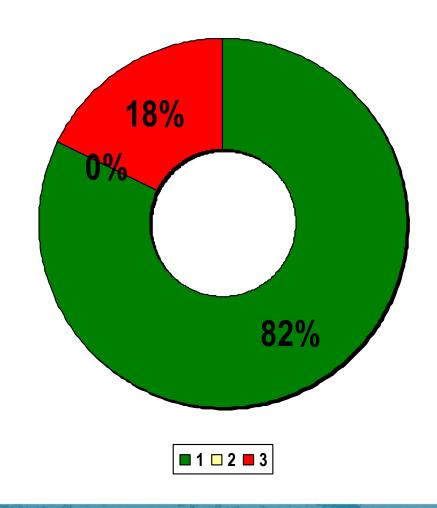
The Governor's Office of Planning and Budget estimates that Washington County's population will grow at an annual rate of 2.9 percent from 2013 and 2060.

This rate is significantly slower than the region's historical rate of population growth, but is significantly faster than the rate reported between 2009 and 2012.



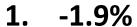
Do You Believe that Washington County Will Grow Faster, Grow Slower, or Grow About the Same As Projected by the GOPB?

- Faster than Projected
- 2. About the Same as Projected
- 3. Slower than Projected

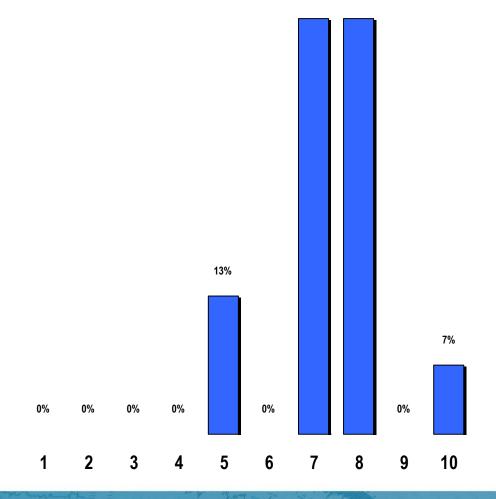




Which Rate of Growth Do You Think Most Closely Approximates What Washington County Can Expect?



- 2. -0.9%
- 3. 0.0%
- 4. 0.9%
- **5. 1.9%**
- 6. 2.9% (GOBP)
- 7. 3.9%
- 8. 4.9%
- 9. 5.9%
- 10. 6.9%

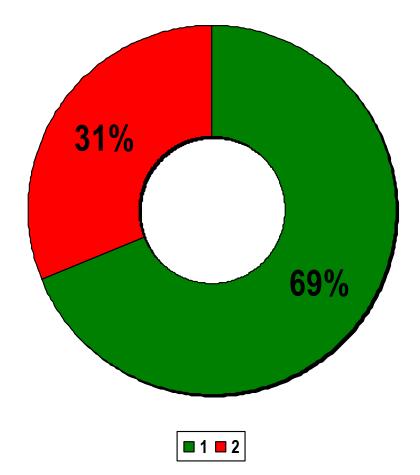


40%

40%

Should Washington County reduce its supply expectations to reflect the impacts of drought and climate change?

- Yes, Expectations
 Should Be Reduced
- 2. No, Expectations
 Should Not Be
 Reduced

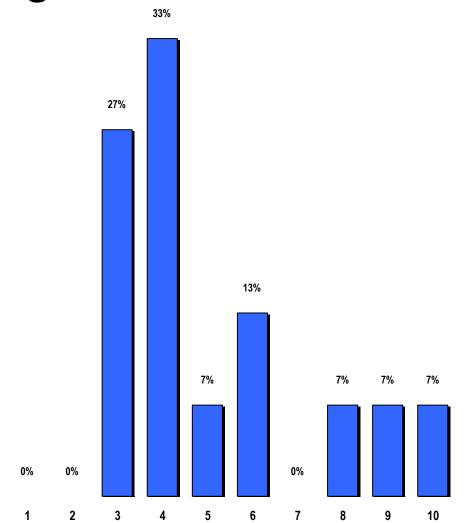




About how much would you say this reduction for drought/climate change should be?

