

Water Line

Summer 2006

Sand Hollow Reservoir
Photo: Doug Wilson

Pipeline and Conservation Act guarantee future of Washington County

Lake Powell Pipeline

Vanguard Media Group has been retained by the District to facilitate the dissemination of information to the public on the Lake Powell Pipeline. The original public opinion survey was conducted by Vanguard in 2005 and included 440 people living throughout the state of Utah. In 2006, another survey was conducted which included only Washington County residents numbering 213. The results of this 2006 survey are noteworthy and I would like to comment on just a few of the findings.

When asked how important it is for Washington County to have an adequate supply of water to sustain current needs, 91% rated it very important. When asked how necessary water development projects are in planning for Washington County's future, 83% rated it very important. From this response, we gather that the majority of those polled do see water as a vital need to sustain our community and are tuned into the importance of continued development of water resources.

As to why the pipeline is necessary, the results included such responses as

"we need water for survival";

"we are tired of our water going to California"; and

"if they don't do it, they aren't doing their job."

These remarks are self-explanatory. I would like to spend some time addressing two of the comments offered as to why this pipeline is NOT viewed as being necessary.

"We should tap into current resources and leave that water alone" - this is a good point. Several projects are in the planning stages that would tap into our current resources:

- *Ash Creek Pipeline Project* - water from open ditches on Leap, South Ash and Wet Sandy Creeks would be piped and sent to the proposed Sandstone Mountain Reservoir yielding approximately 6,000 acre feet of water annually.

- *Well Development Recharge* - the District is entitled to 17 wells from its water rights around Sand Hollow Reservoir. To date, seven wells are producing; two more wells have been drilled but are not yet in production; one is currently being drilled and three more will be drilled by the end of this year. When all 17 wells are operational, the total yield will be 15,000 acre feet annually.

- *Crystal Creek Pipeline* - this project is currently underway consisting of 12 miles of pipe from Crystal Creek to Kolob Reservoir with an estimated yield of approximately 3,000 acre feet annually.

- *Wastewater Reuse* - St. George City has plans for building a 10 million gallon per day reuse facility. This would provide water for landscape irrigation and free up potable water for human consumption.

- *Sullivan Well Completion* - this well has the capability of pumping 2,000 gallons per minute of high quality water. The District will drill at least one more well in this area to utilize its authorized water right.

- *Agricultural Water and Pah Tempe Springs utilization as a secondary water source* - the results of these secondary water projects could yield as much as 15,000 acre feet annually for landscape use.

Development of approximately 32,000+ acre feet of water prior to construction of the Lake Powell Pipeline is in the planning stages. However, these projects would provide adequate water to Washington County only through about 2020. We are tapping into our current sources, but we **cannot** leave the Lake Powell water alone. It is

Manager's Message

Ron Thompson, General Manager

ours and we are going to need it for future generations.

"We have other reservoirs that supply adequate water" - yes, our reservoirs have been full since the storms of 2005. But, we reside in a desert. Just four years ago, at the end of 2002, our reservoirs were dangerously low. Quail Creek was 33% full; Sand Hollow was 13% full; Kolob was 49% full; and Gunlock was 35% full. Due to the diversity of our climate, it is important to have redundancy in our water system that would protect us against the long-term effects of drought.

Washington County Growth and Conservation Act of 2006

In March of this year, after a year and a half of discussions among county officials, government agencies, municipalities, special interest groups, environmental entities, state delegates and local citizens, the Washington Lands Bill was presented in draft form. Since then opinions have been cast both for and against the bill's intent. Let's take a look at the negative comments directed at this bill. It has been referred to as a:

- *"Land grab with developers being the main beneficiaries"* - I would not call a 1.9% potential increase in private property as a "land grab." 16% of the land in Washington County is currently in private ownership; the bill would increase that to 17.9%. The beneficiaries would be those who want to raise their families in Washington County and are looking for available, reasonably priced land on which to build their homes. The lack of available land has driven prices above the affordable for most residents.

- *"Threat to open space"* - with more than 85% of the land in Washington County belonging to the federal government, potentially selling off up to 25,000 acres would certainly not constitute depletion of open space within the County.



- *"Sale of federal land to fund Lake Powell Pipeline"* - 8% of the sale of this property would go to the District for water treatment, water conservation and water transmission *within* the County.

