



MEETING SUMMARY OF MEETING TWO

NOTES:

The following pages contain a summary of the presentation and discussions from the WCWCD Community Integrated Resource Planning Advisory Committee Meeting of 25 October 2012.

These pages, together with the presentation slides, constitute the meeting record.

533 E Waterworks Drive
St. George, UT 84770
435-673-3617
wcwcd.org

Committee Members in Attendance

- Barry Barnum, City of St. George
- Kip Bowler, Banker/Rancher
- Lee Bracken, City of Enterprise
- Dave Clark, Banker
- Paul Clove, Businessman
- James Eardley, Washington County
- Tracy Ence, Development
- Murray Gubler, Chamber of Commerce
- Mary Jo Hafen, City of Santa Clara
- Clair Hall, Community Citizen
- Mike Heaton, City of Washington
- Scott Hirschi, Economic Development
- David Isom, Health Care
- Floyd Jackson, Contractor
- Dick Kohler, Architect
- Natalie Larson, Realtor
- Carol Sapp, Southern Utah Home Builders Association
- Brad Seegmiller, Southern Utah Title Company
- Lawrence Snow, Shivwits Band of Paiute
- Don Stratton, Vision Dixie
- John Wadsworth, Farmer
- Christi Wedig, Citizens for Dixie's Future
- Travis Wilkinson, Small Business
- Karl Wilson, City of LaVerkin

Committee Members Absent or Excused

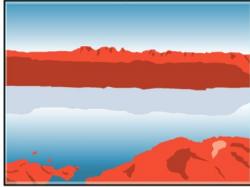
- Larry Blake, Rancher
- Chris Hart, City of Ivins
- Lynn Olds, Toquerville Citizen
- Max Rose, Education
- Darin Thomas, City of Hurricane

District/Committee Staff Members in Attendance

- Barbara Hjelle, Associate General Manager/Counsel
- Corey Cram, Associate General Manager
- Roberta McMullin, Executive Administrator
- Julie Breckenridge, Water Conservation Manager
- Doug Wilson, New Project Development & Information Systems Manager
- Ann Jensen, Publications and Outreach
- Tina Esplin, Legal Secretary
- Brie Thompson, Chemical Engineer
- Judie Brailsford, Public Outreach
- Dr. John Brailsford, Public Meeting Facilitation

Other Attendees

- John Crandall, Presenter, Executive Vice President/Manager of George K. Baum & Company
- Lisa Rutherford
- Paul Van Dam
- Bob Amaroso
- Paul Monroe
- Steve Meisner



WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

NOTES:

Agenda

1. Welcome and Introductions

John Brailsford called the meeting of the Community Integrated Resource Planning Advisory Committee (CIRPAC) to order at 4:00 p.m. at the District Office at 533 East Waterworks Drive, St. George, Utah, and welcomed everyone. The people who were not here at the first meeting, David Clark, Jim Eardley, Lawrence Snow, Donald Stratton and John Wadsworth, introduced themselves.

2. Respond to questions and comments from September meeting

- *Review the Socioeconomics and Water Resource Economics by Darryll Olsen, Ph.D. (Draft Study Report 10)*

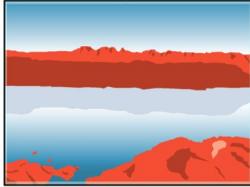
Barbara Hjelle said this study is an economic cost-benefit analysis produced by MWH, consultants to the state for the Lake Powell Pipeline Project (posted on the CIRPAC page). Economic models are required by the federal and state government agencies. The costs they include in their project costs projections are not just the construction costs, but also operation and maintenance costs over the life of the project (fuel, oil, insurance, repairs, licensing), pumping costs, foregone power costs; plus some optional components that are not part of the state project and may never be built. So the range varies and the construction costs are different in each of the models they use. It is important to note, however, that in each case the direct benefits of the project did exceed the costs regardless of whether the optional components are included or not and the indirect benefits are not addressed in this report.