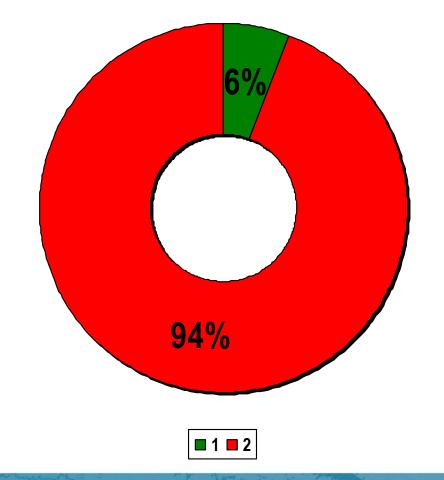


- 2. 3%
- 3. 5%
- 4. 10%
- **5. 12%**
- **6.** 15%
- **7. 17%**
- **8. 20**%
- 9. 25%
- 10. 30%



Should Washington County Utilize 100 Percent of Its Available Water Resources before Developing New Water Resources?

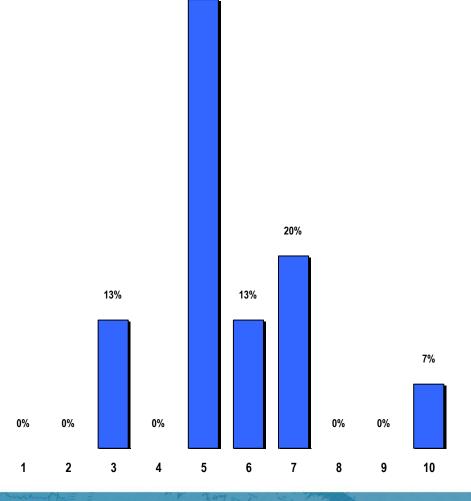
- 1. Yes, 100 Percent of Resources Should be Utilized First
- 2. No, Resource
 Development
 Should Precede
 Additional Demand



About how many years of growth should Washington County hold in reserve?



- 2. 2 Years
- 3. **5 Years**
- 4. 7 Years
- 5. 10 Years
- 6. 15 Years
- 7. 20 Years
- 8. **25** Years
- 9. 30 Years
- 10. 35 Years





Conservation...

Washington County is currently demanding approximately 270 gallons per capita per day.

The Governor's conservation goal would reduce the value to 251 gallons per capita per day by 2025.

Conservation would increase capacity of the existing water system, but does not come without a cost.



SWSI 2010 MUNICIPAL AND INDUSTRIAL WATER CONSERVATION STRATEGIES

January 2011

Prepared for:



Prepared by:



Ŏ.



Passive Water Conservation

natural replacement of toilets, clothes washers, and other standard domestic fixtures

Active Water Conservation

education programs, landscape audits, landscape restrictions, rebates for landscape changes and turf replacement programs, required retrofits on sale of property, leakage detection programs, elimination of single pass cooling



SWSI 2010 MUNICIPAL AND INDUSTRIAL WATER CONSERVATION STRATEGIES

January 2011

Prepared for:



Prepared by:



Ŏ.



Passive Water Conservation

\$0

Active Water Conservation

\$10,600

SWSI 2010 MUNICIPAL AND INDUSTRIAL WATER CONSERVATION STRATEGIES

January 2011

Prepared for:



Prepared by:



Ŏ.



Low Scenario

\$5,838

Mid Scenario

\$7,296

High Scenario

\$8,183





Submitted via FERC's eFiling system

March 13, 2013

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

RE: The Local Waters Alternative to the Lake Powell Pipeline – Hydroelectric Project No. P-12966.