- *"Desert Tortoise Habitat to be compromised"* - the Habitat Conservation Plan that governs management of the Reserve was signed in December 1995 with only a 20-year life span. This bill will assure the designation of the Reserve as the Red Cliffs National Conservation Area which, in turn, will guarantee perpetuity.

Outside interests in general and Southern Utah Wilderness Alliance (SUWA) in particular have endeavored to push their own agendas at the expense of taxpayers and government entities. They have descended upon Washington County and done all in their power to skew the facts and verbalize accusations that the public and the environmental community were not involved in the two-year process.

This is a county-based land plan; it is *our* plan for *our* community. It has been drafted in such a way as to protect the quality of life and the economic base of Washington County. Those impacted by the plan will be called to the table in the future to share their vision as to the best use of Washington County land for the benefit of Washington County's current and future residents.



LAKE POWELL PIPELINE

Delivering the future.

PIPE DREAMS

by Ann Jensen

It is impossible to present a complete history of the Colorado River Compact in a small article. This will, however, be an attempt to show from an historical perspective the concerns surrounding apportionment of Colorado River water. It will, hopefully, lead up to the conclusion that we, the state of Utah, *must* seize our share of this resource for the benefit of the people of this state. The Colorado River is one of the last major sources of developable water in the state of Utah.

At the beginning of the 20th century, the Colorado River lay untouched. As the Imperial Valley grew into a major agricultural area, the state of California began to tap into the irrigation potential of the Colorado River. A canal was constructed in 1901 to deliver Colorado River water to California. The canal ran through Mexico; California had no desire to deal with a foreign entity.

The Bureau of Reclamation supported the Imperial Irrigation District and recommended that a storage reservoir be built on the Colorado River drainage basin. The people in the lower reaches of the river commended the reservoir plan; the people in the upper reaches were concerned. The “*first in time, first in right*” principle prevailed at that time. The lower reaches would use the water first and, therefore, secure right to it, leaving the upper reaches without any water allocation.

Colorado River profile:

Drainage basin covers 244,000 square miles.
It is 1,440 miles in length.
Meanders through 7 states and Mexico.

In 1922, the Colorado River Compact was enacted. The Compact divided the river into upper and lower reaches with the separation point being Lee Ferry, Arizona. Each basin



Lake Powell
Photo: Doug Wilson

received an allocation of 7.5 million acre feet per year. The states themselves were responsible for the method of dividing up their allotment.

In 1941, water development was restricted in the Upper Basin due to World War II. The states wished to continue their water development projects, but could not get federal funding unless an Upper Basin Compact was put in place. The Upper Colorado River Basin Compact was entered into by the Upper Basin States on October 11, 1948.

This Compact allowed for the distribution of water in the following manner:

- **Colorado – 51.75%**
- **New Mexico – 11.25%**
- **Utah – 23%**
- **Wyoming – 14%; and**
- **Arizona was to receive 50,000 acre feet.**

Through the Compact of 1948, the Upper Basin states were assured their water allotment would be protected even though development might be gradual. Their fears that they would lose their share of Colorado River water through non-use were finally put to rest.

At the beginning of the last century, California reached out and made use of this water to irrigate crops in the Imperial Valley. The State of Nevada, which is currently experiencing immense population growth, would gladly take any water that Utah fails to capture and allows to flow downstream.

Are the residents of Washington County going to sit quietly by as our allotted portion of Colorado River water flows into Nevada?

Are we going to say “*take our share because we want to curb growth and we can only do so if we do not provide water for the future?*”

Colorado River water is ours for the taking. We just have to provide the infrastructure to convey it – this infrastructure *is* the Lake Powell Pipeline. It *will* deliver Washington County’s future.

Colorado River usage:

- Provides water for municipal and industrial use to 24 million people
- Provides irrigation water to about two million acres of land
- Provides more than 20 million annual visitor days of outdoor recreation
- Has more than 60 million acre feet of storage capacity
- Has a hydro-electric generating capacity of 4,000 megawatts

Sources:

Anderson, D. Larry, Past Director of Utah Division of Water Resources, *Utah’s Perspective The Colorado River*, Second Edition, May 2002
Water Delivery Financing Task Force Report, *Financing the Lake Powell Pipeline and Bear River Projects*, September 2005
Lewis, Young Robertson & Burningham, Inc., *Water Regional Capital Facilities Plan and Impact Fee Analysis*, October 2005

For more information on the Lake Powell Pipeline and the Colorado River Compact of 1922 log on to
<http://www.lakepowellpipeline.org/>

STAFF LEAKS

Hank Childers, Water Treatment Plant Supervisor

by Marisa Childers & Ann Jensen

After 23 years of service to St. George City, Hank became a District employee in April 2006. It was at this time that the District officially took charge of the operation and management of the St. George Water Treatment Plant.