- *Gray water recover systems*

Barbara reported gray water (which is untreated water that hasn't come in contact with toilet waste) is regulated by the state (Utah Administrative Code – R317-401 is posted on the CIRPAC page). Most states have not allowed gray water to be readily used without stringent requirements because of its potential to be contaminated with e-coli or other toxic components that cause health and safety concerns. The beneficial use of water is also a matter of state law. The treating of individual pockets of water on a lot-by-lot basis is costly and risky, whereas those issues are taken care of if that water is gathered into systems meeting state and federal standards for reuse and wastewater treatment plants and run by trained professionals.

- *Explain gallons per capita per day (gpcd)*

Corey Cram responded to a request as to where to get accurate data regarding future water supplies. He showed how we get our information from our local cities that report their information to the state of Utah. Our local cities have wells and own water rights and have to report to the state engineer that they are using these water rights for beneficial use so that their water rights do not come into question for non-use. Some of the cities have lots of resources and some cities have limited resources in their reporting which may cause differences in the detail in the data. We use the information that is reported to the Utah State Division of Drinking Water. The current information for 2011 shows that the residential water use is 104 gpcd, second home water use is 38 gpcd, and economic water use is 126 gpcd.



WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

NOTES:

- *Provide accurate data*

Corey explained that data and statistics can be used to show anything. We need to make sure we look at apples to apples and compare accurately. It is important that we give accurate information. We will tell you where our information comes from, how it is collected, what it means and how it should be used.

- *When does growth get out of hand*

Corey said that traditionally leaders in Washington County and also the state have welcomed people, businesses and visitors to this area, have provided water to them and have been good at making wise water management decisions critical for flourishing communities. That has consistently happened in the past and what we expect in the future.

3. Water Supply/Delivery History: Past, Present, Future (DVD)

Water Supply/Delivery History: Past, Present, Future (DVD) was shown. (Link to website is on the CIRPAC page)

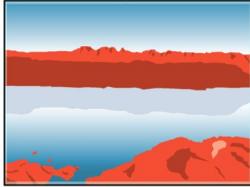
4. Regional Water Supply Agreement

Corey explained how the District and the communities are working together locally to address water needs. In 2006, the Regional Water Supply Agreement (RWSA) was established, with the District, St. George, Ivins, LaVerkin, Hurricane and Washington. Later, Toquerville, Leeds and Santa Clara signed onto the agreement. All of our communities were growing. Some cities had tied up their water supply and others hadn't and didn't have enough water to meet their needs, so they would purchase a block of water up front from the District on a take-or-pay contract where they would have to pay whether

they used the water or not. The District was also encouraging the cities to conserve water, making a conflict with the need to sell water for the take-or-pay contracts. To alleviate these problems, the RWSA was established as follows:

- The District supplements city supplies to meet demands
- 'Take or pay' contracts were eliminated – cities pay only for water used at wholesale cost
- Conservation measures required for all cities
- Cities can use own water or purchase from District
- Policies encourage reliance on water treatment plant to spread fixed costs
- City water sources must be maintained
- Reliability of the overall water treatment and delivery system increased

This agreement also requires that an Administrative Committee, consisting of the city mayors and city managers, meet quarterly to look at issues, adopt rules and procedures and establish priorities. A Technical Committee, consisting of the city public works or water superintendents, meets monthly to look at challenges and maintenance needs. This allows the District and cities to work together. Mayor Wilson said it is a very good arrangement for LaVerkin. LaVerkin probably sits as good as anyone in Washington County with its own water, but because of the agreement they know water is available from the District for the future. It is reflected in LaVerkin's capital facilities plan and is important. Barry Barnum said he remembered before 2006 a small group went to Las Vegas and met with Pat Mulroy, who told them that Clark County Southern Nevada Water Authority formed a water authority much like our RWSA in order for all of their cities to survive.



WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

NOTES:

After meeting with her, the RWSA was established while we had time to do it right without being desperate or in a crisis. There are many benefits right now. It helps secure and better manage the water supplies for the future, and we are seeing tremendous results. Corey said the partners in the RWSA work together to help each other out when wells go down, and they supply each other water when needed.

Quail Creek Water Treatment Plant: Corey said the Quail Creek water treatment plant was

- Constructed by St. George to treat Quail Creek Reservoir water
- Originally built for 20 million gallons per day (mgd) capacity
- Upgraded to 40 mgd in 2005
- Taken over operationally by the District in 2006 in conjunction with the RWSA
- Upgraded to 48 mgd in 2009
- Highly regulated for water quality and source protection by state and federal standards that are getting consistently tighter
- The District is committed to continue to provide safe and reliable water

Taste and odor management: Corey explained that in summer months our water has in the past had a musty, earthy smell and taste that, although it doesn't affect the safety of the water, is noticeable and caused by algae in the reservoir that die and release chemicals:

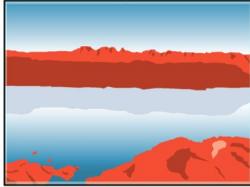
- Prior complaints about water taste were addressed
- Cause and treatment methods were determined
- Testing equipment for sampling and analysis was added

- Dive team, monitoring and treatment plan was implemented
- Copper sulfate chemical spot treatments are done as needed

Water treatment plant demand, production and delivery:

Corey explained that demand is how much water is being consumed, and we have the ability to manage demand from the cities on a daily basis. A pipeline network has been developed to deliver water to the cities that extends from the Town of Virgin to the City of Ivins, and we can move water back and forth to wherever it is needed. Demand has seasonal variations, going up in the summer and down in the winter. Storage tanks allow us to have steady production, treat water and have it in storage to buffer demand, provide fire flow and pressure control. The District has three storage tanks at the water treatment plant and the cities have their own storage tanks along with a complex system of storage tanks, pump stations, meters, and booster pump stations. The challenge to deliver water to the cities requires cooperation and is all facilitated because we have the RWSA in place allowing everyone to work together to solve problems as our cities grow and change.

Addressing water quality issues: Corey showed that St. George has 11 wells on the west side of the county that takes water from the Navajo Sandstone aquifer, our best aquifer, which has some quality issues with arsenic. Barry said that Gunlock has really good water, but the arsenic standards have gone from 50 parts per billion (ppb) down to 10 ppb and arsenic concentration in the Gunlock wells is about 20 ppb, so St. George had to turn off all but two wells because the rest are too



WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

NOTES:

high in arsenic. Corey put that in perspective: there are about 7 billion people in the world and if you were looking at the 10 ppb that would be looking for 70 people in the entire population of the world. That is the concentrations that we are looking at in water which helps explain why we get different lab variation results. The water in these wells is still there as a resource that can be treated or used as secondary water. Barry said St. George has five wells at Snow Canyon that also exceed the arsenic standard, but we blend and dilute this water with Quail Lake water and that brings the Snow Canyon water into compliance. Arsenic can be treated, but right now the cost of building a treatment plant or building a pipeline to blend the Gunlock water with the Quail Lake water costs are both about \$10M, so we are holding off as long as we can.

– COMMITTEE BREAK –

5. Water Resources in Washington County

This presentation will be continued at the next meeting.

6. Overview—Financing Water Infrastructure

John Crandall, Executive Vice President/Manager of George K. Baum & Company was introduced and gave a presentation on financing water infrastructure:

Historical Perspective:

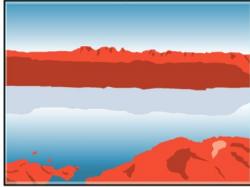
- Historically, large water projects have been funded by the federal government because the federal government was interested in clean water and safe water projects.
- As federal funds decreased, local governments then needed

to step up and fund local projects.