Dear Secretary Bose:

Western Resource Advocates respectfully submits the Local Waters Alternative to the Lake Powell Hydroelectric Project ("LPP") into this Federal Energy Regulatory Commission ("FERC") docket. Western Resource Advocates is a nonprofit conservation organization dedicated to protecting the Interior West's land, air, and water. Western Resource Advocates seeks to mitigate the impacts of climate change to the West's communities and rivers, and promotes a sustainable energy and water future.

The Local Waters Alternative is a conservation alternative to the proposed LPP that presents a more reasonable No Action Alternative than the one proposed by the applicants, and could save Utah taxpayers hundreds of millions of dollars. Specifically, under the Local Waters Alternative:

- Local water supplies could exceed demands by 20% by 2060 without construction of the Lake Powell Pipeline; and
- Implementation of the Local Waters Alternative would cost about one-third the predicted price tag for the proposed Lake Powell Pipeline.

As we noted in our May 6, 2011, see eLibrary Accession No. 20110506-5161, many of the Draft Study Reports for the LPP are fundamentally flawed, do not meet the objectives of the Approved Study Plan, and therefore should be revised. The Local Waters Alternative supplements and elaborates upon our earlier critique of the Draft Study

COLORADO • 2260 BASELINE ROAD, SUITE 200 • BOULDER, CO 80302 • 303.444.1188 • FAX: 303.786.8054 • EMAIL: info@westernresources.org
NEVADA • 204 N. Minnesota Street, Suite A • Carson Citt, NV 89703 • 775.841.2400 • FAX: 866.223.8365 • EMAIL: info@westernresources.org
NEW MEXICO • 409 E. Palace Avenue, Suite 2 • Santa Fe, NM 87501 • 505.820.1590 • FAX: 505.820.1589 • EMAIL: info@westernresources.org
UTAH • 150 South 600 EAST, Suite 2AB • SALT LAKE City, UT 84102 • 801.487.9911 • EMAIL: utah@westernresources.org

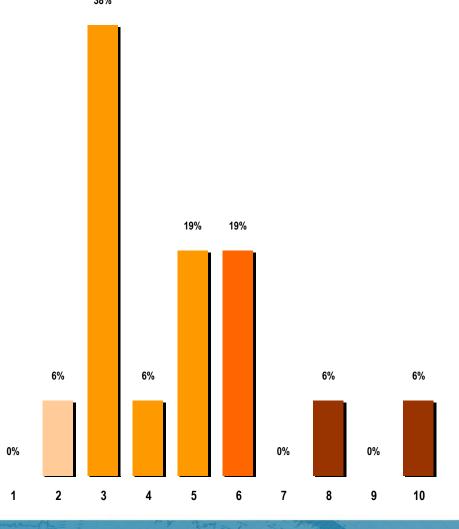
www.westernresourceadvocates.org

"Using the Maddaus conservation study, the estimated one-time cost to save one acre-foot is \$3,824 for the utility, and \$13,980 for the community, the latter of which includes costs to both customers and the utility. These conservation cost estimates are roughly in line with reported costs of conservation in Colorado, which range from about \$5,000 - \$10,000 per acre foot."

What Level of Conservation Do You Think is Reasonable for Washington County by 2025?

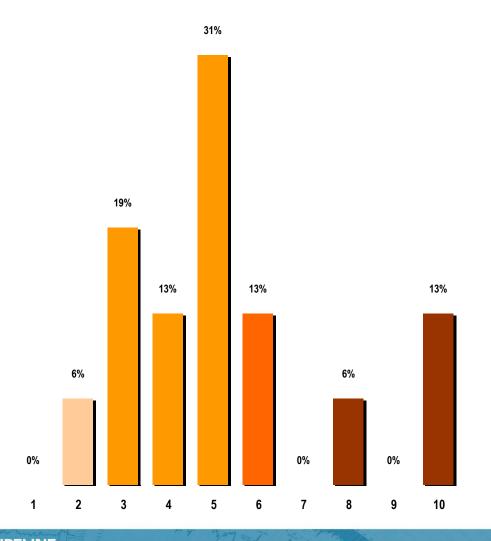


- 2. 302 GPCD (-10%)
- 3. 285 GPCD (-15%)
- 4. 268 GPCD (-20%)
- 5. 251 GPCD (-25%)
- 6. 235 GPCD (-30%)
- 7. 218 GPCD (-35%)
- 8. 201 GPCD (-40%)
- 9. 184 GPCD (-45%)
- 10. 168 GPCD (-50%)



What Level of Conservation Do You Think is Reasonable for Washington County by 2050?