Clean water is not an expenditure of Federal funds; clean water is an investment in the future of our country.

(Bud Shuster, U.S. Representative, quoted in The Washington Post, 1/9/87)

Hank is a native of St. George. He was born in the winter of 1954 and has spent most of his life in Dixie. After graduating from Dixie High School in 1972, he worked in the construction industry as a roofer until 1979. Upon returning from an LDS mission in North Carolina in 1981, he married Marisa Jones. Hank

and Marisa live in Winchester Hills and have six girls and one boy.

Hank began working for the St. George Water Department in 1983 as a water maintenance worker and meter reader. Through correspondence courses, he certified with the state of Utah as a Level 4 Distribution Operator and a Level 4 Water Treatment Plant Operator. Hank has been involved with the Quail Creek Water Treatment Plant construction and upgrades from its beginnings in 1988.

In August 1989, he became a plant operator and in 1993 was promoted to plant superintendent. He continues in that position today.

Access to clean water is crucial to each one of us in our day to day lives. Drinking water must be treated in order to protect the health



Photo: Front row left to right: Jarrett, Hank, Marisa, Kember. Back row left to right: Kaylee, Sara, Chrissy, Rachel, Micki.

of the public. For the past 13 years, Hank has dedicated his days to protecting and monitoring the water that comes into and runs through the treatment plant.

As a supervisor, Hank oversees a crew of seven individuals who operate and maintain the treatment plant. Daily tasks range from maintaining small sample pumps to large compressors and chemical feed equipment. One of his principal challenges is maintaining the highest water quality possible through lab jar testing, biological analysis and general water chemistry. Currently, extensive studies are being conducted on raw water sources to enable plant operators to find and treat only the best water available.

Hank loves Washington County and, in particular, St. George. Week-ends find him hiking local areas, fishing and enjoying dinner and a movie with his wife. He also enjoys hunting. He and his son, Jarrett, are planning a big get-away week this fall with rifles in hand and a big buck in their dreams.

Tamarisk-eating beetle released in St. George

By Corey Cram

The City of St. George has approved release of the tamarisk beetle to help address the problem of tamarisk in the area. Personnel from St. George City and others drove to Delta, Utah this past July to bring the beetle to Washington County.

Thousands of these beetles were harvested by hand. The beetles were then turned loose on St. George City property that contains dense stands of tamarisk.

These beetles feed exclusively on tamarisk and defoliate it. Over the course of a few years, the trees/bushes are stressed to the point that they die.

The photo of the Sevier River (below) near Delta, shows the devastation this beetle can cause to tamarisk bushes over a period of time. It is hoped this biological control mechanism will become an effective tool in controlling tamarisk along local rivers and streams.



Beetle defoliating tamarisk bush

Management plan ten years in the making

By Ann Jensen

The Virgin River Watershed Advisory Committee began working on a watershed plan back in 1996.

On June 28, 2006, this Advisory Committee and representatives from the Virgin River Management Plan Coordinating Committee and stakeholders came together to receive their copies of the completed Watershed Management Plan.

Corey Cram, the District's Watershed Coordinator, chaired the meeting. He reviewed the major points covered in the plan. He also explained some of the projects currently in

progress in the watershed. The group discussed how best to implement the plan to make sure it does not end up just sitting on a shelf.

The group will meet again in the near future to hear various presentations on the work currently being done in the watershed.

The Watershed Management Plan can be accessed on the District's web page at <http://wcvcd.state.ut.us>.



Zion National Park is within the Washington County watershed
Photo by Doug Wilson



**VIRGIN RIVER
PROGRAM**

Virgin River Program hosts stakeholder meetings

By Steve Meisner

The Virgin River Program invited stakeholders to meet in St. George on July 20 and 21. Those participating in the meetings represented: the Cities of St. George, Toquerville and Springdale; Washington County Commission; Representatives Last and Clark; Bureau of Reclamation; Division of Wildlife Resources; Washington County Economic Development Council; Ash Creek Special Service District; private landowners; Backcountry Horsemen; Red Cliffs Desert Reserve; Washington County Water Conservancy District; and Congressman Matheson's office.