- Initially, projects were primarily funded through general obligation bonds backed by property taxes, as water revenues were not sufficient to pay for new projects.
- Property tax has provided important stable revenue, given the volatility of other sources of revenue (caused by variations in demand based on climate, temperature and annual rain/snow fall).
- As the population grew, so did the need for projects and water revenue from impact and customer fees.

Current Perspective:

- Now, water fees, including customer use and impact fee revenues, provide the largest portion of revenues that water districts receive.
- The stratification of revenues is a very important bond/credit consideration. Diversity is good. The District's bond rating has a direct impact on the District's cost of borrowing.
- This is true especially since the financial meltdown beginning in 2007.
- In 2007, there were eight bond insurers and credit enhancement was easily available and inexpensive, allowing the District to bring any investment grade credit up to "AAA" rating.
- Currently there is only one viable bond insurer with a "AA" rating.
- Thus, underlying bond ratings have become much more important.



WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

NOTES:

- As such, the underlying credit metrics are much more critical.
- Washington County Water Conservancy District's rating prior to 2008 was "A+", now the rating is "AA", which means the District can access capital at much lower interest rates, which keeps overall interest expense lower.
- Property tax is an important stable revenue which is pledged first to pay O&M of the District.
- Property tax is a stable component of the funding portfolio of the District because it provides significant stability when compared to unstable variable water rates and impact fees.
- Now, property taxes make up just 50% of the District's revenue and will continue to decrease as a percentage of total revenues.

Typical Utility Financing Covenants:

- Net Revenue Pledge
 - Gross Revenue less O&M = Net Revenues
 - Net revenues must meet the rate covenant
- Rate Covenant
 - Net Revenues exceed debt service requirements by 115% – 125%
- Additional Bonds Test
 - Revenues must exceed maximum annual debt service or aggregate debt service according to the historical look-back method or projected revenues method:
 - * *Historical "Look-Back" of Revenues:* Past 12 to 24 months net revenues must cover existing debt service plus proposed debt service
 - * *Projected Revenues:* Future net revenues estimated to cover debt service (including proposed debt

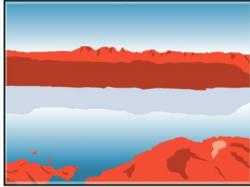
service) beyond the construction date

Typical Utility Financing – Debt Service:

- Debt Service – Level amortization
 - Credit strength - pay now vs. deferring principal
 - * Deferred principal increases interest expense
 - * Allows for additional capital projects
- Amortization
 - Equal to or less than useful life of the project
- Additional Bonds
 - Debt Service fits under existing net revenue curve
- Typical Projects
 - Sized between \$20 - \$75 million
 - May or may not include new revenue associated with project
- Examples of Outstanding Bonds of Local Water Districts
 - Washington County Water Conservancy District (\$55,612,000)
 - Jordan Valley Water Conservancy District (\$185,755,000)
 - Weber Basin Water Conservancy District (\$133,925,000)

Typical Utility Financing – Debt Service:

- Water/Sewer projects share common hurdles when building projects:
 - The capacity of the project is utilized as the growth occurs
 - As soon as the majority of the capacity is used, development of the next resource should be well under way



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MEETING SUMMARY con't

NOTES:

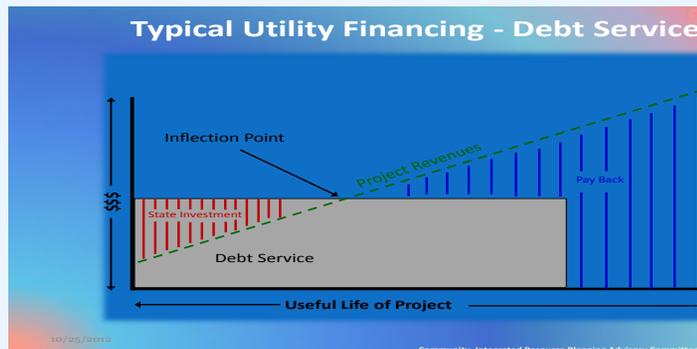
- Unfortunately, these large pipeline projects cannot be built incrementally
- In order to deliver any quantity of water, the pipe must be open from start to finish
- Because of size and magnitude of project Districts cannot currently fund these projects
 - The large size of the project (capacity) and associated large annual debt service requirements cannot be utilized currently, but the Districts will grow into these projects
 - Thus the Districts cannot finance these projects on their own