- 1. 318 GPCD (-5%)
- 2. 302 GPCD (-10%)
- 3. 285 GPCD (-15%)
- 4. 268 GPCD (-20%)
- 5. 251 GPCD (-25%)
- 6. 235 GPCD (-30%)
- 7. 218 GPCD (-35%)
- 8. 201 GPCD (-40%)
- 9. 184 GPCD (-45%)
- 10. 168 GPCD (-50%)





The Economists' Models



Lake Powell Pipeline **Act Model**



The Big Three

Reliability

Capacity

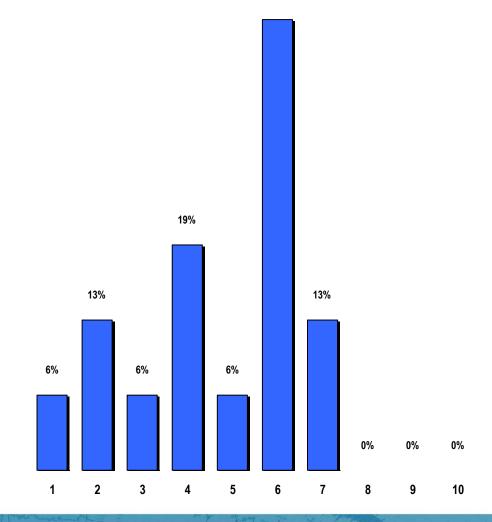
Conservation



How much would you be willing to pay per gallon to ensure water system <u>reliability</u> into the foreseeable future?



- 2. 0.10¢
- 3. 0.25¢
- 4. 0.50¢
- 5. 0.75¢
- 6. 1¢
- 7. 5¢
- 8. 10¢
- 9. 25¢
- 10. 50¢

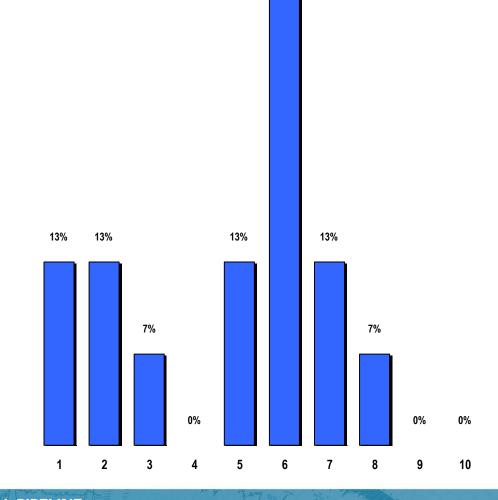


How much would you be willing to pay per gallon to ensure Washington County has the <u>ability to grow</u> into the future?

337



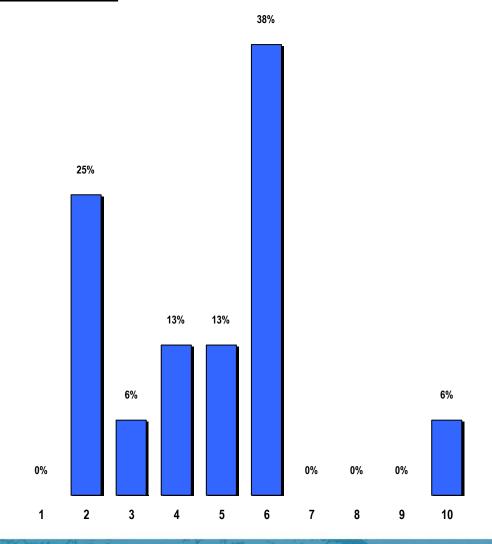
- 2. 0.10¢
- 3. 0.25¢
- 4. 0.50¢
- 5. 0.75¢
- 6. 1¢
- 7. 5¢
- 8. 10¢
- 9. 25¢
- 10. 50¢



How much would you be willing to pay per gallon for water <u>conservation</u>?