The meeting included such topics as:

- Program goals;
- Current activities of the Program;
- Native and endangered species found in and along the Virgin River;
- How the Program benefits the community; and
- Information for those wishing to contact the Program.

For information on the Program, you may contact me at 673-3617.



Conservation Corner

Prepare now for next year's heat

By Julie Breckenridge

Soon the heat will subside and wonderful weather will once again favor Utah's Dixie. No one really wants to start thinking about next year's summer heat. However, taking advantage of the fall's cooler temperatures can help prepare our landscapes to be water-efficient even through long, hot, dry summers.

A water-efficient landscape is healthy because of its **deep** root system. A healthy landscape does not appear by accident, but it doesn't have to be labor intensive either. Use of best management practices will ensure water efficiency.

Rick Heflebower, horticulturist of USU Extension, has written a report entitled "Renovate Your Lawn After a Long, Hot Summer". This report can be accessed on the District's website (<http://wcwcd.state.ut.us>). If you do not have access to the internet, call me at 673-3617 and I will forward a copy to you.

In this publication, Rick will show you how to both identify and rectify problem areas in the turf. He concludes the report with a list of best management practices.

He also mentions (a few times), that **overwatering** can cause more damage than **underwatering**. With that in mind, fall is the time to limit irrigation frequency.

Why is fall an ideal time to resolve problems? Obviously, the fall season brings shorter days and cooler nights and this is ideal weather for turf to thrive. With less watering, deep roots will be encouraged.

So, if you have been watering everyday during the summer months (and you know who you are) it is time to decrease your irrigation frequency. Watering everyday causes the plants to weaken and become unhealthy.

Adding a little stress at the right time will get those roots growing deep. Just start by adding a day in between irrigations. Then keep adding another day between irrigations every week until winter sets in. At this time, the irrigation system can be turned off completely.

The District is currently offering **free water checks**.

An intern will come to your home and run a series of tests on your irrigation system. You will then be given suggestions regarding:

- how to improve your irrigation system's efficiency;
- the amount of time needed for each irrigation; and
- the frequency for each irrigation.

For an appointment, please call 673-3617.



Blooming Cactus
Richard and Maurine Etzel

Local Reservoir Capacities and Levels

Reservoir	Capacity	August 2005	Percent of Full	August 2006	Percent of Full
Quail Creek	40,000 af	36,173 af	90%	30,369 af	76 %
Sand Hollow	50,000 af	39,087 af	78%	46,843 af	94 %
Gunlock	10,884 af	10,884 af	100%	9,118 af	84 %
Kolob	5,585 af	5,549 af	99%	4,899 af	88 %

Book Review



By Ann Jensen

In his book, *Rainwater Harvesting for Drylands*, Brad Lancaster encourages and demonstrates creative methods of diverting rain water away from storm drains and onto landscape. Lancaster is a perma culture consultant, designer and educator who lives and works in Tucson, Arizona.

Even though precipitation levels are minimal in Washington County, some of his ideas may get you thinking about how rainwater can be utilized to nourish lawns, trees and shrubs. For more information, log on to <http://www.HarvestingRainwater.com>.



Water Line Summer 2006

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FREE Landscaping Workshops September – November 2006

By Julie Breckenridge

These workshops are held at the
Tonaquint Nature Center

1851 Dixie Drive • St. George, Utah

Space is limited so please call 673-3617
to reserve your spot.

It's All In The Container

Saturday, Sept. 16: 10-11 a.m.

From patios to large yards, learn how you and your green thumb can add more space, color and visual interest using containers. Learn how to care for potted and ornamental plants, vegetables and perennials while minimizing water usage.

Unlock the Bulb Mystery

Saturday, October 21: 10-11 a.m.

Bulbs are a great way to add color and the element of surprise after a dull, cold winter. Learn which bulbs will work well in our climate and how to care for them through the seasons.

I Do What? Where?

Maintaining Native Plants

Saturday, November 18: 10-11 a.m.

There has been a heightened interest in planting desert plants. Attend this class and learn how to take care of desert plants through all southern Utah's seasons.

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