Christie Wedig asked what it would look like if property taxes were stripped out and only water rates were actually reflected and allowed. How high would water rates have to go if the state doesn't kick in to fund the LPPP?

John said revenue requirements, regardless of whether revenue comes from taxes, impact fees, property taxes or water rates, still have to hit the fund requirements, so you would see a shift coming from all those entities that currently don't pay taxes. The schools, churches and county property that use water would get much bigger water bills, so there would be a shift to those areas that are water users, and they would have a much higher water bill.

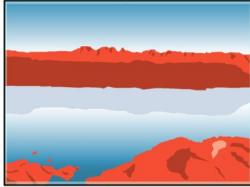
Below is an illustration of what the Lake Powell Pipeline Project (LPPP) might look like as far as projected revenue and debt service if the state finances this project and is paid back principal and interest. It is a very big project and will grow into capacity.

Carol Sapp asked where John got the 30% suggested as secondary homes. John said he got this information from the State Tax Commission and the 30% is secondary in actual dollars not numbers. Carol also said that property taxes can be used for O&M costs, but not impact fees, and John said that is correct.



Dave Clark wondered what the assessment valuation of Washington County was when Quail Creek was built because we are talking about a \$10M project and he would like a comparison in relation to that.

Corey said the ratio was about a 3 to 1 ratio at the time Quail Creek was built, and we are looking at a 10 to 1 ratio now. Dave said historically the U. S. Bureau of Reclamation would fund these kinds of projects, but no longer do so, and he wanted to stress that this financing vehicle is not a tax subsidy.



WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

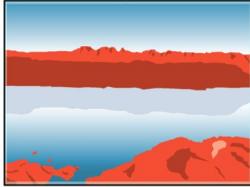
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Washington County would pay back every bit of the money loaned for the project. John confirmed that is absolutely right. The U. S. Bureau of Reclamation built big projects and that mechanism worked well until funds were no longer available. With a big project like this, we are asking the state not to pay, but to finance up front, and as the county grows the money would be paid back with interest.

Christi Wedig mentioned a paper written by economists from University of Utah that stated water rates would increase dramatically if the Lake Powell Pipeline Project were to be built. Dave stated we need to find out where they got the figures and follow the accounting in the letter to the state from the economists at the University of Utah. It looked like it was more of an editorial piece. He couldn't follow their figures and would like to follow them down to the penny. Christi said she wasn't involved in the crafting of the letter. It was something she worked with the SUU professor to produce that information. She said that the bottom line is today's net revenue comes from property taxes, and they say we are socializing water rates in Utah. She said that today the District is \$10M and of that, half comes from property taxes, so the debt service comes due with an annual payment of around \$47M a year, so take current revenues of \$10M vs. the \$47M and she believes that is where the 370% increase comes from. Barbara asked the moderator if the District can have an opportunity to rebut the letter and make comments. The moderator said if in discussion something comes up that needs to be discussed in detail, it can be addressed at a future meeting.

John Crandall said they are right in that if we have to pay on day one, there would be a shortfall and that is what we are talking about. Down here as you grow, the revenue would increase. You want your revenue to grow to pay, but there is a big difference between growth per capita and growth of revenue of the District. Revenues of the District need to grow, but saying they will grow 370% is incorrect because that is not the plan to pay this. Just like every water project, you have to grow into it. This is a big project, and you cannot do it on day one as with other projects. Dave said he would like to remind everyone here in talking about taxes that \$700M in financing projects is granted back to communities, some with zero interest, something that has 100 years of history, and there isn't a community in this county or anywhere in the state that hasn't gone there and benefitted from other communities.