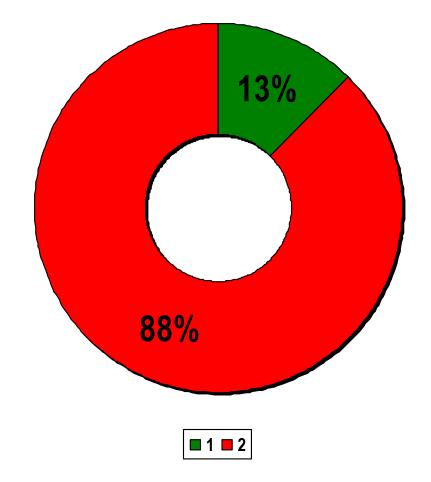


- 2. 0.10¢
- 3. 0.25¢
- 4. 0.50¢
- 5. 0.75¢
- 6. 1¢
- 7. 5¢
- 8. 10¢
- 9. 25¢
- 10. 50¢

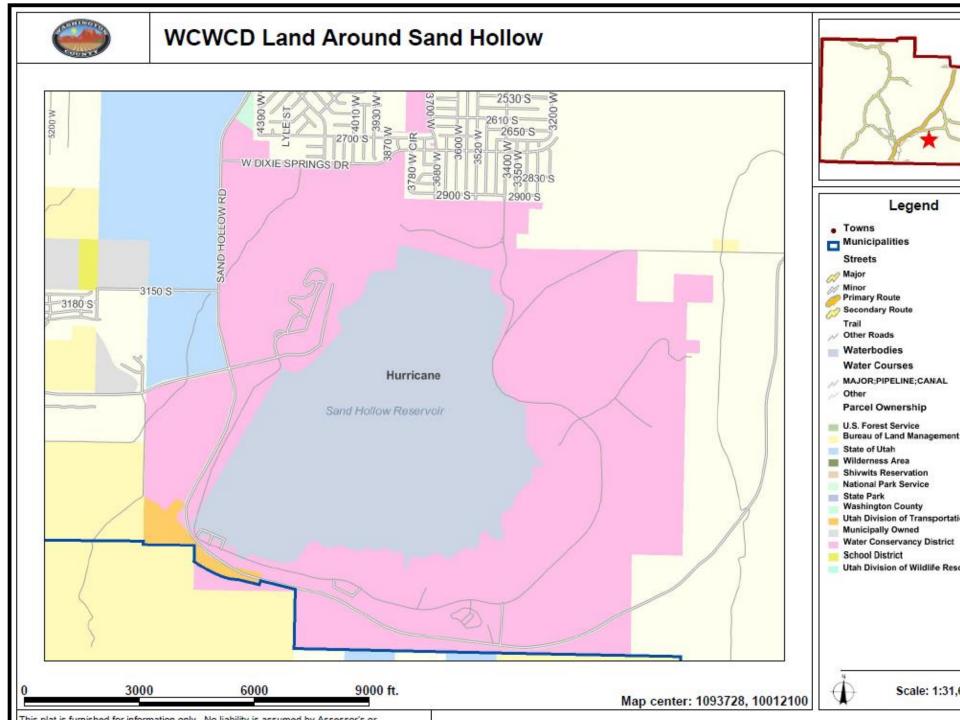


Who should bear the majority of the construction cost burden for the Lake Powell Pipeline?

- 1. Existing Rate Payers
- 2. New Growth

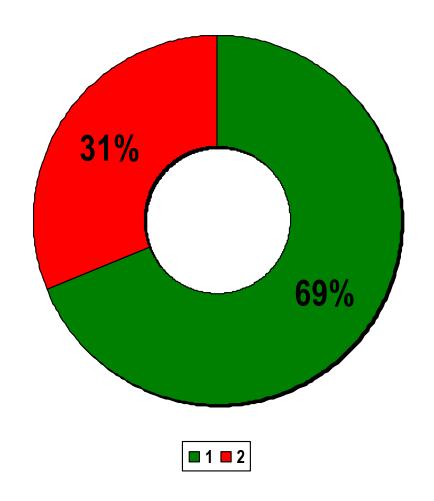






Should the sale of land be used to offset this cost?

- 1. Yes, It Should Be **Used**
- 2. No, It Should Not **Be Used**

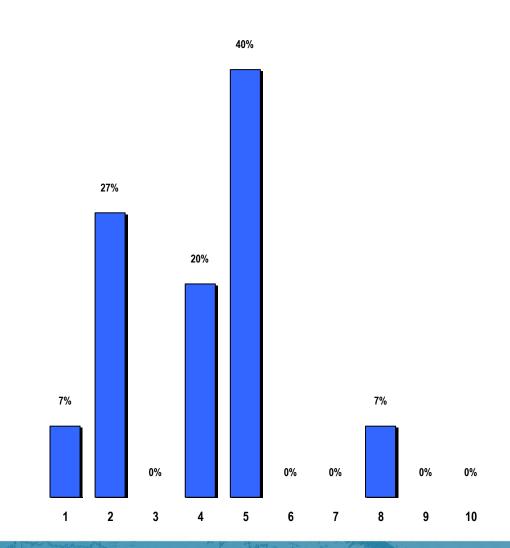




What share should XXXXXXX bear of that total?

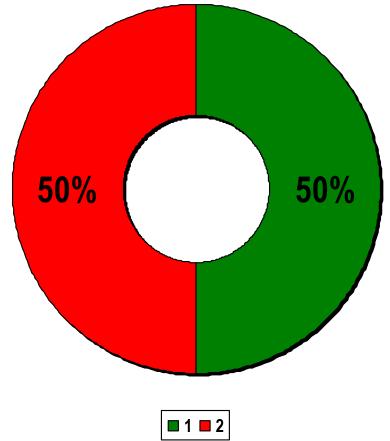


- **2.** 60%
- 3. 65%
- **4. 70%**
- **5. 75%**
- 6. 80%
- **7.** 85%
- 8. 90%
- 9. 95%
- 10. 100%



Who should bear the majority of the burden for the cost of conservation?

- 1. Existing Rate Payers
- 2. New Growth

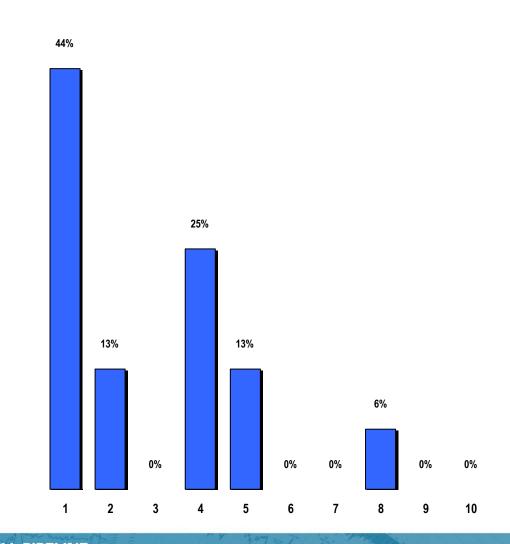




What share should XXXXXXX bear of that total?



- 2. 60%
- 3. 65%
- 4. 70%
- 5. 75%
- **6.** 80%
- **7.** 85%
- 8. 90%
- 9. 95%
- 10. 100%





What Is Not **Considered Here**