Dick Kohler said the federal government had this role in previous large projects such as the Central Utah Project and other projects all over the state for a long time, and questioned if the legislature understands it has the role of financing projects and is intentionally absorbing this role. Dave said it is a role that needs to be filled and at the end of the day is best filled by the state. The federal government vacated the market, so the state is now left with the best tools to accomplish this. Dick asked if there is a rural vs. urban view in the state of Utah. Dave said there is a stark difference from folks that live on the Wasatch Front than folks that live in other areas when it comes to water. There is a difference between geography in the state of Utah and here.



WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

NOTES:

And, we have developed this system where we told the District "I want reliable water every time I turn on my tap and water my lawn and I want it as cheap as possible," and they have done exactly what we asked them to do and we are now are in the process of beating them up for doing what we have asked them to do. Water management needs modified changes as we grow, but I am reluctant to beat them up for doing what we asked them to do and for doing what has been done for 100 years in the state of Utah.

7. Meeting Wrap-Up

The meeting was concluded by thanking CIRPAC for their participation in this process.

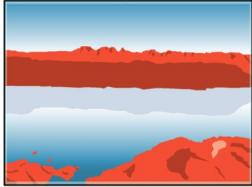
8. Public Comments

John Brailsford called for Public Comment

Questions and comments written on board:

- Gunlock Wells
- Address future water rates with additional water development projects.
- If property taxes were eliminated as revenue for the District, what would it do to the District's bond rating, bond rates, etc.?
- Just because someone takes the primary residential discount on their property tax, it doesn't mean it is a second home so you cannot look at that percentage and know for certain that those are all homes that are occupied less than so many months out of the year.

- What we see in this county is actually modeled upon a system of historical investment in the water systems by the Mormon Church. When people didn't actually have money for things like the Hurricane Canal the Church loaned them the funds and that is actually the model for what the Bureau of Reclamation did.
- Most of the water in this county is agricultural water and in many other places in the west the water districts have cooperatively worked with farmers to use and buy their water and to determine what that amount of water is. Has there been any thought about doing that and what the comparative cost would be?
- The socio economic reports done by the state are very complex and you need to be aware and learn more about the cost/benefit analysis because they can be manipulated in many ways.
- Anyone who studies the U. S. Bureau of Reclamation and dam projects will learn very quickly they were done to drive growth so that challenges the idea that water doesn't drive growth, and we need to be careful about using history to determine what we do in the future.
- We need to look down the road and realize the problems we are talking about today, that we are going to be water limited by 2020 if we don't have this pipeline, and think what is going to happen when we max out this pipeline water.
- With Utah being a growth state, how do other states do a better job of conserving water than we do and continue to grow and prosper?
- Has the additional treatment costs of the new water from the LPPP been included in the cost of the project?



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WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

MEETING SUMMARY con't

NOTES:

- Would like to have more information on why the arsenic levels were reduced by the federal regulatory agency?
- Have the wells been included in the water needs assessment total water available numbers?

8. Upcoming Calendar

The 2012/2013 CIRPAC meeting schedule shall be held monthly except when notified otherwise:

2012 Thursday, November 29	4:00 – 6:00 pm
2012 No meeting in December	
2013 Thursday, January 24	4:00 – 6:00 pm
2013 Thursday, February 28	4:00 – 6:00 pm
2013 Thursday, March 28	4:00 – 6:00 pm
2013 Thursday, April 25	4:00 – 6:00 pm
2013 Thursday, May 23	4:00 – 6:00 pm

Adjourn

The meeting was adjourned at 6:07 p.m.